Bird shooting and trapping in the Maltese Islands : some socio economic, cultural, political, demographic and environmental aspects.

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Bird shooting and trapping in the Maltese Islands —

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ABSTRACT

Hunting in Malta implies almost exclusively the shooting of migratory birds while trapping implies the catching of birds, mostly finches, which are kept as song birds. Both activities are more than just pastimes, as they have strong social, political, economic and environmental aspects. The number of hunting licences has grown rapidly during the past 25 years while the land area available for hunting has decreased as a result of development. The growth in the number of hunting licence holders before the 1970s is roughly congruent with demographic growth but the sharp increase in the number of hunters which took place after the 1970s is related to economic, not to demographic growth.

The availability of free time and the increase in the number of hunters and trappers resulted in more impact on the environment. Technology enhances the hunters' performance and enables them to shoot birds which were previously not shot or shot in very small quantities. The proliferation of collections of stuffed birds accentuates the problem.

Hunters often argue that they have a right to hunt as hunting is a traditional sport. Apart from the fact that today's hunters use non-traditional means to hunt, there is no evidence of a Maltese sport hunting tradition. Hunters constitute about five per cent of the population, but elections in Malta are very often won or lost with a small number of votes and political parties are very careful when tackling the issue. Hunters perceive themselves as a strong political force and lobby against restrictive laws.

The decreasing number of various species of birds in Europe is well documented and Maltese hunters and trappers often lament about the lack of wild birds. Analysis of ringing recoveries shows that Maltese hunters kill birds from specific European populations in both spring and autumn migrations. It is argued that this kind of shooting can have detrimental effects on the populations concerned. Rather than being an industry which generates substantial business, as hunters argue, it is shown that hunting has a detrimental effect on the economy both in real and in potential terms.

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Declaration

I declare that the material contained in this thesis has not been submitted for a degree in this or any other university and that the work is solely mine.

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Preface

Hunting in Malta implies almost exclusively the shooting of migratory birds. Apart from hunters, there are a large number of trappers who trap finches to be kept as songbirds. Both shooting and trapping are pastimes which have strong overt social, political and environmental considerations. There are various other aspects which play a key role, but which are less obvious at face value, such as economic ones.

In the 1960s and 1970s, Malta underwent great changes in many spheres of life. Increased economic activity brought about a better standard of living but it all came at a price and pressures on the environment grew while awareness about the need for conservation was still in its infancy. I have grown up in an environment which, at best, can be described as hostile to birds. Grandfathers from both sides of my family, were shooters who hunted for brief periods of time before and after work and on their days off on Sundays and public holidays. Whatever they shot, went into the pot. What they would not eat themselves, such as birds of prey, they would give to someone else who did. Some of my uncles, followed in their fathers' footsteps. As stuffed bird collections started increasing in popularity in Malta, some of my uncles shot not just for the pot, but also wanted to fill their showcases or to decorate the mantle piece. A stuffed male golden oriole mounted on a twig was as much part of the furniture as the television set in the sitting room. A stuffed herons, needing more space, would be placed in the middle of the stairway. I do not blame them for such a mentality. Unfortunately for them, and many others like them, they did not know any better. Bird shooting was part and parcel of their daily lives.

At a tender age, I was used to seeing guns, cartridges and dead birds in my grandfather's houses. I recall going to my grandfather's house, and watch him clean the guns after the morning shoot. I spent countless hours sitting and watching while he loaded cartridges for the next migratory season. The Sunday afternoon family outings were never without a gun or two. Being brought up in such an atmosphere, I could not but aspire to become a shooter and to have a large collection of stuffed birds. At school, environmental education was unheard of and, although I was very interested in birds and loved animals, I used to think that the gun was the only means with which to enjoy birds. At the age of fifteen, I was introduced to the Malta Ornithological Society (MOS) by my mother. It did not take me long to realise that the gun is anything but the right way to appreciate birds. I joined and in no time I found myself occupying various posts within the council. A few years later I left and helped formed a pressure group for the protection of the environment, which I later had to leave due to pressure of work and which has since become known as Friends of the Earth (Malta).

Having lived on both side of the fence — having been brought up in a pro-hunting environment and later having been active in the conservation movement — I first set forth in preparing a study on bird hunting and trapping in the Maltese Islands. The result was *Fatal Flight, the Maltese obsession with killing birds*, published in 1992. The book created a controversy with hunters claiming that the figures of birds shot published in the book were inflated and environmentalists, after endorsing it, kept their distance from it because its undertones called for a ban on hunting and criticised the environmental groups for bending backwards to compromise with hunters who, on their part, opposed any forms of restrictive legislation. While doing research for the book, I realised that there was more to the hunting issue than what I could write in the book. The idea hovered in my mind, until I formulated a plan of study which formed the basis of this thesis. As my research evolved, new ideas led me up several paths and the plan of research took new dimensions. And the following pages are the result, which cover developments which took place until 1996.

Acknowledgements

The production of this thesis would not have been possible without the immense help and encouragement I received from innumerable people. It would be difficult to name them all, but my gratitude to my supervisor Prof. Ewan Anderson must be underscored. Not only did he encourage me to embark on the project, but, in spite of time constraints and other problems, he always managed to deliver advice and support.

Prof. Patrick J. Schembri, Head of the Biology Department of the University of Malta, Charles Gauci, the warden at the Ghadira Nature Reserve and one of the leading Maltese ornithologists and Alfred E. Baldacchino, the former secretary of the Malta Ornithological Society, deserve a word of thanks for reading various sections of this thesis and whose remarks, comments and suggestions were invaluable to me in many ways. John Schembri, who co-ordinates the Geography department within the Mediterranean Institute at the University of Malta, was only too keen to discuss the chapter on demographic aspects while Louis F. Cassar, of the International Environment Institute was helpful in many ways. Mr Andrew Ellul's criticism on the chapter dealing with economic considerations was very valuable.

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Most sincere and grateful thanks to Dr Paul Sant Cassia, Dr Charles Cassar and Prof. Jeremy Boissevain, with whom I discussed some aspects of a socio-anthropological nature. I must also thank, albeit anonymously, Taxidermists A, B and C and the shooters who gave me their bag records. I cannot mention their names as the risks would too great for them.

The list of acknowledgements would be incomplete if I did not thank the wives of those mentioned above, for bearing with me while I monopolised their husbands' time.

The staff of the National Library and the Palace Archives, in Malta as well as the staff at the library at the University of Durham and at Palace Green deserve a word of thanks as much as anybody else. They were all extremely helpful during my hours of research. Colleagues at work were also very helpful in many ways, but particular thanks are due to Andre Camilleri, Mario Borg and Ian Buhagiar who helped with several scans and graphics.

Writing is essentially a solitary activity, and last, but not least, I would like to thank my parents who suffered in silence whenever our family was victimised as a result of my actions in favour of conservation. Last, but not least, I owe a lot to my wife Rose, who had to join the long list of suffering wives. She stood by me in difficult moments and was often the silver lining when bad weather seemed to prevail. To her, and my parents, this work is dedicated.

Introduction

The current trend in geography is to make the discipline more streamlined into distinct physical and human parts. As Unwin (1992) argues, this division resulted in geographers having remarkably little to say about some of the most pressing issues of the 20th century and if this trend of division continues, then holistic approaches to particular problems will become rarer as the discipline becomes more "human" and "physical" oriented. It should not come as a surprise that anthropologists seem to be more interested in hunters, gatherers, fishermen and farming communities than geographers are. Viewed critically, geography, can say a lot about present activities which have impacts on the environment and can predict consequences, offer alternatives and provide possible solutions to current issues, even where such issues are not perceived as 'environmentally harmful', especially in the eyes of those that practise them.

The bird hunting issue in the Maltese Islands is a case in point. Hunters are of the opinion that their activity does not harm the environment. Such opinion is probably the result of the notion that present day hunting does not alter the landscape as much as other activities. Yet, as this study shows, the impact of hunting on the environment can be substantial, especially where hunting pressure is considerable and where the density of hunters exceeds the carrying capacity of the land. The Maltese Islands presents such a scenario: hunting pressure is very high, especially during the outward migration of birds in autumn, when birds leave their breeding areas in Europe and fly to their wintering quarters in Africa, as well as during the return journey in spring, when birds leave their wintering grounds to return to their breeding grounds.

The number of hunters in Malta can be said to exceed the carrying capacity. Figures discussed in this study show that while on average, there are two hunters per square kilometre in the countries forming the northern Mediterranean region, and about 0.08 hunters per square kilometre in the North African countries forming the southern edge of the Mediterranean, in Malta there are over 50 hunters per square kilometre. The total number of hunters expressed as a percentage of population in Malta is twice that of the countries bordering the north of the Mediterranean while it is 12 times the number in North African countries. The only country in the Mediterranean with a higher number of hunters per 1,000 of population is Cyprus, where there are 80 hunters per 1,000 of population, whereas in Malta, there are 44 hunters per 1,000 of population. But in Cyprus, the density of hunters is 4.86 per square kilometre while in Malta there are over 50 hunters per square kilometre. The only country in the

Mediterranean with a density of hunters comparable to Malta is Lebanon, where the 400,000 hunters constitute 188 hunters per 1,000 of population and there is a density of 39 hunters per square kilometre. The total number of hunters in the countries forming the north of the Mediterranean just exceeds two per cent of the population, while only 0.35 per cent of the population on North African countries are hunters. But in Malta the number of hunters accounts for over four per cent of the population.

When using the word hunting in the Maltese context, one should bear in mind that it implies exclusively the shooting of migratory birds. Most hunting activity takes place on land, although a small number of shooters also hunt in close proximity to the coast from sea craft. Such kind of shooting is now restricted to the months between November and January, but it is not uncommon to come across hunters on sea craft particularly in the channels between Malta, Comino and Gozo during the months of February and March, when large numbers of ducks, waders and other birds fly through these narrow straits. Hunters on sea craft may also be encountered around the coast in September and early October when birds of prey migrate in considerable numbers. The absence of thermals over the sea forces these birds to fly low over the water and are more easily found to be within the range of the prowling guns.

Since most hunting activity takes place on land, and as hunting close to inhabited areas is forbidden, the area available for hunting is further restricted, pushing up the real density of hunters even more. Most hunting takes place in the countryside where agricultural land is more common, and in public and private uncultivated land. With the large population of the Maltese Islands and shortage of land space, it is inevitable that conflicting multiple land uses arise. Hunting creates one of these conflicting uses with picnickers and those who go to the countryside for reasons other then hunting. Some of these conflicting uses are discussed in this study. These can include anything from damage done by hunters and their dogs to produce in the fields to nuisance and inconvenience caused by shooting. In Malta, hunting activity is also responsible for changes in the landscape. Hunters build rooms and hides, which are visually intrusive on the landscape. They create paths and tracks so that they can drive to their hides. But one of the most evident impacts is the lack of birds in the Maltese countryside. Unless one is in a bird sanctuary, it is indeed difficult to see birds for any length of time, and even in the sanctuaries, birds very often carry the signs of the hunting pressure around the area — crippled or injured waders are a very common sight at the wetland reserve at Ghadira while a cursory glance through a pair of binoculars at swallows resting on wires is bound to produce a number of birds with ruffled or broken feathers — the result of near misses. The question of hunting in Malta has a number of facets, each of which is dwelt upon in the various chapters of this study, but before going into the issue, it is pertinent first to define the context of where all of this activity takes place.

The various facets of the geographical context have to be defined as they are all related to the hunting issue. As hunting in Malta is almost exclusively concerned with the shooting of migratory birds, the location of Malta in the centre of the Mediterranean is important as the islands are situated across one of the migration routes in the region. The geology and geomorphology of the islands play a key role as they provide basis for the various habitats and ecosystems which are sought by different species of birds at different times of the year. Valleys, plains and cliffs provide different habitats for different species. Geology, geomorphology and soils are also important because they are affected by hunting activity. Trapping sites are constructed in certain areas, dug out in others and simply used as they come in areas suitable for bird netting purposes. Different weather conditions funnel birds into particular habitats. The climate is also an important and determining factor as bird migration is deeply influenced by climate. Wind speed and direction not only influences the course of direction, but also determines the quantity and types of birds seen at different times of the year. Rain and inclement weather grounds migrants, especially when these follow a period of fine, settled weather. The human aspect of geography is important in view of the recent but continued large scale impact of hunting.

GEOGRAPHICAL SETTING

The Maltese archipelago is situated in the centre of the Mediterranean (Fig I.1) and is composed of Malta and Gozo, which are inhabited and a number of uninhabited islets and rocks. The islands occupy an area of about 316 square kilometres. Mainland Malta is the largest measuring 245.7 km^2, Gozo measuring 67 km^2 and Comino measures 2.8 km^2. St Paul's Islands measure 0.1 km^2, Filfla 0.02km^2 and the Fungus rock in Gozo 0.007 km^2. Malta lies some 96 kilometres from Sicily and about 290 kilometres from North Africa. The most detailed geographical account of the islands in English during this century is given by Bowen Jones *et al* (1961) while Ransley (1985) gives a more elementary description. Other useful information is found in a number of Technical Reports drawn up by various consultants in conjunction with the Structure Plan for the Maltese Islands, such as Anderson and Schembri (1989) and Schembri (1991). The first popular book about the geography of the Maltese islands in Maltese was published only recently (Schembri and Baldacchino 1992).

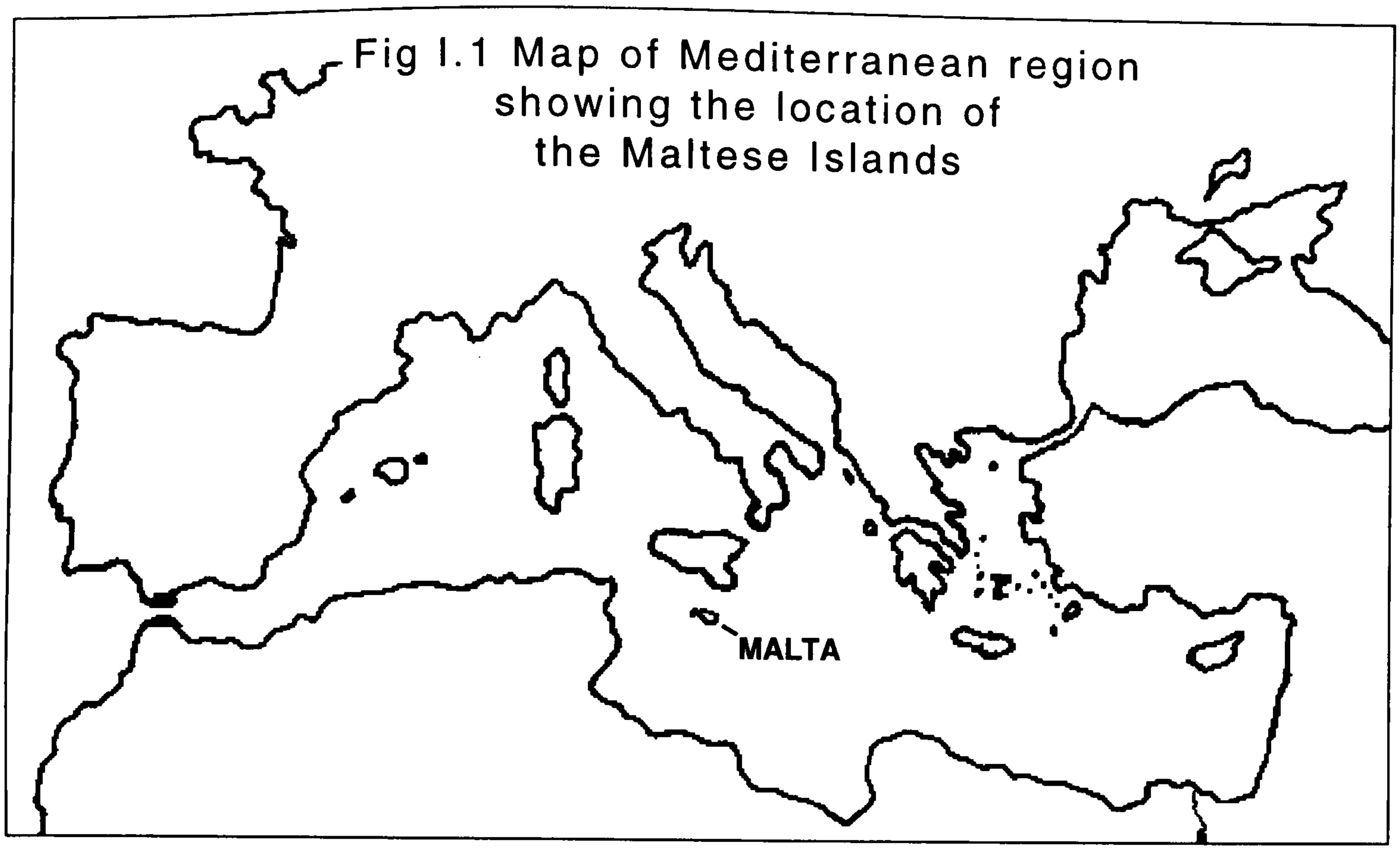


Fig I.1 Map of Mediterranean region showing the location of the Maltese Islands

Geology, Soils, Geomorphology

The geology of the islands has been studied with the more recent accounts being those of House *et al* (1961), Pedley *et al* (1976, 1978) and Zammit Maempel (1977). Geologically, the Maltese archipelago is composed almost entirely of marine sedimentary rocks, mainly limestone dating to the Oligo-Miocene age which are similar to the mid-Tertiary deposits found in Sicily's Ragusa region and in Libya's Sirte basin. There are also a few minor Quaternary deposits of terrestrial origin. The five main rock types in order of decreasing age are: Lower coralline limestone, Globigerina limestone, Blue clay, Greensand and Upper Coralline Limestone

There are three basic types of soils in the Maltese Islands which all have the same basic characteristics, being relatively young in age, very similar to the parent rocks from which they have been formed. Soil horizon development is lacking due to an ineffective climate and to great human modifications. Maltese soils have been studied by Lang (1960), and using the Kubiena classification system, Maltese soils are classified into:

i. Terra soils: relic soils formed during the Pleistocene and little affected by the current climatic regime.

ii. Xerorendzinas: immature soils which develop on weathered Globigerina Limestone and on colluvial and alluvial valley deposits have a high calcium content and are low in organic matter.

iii. Carbonate Raw Soils: immature with a very high calcium carbonate content and very low in organic matter.

In addition to these three types, there are a variety of soil complexes formed through human agency, either by mixing different types of soils, or mixing powdered rock with existing soil or by addition of rock debris to soil during reclamation of disused quarries and over garigue habitat. Domestic waste is currently being composted and is being mixed with soils in various areas, and this can, in the long term, alter the composition of soils.

The rocks forming the Maltese archipelago were formed under water and as tectonic movements brought the rocks above sea level, different forms of erosion of the different rock types gave the islands a characteristic topography.

Both Malta and Gozo are tilted seawards to the north-east and the lower coralline limestone forms steep cliffs on the west and south west coast of both Malta and Gozo. Inland of such cliffs, karst landscape predominates. There are no mountains but only small hills with the highest point in Malta at Dingli Cliffs being 253 m above sea level while the highest point in Gozo is 191 m above sea level. There are neither streams nor rivers but only small springs.

The islands are split by natural faults which may be grouped into two main families; the predominant ones being those trending NE-SW and those trending NW-SE. The island of Gozo is more hilly, with low lying plains separating one hill from the next. A number of ecologically important valleys are present in both Malta and Gozo. The mouths of some valleys lead to the coast and due to sea-level changes these give rise to headlands, creeks and bays.

CLIMATE

The most recent review of the Maltese climate is the one by Chetcuti *et al* (1992). The climate is typically Mediterranean with the characteristic biseasonality of hot, dry summers and mild wet winters. Rainfall is highly variable from year to year, with some years being extremely wet while others extremely dry. The average annual precipitation, based on data collected between 1854 and 1986, is 529 mm. Precipitation during the months between October and March accounts for 70 per cent of the total annual rainfall while the months between April to September are usually the dry months. Air temperatures are moderate with a mean monthly range of between 12.3°C and 26.2°C and in contrast to rainfall, the temperature is remarkably stable from year to year. The first three months of the year are the coldest ones with dry temperatures hardly above 15°C during the day while night temperatures hardly ever exceed 10°C. Although light frosts occur, Haslam *et al* (1977) state that they never last long enough to have an effect on the vegetation. Wind is a prevalent feature of the Maltese climate and combined with other climatic factors such as rain, can exert influence on bird migration. Only under eight per cent of the days are windless and the prevalent wind is the north-westerly which on average blows on 19 per cent of the days. The westerly wind is the next most common, with other winds blowing for roughly the same periods of time.

Since bird migration is at its peak between March and May and from September to October, it is worth taking a brief, closer look at the winds during these months. In March, calm days account for about five per cent of the days. The north west predominates, but when the easterlies blow, they bring with them hot, humid air. In April there is an increase in the prevalence of easterly and southerly winds. Wind in May shows characteristics which are similar to April, although the winds are calmer. In September there is a distinct change in wind pattern and the predominance of the north-easterly decreases and the occurrence of the damp south-easterly winds increases. In October there is another shift from south easterly to north easterly and easterly winds. Sultana and Gauci (1982) state that westerly winds bring heavy passages of birds of prey, especially when limited incursions of cool polar continental air from the eastern side of the anticyclone create a little instability over the islands and thermals abound. But during both spring and autumn migrations, large passages of birds are mainly conditioned by depressions which move north-east from over North Africa meeting anti-cyclones over south and south-eastern Europe. When this happens, the cool continental polar air comes in contact with warm, humid continental tropical air producing vast layers of middle cloud often accompanied by rain. Migrants become disoriented and make for the nearest land. In Malta, rapid transitions from favourable to unfavourable weather are unusual and consequently, large influxes of birds are scarce and irregular. But in a typical season there will be a number of small to moderate influxes interspersed with periods during which comparatively few migrants can be seen. Large influxes take place from time to time and occasionally, the Islands are flooded with migrants.

Ecosystems

The major land communities, classified on the basis of vegetation are:

i. Woodland communities: these include both natural, semi-natrual and afforestation areas. The natural woodland has practically disappeared and the only remnants are found in four localities in Malta, the oldest being a copse of holm oak which are believed to be between 500 to 900 years old. Semi-natural woodland is woodland originally planted by man but which is now self regenerating and has the shape of a natural woodland. The best example of such woodland is Buskett in Malta. Afforestation areas include all man made projects from orchards to afforestation areas such as Mizieb. Such areas are too young and human intervention too intense for them to regenerate naturally and to qualify as semi-natural woodland.

ii. Maquis: such communities develop naturally on the steep sides of valleys and at the foot of inland cliffs. Artificial maquis often develops around trees as a direct result of man's agency. Maquis communities also include the garigue habitat found on karstland, with its characteristic low growing perennial bushes.

iii. Steppe: steppic communities are dominated by grasses and thistles. These communities develop as a result of degenerating maquis and garigue communities, mainly due to grazing.

iv. Cliffs: provide shelter due to their relative inaccessibility. Some cliffs have a tier of boulder screes which forms important habitat for a number of endemic species of flora and fauna

v. Sand dunes: are among the rarest natural habitats left, and the remaining ones are fast being degraded mainly due to human activities.

vi. Streams and rock pools: the few existing permanent springs support a number of species of flora and fauna whose livelihood depends on a supply of water all year round. Such species include the fresh water crab, which is rare mainly due to its limited distribution. Other water habitats include pool habitats, which are very rare, and watercourse communities which are encountered only during the rainy season.

HUMAN IMPACT

There are two theories about the presence of the first humans in Malta. The most recent one states that humans came to Malta during the last phases of the ice age, at the end of the Pleistocene period some 15,000 to 18,000 years BP (Mifsud and Mifsud 1997). The traditional view states that the first inhabitants came to Malta from Sicily ca. 7,000 years BP. The earliest people were farmers who started chopping down trees both for wood and to clear land for agricultural purposes. They also introduced sheep and goats which prevented the regeneration of the indigenous forests and now only small pockets of indigenous woodland survive. Deer were common during the Pleistocene period but became extinct during the early Neolithic phase because of hunting and loss of habitat (Savona Ventura 1996).

Malta's population stands at over to 360,000 and is very high when compared to the land area available. The population density exceeds 1,100 inhabitants per square kilometre and the growth rate is estimated to be 0.9 per cent per annum. The resident population is augmented with over one million tourists annually. Figures for 1995 show that the tourist population was close to 33,000 per day (Cilia 1995). The human density has several implications on the resources available, especially land use and human influence is a major feature in the ecology of the islands. In spite of their size and the pressures on land, the different habitats support different communities of plants and animals. About 2,000 species of plants and 3,000 species of animals have been recorded to date.

The intense human pressure has resulted in the loss of habitats, often accompanied by the loss of several species. The most evident pressures on land use are due to building and road works, as well as the related industry of quarrying which produces both stone used for building as well as spalls used in the production of concrete. The increasing population accompanied by socio-cultural factors such as a shift from extended families to nuclear families and the increasing number of unmarried adults who seek to live on their own creates a demand for more accommodation. With the current trend of people wanting to own the property in which they live, (ca. 60 per cent of households were owner occupied in 1990), the expansion of the built up areas is likely to have more impact on the environment. A bigger population also puts more pressure on potable water. Malta now depends on desalination plants for most of the water, the production of which accounts for about 20 per cent of the generated electricity supply. The disposal of waste, both domestic, building and industrial waste is another problem which is not restricted to the official dumping sites and creates additional pressures on the land. Agriculture is another prime modifier of the environment especially when land is reclaimed for agricultural purposes. About 38 per cent of the islands are cultivated. Recreational activities also have an impact on the environment. On weekends and public holidays, the countryside is invaded by picnickers, especially during the afternoons and a variety of activities have impacts, most of which have not yet been studied. These include anything from erosion and trampling to collecting of specimens and systematic cutting of certain species of wild flowers. The rather recent introduction of off road driving is leading to a fast erosion of certain habitats especially clay slopes.

Certain activities have long been practised by humans, but their impacts on the environment were limited because the population was lower and the carrying capacities were not exceeded. Quarrying, for instance, has been carried out since Neolithic times. By the time of the Knights, quarrying was still taking place and stones were quarried from the vicinity of the locality which was being built. As the population started to grow, quarries started getting relatively bigger but as soon as the quarry was no longer used, soil was dumped into the shallow scrapes and the quarries were turned into fields. As the standard of living rose and the population continued to increase, the urban areas started to grow and the environment became subjected to greater pressures. New roads and the introduction of cars brought considerable impacts. The most rapid changes occurred during the post-war period. Cilia (1995) states that until the second World War, the country's meagre natural resources and the way of life of the population dictated a very low rate of building activity, but the war changed this somewhat idyllic living and created infrastructural needs which until then had not been previously experienced on the islands. As Table I.1, (citing the figures published in the latest census) shows, the most evident changes started taking place during the post war period.

Table I.1
Comparative indicators for population and land use

Year	1957	1967	1985	% change 1957-67	% change 1967-85	% change 1957-85
Population	292,019	288,238	319,736	-1.3	10.9	8.7
Households	68,007	70,114	96,725	3.1	38.0	29.7
Dwellings	66,322	78,806	113,785	18.8	44.4	41.7
Average household size	4.15	3.97	3.25	-4.3	-18.1	-27.7
Built up areas (Km2)	11.1	14.6	39.3	31.5	169.2	71.8
No. of households/Km2 in built up area	6,130	4,800	2,460	-21.7	-48.8	-149.2
% built up	4.5	5.9	16.0	31.1	171.2	71.9
Irrigated land (Km2)	7.0	6.0	4.0	-14.3	-33.3	-75.0
Dry agricultural land	131	106	88	-19.1	-17.0	-48.9
Total agricultural area (Km2)	138	112	92	-18.8	-17.9	-50.0
Persons/Km2	1,188	1,173	1,301	-1.3	10.9	8.7

Source: adapted from the brief for the consultancy tender Structure Plan for the Maltese Islands, 1988

Between 1957 and 1967, there was a drop of 1.3 per cent in the population while between 1967 and 1985, the population increased by almost 11 per cent. The number of households increased by almost 30 per cent between 1957 and 1985 while the number of dwellings increased by almost 42 per cent during the same period and the built up area saw a dramatic increase of 72 per cent. On the other hand, the agricultural area decreased by 50 per cent.

Exploitation of wildlife

Schembri (1991) states that local wildlife has been exploited since time immemorial but in most cases, the rate of replacement was much higher than the rate of exploitation. Some species are now overexploited and declining mainly due to indiscriminate methods of collection, commercial exploitation and collecting for private use. Indiscriminate methods of collection, even though many of them are illegal, are sometimes used. These include explosives by fishermen, the use of fine mesh nets in inshore waters and the use of vertical nets by hunters and trappers. Examples of over exploitation include the catching of marine turtles for their shell and meat, the collection of chameleons from the wild to be sold as pets as well as the collection of various shells for private collections and the picking of several species of wild flowers for sale, particularly narcissus, pheasant's eye, heath and star of Bethlehem. Schembri concludes that "with perhaps one exception, private collectors do not have a great impact on Maltese wildlife. The exception is the case of birds, which are shot for stuffed bird collections. Additionally, the bird life, both resident and migratory, is also under special pressure from sport hunting and from trapping" (Schembri 1991 p.73). Out of the 26 regular breeding birds, only five are not endangered and 21 are listed in the *Red data book for the Maltese Islands*. Of these ten are endangered, nine are vulnerable and two are very rare (Sultana 1989). The *Red Data Book* omits extinct species such as the jackdaw and occasional breeders such as turtle dove and short-eared owl.

Although a number of human and industrial activities have been well documented and studied, even if the powers that be ignored the studies and pleas for the conservation of natural and historic heritage, other activities received little scientific attention. Among these is the question of shooting and trapping of migratory birds. Past ornithological literature contains references to the widespread shooting of birds, but tended to focus on recording the species and the seasons in which they were recorded. This trend continued even in publications of the Malta Ornithological Society, which was striving to protect birdlife. The *New Guide to the birds of Malta* (Sultana and Gauci 1982) contains less than two pages about the hunting and trapping related problems out of the 16 introductory pages. Other references to hunting and trapping are found as a tailpiece to the description of certain species, but there is no systematic attempt to either quantify the problem nor to assess its impacts.

History of hunting in Malta

Although the first people who settled in the Maltese Islands 7,000 years BP were agriculturalists, it is very probable that they supplemented their diet with hunted meat. However, too few hunting weapons have been found — only a few sling-stones, which date back to about 3,500 BC and two spear-heads dated 3,000 BC have been found. These may well be the earliest hunting weapons, but they could also have been used for other purposes. The lack of finds of wild animal remains and hunting weapons makes one conclude that hunting was not an important feature of daily life in prehistoric Malta. There is almost no information at all about hunting and hunting methods before the 14th century, but in all probability, cross-bows and slings were used. In the Court documents of the 1480s, one finds an account where a witness testified that it was the habit of the accused to carry a crossbow for shooting rock pigeons in the west of Gozo (G. Wettinger pers. comm.).

In Medieval times, falconry was a popular pastime of the nobility on the continent. It is not known when or by whom falconry was first introduced into the Maltese Islands. In 1239 Emperor Frederick II annexed Malta to Sicily and a year later he sent a team of eighteen falconers with horses and men to report on the number of falcons on the Islands, how they were kept and how many were caught from the wild that season (Huillard Breholles and De Albertes de Luynes 1963). Specific mention of the use of a falcon for hunting is found in an account dated 1499 (G. Wettinger pers. comm.). During those times, kings and nobility used to keep falcons and the Maltese nobility had petitioned the king to be allowed to keep a number of royal falcons, which falcons were considered to be property of the King, "as in Malta there was nothing to do except to go hawking' (Mifsud 1917) and to prevent them from becoming 'idle' " (Abela 1647).

The Knights of St John, who were granted the Maltese Islands in fief, were obliged to pay the yearly nominal rent of a falcon or a hawk on All Saints Day. However it later became customary to send a number of falcons to the kings of France, Spain, Portugal and Naples. The custom of sending falcons to kings existed before the Knights of St John were given Malta. Written documents dated 1446 indicate that falcons were already being sent to the King of France. In the mid-1500s, falcons were trapped both in Malta and in Lampedusa, where the Grandmaster used to send falcon trappers during the migration period (Fenech 1992). Both Abela (1647) and Ciantar (1772) mention the use of *paragni*, a set up of net and a domesticated falcon used as a lure, with which other falcons were caught. This they termed as "an ingenious invention". In his description of Gozo, Agius De Soldanis (1746) gives a list of 13 places where 20 falcon traps were set and states that in some years, up to 50 falcons were trapped.

During the period between the sixteenth and eighteenth century, hunting was a popular pastime for some of the Knights and both deer and gazelles were imported to be released at Buskett Gardens, where the Grand Master's hunting lodge was situated (Kraus 1891). In the mid 1700s, two knights who were both avid hunters, reared a quantity of rabbits and partridges in Gozo for shooting. However, these were practically annihilated by shooters, as had happened to a previous stock some thirty years before (Agius De Soldanis 1746). Ciantar (1772) wrote about the hunting of several species of birds and mentions migratory birds like thrushes, doves and birds of prey as well as *beccafichi* (i.e. garden warblers, whitethroats and blackcaps).

It is difficult to trace the exact date when the shooting of birds was introduced in the Maltese Islands. Through Count Erbach's account we know for sure that light firearms for hunting were already in use in the early 1600s. In June 1582, an edict, which specifically mentions the use of firearms for hunting purposes, was issued. Regulations were then issued in the form of *Bandi*, which were edicts decreed by the Grandmaster. Various edicts made it compulsory for shooters to obtain a licence from the Grand Falconer, however, a licence as we know it today, which has to be obtained from the police, was introduced on 10 March 1854 (Fenech 1992). Although Ciantar (1772) mentions the use of the arquebus for shooting, we read nothing about how popular this was. Shooting started becoming more popular when firearms become more readily available. Wright (1864a) spoke of 'crowds of native sportsmen who sally out during the shooting seasons', and later wrote that 'nearly everybody has a gun' (Wright 1870). All kinds of birds were shot: Cooke (1892) wrote about the 'unjustifiable crusade which is carried on, in season and out of season, against birds of all kinds'. Twenty-five years later, Despott wrote about the 'great slaughter wrought by sportsmen both licenced and unlicensed ones' and estimated the number of shooters at a thousand, 'perhaps twice as many if we count the unlicensed ones, and to these may also be added another army of netters' (Despott 1917).

Besides the fact that local shooters neither had the time nor the means, those who had a gun shot only for the pot. Old time shooters will readily confirm that they shot at and ate almost any bird. Wright noted that "all kinds of birds from an eagle to a nightingale, are sent to the market as "game" (Wright 1870 p.493). Adams too noted that "the poulterers' shelves are stocked with all manner of birds, great and small" (Adams 1870 p.90). Indeed, anything from a swallow (Wright 1864b p.291) to a stork (Despott 1917 p.89) was shot and exposed for sale on the market. The habit of collecting stuffed bird specimens was introduced in Malta in the middle of the nineteenth century and although by 1917 there was "a pretty good number" of stuffed bird collections (Despott 1917), the number of collections grew rapidly after the 1960s. Seddall wrote that Malta fails to convey any impression of its being in any sense an ornithological paradise. "Yet, with all these detracting influences, a day occurs now and then on which neither could the sportsman desire better sport, nor the collector a greater variety in his bag. Such a day, I remember occurred on 17th April, 1854, when, having taken my station on the shores of Fort Manoel Island, near the bridge, I was fully occupied the whole day in observing and securing specimens of the flocks of sandpipers, herons, and other waders, which descended every few minutes...The oyster catcher, the glossy ibis, stilt plover, besides many other treasures, found their way into my bag" (Sedall 1870 p.353).

Most hunters were as indiscriminate as they are today, the only difference being that although they shot birds primarily for sport, most birds were eaten and not stuffed. Some shooters used to sell game which they shot in order to buy more gunpowder and lead shot. In the 1920's, a turtle dove was sold for one penny while a nightjar would fetch half a penny. At that time, a farmed rabbit fetched one shilling three pence, that is, fifteen times the price of a turtle dove and thirty times that of a nightjar (G. Borg pers. comm.). When mentioning scops owls, Wright states that "it is sold in great numbers, with nightjars and other birds for the table and is considered good eating by the natives" (Wright 1864a p.50). This was still common practice in Despott's times, who noted that "thousands of nightjars were shot" and many ended "at the market together with large quantities of scops owls" (Despott 1917 p.467). Mentioning birds such as the hoopoe, Despott states that "great numbers are taken... and many are brought over into the market, where they are sold as an article of food" (Despott 1917 p.469).

Indiscriminate means of capture which ensured large catches of birds with little effort, such as vertical nets and nets which were placed on and around trees and did not need to be manned, although illegal, were widely used both for finch trapping as well as for other birds like nightingales, which were consumed (Despott 1916a, 1932). The licence for bird trappers was introduced in 1932. In 1936, the number of licensed trappers stood at 700. Laws were openly defied and birds which were then protected such as warblers, nightingales, starlings and golden orioles, were often sold on the market sometimes with their feathers plucked to make their identification more difficult (Despott 1916, 1917). Payn wrote that from his personal observation, laws were "observed mainly in the breach" (Payn 1938 p.103).

Needless to say, there were those few who could afford to shoot and who shot more for sport than because they needed the meat. General Sir Frederick Ponsonby, who governed Malta between 1827-36, had a shooting resort at Marfa and guests of the Government or distinguished people, were invited to accompany the Governor on shooting expeditions. In one of his letters from Malta, Disraeli wrote that he had accompanied the Governor on a shooting expedition (Mifsud Bonnici 1936). Baden Powell, who was in Malta in the early 1900s, used to shoot woodcock at the Governor's country palace at Buskett — of which he was in charge. Powell wrote, "I arranged with the head gardener that when any woodcock were seen, he was to hoist a yellow flag on the tower. This was visible to me from my office eight miles away in Valletta. When I saw the flag flying, I would jump into my cart and drive out to Verdala, and the gardener in the meantime would have called together a few beaters, and we would proceed to get the cock" (*Daily Malta Chronicle* 1932).

The fact that, earlier last century, there were people who could afford to shoot for pleasure, could be borne out by the fact that a gun club existed. The Malta Gun Club already existed in 1827 (*Daily Malta Chronicle* 1887). Shooting competitions using live and clay pigeons, as well as turtle doves, were frequently organised. Turtle doves were considered to be better sport as they were more agile. Pigeon shoots were held in winter while turtle dove shooting competitions were held in May and June — during and immediately after the spring migration. Trapped turtle doves were usually sold for shooting matches.

Turtle doves and quail are the main game birds which occur and which can be shot in spring while dottorel, thrushes, stone curlews, woodcock, snipe and golden plover are the main game species which are hunted from October until April or May. Lapwings, which appear late in winter, are also shot. Practically all shooters shoot thrushes. They appear in large numbers and are considered good targets. Woodcock are eagerly sought by many shooters and some almost specialise in their shooting in winter. Duck shooting is very popular and shooting from sea-craft is gaining popularity. Formerly, duck were shot only at the salt-pans, at places along the coast or in inland valleys and on water reservoirs in winter.

As has been stated earlier and as one shall read later, it is only a negligible number of shooters who shoot only at game birds. In 1974, when the situation was not as bad as it is now, with shooters numbering less than half of what they do today, a keen hunter wrote: "in the simple days the shooter took comfort from the enjoyment of the countryside, the occasional thrill of the chase, the healthy sun and air, as well as the friendly chat with the farmers. The few and far between examples of such sportsmen today constitute the laughing-stock of the multitude armed to the teeth with tons of expensive ammunition, chrome plated guns and all the paraphernalia which the trade offers for sale" (Gauci 1974b).

Although the nature conservation movement, particularly the Malta Ornithological Society, campaigned about the problem mostly from its inception in 1962 until the late 1980s, there have been no proper studies about the various impacts of hunting and trapping before 1992, when Fenech (1992) used shooters' bag records and taxidermists' log books to estimate the number of birds killed. These estimates showed that the number of birds killed were "much higher than previously thought" (Sultana 1991). Previous estimates, such as those given by Woldhek (1980) and Sultana and Gauci (1982), were based on occasional visits to taxidermists which were mainly aimed at recording rare species; while the estimates given by Magnin (1986) were based on a survey with several Maltese bird watchers. Apart from looking at environmental aspects of hunting, this thesis also looks at the various social and economic aspects of hunting and trapping. For a detailed account of hunting practices, it is suggested that reference should be made to the study by Fenech (1992). This thesis compliments the said study by looking at how bird shooting and trapping are manipulated in the socio-political situation and goes on to examine their influence on all spheres of life: from family to village life in Malta, to Malta in the eyes of foreigners and confirms the validity of the figures of birds killed given through replication of data which became available after 1992.

AIMS AND STRUCTURE OF THE STUDY

The aim of this study is to make a complete assessment of the situation through the gathering and analysis of data and to illustrate the magnitude of the problem in terms of social, environmental and economic terms. It is through the interpretation of different sets of data that one can extrapolate to show the extent of the hunting problem. Hunters and politicians today speak of the "hunting tradition". But how traditional is hunting in Malta? The issue is discussed in this thesis. Again, both decision takers and hunters often argue that there are no proper studies which show how many birds are shot and whether this has an impact of the overall population of the species concerned. They also argue that the amount of birds killed in the Maltese Islands is minuscule compared to the number of migrants which cross the Mediterranean. This thesis shows that the number of birds taken is neither small nor negligible and that the birds taken locally come from specific European populations. Gathering data about a subject which is a political and social hot potato is always difficult. The people involved — hunters and trappers — are suspicious and reluctant to give even elementary information while people who are not involved, cannot help. Observation in the field offers some scope for collecting data but has recently become a very risky venture. Birdwatchers taking field notes at bird sanctuaries such as Buskett gardens have been threatened, shot at, bullied, beaten by hunters and had their equipment smashed or stolen on more than one occasion. Outside of sanctuaries, the situation is as bad. People with binoculars or photographic equipment have been assaulted on more than one occasion. Hunters do not like the idea of being watched and it is impossible to watch from a distance: with the density of hunters existing in Malta, other hunters are likely to spot the researcher. As hunters perceive non-hunters as "against them", having a pair of binoculars and a note pad in the countryside are very likely to land one in trouble during the hunting seasons. This renders the collection and collation of data into a more painstakingly long and difficult exercise.

This is the first academic study which demonstrates the multi-disciplinary nature of the hunting issue in Malta, which ranges from human behaviour and attitudes to impact on the physical environment and on the economy, which in turn may effect the lifestyle of the whole nation. Although hunting is a pastime, it has a potential effect on the mainstay of the economy, the tourist industry. Many tourists dislike hunting; while being on one of the Mediterranean migration routes, the tourist industry can be boosted by special interest tourism which can be lured to come for bird watching holidays. This thesis is the first study to look at the politics of hunting and the demography of hunters and trappers. With parties winning (and losing) elections by a number of votes which hardly ever exceeds half the number of licensed hunters and trappers, it is almost incredible that no one has bothered to look at the effect of hunting on local politics. It is also the first study to analyse local newspapers from 1962 to 1996 as well as opinion polls to find out more about public attitudes to hunting. Demographic studies in Malta are hard to come by, except for the official Demographic review published annually by the government. Thus it comes as no surprise that demographic studies of special interest groups, such as hunters and trappers, did not exist prior to the one found in this thesis. Demographic studies are essential as they provide key information for decision makers and may well dictate the line of action to be taken when intervening on a particular subject such as drawing up hunting legislation.

This thesis is divided into eight chapters, the first of which gives anthropological background and introduces the reader to the question of hunting through the theoretical discussion of the evolutionary theories and hunting. The "hunting hypothesis", that is the debate whether the human race owes its origins to hunting, is discussed and the flaws in this theory are disseminated. It is argued that in evolutionary and other studies, the importance of hunting has been over stressed while the importance of gathering has been toned down, even though evidence shows that gathering accounts for a much larger percentage of the diet in so called "hunter gatherer communities" still existing today.

The symbolic elements of hunting, the ritual like organisation of certain hunts and the significance of hunting from the Middle Ages up to current times are also discussed. This chapter also traces the early anti-hunting sentiments in literature and art. In literature, such sentiments date back to the sixteenth century while in art the change of heart started becoming visible in the seventeenth century. A discussion about how various philosophies, religions and science influenced both hunting and the nature conservation movements also takes place. The role of "penitent butchers", who were essentially hunters who stopped hunting and became leading conservationists and the emergent conservation movement in the mid-1800s is also discussed. While scientists were seeking the protection of birds and animals for the protection of agriculture, a tender view of animals started haunting people's imagination and authors were writing children's stories where animals had reason, feelings and talked. It is argued that such a tender-minded romantic view of animals had a big effect on the popular imagination and had a wider effect than the literature of earlier periods which had limited readership and expressed the feelings of only a few. This tender view of animals reached the peak with Walt Disney's film Bambi.

The philosophical defence of hunting by Ortega and his disciple Shepard is evaluated and criticised and the eco-feminists' view on hunting is discussed briefly. Only a brief overview is given of the eco-feminists' view as it is considered to be very extreme. The question of whether sport hunting is ethical is discussed through the dissemination of the ideas of leading philosophers in the field. The question of whether hunting is a moral issue is also addressed. The influences that the Judaeo-Christian religion had on hunting are looked into through a discussion of the historic relationship of the Church with hunting. This includes aspects ranging from hagiography to legends involving saints who are claimed to have been hunters. Finally, a discussion of the nostalgic idea that hunting is a link with the past and that in the past, hunters had a code of conduct and behaviour which today's sport hunters no longer use, is also discussed and dismissed through examples from different cultures.

While the first chapter gives the theoretical background to the hunting issue, the second chapter places Malta in the European and Mediterranean contexts. Hunting is one of man's oldest occupations which, through time has changed in both its significance as well as the way it is practised. Various international conventions have been drawn to safeguard migratory birds and their habitats while the European Union has a number of directives which oblige member states to enact and enforce measures to protect birds more effectively. In the second chapter, Malta's legislation and hunting situation is compared with the countries forming the Mediterranean region. Since a number of Mediterranean countries are also EU member states and as Malta is seeking closer ties with the EU, the Maltese situation is also compared to the European one. In this chapter, it is shown how Malta has the highest density of hunters in the Mediterranean region and that Maltese hunting legislation is the weakest in the region as it allows the hunting and trapping of birds in spring, when birds are on their way to the breeding grounds. As information about hunting in the Mediterranean countries is very scant, a questionnaire was drafted and sent to various organisations and individuals involved in the hunting issue in all the countries of the region.

The social aspects of hunting and trapping are looked into in the third chapter. This chapter was necessary as by looking at various social aspects, changing trends in the ways society thinks and behaves may be seen by analysing various aspects ranging from language to art. As a number of places bear birds' names, the chapter first discusses the relationship between birds and humans by plotting and looking at such place names as well as bird names in early Maltese dictionaries. The importance of hunting to hunters is discussed and the influence of shooters and trappers on the Maltese way of life analysed. As various groups often use different registers when speaking to peers or people outside their "group", the language of hunters is discussed and conclusions are drawn about how hunters view their prey when talking to other hunters and when talking to non-hunters. It has been found that while hunters use hyperbolic verbs to emphasise their skill when speaking to peers, they speak of 'catching' and 'harvesting', rather than of 'killing' to non-hunters. The macho element in Maltese hunters is also dwelt upon and parallels from the Maltese scenario are drawn to show that the association of hunting and warfare made about Imperialist hunters can also be met with in Malta.

The popularity of hunting is assessed through a discussion of the implications of any mention of hunting in folklore, proverbs, myths, local traditions, literature and art. The conclusions drawn are that bird shooting and trapping were practised by a small percentage of the population, that hunters and trappers caught birds primarily for food and that sport hunting in Malta is not really a tradition spanning hundreds of years but a very recent development. This is also supported by data discussed in the sixth chapter which shows a direct linkage between the increase in the number of hunting licences and the increase in gross domestic product. A discussion on representations of hunting and trapping in literature and art also supports the idea that hunters were not an important facet of Maltese life as hunters and trappers are conspicuous by their absence from Maltese literature and art while their presence in the arts after the 1960's is a negative one in the sense that the artist/writer depicts them as either insensitive or cruel or bemoans the fate of the birds at the hands of hunters and trappers. Analysis is also made of hunting-related cartoons in the press from 1869 to 1996. The presence of such cartoons sheds light on the popular perception of hunting and it is worth noting that there are no pro-hunting cartoons in the local press, not even in the shooters' monthly paper which sometimes carries cartoons. An interesting conclusion is that there is absolutely no representation of trapping in Maltese art and very few scant references in literature. This supports the view that hunting and trapping were practised by a small minority of the population and that hunting activities are not really a tradition but a recent development.

The fourth chapter discusses aspects of hunter and trapper demography. No previous study has ever looked at the demographic structure and distribution of hunters, let alone attempted to look at trends. In the fourth chapter, the geographical distribution of shooters and trappers in the Maltese Islands is analysed and correlations are made between the number of hunting licences per village, the village population and the land available for hunting in proximity of the village. The trends in the number of hunting and trapping licences paid are analysed and interpreted in the light of age structures of shooters in a number of villages. The age structures offer a sound basis for discussing the future trends of hunting and trapping. Statistics cited show that the growth in the hunting licences between 1980 and 1995, when licence statistics are available for every village in Malta and Gozo and during which time there was a significant growth in the number of hunting licences, is not related to the increase in male population. While villages in Malta saw an average increase of 4.4 per cent in the male population, the number of hunters increased by over 27 per cent, while in Gozo, the number of hunting licences increased by 92 per cent while the number of males increased by 7.6 per cent. This too strengthens the argument that hunting is not a 'traditional' pastime as the increase in the number of hunters can be shown to be directly linked to economic growth, and not to population increase. Case studies of the age structures in particular villages hailing from various regions in Malta and Gozo are discussed with a view to establishing trends in these villages. This data shows that although there has been an influx in the number of hunters, the age structure shows that hunters are an ageing group and unless a sustained influx is maintained at the lower age brackets, the number of hunters will decrease considerably over the next generation.

Chapter five looks at the relationships between shooters and the local institutions. The most influential institutions in Malta are the political parties and the Church, and it would be a flaw if the relationship between hunters and trappers and these institutions is not discussed, moreso in view of election results and the pressure exerted by the hunting issue. As it is important for one to grasp how the Maltese parliamentary democracy functions, this chapter briefly discusses the electoral process in Malta. Anthropologists say that the Maltese system fuels the system of patronage. Being a small country, Members of Parliament try to keep regular contact with people hailing from their electoral districts. This leads to pressure on many MPs, who are sought by many for any kind of 'favour'. Hunters are often asked by their association to lobby their local MPs.

To find out more about how MPs feel about the hunting issue, a survey of all MPs and candidates who contested the general elections of 1992 was conducted. The reason for this choice was dual: firstly, the survey was conducted shortly after the election, during which the hunting issue was important but parties did not seem to have very divergent policies. Both parties appeared to have 'pro-hunting' candidates as opposed to the October 1996 elections when the Nationalist Party with its policy of wanting to join the European Union, was perceived by hunters as being anti-hunting because spring shooting and trapping would have to be curtailed. The second reason was that since the Malta Labour Party had an agreement with hunters and the Nationalist Party's policy on the issue was clear, it was pointless to see how individual candidates thought about the issue as when it comes to the crunch and vote in parliament, they would have to toe the party line. The results of the survey give a clear view that contrary to Labour and Socialist parties on the continent, the Maltese Labour Party has a more pro-hunting stance that the Nationalist Party. Labour's pro-hunting stance manifested itself in the party's policy on hunting which was issued after the government announced new hunting regulations in 1993.

Since the Maltese hunters' associations are effectively gun lobbies, comparisons are made between the Maltese hunters' lobby and the National

Rifle Association in the USA. The reason for comparing these two lobbies in distant lands is that both lobbies are the most influential gun lobbies in their respective countries, and while the NRA chooses to be invisible and very diplomatic in its operations, the local hunters' associations operate in a completely different manner and may well offer a subject suitable of study in their own right.

The relationship between the Catholic Church in Malta and shooters and trappers is looked into as hunters often try to rope in the Church in defence of their pastime. A legend about a rabbit hunter who dreamt he had an apparition is sometimes used by hunters to justify hunting. The same can be said for the quoting of certain excerpts of the bible. Maltese hunters also claim that St Julian is their patron saint and on the day of his feast, hunters stand on the roof of the church and fire blank shots in honour of 'their' patron saint. It is argued that the legend of both St Hubert, who is internationally acclaimed at the patron saint of hunters, as well as that of St Julian, have anti-hunting messages as both saints, who were said to be avid hunters, were asked to change their way of life through apparitions they had while hunting. Since it is not only hunters who have an opinion about hunting and the non-hunting sector of the public is becoming increasingly aware about the issue, public attitudes to shooting and trapping are discussed through an analysis of hunting related reports in daily and weekly newspapers since 1962, when the conservation movement was launched in Malta and the interpretation of a number of opinion polls. The polls show how the various socio economic groups and the various age groups look at hunting practices.

The sixth chapter looks at the economic considerations of hunting and trapping. Hunters often argue that their pastime provides a source of revenue to the public coffers and generates an amount of business in the Maltese economy. These arguments are analysed and criticised. The argument that hunting is a source of revenue is rebutted through the formulation of a balance sheet weighing the government revenue due to hunting and trapping and the cost of this revenue. Also analysed in this chapter is the customs duty levied on hunting related material and equipment and an evaluation based over a ten year period is made. The scenario in the fields of customs duty has changed due to the introduction of Value Added Tax in 1995, and revenue through customs duties has decreased drastically as a flat rate of 15 per cent has replaced duties which previously ranged between 55 and 80 per cent. The effects of hunting on the local industry is also looked at. Both the economic effects of the local hunting related industry and the effects of hunting on the labour force in other industries is analysed. The adverse effects resulting from the hunting activities are also discussed. With tourism being one of the most important contributors to the Maltese economy, the effects of hunting on the tourist industry are looked at.

In the chapter dealing with environmental impacts, use is made of bird ringing recoveries to trace the origin of Malta bound migrants and the destination of birds marked in Malta. This data gives an indication of which bird populations visit Malta and hence, which populations are being subjected to hunting pressure. This data is used to assess the impact of hunting on bird populations. Apart from the killing and catching of birds, the activities of shooting and trapping have several other impacts on the environment. As stated earlier, the word 'hunting' in the Maltese Islands implies almost exclusively the shooting of migratory birds. There are no resident game bird species and birds are not reared for shooting purposes. There are no mammals which can be hunted, except for wild rabbit; but as discussed in this thesis, very few hunters specialise in rabbit hunting and the number of hunters who pay a licence to hunt rabbit constitute a very small percentage of the hunting licence holders. While hunters shoot most species of birds with the exception of small warblers and finches; trappers trap mostly finches, turtle doves and quails. Other species such as plover, starling, thrush, larks, pipits and wagtails are trapped by a small number of trappers while children often trap robins. As both hunting and trapping are most evident during the migrations in spring and autumn, the impacts on the environment are most visible during these times, but the effects may last much longer.

The most visible impact is the lack of bird life and the small number of breeding birds. Species such as the jackdaw, the barn owl, peregrine falcon, kestrel, turtle dove and quail do not breed due to hunting pressure. The jackdaw became extinct as a breeding bird in the late 1950s while the last pair of barn owls was shot in the early 1980s. The impact of hunting on migratory birds can vary depending on both the types of birds being shot as well as the time of the year in which they are killed. It used to be commonly held that hunting in autumn, when the birds are returning to Africa from their breeding grounds, is less damaging and thus more acceptable from the ecological view point then hunting in spring, when birds are on their way to the breeding grounds. It was commonly held that hunting in autumn does not affect bird populations negatively as the population of birds would have swelled with birds fletched during the pervious summer and that the mortality rate of first year birds is higher than the mortality rate of adults. Yet, as a study on the hunting of thrushes discussed in this thesis shows, over 30 per cent of the thrushes shot in the Maltese Islands in autumn and winter are adults. Since the origin of Malta bound thrushes is not known, hence the populations of such birds is not known, further studies have to be made to ascertain whether this form of hunting can be termed "sustainable". While one can argue that the shooting of thousands of thrushes may not have an impact on the populations concerned, the shooting of even individual birds of certain species may account for a large proportion of the population. The shooting of individual Eleonora's falcon, which breeds in small colonies in the Mediterranean can be detrimental to the colonies from where the birds come while the systematic shooting of birds of prey and herons is likely to have a long term negative effect on the populations concerned. The use of data from two part-time taxidermists and bag records of ten individual hunters is used to give an indication of the quantities of birds shot. Although the sample size is too small to be of any scientific significance, the replication of data given by two separate sets of information illustrates that the results are reliable enough to give more than a clear indication of what goes on.

Apart from the impact on bird life, there are various impacts on land use by both shooters and trappers. The latter need larger areas for their hides and the trapping site on which the nets are laid. As discussed in this thesis, on average trapping sites occupy an area of 100 square metres. Trappers often construct their trapping sites in ecologically sensitive areas and use herbicides to clear their trapping sites, destroying indigenous flora in the process. Trappers also create tracks and unofficial roads and widen existing footpaths in order to be able to drive as close as possible to the trapping site. Less visible is the problem of spent lead shot which ends up in the countryside as a result of shooting. As few hunters collect the spent cartridges, the spent shells are one of the commonest forms of litter encountered in the countryside. Due to the small size of the Islands, conflicting multiple land uses often arise and hunters, trappers and picnickers often compete for the same land space, so much so that in 1993, new legislation made it illegal to hunt in the afternoons on Sundays and public holidays.

The concluding chapter, apart from summarising the work carried out, looks at the future and discusses alternatives forms of recreation and makes suggestions for improvement of existing legislation without causing social upheaval. The conclusion also contains reflections of what more could have been done in this thesis and provides ideas for further studies.

CHAPTER 1 HISTORICAL AND ANTHROPOLOGICAL BACKGROUND

INTRODUCTION

Before studying socio-economic and environmental aspects of hunting, one must look at what hunting meant to humankind and its meanings in today's world. The question of whether the human species owes its existence to hunting is considered in some detail through discussion on the 'hunting hypothesis'. The major works illustrating the flaws in this hypothesis are discussed. The term 'hunter-gatherer' is widely used in many disciplines from archaeology to anthropology. Modes of subsistence of existing 'hunter gatherer' societies are looked at to illustrate that such communities are, in effect, 'gatherer-hunters' and that the importance of hunting has been over stressed. It is argued that the acceptance of the 'hunting hypothesis' and that hunting is an instinct stems for the desire to justify certain acts by labelling them as 'instincts', hence beyond moral retribution.

The association between hunting and warfare is discussed and is placed in the context of imperialist practices, where imperial hunters in the colonies not only hunted for sport but used hunting as an overt or implied sign of their supremacy and looked at natives, their country and their wildlife as things to be subjugated and controlled. The challenging of the idea that 'man' is supreme and the gradual erosion of the idea of 'the great chain of being' are examined in the light of emergent anti-hunting sentiments. The tend is explored both in literature and later in art. Ambivalent attitudes to hunting, which soon evolved into clear anti-hunting sentiments can be traced back to sixteenth century. The transition in art is also discussed, where a move can be seen from glorifying the hunter's conquest over beast to paintings evoking compassion for dead or dying animals. The emergence of the conservation movement is outlined, and the role of converted hunters, or 'penitent butchers', as they were labelled at the time, is discussed. This chapter also tries to discuss the motivation behind the killing of animals and distinction is made between hunting for food and killing for sport. The two principal philosophical defences of hunting are discussed, as are examples from other moral, ethical and philosophical works disputing the justification of hunting. The eco-feminist position on hunting is also discussed, albeit only briefly, as it is considered to be a very extremist view on the subject.

It is concluded that the concept of noble savage is an incorrect one as there is no evidence to support the theory that primitive or indeed existing hunters, strive to protect animals or nature. Evidence from pre-history points to mass killing of herds of animals while closer to our times, extinction due to excessive hunting pressure and modification of habitat has occurred on several occasions. The argument that hunters help protect nature is disputed as land managed for hunting is primarily managed for hunting purposes and that other species benefit is incidental and immaterial to such management. Indeed, when other species benefit, 'man' tries to suppress them, as in the case of birds of prey and predators on grouse moors.

'MAN THE HUNTER' EVOLUTIONARY THEORIES

The debate about human evolution is still raging today. Discussion usually centres around whether 'ape-like man' hunted to become 'man-like apes' or whether human kind evolved because of other influences. Those who advocate the 'Man the hunter' theory find comfort in a number of hypotheses. During the Man the Hunter symposium held at the University of Chicago in 1966, it was held that: "ten thousand years ago the entire population of the earth subsisted by hunting and gathering, as their ancestors had done since the dawn of culture. By the time of Christ, eight thousand years later, tillers and herders had replaced them over at least half of the earth. At the time of the discovery of the New World, only perhaps 15 per cent of the earth's surface was still occupied by hunters and gatherers, and this area has continued to decline at a progressive rate until the present day, when only a few isolated pockets survive" (Murdock 1968 p.13). Other speakers stressed "the genus Homo has existed for some 600,000 years, and agriculture has been important only during the last few thousand years" (Washburn and Lancaster 1968 p.293). At the conference, the theme was recurrent: "cultural man has been on earth for some 2,000,000 years; for over 99 per cent of this period he has lived as a hunter-gatherer...Of the estimated 80,000,000,000 men who have ever lived out a life span on earth, over 90 per cent have lived as hunters and gatherers, about six per cent have lived by agriculture and the remaining few per cent have lived in industrial societies. To date, the hunting way of life has been the most successful and persistent adaptation man has ever achieved" (Lee and DeVore 1968 p.3).

Such statements, have been both qualified and challenged since the time they were first uttered and later put in print. Ingold, for instance, states: "These words conceal with a flourish of confident rhetoric, a yawning uncertainty about what a life of hunting and gathering usually entails. It is not merely that during all periods of history, men and women must have done other things with their time besides hunting and gathering, nor that we representatives of the residual one per cent sometimes hunt and gather too. For even as categories denoting types of activity, the terms 'hunting' and 'gathering' are fraught with ambiguity...Hunting and gathering do not merely denote mechanical executions, triggered by environmental stimuli, of a received behavioural programme (whether learnt or innate), but represent alternating phases in that continuous task which, for the hunter-gatherers, is no less than life itself" (Ingold 1986 p.79).

The hunting hypothesis

One of the most important theories affecting the debate was the 'Hunting hypothesis'. Essentially, the 'hunting hypothesis' of human origins is the story of how some apes became human when they took up weapons and began to kill. It was fielded in 1920 by Read, a professor of psychology at the University College of London. Read argued that the most distinctive features of humankind — bipedalism, big brains, co-operative social organisation, sexual division of labour and so on — evolved when our most ancient, ape-like ancestors abandoned their arboreal, vegetarian existence for a way of life as terrestrial predators (Read 1920). Few seem to have paid much attention to Read's book, and contemporary reviews were generally dismissive and hostile. Barely three decades later, however, the tables had completely turned. Darwinism made a triumphant comeback as the anatomist Raymond Dart, who never once cited Read's work, came up with the hypothesis that the critical step to humanity was taken when the ancestral man-ape left the trees in pursuit of red meat on the open savannahs (Ingold 1995).

The idea that human behaviour might be influenced by millions of years of evolutionary history is a direct legacy of Darwin's theory of natural selection that if a species changes its physical structure over many generations in response to environmental conditions, then the behaviour with which each species adapts to these conditions must change as well (Darwin 1871). As soon as scientists acknowledged that contemporary human behaviour had been moulded by evolution, than it became a matter of great importance to reconstruct prehistory. When in 1924 Dart discovered the manlike *Australopithecus Africanus* at Taung in South Africa, he did not limit himself to a physical description of the fossil but suggested that the human line itself must have originated in country much like the open veld where the Taung fossil had been found. He reasoned that the abundance of food in the forest had offered no challenge to the apes, and thus they remained apes, but the open veld required "higher manifestations of intellect" (Dart 1925 p.199).

In a number of subsequent papers, Dart continued to include hypothetical reconstruction of austalopitechine behaviour in his attempts to convince the scientific world that these creatures were hominid rather than pongid (Dart 1926, 1953, 1957, 1959). Australopithecus was depicted as a meat-eater who depended on hunting for food and the crucial behaviour between this early hominid and his non-human primate contemporaries was that he pursued, killed, and ate other animals. Many of Dart's theories were never accepted, but there was a wide interest in this field. Cartmill notes that "an imposing array of distinguished scholars and eminent anthropologists agreed: hunting was what had turned apes or man-apes into people, and man's need to become an ever more effective hunter had governed the whole course of human evolution until the invention of agriculture" (Cartmill 1993 p.9). This is, what Ardrey (1976), drawing on Dart, called the "hunting hypothesis". Cartmill states that the hunting hypothesis sounded "cool-headed, scientific and objective. But from its very first appearance in Dart's papers of the early 1950's, the hunting hypothesis was coloured with a wash of the darkest disapprobation" (Cartmill p.9-10).

SUPPORT FOR THE HUNTING HYPOTHESIS

Support for the "hunting hypothesis" was sought in three main areas: archaeological record, in studies of the behaviour of the living non-human primates and in the subsistence patterns of those human groups which do not practice agriculture. Archaeological record provided most of the evidence used by the advocates of the hunting hypothesis. Dart relied on the masses of broken bone found in the breccias of Makapansgat and other South African sites for evidence that australopithecines were carnivorous, and hence human. As Dart saw it, the australopithecines "were human in their cave life, in their love of flesh, in hunting wild game to secure meat...these Procrustean proto-human folk tore the battered bodies of their quarries apart limb from limb and slaked their thirst with blood...Man's predecessors differed from living apes in being confirmed killers: carnivorous creatures, that seized living quarries by violence, dismembered them limb from limb, slaking their ravenous thirst with red hot blood of victims and greedily devouring livid writhing flesh" (Dart 1953 p.204, 209).

Harding and Teleki (1981) argue that after establishing the australopithecines' carnivorous habits to his own satisfaction, Dart proceeded, in a circular argument repeated by later writers, to establish that these creatures were hominids, by comparing their purported behaviour with his own rather dismal view of human history: "The blood-bespattered, slaughter-gutted archives of human history from the earliest Egyptian and Sumerian records to the most recent atrocities of the Second World War accord with early universal cannibalism, with animal and human sacrificial practices or their substitutes in formalised religions and with the world-wide scalping, head-hunting, body mutilating and necrophiliac practices of mankind in proclaiming this common bloodlust differentiator, this predaceous habit, this mark of Cain that separates man dietetically from his anthropoidal relatives and allies him rather with the deadliest of the Carnivora" (Dart 1953 p.208). Harding and Teleki (1981) remark that in spite of Dart's sanguinary description of the events he believed formed the South African bone accumulations, it was never fully established whether the australopithecines were predators or prey. Analysis by Brain (1970, 1981) indicates that early hominids were highly susceptible to predation by carnivores and that they were victims in at least one South African site.

Dart had misinterpreted many of the fossil finds, but it was only in the late 1970's that his misinterpretations started coming to light. Cartmill wrote: "his collection of bone and horn 'tools' from the Transvaal was the first part of the package to be tossed out" (Cartmill p.15). The tools looked exactly like fragments of bone left by leopards and hyenas. Round holes in the fossil skulls, which Dart and Ardrey thought that man-apes had made with bone daggers, turned out to match perfectly the fangs of a leopard. Dents, which Dart had thought were left by bone clubs, were reinterpreted as the impressions of rocks pressed against the buried fossils. By the mid-1970's there was no reason left for believing that Australopithecus in South Africa had used animal bones and horns as tools, as Dart had suggested. But as Harding and Teleki note, the australopithecine model was then generalised to include all early hominids, irrespective of their taxonomic status, so the view that early humans depended on hunting for their survival, and that hunting in turn gave rise to many other unique forms of human behaviour, has since become thoroughly entrenched in theories of human evolution (Harding and Teleki 1981).

There was little disagreement that hominids had been involved in creating some of the patches of bone debris uncovered at Olduvai Gorge, for these were associated with clearly utilised stone tools (Leakey 1971). Most scientists assumed that australopithecines had made those tools themselves and used them to butcher animals. Later research showed that bone finds in caves where fossil Homo is found were a mixed bag, which seem to have been dragged into the caves by a scavenger.

THE SCAVENING HYPOTHESES

Examination of faunal remains at archaeological sites led to the 'scavenger hypothesis' which began to challenge the 'hunting hypothesis' (Binford 1981, 1984, Blumenschine 1986, Shipman 1986). The possibility that early hominids may have scavenged meat or other already dead substances is not new. This idea had already been suggested by several earlier investigators (Bartholomew and Birdsell 1953, Clark 1960, Schaller and Lowther 1969). However, the view of scavenging as an alternative exclusive of hunting was a new idea emergent in the late 1980s.

The issue of hunting versus scavenging is believed to be important because hunting is often portrayed as the critical factor underlying the hunting-gathering adaptation, home basis, food sharing, and other distinctive human traits. If early hominids were hunters, then these other traits can also be projected back into the past to characterise our ancestors. Potts (1988) argues that the elevation of hunting to such a central role is based on the line of thinking that hunting provides abundant food resources. The killing of large game offers a superabundance with potential for sharing with members of the social group. The transport of this food to a home base provided the foundation for sharing and other forms of social co-operation. However, this portrayal of hunting has been contrasted with hominid scavenging, which involved picking up the leftovers from carnivore kills — scraps of food, disarticulated parts of carcasses — a practice that could not support food sharing much less home base activity (Binford 1981, Shipman 1983).

At Olduvai, hominids were collectors of animal bones, and the bones were processed for some reason. Potts notes that advocates of the hunting hypothesis have pointed at the Olduvai evidence for support; but those arguments have been based on simplistic assumption that animal bones in association with stone tools (=weapons) imply hunting by hominids. A number of bones recovered from Olduvai show stone tool marks overlying carnivore tooth marks, which indicate scavenging. Potts argues that early hominids could have also scavenged whole carcasses which died of natural causes, without the need to steal them from other predators. Furthermore, the unselective mixture of bones from animals of different sizes found also point to scavenging. Predators are usually selective in the kind of prey, taking mostly young and weak animals, but bones from tiny klipspringers to 2,000 pound eland suggest that Homo was a scavenger who obtained his meat by taking it away from four-legged predators. If early Homo was a scavenger, it seems more unlikely that Australopithecus could have been much of a meat eater at all. Lovejoy concluded that there is no evidence that early hominids hunted and that meat was probably not a significant part of Australopithecine diet (Lovejoy 1981).

Blumenschine and Cavallo state that scavenging may have been more common than hunting two million years ago. Flaked stone tool making, the practice of butchering large animals and the evolution of big-brained Homo all make their first known appearance in the physical record at this time. "The earliest hominids probably scavenged and took small prey with their hands, as chimpanzees and baboons do. Only their next step was unique; they began to use tools to butcher large carcasses that non-human primates cannot exploit. The difficulty of this lead belies the charge that scavenging offers no challenge that might select for human qualities" (Blumenschine and Cavallo 1992 p.91).

Although the part played by hominids in the death of the ancient animals found at Olduvai has never been clear, the discovery of tools associated with bone provided one of the most persuasive arguments in favour of the hunting hypothesis. "Circumstantial though it was, this evidence was especially appealing because an association had long existed in the minds of scientists between the emergence of the hominids, their use of stone tools as weapons, and an evolutionary reduction in the size of canine teeth in the hominid line" (Harding and Teleki p.3). This association bore all the authority of Darwin, who stated that the use of arms and hands was partly the cause and partly the result of man's erect position and the loss of large canine teeth was due to decreased use of their jaws and an increased use of stones, clubs and weapons. From Darwin's time onward, tools came to be thought of as weapons, even though no analysis of these mute stones had provided any clue to their original use. From the use of tools as weapons, it was a short step to a hypothesis in which tools made possible a hunting way of life.

Harding and Teleki suggest that the paleoanthropological preoccupation with hunting may have stemmed in part from the fact that the first prehistoric excavations were carried out in Europe, in deposits laid down in glacial times when the severe climate probably did not make human populations especially dependent on animals for food. The abundant evidence for hominid exploitation of animals in periglacial environments of the Upper Paleolithic in Europe may have coloured the way in which many subsequently discovered sites were interpreted, even if these sites were located in Africa at much earlier time scales. As Harding and Teleki wrote, "archaeology provided the major evidential bulwarks for the hunting hypothesis, supplying concrete data in the form of stone tools and broken animal bones that can be tabulated, analysed, and evaluated, whether or not the reasons for their original association have been established" (Harding and Teleki p.3-4).

Non-human primate behaviour, the second source of evidence for the hunting hypothesis, has been useful only in the negative sense. If the hypothesis states that primates can be distinguished from non-human ones by the fact that humans hunt animals and eat meat, then the corollary is that non-human primates subsist entirely on vegetable matter. This assumption, treated as if it were fact, was used to support the hunting hypothesis. Morris (1967 p.31) declared "we are vegetarians turned carnivores" while other primates are "typical forest-dwelling fruit-pickers". Schaller and Lowther (1969 p.308) asserted that "all monkeys and apes are basically vegetarians, feeding on leaves, fruits, roots and bark". Yet, research has shown that most non-human primates are omnivorous (Harding 1981). Apes, such as chimpanzees, prey on other animals and steal kills from other predators. As Boesh (1989) argues, if chimpanzees are predators, then predation was not a new departure for our own ape-like ancestors, and predation cannot thus explain why our ancestors evolved into australopitechines but chimpanzees did not. Most band societies, especially the equatorial ones, only eat meat as a supplement to plant foods and rarely rely on hunting as the main source of food (Hayden 1981); and that the biological behavioural, and psychological affinities of hominids lie with primates rather than social carnivores (Teleki 1975).

The third major source of evidence advanced in support of the hunting hypothesis is a homology drawn with contemporary band societies that subsist entirely by gathering and hunting for their food. In this line of reasoning, the hunting aspect of resource exploitation has been heavily emphasised while gathering, which provides some two thirds of the food consumed, has received little attention and many writers omitted gathering completely when referring to these people as "hunters". The last aspect of the hunting hypothesis is a theory eloquently expressed by Schaller and Lowther (1969), which rests on the assumption that hunting and meat-eating have been central to the human adaptation since Plio-Pleistocene times, that is, for about two and a half million years. Observing that individual groups of the same primate species tend to behave differently in different habitats, Schaller and Lowther conclude that phylogenetically close animals such as primates make poor behavioural models for early humans. They suggest as more likely candidates the group-hunting social carnivores, which are being described as being subject to the same environmental pressures that confronted early hominids. In a related development, the long-dormant theory that scavenging may have provided a transitional adaptation between a hypothesised vegetarian ancestor and hominids dependent on meat was revived. Harding and Teleki note that "all these approaches are founded on the tacit assumption that the obtaining and eating of meat was the decisive adaptation in early hominid evolution: thus they lack any explanatory power if this assumption cannot be demonstrated" (Harding and Teleki p.6-7).

Upper Palaeolithic hunting and gathering peoples inhabited many environments that have no equivalent in the historic or modern world. "The assumption that modern hunting and gathering peoples retain the institutions and behaviour patterns of the Palaeolithic period is unwarranted. Food-collecting sociocultural systems have surely developed and changed during the millennia just as have more complex social formations" (Mueller-Willie and Dickson 1991 p.28). It is evident that the hunting hypothesis has become firmly established in the popular and professional literature "despite a number of flaws in its logical underpinning and criticisms of its validity" (Harding and Teleki p.7). These authors maintain that the evidence assembled, in spite of its diverse conclusions, convinced them "more firmly than ever that hunting was not the decisive factor differentiating the earliest hominids from their immediate predecessors" (Harding and Teleki p.8).

Sauer doubted whether there were specialised hunting cultures in the Old World or anywhere else much before the relatively late date of the Solutrean folk, who penetrated only briefly into Europe. They were followed by the Magdalenian hunters, who seem to have come from the Arctic lands. Straus argues that many of the supposed hall-marks of the upper Palaeolithic, such as mass hunting of herd species and elaborate compound weapons such as darts and bow and arrow, did not develop in south-west Europe until the second half of the Upper Palaeolithic, about 20,000 years BP (Straus 1991). Sauer was of the opinion that there were variously differentiating cultures, depending on both collecting and hunting, some groups specialising more in plant raw materials, others showing more interest and proficiency of hunting.

The direction of specialisation depended on the environment in which they lived. "The hunting peoples of historical time were strikingly limited environmentally in their distributions, in Arctic lands and on the great continental plains; and their predecessors occupied in the main the same areas. There would seem therefore to be overemphasis on hunting in the interpretations of the habits of early man" (Leighly 1974 p.161). Straus states that many Palaeolithic sites show evidence of sedentary occupants and long use and therefore may not be seen as campsites of people concerned mainly with hunting. Most Palaeolithic stone implements, usually described in terms of hunting use, have equal or greater utility for other purposes. "The so-called hand axes would have been suicidally dangerous against any large animal and no more useful than a cobble against a small one; on the other hand, they could serve for cutting and splitting wood, for cutting bark, and in digging" (Leighly 1974 p.162).

Sauer states that with the fading of the continental ice, the pace of change was greatly accelerated on the Euro-Asiatic continent. "It was no longer a matter of slow differentiation of collecting and hunting folk, such as had occupied the preceding 90 per cent of total human time. The final periods of the Ice Age were marked by a major revolution in the coming of Great Hunters, who dominated especially the wide continental plains. After them, but not derived from them, arose the Neolithic planters. The antithesis between mobile hunters and sessile planters is extreme. I know of no evidence that the former ever turned farmers, except late, and then reluctantly, under pressure. The attention of the hunters was diverted from plants; the origins of planting must be sought in cultures with strongly sedentary qualities and major concern with the exploitation of plants" (Leighly 1974 p.164).

Hole (1989) states it has been customary to conceive domestication as a 'revolutionary' event whose essential elements were in place throughout Southwest Asia as early as the 10th millennium BC. Now there are two different points of view which both argue for a long period of development and plant domestication, but Hole considers livestock to have been brought under control through entirely separate processes, "perhaps without a lengthy period of development, and that it was the conjunction of these two economic adaptations that resulted in the Neolithic revolution" (Hole 1989 p.97).

Sauer's argument that there were no specialist hunters until late in the human evolutionary process and that agriculture rose from sedentary groups, independently of hunters implies that the process of domestication of plants and animals was part of the cultural process. Slocum argues that "by itself, hunting fails to explain any part of human evolution and fails to explain itself...To explain human nature as evolving from the desire of males to hunt and kill is to negate most of anthropology. Our species survived and adapted through the invention of culture, of which hunting was simply a part" (Slocum 1982 p.483). Uerpmann (1989) states that there is evidence to suggest that various stages of the transition can be classified from Palaeolithic hunters and gatherers to Neolithic farmers and herders, at least for the circum-Mediterranean areas and the adjacent parts of Europe and western Asia. Some argue that domestication occurred with cereal production during the Neolithic period (Bokonyi 1989).

Others suggest that at the end of the Palaeolithic, a population growth in certain regions and the depletion of natural food resources, some Palaeolithic pet owners were obliged to convert their pets into livestock (Serpell 1989).

Clutton-Brock concludes that pressures induced by human social systems resulted in a sequence of cultural changes that have followed the same pattern throughout Eurasia. "This began with broad-spectrum hunting towards the end of the Pleistocene, which was replaced by dependence on a few species of large mammals as resources diminished and the human population increased. Change of climate, over-hunting, or the immigration of agriculturalists then resulted in settlement and the cultivation of plants" (Clutton-Brock 1989 p.115).

GATHERER-HUNTERS

Throughout studies on the human evolution, 'hunter' took precedence over 'gatherer', because it was assumed that hunting was more important to people's livelihood than gathering. Isaac and Crader conclude that "meat-eating as a part of early hominid diet, should be regarded as one useful hypothesis, not an established fact...Ethnographic, primatological, and ecological considerations lead us to surmise that foods such as tubers, roots, fruits, nuts, eggs, insects and other small animals were quantitatively the main items of early hominid diets" (Isaac and Crader 1981 p.94). As Mann noted, "hypothesis that propose more specialised dietary adaptations for earliest hominids (small object feeders, vegetarians, carnivorous predators) do not take into account the behavioural flexibility of either the living gatherer/hunters or the non-human primates, particularly the chimpanzee. The australopitechine evidence, including paleo-environmental reconstructions, stone tools and the archaeological evidence for meat eating, suggests that the early hominids were not limited to any particular environment but exploited several diverse habitats through a seasonal or yearly round" (Mann 1981 p.34). Furthermore, among the many "hunter-gatherer" communities existing in the world today, from the North Pole to the Kalahari desert, at least two thirds of the diet consists of plants. It is now generally accepted that plant and marine resources are far more important than are game animals in the diets of so called "hunter-gatherers", and this is demonstrated in Table 1.1 (Lee 1968, Burch and Ellana 1994). Lee remarks that although hunting is rarely the primary source of food, it does make a remarkably stable contribution to the diet. Fishing appears dispensable in the tropics, and a number of northern peoples manage to do without gathered foods, but, with a single exception, all societies at all latitudes derive at least 20 per cent of their diet from the hunting of mammals. Latitude appears to make little difference in the amount of hunting people do. Except for the highest latitudes, where hunting contributes over half of the diet in many cases, hunted food almost everywhere else constitutes 20 to 45 per cent of the diet. "The mean, median and mode for hunting all converge on a figure of 35 per cent for hunter-gatherers at all latitudes. This percentage corresponds closely to the 37 per cent noted in the diet of the !Kung bushmen of the Dobe area" (Lee 1968 p.42-3).

Table 1.1
Primary source of subsistance by latitude

Degrees from the Equator	Gathering	Hunting	Fishing	Total
60+	—	6	2	8
50—59	—	1	9	10
49—49	4	3	5	12
30—39	9	—	—	9
20—29	7	—	1	8
10—19	5	—	1	6
0—9	4	1	—	5
World total	29	11	18	58

Source: adapted from Lee 1968 p.43

In spite of the number of examples which support the fact that gathering constitutes more to the food supply than hunting, the term 'hunter-gatherer' is still used to describe foraging societies. The !Kung bushmen of Botswana, who inhabit the semi-arid northwest region of the Kalahari desert, are amongst the most studied hunter-gatherers existing today. They are entirely dependent on gathering and hunting for their subsistence. The relatively small contribution of meat to certain bushmen of the Kalahari groups' diets, in contrast to vegetable foods, has been documented by a number of researchers. According to Lee (1979), gathering provides about two-thirds of the diet. Marshall (1976) estimates a similar figure for the !Kung of Nyae Nyae. The ratio of plants to meat consumed by the =/= Kade of the central Kalahari is 20:1 (Tanaka 1980). Silberbauer noted that meat is important more as an exchange commodity. People get excited at the sight of game meat, but "the stimulus to excitement is the presence of meat, not the eating of it" (Silberbauer 1981b p.494).

It has been noted that "hunters'" contributions to the diet are irregular and periods as long as two months may pass without meat (Silberbauer 1981a). Men contribute mainly by hunting, although they also collect plants and small animals. Although men's and women's work input is roughly equivalent in terms of man-day effort, the women provide two to three times as much food by weight as the men (Lee 1968). On the Columbia-Fraser plateau of north-western North America, three quarters of the people's food energy needs were acquired from food plants gathered by women (Burch and Ellanna 1984). Andrews found out that three species of fish accounted for 71 per cent of the total weight of all wild foods harvested per capita in the area of the Akulmiut of Western Alaska (Andrews 1994). Writing about the prehistoric Tsembaga people of Papua New Guinea, Allen notes that although game is relatively plentiful, it contributes by weight only one per cent of the daily food intake (Allen 1977). Studies of the Maring speaking Kundagai of Tsuwenkai in the central highlands of Papua New Guinea show that both hunting and gathering contribute minimally to the diet. Swidden cultivation of root crops, especially the sweet potato, leafy greens and other crops, and pig-raising are the mainstays of the Maring subsistence (Healey 1990).

Writing about the semi-sedentary Akwe-Shavante of Brazil, Maybury-Lewis noted that "without hunting Shavante culture would have been very different, but without gathering, the Shavante would not exist" (Maybury-Lewis 1974 p.36). A group of Hadzabe, a nomadic hunter-gatherer community in Taiwan, which have resisted changing from a foraging community to a sedentary agricultural way of life, have recently settled and are supplementing hunting and gathering with agriculture (Kaare 1994). The Tasaday, a group of people living in South East Asia, which came to the notice of the world only in 1966, are food collectors more than hunters. They depend on wild yams, fruits, palm and bamboo shoots and wild bananas as staple foods and obtain their protein from crabs, fish, frogs and tadpoles from the mountain streams. Deer, wild pig and monkey are common in the forest but are not regularly hunted (Glover 1977). Cartmill states this undercuts Darwin's notion that our ancestors had to turn carnivore or starve when they moved out of the forest: "there is no reason to think that Australopithecus had to be more carnivorous than a chimpanzee to survive on the fringes of the Kalahari" (Cartmill p.18).

THE COMFORTING HYPOTHESIS

The hunting hypothesis has been interpreted as being "comforting to the reader who is seeking some sort of absolution for his sins...if it is in our nature to be what we are, if we are the lineal descendants of our 'murderous' ancestors, we can hardly be blamed or blame ourselves for ...crime, rape, murder, arson, and war" (Montagu 1978 p.100). Cartmill stresses that "the importance of hunting lies in its symbolism, not its economics. For a few skilled hunters in rural areas, 'harvesting' wild animals with a gun may still be an efficient way of putting meat on the table, but the average U.S. deer hunter, who expends about five man-hours of labour and $20 in cash to bring home a single pound of venison, would be better off harvesting some roast beef in a restaurant" (Cartmill 1993 p.28). This argument holds true to most hunters anywhere in western Europe, and indeed, throughout most of the first and second worlds. On many of the managed shoots in the United Kingdom and elsewhere, hunters pay considerable sums of money to shoot grouse, pheasant, duck, deer, wild boar and other birds and animals, but cannot take any of it home, or can only take a 'sample', the rest is sold by the management of the shoot.

Some authors argue that the urge to kill is an instinct and "instincts do not qualify for moral valuation" (Causey 1989 p.338). Some shooters justify hunting by saying it is "natural", that it is an "instinct". Azzopardi states that "one of the morphological adaptations of hunters are forward looking eyes as present in sharks, cats and hawks, while the hunted have eyes on the side of their heads so as to have a wider range of vision as a protection against surprise attack" (Azzopardi 1992 p.4). Human beings have forward looking eyes, hence we are hunters, he argues. Such a statement shows a profound ignorance of elementary biology. Firstly, sharks and hawks do not have forward looking eyes. Jumping spiders and wolf spiders, which are known to be hunters *par excellence*, have eyes all around the head. They in turn are hunted by both birds and certain wasps. So much for the argument that the direction in which the eyes face, distinguishes the hunters from the hunted. Human beings have forward looking eyes for ancestral reasons — we are primates. Primates originally lived in trees and needed stereoscopic vision to be able to judge distances carefully, as they moved from branch to branch. Primates are omnivorous, not primarily carnivorous, as real hunters are. Cats and other raptorial predators such as wolves and weasels have many adaptations for hunting. They have speed for running down prey, sharp claws for catching and incisive canines for tearing flesh. These adaptations, as well as other physiological and morphological ones, are present in natural predators but are absent in man. As Churchill states, hominids are ill adapted to the predatory niche. Human beings lack claws, large fangs or great speed. It is weapons which expand the captuarable prey size range and projectile weapons make possible killing at a distance (Churchill 1993).

Primitive peoples were gatherer-hunters, their 'instinct' was to obtain food, not to hunt and one cannot speak of a hunting 'instinct' with reference to man. If hunting was really an instinct, then it would not be a small minority of males who hunt, but all males as well as females. Debating the 'hunting instinct' notion, Fiddes quotes Kephart as writing: "since only males hunt, and the psychology of the species was set by hunting, we are forced to conclude that females are scarcely human, that is, do not have built-in the basic psychology of the species: to kill and hunt and ultimately to kill others of the same species. The argument implies built-in aggression in human males, as well as the assumed passivity of human females and their exclusion from the mainstream of human development" (Fiddes 1991 p.61).

The main theorist of human socio-biology, Edward O. Wilson, concedes the importance of cultural developments, but argues that as these have lasted for only ten thousand years they could not have had much genetic human effect (Wilson 1975, 1979). Bekoff and Jamieson argue that evolutionary and grandiose claims about the origins of behaviour in humans "almost invariably smack of facile adaptionism or vulgar Darwinizing, in which data are jammed into readily available evolutionary framework despite a lack of adequate evidence" (Bekoff and Jamieson 1991 p.377). Shipman (1983) argues that if there is an apparent trend in human evolution, it is towards behavioural flexibility and adaptability and away from geneic specialization and calanalization. There are major differences between modern hunter-gatherers and early hominids. The brain size is now bigger and with more capabilities, all modern hunter-gatherers have fire with which they can cook and keep predators away, the environment today is different, they live in marginal areas where there are no or fewer predators. The tools, weapons and implements modern hunter-gatherers have are more sophisticated. Shipman states that "if analogies of chimps and bushmen are thrown into the wind, the evidence at hand suggests a more opportunistic and less systematic use of carcasses than is seen in modern human behaviour" (Shipman p.43).

WHAT IS HUNTING?

Cartmill defines hunting as a "deliberate, direct, violent killing of unrestrained wild animals" (Cartmill p.29). He argues that hunting is not just a matter of killing an animal; it must be a specific sort of animal killed in a specific way and for a particular reason. The quarry must be wild, not friendly or submissive to humans. Hence game birds, animals or domestic livestock on private land still count as wild, as long as they flee at the sight of humans. The methods and motives of the hunter are also important in defining hunting: "Hunting has to involve violence. You can hunt elephants with poisoned arrows, but putting out poisoned hay for them is not hunting. The fatal violence must be inflicted directly, not mediated by a snare or trap. The hunter's assault on the quarry must be premeditated, which usually entails a period of chasing, stalking or lying in ambush. Running over wild animals on the highway does not count as hunting, even if you do it on purpose. Finally, the killing must be undertaken at the hunter's initiative. Animal killing that does not meet all these criteria is not hunting, but something else: fishing, trapping, slaughter, vandalism, religious sacrifice, self-defence, pest control, or a road kill" (Cartmill p.30). In this context, wild animals are those that shun or attack human beings. The hunt is thus a confrontation between humanness and wildness, between culture and nature. Because it involves confrontational, premeditated, and violent killing, it represents something like a waged war by humanity against the wilderness.

Hunting as war

An organised hunt, with its weapons and strategies, is like a military campaign, and it is not surprising that many people have found parallels between hunting and warfare. Thomas, for instance, concluded that "hunting simulated warfare" (Thomas 1983 p.183). A cursory glance at shooting catalogues today is bound to reaffirm such theory. Apart from the use of military camouflage clothes, catalogues and adverts often sport the words "commando-style" clothing and some hunting guns resemble military weapons more than conventional shotguns. As described in Chapter 3 of this thesis, there are numerous examples of how some Maltese hunters view hunting as a sort of war game. The names printed on cartridges often have overt military connections and some bear names of guided missiles.

Throughout history, hunting has been widely regarded as a sort of war game, the first step in a young man's combat training. The analogy recurs throughout the history of Western literature starting with the ancient Greeks. In ancient Greek myth and literature, the hunt was usually regarded as a just war, a triumph of the humane and rational over the bestial and irrational. Warriors in the *Iliad* are likened to hounds, hunters, predators and prey. Xenophon thought that hunting was the best training for war because it cultivates manly virtues and teaches military skills (Marchant 1968). Cartmill suggests that hunting was not a traditional Roman pastime and Romans of the early republic regarded hunting as a form of chore. Sportive hunting came to Rome as a rich man's affection. The middle ages saw hunting restricted to the aristocratic upper classes but throughout the Christian era, hunting has been viewed in an increasingly unfavourable light. In the later middle ages, when the hunt became an exclusive privilege of the aristocracy, "the wild forest came to be seen as a lovely place, and the hunter's quarry took on an air of tragedy, nobility and mystery" (Cartmill p.xi-xii).

Literature shakes the foundations of 'man's' dominion

Doubts about the legitimacy of 'man's' dominion began to surface in the sixteenth century, and with them came the first condemnations of hunting of Erasmus (Hudson 1941) and Thomas More (Bradner and Lynch 1953). Erasmus ridiculed the elaborate rituals of the medieval hunt, dismissed hunting as mere butchery and hunters as empty-headed, snobbish aristocrats. Erasmus thought hunting was simply a foolish waste of time, but More saw it as a sign of man's depraved nature.

There are various examples of ambivalence between the noble hunt and the quarry's demise even in Middle English Literature, where hunting is almost always a secondary activity. The hunting scenes in *Sir Gawain and the Green Knight* are the most widely known and the most fully developed in Middle English literature. The poet's representation of the three hunts is fairly accurate (Rooney 1993). There are occasional flashes of strikingly detailed knowledge and instances of precisely used vocabulary when compared to hunting treatises of the time such as *The Tretyse off huntyng* (Rooney 1987), *The Boke of Huntyng* (Tilander 1964), *De arte bersandi* (Tilander 1956), *The Master of the game* (Baillie-Gronham 1904). Rooney states "although it would be inappropriate to find much sentimentality in the Gawain-poet's treatment of animals, the scene of slaughter is depicted with sensitivity to the fear and suffering of the deer. It is probably unlikely that the repulsion a modern reader feels at this point would have been fully shared by a medieval audience, but we may envisage an ambivalent or dual-aspected response, which both recognises the savagery of the carnage and appreciates and imagines the 'joy' of the hunters" (Rooney 1993 p.168-9). She states that on the whole, the representation of hunting in Middle English literature emphasises the 'noble sport' concept rather than the pursuit of animals for food or fur, depending on what the author wanted to convey. So in a secular context, the hunter might be given a special status, making him a hero with particular chivalric or martial standing. In a religious context, hunting is often condemned. But in both contexts, the hunt must occupy a suitable position in the hunter's order of priorities. The hunter-hero must leave his hunting if an adventure, battle or love affair emerges as a new interest, priests and other men of God should not hunt at all, and any hunter must be careful to avoid hunting at the expense of his spiritual well-being. "Context becomes an essential yardstick by which the hunt is measured: essentially, hunting is better than idleness, but is generally to be abandoned if some other, more important, activity demands the attention of the hunter" (Rooney 1993 p.194).

Ambivalence towards hunting could also be seen in plays: the scene with the wounded stag (II.i.29-66) in Shakespeare's *As you like it* shows that in the sixteenth century the rejection of hunting is characteristic of "an intellectual world which does not share the values of aristocratic courtly society" (Rothstein p.347). And equally ambivalent is the lengthy stag chase in Drayton's *Poly-*

Olbion (1612), where the hounds are cruel and ravenous, the hunters bloody, and the stag's tears – traditional at his death — fall on "ruthlesse earth" (Song 13, ll. 93-161). The hunt is a symbol of bloody oppression in Shakespeare: in *Julius Caesar*, Mark Anthony eulogises Caesar as a "brave hart" struck down by "butchers". When hunting is not a metaphor for murder, in Shakespeare it is often a metaphor for rape. Throughout *The Rape of Lucrece* or in *Titus Andronicus*, the rape and mutilation of Timu's daughter is treated as a methaphorical deer hunt. Again, hunting related activities are metaphors for fear in Shakespear's *Henry VI* "The bird that hath been limed in a bush with trembling wings misdoubted every bush" (Henry VI Pt 3 Act V Sc. 6).

But the association of hunting with such distasteful notions were not yet common in the sixteenth century. Although such aversion was still uncommon, it did show up in the graphic arts however. Albercht Durer's 1504 drawing of a stag dying with a crossbow bolt in its skull testifies the appearance of a new set of attitudes. In 1642, a new theme surfaced in British literature — landscape or topographical poetry. John Denham's *Cooper's Hill* was the first poem to be labelled as such (Banks 1969). Rothstein notes that the widely read and admired *Cooper's Hill* "codified the stag hunt in a topos, first in 1642 and then, with much more psychological detail in the second version of 1655". Both versions show the stag alerted to flight, who vainly tries to escape on land and by water, then defends himself with resolution, and finally dies. "In 1655 Denham expands on the emotions of a prey who passes through fear, disappointment, shame, weariness, and desperate courage. The thirty-eight lines of 1642 (ll 263-300) swell to eighty-two in 1655 (ll 241-332) as the reader is forced to share vicariously the pains of the anthropomorphized stag" (Rothstein p.334).

Rothstein notes that "at least from the time of Cooper's hill in 1642 to the later eighteenth century, poems tend to be at best ambivalent about hunting, and often inconsistent in their posture toward it" (Rothstein 1984 p.330). Thus some poets, such as Fitzgerald, "dwells on the pathos, not the robust exhilaration of the hunt. His gun-carrying speaker spies a 'frightened snipe' who: 'implores the passive air, In vain! for death e'en persecutes him there'" (Rothstein p.331). But ambivalence soon started to fade: Pope's Windsor-forest (1712) juxtaposes historical, legendary, and mythical scenes with contemporary sketches of nature (Quintero 1992). Pope compares birds to human victims of oppression. Various other writers criticised the hunt. As Fisher noted, "eighteenth-century poetry began firmly in a pastoralist tradition with classical staging. Alexander Pope's world, or at least the world he loved, was the newly developed world of formal garden and park: the new world of the game gun, in which whirring pheasants mounting exulting on triumphant wings were shot in their joy, where doves, woodcocks and lapwings in leaden death aroused the poet's pity. Notwithstanding Sommerville, the poet of the new field sports, most of the pastoralists brought us much pity and tenderness, and begun to build the concept of bird freedom into an edifice: for free-wild animals enthused, by their freedom and wilderness then as now, not only poets but scientists" (Fisher 1966 p.186).

To cite but a few examples, writing on skylarks, Pope noted: "Oft as the mounting larks their notes prepare, they fall, and leave their little lives in air" (Davies 1966 p.41), while John Philip's 1707 poem *Cyder* speaks of "heavy loads, o'er-takes" tuneful birds who "leave their little lives, above the clouds, praecipitant to earth" (Rothstein 1984 p.339). Blake, in his work of 1798 *Auguries of innocence* attacks all forms of cruelty from starving a dog to misusing a horse and killing a fly and finds fault with accepted 'sport': "Each outcry from the hunter hare, a fibre from the brain does tear" (Evans p.20). Rothstein concludes that "if the allusion, though covert and brief, clarifies the later poets' meaning, hunting appears senseless as well as malign, natural as phenomenon but unnatural as a human choice" (Rothstein p.340).

On the other hand, like literature by colonial hunters which came later, works written by and for shooters illustrate a kind of insensitivity to the life of animals being killed. In a poem written in 1717 attributed to William Churchill, one reads: "my vivid shot their glossy plumes should tear, and dropping snipes lose fleeting lives in air" (Rothstein 1984 p.339). In a poem published in 1798 entitled *snipe shooting*, the author describes a shooting scene, which ends with the bird taking flight and "now glancing, just the marksman gets his aim, his ready finger doth the trigger strain. He fires - the fatal shot unerring flies, the snipe is struck, she flutters, bleeds and dies" (Osborn 1930 p.177). But literature meant for wider consumption felt differently about hunters and hunting. In a poem *free-thoughts upon the brute-creation* (1742), John Hildrop implies that the hunting squire was looked upon as being especially empty headed and therefore brutelike. Rothstein notes that "the less noble hunters are and the more the analogy between man and beast becomes a resemblance, the less right man has to slaughter fellow creatures for fun and the more disdain he draws on himself for doing so" (Rothstein p.342). Benjamin Hutchinson, writing the poem *Kimbolton park* in 1765 blamed hunting as arrogant as well as cruel and unreflective. John Aldington wrote *the cruelty of sport* in 1769, where he speaks of wild ducks, which, "after soft soliloquies...with deep sobs they leave their spacious towns.... and are shot in the murder of the day". At this "extreme variety of woe", Aldington warns, "the conscious eye must surely drop a tear, or all its tender faculties are lost" (Rothstein p.343).

It may be argued that the feelings aroused by a poem written 200 years ago are simply different from those it may arouse today. Some may argue that animal suffering, such as 'sobbing deer' in the sixteenth century literature might be there to amuse people. But Shakespeare used hunting metaphors for tragic effect. There is also a difference between literature by and for hunters and other forms of literature. Rothstein remarks the hunting sections in Denham, Dryden, Pope and Gay do not benefit from a reader's knowing about social attitudes; they were written for a wider audience, while the hunting sections in Somerville, Powney, Wilkes and Fitzgerald become much more easily understood if the reader does have some knowledge of hunting practices since they were written primarily for sportsmen.

Poets such as Coleridge, Wordsworth and Shelly helped change man's accepted values about nature. Wild nature was to be regarded no longer as 'horrific', as British naturalist Thomas Pennant called it in 1777, but something in which to glory. Thomson, the most influential new poet of the second quarter of the 18th century, was the first significant poet of the period to abandon any ambivalence towards hunting. Cohen (1970) describes James Thomson's poem *The Seasons* as a poem about nature and the nature of the world. The poet establishes a parallel between nature and man. Cohen notes that "the hunter's brutality" appears in every season (Cohen p.188). In spring there are references to 'tyrant man' who cages birds, to those who rob nests. In summer there is the stock-dove's mate, 'struck from his side by savage fowler's guile'. In winter there are hunters who 'worse than the season, desolate the fields, and the ruthless hunter who, with clubs, beats the elks to death'. In autumn, man as hunter, appears several times:

O let not, aim'd from some inhuman eye
The gun the music of the coming year
Destroy; and harmless, unsuspecting harm,
Lay the weak tribes, a miserable prey,
In mingled murder, fluttering on the ground!"

Also in autumn, Thomson mentions "the rude clamour of the sportsman's joy". The hunt is described as "the falsely cheerful barbarous game of death" where man is a "steady tyrant" inflamed "with the thoughtless insolence of power" beyond hungry beasts of prey, for he is "lavish fed" but still joys "at anguish and delights in blood". "Poor is the triumph o'er the timid hare!", "a weak, harmless flying creature" besieged by fear and noise. Deserted by the herd, the stag sobs, swims, faints, stands desperately at bay as "big round tears run down has dappled face," and dies as "blood-happy" dogs "mark his beauteous chequered sides with gore" (Rothstein p.352-3).

In *The seasons*, there is the contrast between the surging flight of the birds and the sudden death:

> "Nor on the surges of the boundless air,
> tho borne triumphant, are they safe; the gun,
> Glanc'd just, and sudden, from the fowler's eye
> O'ertakes their sounding pinions; and again,
> Immediate, brings them from the towering wing,
> Dead to the ground".

Cohen notes that Thomson implies that in hunting man loses his charity and humanity and leaves himself open to meaner passions, and in post-hunting scenes, man himself becomes hunted by his meaner passions, an object of ridicule and disgust. *The seasons* simply opposes hunting. The hunt passage is a description of what the Squire, not nature, destroys. It is destruction for private pleasure, a transformation wholly to be deplored.

Mentalities were changing on continental Europe as well. Cartmill states that both Goethe and Schiller commented that "whenever anything moves, the hunter shoots it. He thinks that every living creature, no matter how vital and alive, was made for him just to pop in his game bag" (Cartmill p.123). Goethe remarked that "every animal is an end in itself" (Lovejoy. p.189). Romantic outrage about hunting culminated in Coleridge's *Rime of the ancient mariner*. In the poem, described as "the most widely read attack on sport hunting ever written" (Cartmill p.122), the hero sailor shoots an albatross for fun and is punished by being plunged into a living hell — from which he is released only when he forswears hunting and learns to love bird, man and beast.

As Cartmill notes, the anti-hunting sentiments voiced by Colerige, Thoreau and other nineteenth century writers were rooted in a Romantic love of animals and unspoilt nature; but in later Victorian literature, such sentiments were often mixed with corrosive doubts about the value of progress, the superiority of European culture, and the goodness of man. American essayist Charles Dudley Warner was among the first to tie these doubts together in 1878. In a short ironic story of a hunted doe which gets her throat cut in the penultimate paragraph, Warner invokes the suffering of the doe and her starving fawn to castigate mankind and hunting in all its forms and draws explicit parallels between deer hunting and Western imperialism (Warner 1878).

Mark Twain saw little difference between the hunting of people and the hunting of animals. Twain recounts horror stories he had heard in India about the Thugee devotees of the goddess Kali who ritually murdered unsuspecting travellers. Twain concluded that there was only a minute moral difference between Thug and the hunter: "The joy of killing! the joy of seeing killing done-these are traits of the human race at large. We white people are merely modified Thugs...who long enjoyed the slaughter of the Roman arena, ...We are gentle Thugs in the hunting season, and love to chase a tame rabbit to kill it...There are many indications that the Thug often hunted men for the mere sport of it; that the fright and pain of the quarry were no more to him than the fright and pain of the rabbit or stag to us; and that he was no more ashamed of beguiling his game with deceits and abusing its trust than are we when we have imitated a wild animal's call and shot it when it honoured us with its confidence and came to see what we wanted" (Twain 1897 p.125-6).

Hunting in Art

The change of heart was also visible in art galleries. In art of the seventeenth and eighteenth century, birds and animals are generally represented as possessions and hunting trophies. After the reformation, the art of 'sporting' and animal painting became popular when compared with the fashionable portraiture or mural decoration which dominated the art of the seventeenth and eighteenth centuries. The theoretical father of sporting painting in England was the pupil of Reubens, Abraham van Diepenbecke (Waterhouse 1953). English sporting and animal painting owes much to foreigners such as John Wyck and the Dutch Peter Tillemans, before Francis Barlow (1626-1702), considered to be the founder of the English school of sporting and animal painting, came to the scene (Rothenstein 1933). Barlow has been described as "married to faithful observation of nature and to honesty", "a happy painter of birds and beasts" and "the famous painter of fowls, birds and beasts" (Waterhouse, 1953 p.81).

In the nineteenth century, animal painting began to celebrate the animals themselves as subjects, whereas hunting earlier had provided artists with a pretext for painting still life of dead game or portraits of rich patrons on horseback. In hunting scenes painted by artists such as Sir Edwin Landseer, Courbet and other nineteenth-century animal painters, the focus shifted to the suffering of the quarry. Landseer himself, at times hunted deer, although he was known to be a "mediocre shot" (Campbell 1976 p.182). However, his paintings "inevitably often aroused sympathy for the beleaguered, wounded and dead stags" (Campbell p.142). Landseer had ambivalent feelings about deer hunting. In a letter written to the Earl of Ellesmere in 1837, Landseer wrote: "There is something in the toil and trouble, the wild weather and the savage scenery, that makes butchers of us all. Who does not glory in the death of a fine stag? on the spot - when in truth we ought to be ashamed of the assassination" (Campbell p.142). Landseer was described as "their slayer and their mourner; he could exalt the sport of deer stalking yet portray its consequences with a savage debunking irony; in a single portrait he could both eulogise it and expose it. Occasionally he treated the stag with sentiment, but always with reverence" (Campbell p.182). Landseer infused into his paintings and drawings of animals "a nauseating sentimentality, infusing human emotions into animals, moralising animal subjects, creating, a parade of beasts as classic worthies. His liquid rendering of the head of a dying stag is charged with the same emotions as the upturned head and adoring eyes of a favourite ghille who holds the boat steady while the Queen steps ashore" (Webster and Lambourne 1974 p.22).

THE GREAT CHAIN OF BEING

From the seventeenth century on, the growth of anti hunting sentiment has been linked in various ways to the growth of science. "Science called into question the moral foundations of man's dominion over nature by blurring the boundary between people and beasts" (Cartmill p.xi-xii). Rothstein too notes that "social attitudes toward animals in general, and hunted animals in particular also changed during the eighteenth century, "partly no doubt in connection with a new taxonomy that stressed continuity between the behaviour of humans and other animals...Along with this taxonomy come ethical implications. Natural law no longer authorised man's treating animals as mere objects of his sport" (Rothstein p.342).

The concept of the great chain of being, which owed its genesis to Plato and Aristotle, attained its widest diffusion and acceptance in the eighteenth century. Writers of all sorts — philosophers, poets and popular essayists talked so much about the chain of being, or accepted more implicitly the general scheme of ideas connected with it, or more boldly drew from these their latent implications or apparent implications (Lovejoy 1965). The trend was to believe that God created the world for the sake of human kind, that humans were midway between God and the beasts. Locke, for instance wrote: "in all the visible corporeal world we see no chasms or gaps. All quite down from us the descent is by easy steps, and a continued series that in each remove differ very little one from the other. There are fishes that have wings and are not strangers to the airy region; and there are some birds that are inhabitants of the water.....And when we consider the infinite power and wisdom of the Maker, we have reason to think, that it is suitable to the magnificent harmony of the universe, and the great design and infinite goodness of the architect, that the species of creatures should also, by gentle degrees, ascend upwards from us towards his infinite perfection, as we see they gradually descend from us downwards" (Lovejoy p.184). Francis Bacon, who advocated the control of nature for human benefit, elaborated on the theme: "Man, if we look to final causes, may be regarded as the centre of the world; insomuch that if man were taken away from the world, the rest would seem to be all astray, without aim or purpose, ...and leading to nothing. For the whole world works together in the service of man; and there is nothing from which he does not derive use and fruit...insomuch that all things seem to be going about man's business and not their own" (Lovejoy p.187).

But other philosophers, such as Henry More and Rene Descartes were thinking otherwise. More wrote: "we are not to be scandalised that there is such careful provision made for such contemptible vermine as we conceive them (the lower animals) to be. For this only comes out of pride and ignorance, or a haughty presumption, that because we are encouraged to believe that in some sense all things are made for man. Therefore they are not at all made for themselves. But he that pronounces this is ignorant of the nature of God, and the knowledge of things. For if a good man be merciful to his beast; then surely a God is bountiful and benign, and takes pleasure that all his creatures enjoy themselves that have life and sense, and are capable of enjoyment" (Lovejoy p.188).

Descartes was the foremost opponent of an anthropocentric teleology and all forms of teleological reasoning in science in the seventeenth century. Apart from other objections, he found the theory in conflict with obvious facts: "It is not at all probable that all things have been created for us in such a manner that God has no other end in creating them...Such a supposition would, I think, be very inept in reasoning about physical questions; for we cannot doubt that an infinitude of things exist, or did exist though they have now ceased to do so, which have never been beheld or comprehended by man, and have never been of any use to him" (Lovejoy p.188). The idea that the world and its contents were there simply to serve man started disappearing. Man was no longer at the centre, but rather part of the whole. Lovejoy notes that Leibniz, who concurs with Spinoza, observes that it is not surprising that "we find in the world things that are not pleasing to us", since, "we know that it was not made for us alone". Archbishop King remarked that it is "absurd to imagine that the earth was made for the sake of mankind, and not of the universe. No one who is not blinded by pride and ignorance could ever suppose it" (Lovejoy p.188).

Man started loosing rungs in the ladder of hierarchy. He was no longer in the uppermost rung after God, neither was he in the middle of the chain. Addison argued that as the space and room upwards is infinite, it must be filled by other creatures, "but the number of grades below is finite" (Lovejoy p.190). With this new perception of human kind in the universe, more negative feelings began to be expressed toward the hunt, and the theme of erotic hunt gradually disappeared from Western art and literature. Cartmill concludes that "the Romantics delighted not only in wilderness, but in wildness, in things inhuman and violent and imbalanced" (Cartmill p.118). Their attitudes to nature were ambivalent, because most of them believed that nature was a construct of the human mind, and thought of themselves as spiritual beings superior to the beasts. But the ambivalence towards beasts was associated with mixed feelings towards hunting. Some Romantics in Germany, celebrated the hunter as a 'noble half-savage'. But not all the romantics regarded the hunter as a fellow nature-lover. Some saw him as a "vicious fool who enjoys destroying his fellow creatures because he cannot empathise with them or grasp their spiritual significance" (Cartmill p.121).

THE JUDAEO-CHRISTIAN RELIGION AND HUNTING

The Judaeo-Christian religion has often been instrumental in providing rationalisations for people's use and abuse of the environment. Christianity is influenced by Aristotelian theories, who claimed 'man' is supreme and creation existed for 'his' sake. St Thomas Aquinas, the greatest philosopher of western Christianity, was greatly influenced by the theories of Aristotle, and the idea that God created all living creatures is deeply ingrained in the Judaeo-Christian religious philosophies. Indeed, "most ecologists thought Christianity was more of a problem than a friend" (Breuilly and Palmer 1992 p.vii). Some hunters, including Maltese ones, rope in the Church in defence of their pastime. In Chapter 5, the influences and role of the Church as an institution and how these play a role in hunting, are discussed. But it is pertinent to point out that historically, one cannot really claim that the Church was in favour of hunting. Glacken (1967) states that hunting "is a sensitive subject in the Middle Ages because of its relationship to theology, and the official attitude of the Christian Church was at odds with an apparently widespread and irresistible infatuation with hunting" (Glacken 1967 p.346). Christian hagiography is full of instances of friendship with animals, ranging from small creatures to predators. Glacken argues that the myths and legends by later writers are woven around the lives of their favourite saints in their forest retreats, striking up friendships with animals. "This Christian hagiography may indeed be a form of protest against heartless killing of wild animals", Glacken argues (p.346). Various saints proclaimed themselves about the issue: St Jerome said there were numerous examples of holy fishermen in the scriptures, but not a single example of a holy hunter. St Ambrose said that the just had never been found among the hunters and Pope Nicholas I declared that only reprobates are given to the chase (Glacken 1967).

Apart from such statements, there are numerous prohibitions of hunting which date back to as early as 506, when the Council of Agde, in Southern Gaul decided that priests, bishops and deacons should be barred from keeping hounds or falcons. This prohibition was renewed by various other councils. At the council of Ofen (Budapest) in 1278, St Ladislaw excluded the members of his order from hunting and falconry. As late as the sixteenth century, the council town of Munster, in Westphalia, demanded that the clergy should not hunt as they claimed Canon law had many references to the clergy being prohibited to hunt. "Rather they should spend their time exclusively in the business of the church, praying, reading and managing the church's estates and such matters. From all this, they are kept by hunting." (Hobusch 1980 p.74).

The legend of St Hubert originated at this time, while discussion about the right of the clergy to hunt was in full swing. The legend of St Hubert is found in *Histoire St Huberti*, written in 1621 by a Jesuit Father Robert, who wrote that as Hubert "came into the forest to hunt, he saw many stags, and among them there was a specially beautiful one, who shone among the rest. This stag turned round and spoke thus: 'Why do you chase me, Hubert?' " (Hobusch 1980 p.75). The legend goes on Hubert was told to abandon unrestricted hunting and profess his Christian faith. Hubert was so impressed that he gave up his worldly vanities and entered a monastery at Maastricht. From this time on, there is proof of his existence. St Hubert, who is said to have been made Bishop of Liege, died in 727 and was canonised only a hundred year later. From a story of his life written 17 years after Hubert's death, there is no reference to his hunting passion. The guild of butchers in the town of St Hubert, in the Ardennes, chose him as their patron saint in the twelfth century and every year, on 3 November, they organised a procession to the cathedral. At that time, it was never mentioned that St Hubert was patron saint of hunters. The first graphic representations of the miraculous stag date from 1138 and 1147 and are found in the hymn books of the monastery of Zwiefalten in Germany. The legend of the miraculous stag gained popularity in the 15th century, at a time when several orders of St Hubert were founded, and the saint increasingly became the ideal, sophisticated hunter. St Hubert's day on 3 November, which marked the end of the hunting season for larger game, was first celebrated in 1744. Celebrations were of high moral value and took a stand against unrestricted hunting and for the protection of game. The pilgrimages served to improve the image of hunting and demonstrated the hunter's love of animals. The legend of the miraculous stag is also found in the early legends about the Roman general Placidus, who was a passionate hunter, and after meeting the miraculous stag, he was converted to a Christian and who was later canonised as St Eustace. In Malta, shooters claim St Julian is their patron saint. Like St Hubert, St Julian changed his lifestyle after mistakingly killing both his parents on his return from a hunting trip. He gave up hunting and started setting up institutions for the sick and needy. Hunters who attempt to justify their pastimes by saying they have the protection of patron saints are ignoring the messages emanating from the legends in which both St Julian and St Hubert changed their way of life and stopped practising hunting.

HUNTING AND IMPERIALISM

In spite of a new way of looking at nature and with legends such as those of St Hubert and St Julians trying to give a new face to hunting, the eighteenth and ninteenth centuries were the centuries in which there was a frantic race for the colonies. The analogy between man's dominion over the beasts and Europe's supremacy over the 'savage races' was reflected in the symbolism of big-game hunting in the tropics. As discussed earlier, the chase had long been regarded as a token of human dominion over animals. Fiddes argues that to an extent, this is so even in our times. He argues that hunting and the collection and exhibition of trophies in shape of animal skins is entirely consistent with the centrality of meat as a symbol of environmental control. "Exploitation of natural resources has thus been structurally analogous to control of human resources. Fox hunting, for example, enables the few active participants ceremonially to display their sovereignty in pursuing a reputedly intelligent animal to its death. But that is not all; the hunt simultaneously vaunts supposed supremacy over the horse ridden, over the hounds commanded, over the servants or workers employed, and even over those without financial or social access to the pursuit should they wish it" (Fiddes p.72).

Apart from the aspect of being in control of nature, European aristocrats, like the ancient Greeks, had always thought of hunting as a sort of war game in which a gentleman could hone his military skills by pursuing and killing unfriendly beasts. A kind of patriotism provided justification for it: MacKenzie quotes Baden Powell's Scouting for boys as saying: "the Colonial boys consider marksmanship the most important thing to practise, because it is for their country. They put cricket and football second, because these are for their own amusement" (MacKenzie 1987 p.177). MacKenzie suggests that "hunting offered the elite a symbolic dominance over the environment, a means of asserting boundaries of territory, action and behaviour" (MacKenzie 1988 p.66). Hunting came to be seen as a symbol of imperial enterprise as those running the colonies took up big-game hunting in most parts of Africa. There were obvious parallels between organising a hunting party to kill wild animals and a military expedition against hostile natives. And colonial hunting rituals celebrated those parallels through symbols of European dominion over the land, its animals and its people.

The ritual of employing a train of a forty to a hundred natives as servants and bearers was part of the imperial show, it impressed on the natives who was in command. The renowned tiger hunter Ralph Stanley-Robinson reminded his companions at the beginning of a hunt "the object of this hunt is imperial. We are the rulers here" (Russell 1984 p.28). The way colonial hunters looked down at natives and their practices is evident in an excerpt from Savile, who attributed the shy nature of waterbuck he was trying to stalk to "the near presence of the heathen". He was refering to the Dinka hunting parties, who occasionally used spears to hunt an occasional fawn or weakling. "This has a bad effect upon the game, who get vastly suspicious of the human kind. It is very noticeable that the herds were seldom startled by a shot, if a shooter remained unseen. But if he allowed himself to come into view they fled incontinently" (Savile 1925 p.41). Others refer to natives as "bush barbarians" (Capstick p.103). Gray points to the ritual significance of imperial hunting, especially in providing an "initiation ceremony" for British men; he also argues that "the wilderness (became) a playground for inflated bullies" (Grey 1978 p.48). Several generations of hunters who wrote about hunting in the Victorian era presented Africa and its wildlife as a vast natural resource waiting to be subjugated. Such accounts are often littered with anecdotes of near misses with death and strong doses of heroism. They tend to raise an innate question: if an animal is so fierce and powerful, than what is the man who kills him? Samuel White Baker, a 'sportsman and explorer' who went to Ceylon to shoot elephants in 1843 wrote that in his opinion, it was the elephant, not the lion, who was the king of beasts. In an effort to prove his point, he colourfully recounts in vivid narrative a near miss with a wounded elephant which charged him. The grass was tall, so the hunter could not escape, and only one barrel of his gun was loaded, which was useless as the enraged elephant was protecteing its forehead with its trunk: "I felt myself doomed...and resolved to wait for him till he was close upon me before I fired, hoping that he might lower his trunk and expose his forehead. He rushed along at the pace of a horse in full speed; in a few moments, as the grass flew to right and left before him; down slashed his trunk with the rapidity of a whip thong, and with a shrill scream of fury he was upon me. I fired at that instant; but in the twinkling of an eye I was flying through the air like a ball from a bat... he struck me with his tusk in full charge upon my right thigh and hurled me eight or ten paces from him". Then the readers are told about a "strict search" the elephant conducted — a futile one of course as otherwise the readers would not have the opportunity of reading the account. But even here, the hunter is the hero as the elephant failed to locate him due to the hunter's actions: "I heard him advancing close to the spot where I lay as still as death, knowing that my last chance lay in concealment. I heard the grass rustling close to me; closer and closer he approached and he at length beat the grass with his trunk several times exactly above me. I held my breath, momentarily expecting to find his ponderous foot upon me. Fortunately I had reserved my fire until the rifle almost touched him, for the powder and smoke nearly blinded him and had spoiled his acute power of scent. To my joy I heard the rustling of grass grow fainter... at length it was gone... I crept to my hands and knees. To my delight there were no bones broken, and with a feeling of thankfulness I stood erect. I with difficulty reached a stream of water near the spot, in which I bathed my leg, but in a few minutes it swelled to the size of a man's waist" (Brander 1971 p.236).

Such near misses with death did not deter the mighty hunters, some of whom argued that if the elephant was the king of beast, the wild buffalo of Asia was the most dangerous quarry of all. Baker wrote: "The charge of a buffalo is a very serious matter: many animals charge when infuriated, but they can generally be turned by the stunning effect of a rifle shot, even though they may not be mortally wounded; but a buffalo is the devil incarnate when it has once decided on the offensive. Nothing will turn it; it must be actually stopped by death, sudden and instantaneous, as nothing else will stop it. If not killed it will assuredly destroy its adversary. There is no creature in existence that is so determined to stamp out the life of its opponents, and the intensity of fury is unsurpassed when a wounded bull buffalo rushes forward upon the last desperate charge. Should it succeed in overthrowing its antagonist it will not only gore the body with its horns, but will endeavour to tear it to pieces and will kneel upon the lifeless form and stamp it with its hoofs until the mutilated remains are disfigured beyond all recognition" (Brander p.239).

Bearing this picture as painted by Baker, the acts of heroism of the hunter are bound to be more striking, especially if the hunter is facing the wounded animal in the shallows of a lake with an empty gun and no bullets left: "Suddenly a bright thought flashed through my mind. Without taking my eyes off the animal before me, I put a double charge of powder down the right hand barrel, and tearing a piece off my shirt, I took all the money from my pouch, three shillings in six penny pieces and two anna pieces, which I luckily had with me in this small coin for paying for the coolies. Quickly making them into a rouleau with the piece of rag I rammed them down the barrel and they were hardly well home before the bull again sprang forward...The horns were lowered, their points were on either side of me, and the muzzle of the gun barely touched his forehead when I pulled the trigger and three shillings worth of small change rattled into his hard head. Down he went and rolled over with the suddenly checked momentum of his charge" (Brander p.239).

It is not that these hunters were without any sentiments towards the beasts they slaughtered. William Finaughty, a notorious elephant hunter who shot 500 tuskers in five years in the 1860s recounts his feelings on seeing a herd of 300 giraffe: "it was a wonderful sight. It seemed a pity to shoot them, but we bottled up sentiment and shot five of them" (Capstick 1991 p.12). In another account, Chanler (1895) describes a scene close to a drinking place where wild animals pressed against each other at a narrow pass to get to the water: "the effect to the eye was charming. The bright tan-coloured skins of the hartebeest shone out in pleasing contrast to the dark gray wildebeest. Had I not been so young, and filled with youth's thirst for blood, I should have been a harmless spectator of this beautiful procession. But this was not to be...A silent signal, and the .450 and the Winchester fired in quick succession, changed this peaceful scene into one of consternation and slaughter...When the dust cleared away, we saw lying on the ground below us four animals — two hartebeest and two wildebeest. I am afraid that many of those who escaped carried away with them proofs of their temerity and our bad marksmanship" (Chanler 1895 p.40).

At other times, the violence and cruelty featured in such man-beast encounters is hardly credible. After shooting a hippopotamus and "knocking loose a great plate from the top of its skull", the hunter shoots again, this time, the bullet "entering the roof of the skull and passed out through the eye". Fearing that he might lose his trophy as the animal made for deep waters, the hunter jumped in the river, armed only with a sharp knife, and hoping to draw her to the safety of a bank, he held on to its tail. "Finding that her tail gave me but a poor hold...I took out my knife, and cutting two deep parallel incisions through the skin on her rump, and lifting the skin from the flesh, so that I could get in my two hands, I made use of this as a handle; and after some desperate work, sometime pushing, sometimes pulling, eventually I succeeded in bringing her to the bank" where a stout buffalo reign was passed through the opening in the thick skin and "moored her to a tree" (Greenwood n.d. [1869?] p.222). In another instance involving a different hunter and an elephant, Greenwood wrote: "having planted a bullet in the shoulder bone of an elephant, and caused the agonized creature to lean for support against a tree, the mighty hunter proceeds to unpack his kit and brew a little coffee. Having refreshed himself with the comforting beverage — taking observations of the tortured elephant's spasms and writhing between the sips — "I resolved to make experiments on vulnerable points, and, approaching very near, I fired several bullets at different parts of his enormous skull'" (Greenwood p.54).

Some saw imperialism as the mark of virile nations. "The nationals of these nations expressed their virility through their capacity to dominate their environment and they did that largely by a combination of hunting, killing and classification. It was through hunting that the most perfect expression of global dominance could be discovered in the late nineteenth century. Hunting required all the most virile attributes of the imperial male; courage, endurance, individualism, sportsmanship, resourcefulness, a mastery of environmental signs and a knowledge of natural history" (MacKenzie p.179). MacKenzie states that "the connections between hunting and sex and between imperialism and sexual separation are indeed close. The hunt has always been a masculine affair....Hunting can be readily interpreted as sexual sublimation. Hunting works are full of descriptions of the physical agonies of the hunt, of the exaltation no civilised world can supply, the tensions induced by the great risk and the ecstasy of release when the hunter prevails and stands over his kill" (MacKenzie p179,180). Beinart remarks that "so pervasive were the language and symbols of the hunt that they were sometimes used to describe contact with people. Baden Powell found sport in war in Africa in the 'chase for wild beasts of the human kind'; 'stalking the African' was also sport. The complex social Darwinist hierarchy which some British hunters imposed on the people as well as the animals they encountered in Africa allowed them to classify, dehumanize and maintain social distance" (Beinart 1990 p.165). For over a century from the 1800s onwards, books and articles by colonial hunters were published. Apart from vivid descriptions of kills and near misses with death, most contained photographs of hunters firing away at wild beasts and posing, often sitting over a dead animal or with a foot over it. Young boys devoured the tales of adventure of such hunters. But the image of the new mythic stereotype — the Great White

Hunter, contrasted sharply with the older, romantic vision of the huntsman and friend of nature. Primitive hunting was permissible because it was necessary for subsistence and involved technology which was less likely to threaten resources in the long term. Primitive man had to get as close as possible to his victim. This implied an enormous labour and skill in approaching the animal, often long hours of lying on the ground waiting for a change in the direction of the wind or the position of the animal. Hunting with high powered rifles is substantially different. The better the technological equipment, the less intimate knowledge of animal behaviour is required for a kill to be made.

PENITENT BUTCHERS AND THAWING HEARTS

At the same time imperial hunters were having their adventures, movements for the protection of animals started emerging. The mid-1800s saw movements for the protection of birds in Europe. The British Association for the Advancement of Science discussed the desirability of protecting birds of prey and seabirds, while German agriculturalists and Foresters at a Vienna meeting in 1868 asked for an international agreement to protect birds useful to agriculture and forestry. The First Ornithological Congress, also in Vienna in 1884, discussed the matter but it took two more congresses before the convention to protect birds useful to agriculture was actually signed by a dozen European countries (excluding Britain) in 1902 (Fitter and Scott 1978). Ripples from the Ornithological Congress reached Malta immediately. Malta was then a British colony and the Governor of Malta was asked "to assist an international enterprise of so great an importance for the progress of science". The committee wanted to collect data on migration of birds and wished that the lighthouse attendants would keep a record of the birds they see, an exercise which was already being carried out in a number of European countries. The first records kept by the keepers of the Gordan Lighthouse in Gozo and the Delimara Lighthouse in Malta were sent to the Secretary of the Ornithological Committee in July 1886 (Palace Archives File 1418/0). But the attendant of the Gozo lighthouse said he was encountering difficulty in identifying birds unless he shot them, but he was not prepared to pay the yearly fee of 10 shillings for a hunting licence. Subsequently he was granted a special licence "for shooting birds for scientific purposes" (Palace Archives File 7192/Ports). This created a precedent and the keeper of the Delimara lighthouse in no time also applied for a similar licence, which was granted to him in July of that same year (Palace Archives File 1418/0). Although the records of birds seen were noted and sent until January 1906, (Palace Archives File Customs 177/906) these seem to have had no bearing at all on bird protection in Malta.

In 1900, Britain, Germany, Spain, the Congo (then an independent nation under King Leopold of the Belgians), France, Italy and Portugal, signed a Convention for the Preservation of Animals, Birds and Fish in Africa. This convention "had been necessitated by the unbridled hunting of game by Europeans" (Fitter and Scott 1978 p.7). The Society for the Preservation of the Wild Fauna of the Empire was formally launched in December 1903. Its aims were to encourage the protection of the wild fauna in all British possessions from "appalling destruction" (Fitter and Scott p.8). Historically, wildlife protection has always begun as an attempt to preserve game animals from overhunting, and has only later developed into a desire to protect wild creatures for their own sakes. The Society for the Preservation of the Wild Fauna of the Empire was not different and the society's first efforts were to preserve 'game' animals. A number of former sportsmen were on the forefront of this society, including American President Thedore Roosevelt. Soon the society began to be lampooned as "penitent butchers" — a claim to which the society replied "we are...men who, having in earlier days taken their fill of big-game slaughter and the delights of the chase in the wild, outlying parts of the earth, now, being smitten with remorse, and having reached a less strenuous term of life, think to condone our earlier blood thirstiness by advocating the preservation of what we formerly chased or killed" (Fitter and Scott p.8).

The protection of agriculture often resulted in legislation affording protection to birds, and Malta was no exception. The first regulations, however, were more aimed at protecting crop from hunters trampling in fields than in protecting birds beneficial to agriculture. John H. Cooke, editor of *The Central Mediterranean Naturalist*, who was then stationed in Malta, was of the opinion that the falling off in the quality and quantity of fruit in the Maltese Islands was due to the increase in the number of various insects. He also attributed the increase in insects to the "unjustifiable crusade which is carried on, in season and out of season, against birds of all kinds" and suggested that legislative measures should be taken "to afford more efficient protection to the birds of these islands, especially to those which, by destroying vermin and injurious insects, render such immense services to our little community" (Cooke 1892). Cooke stirred up a hornets' nest and a number of naturalists and hunters joined in the debate which flowed on to local papers. But again, nothing happened. In 1908, *The Daily Malta Chronicle* wrote a strong editorial entitled 'the protection of birds', in which it was stated that "the shooting that is carried on in this island is without any discrimination. It is really a murderous sport for the most part. Everything is destroyed" (*Daily Malta Chronicle* 1908). Apart from the pressure in the local press, foreign organizations became interested in the issue.

In April 1909 the Royal Society for the Protection of Birds wrote to the acting Lieutenant Governor, informing him that the society was trying to set up a branch in Malta and were trying to find a person willing to act as an honorary secretary (Palace Archives File 824/09). The following January, the Governor requested help regarding the drawing up of a list of birds to be protected and regulations protecting a numner of birds were published in January 1911 (Government Notice 31 of 1911). These regulations were amended from time to time as a the tug-of-war between hunters on one side, and scientist-naturalists on the other, ensued. In Malta, it was still the case where animal and bird protection were the concern of a minority who were either naturalists — the scientists of the time, or other people, usually servicemen interested in nature, who may have been posted to Malta from time to time. But on the continent, another development was taking place alongside the scientific interest.

A tender-minded romantic view of animals and nature seized the public's interest as well, and by and large, had an even bigger effect on the popular imagination. Dressed up talking animals had been used to caricature people or satirise institutions before, but now, eighteenth-century authors wrote children's animal-talking stories discouraging cruelty to animals. The signs of distaste for hunting that began to appear in literature in the sixteenth century had a limited effect as firstly they expressed the feelings of a few and secondly it had limited readership. But the advent of mass media changed the scene radically. Few people have read Thoreau, Freud or Schopenauer. Ideas from the work of these philosophers went into the making of one of best known mythic images of our time: *Bambi*. *Bambi* was the creation of Felix Salten, whose real name was Sigmund Salzmann. He wrote *Bambi* in 1924. Salten describes the forest world in exquisitely poetic prose, and it is in this prose that his animal characters suffer, bleed and die awful, uncomprehending deaths. The book was described as radiating "a cold aura of Schopenhauerian pessimism" (Cartmill p.163). Another author wrote: "death is the central theme in it. Something fears dying, or does die in a terrible agony, in almost every chapter" (Reiger 1980). A roebuck Bambi is speaking to, is shot in front of its very eyes. Another buck has its leg smashed by a bullet and limps throught the book. *Bambi* is shot and passes through a slow, painful recovery. Its mother and a host of other animals are killed in an autumn game drive as man stalks in the forest shooting anything that moves. Maltin remarks that although man is never shown in the film, yet the simple statement by Bambi's mother after a frenzied chase with dozens of deer running for shelter, then 'Man (pause)....was in the forest' creates an impact no literal device could accomplish (Maltin 1973).

Man is portrayed as bloodthirsty and perversely treacherous, as full grown Bambi finds out when he sees a hunter imitating the love call of the deer. Walt Disney immortalised *Bambi*. It was greeted by the London *Times* on August 6, 1942 as the single great masterpiece produced thus far by the cinema. American hunters critcised the film sharply, denouncing it as "the worst insult ever offered in any form to American sportsmen" (Brown 1942). But Bambi was a symptom, not a cause. It was the throbbing pulse of the new consciousness. Before *Bambi* was made, poets were already reversing the situation making hunters victims of their own actions. A children's poem by Causley (1937[?]) speaks of a hunter who got so excited on seeing a rabbit, that he pointed the gun the wrong way and shot himself instead of the rabbit: "Bang went the jolly gun. Hunter jolly dead. Jolly hare got clean away. Jolly good, I said" (Causley 1937 [?] p.108). The children's literature of the 1960s is full of stories showing empathy towards animals. In a story about a man whose vegetable patch was constantly being ravaged by quail and rabbits, the man first set up a scarecrow, which failed to do the trick. He then badly sprains his leg while trying to scare the animals and while recovering in bed, he gets the idea of getting a gun. But his wife does not like the idea and puts a bird feeder outside his bedroom window, so that he can while the time watching birds. Quails and rabbit soon start coming to be fed on the lawn. But when his leg healed, he received a gun as a birthday present from his brother and as soon as the hunting season opened, he decided to go to hunt. On reaching the vegetable patch, quails and rabbits came rushing towards him. He realised the animals were his friends and did not shoot them, but returned home followed by a trail of animals, which he fed on the lawn of his garden (Hader and Hader 1960). Children and adults started becoming more 'pro-nature' and as new sensibilities arose towards animals, plants and the landscape, people started shifting from predators to pet lovers. Yet, in spite of growing sentiments against hunting and increased legislative protection of nature, hunting survived. This raises the question, why do hunters kill?

Why do hunters kill?

Hunting still provides protein for some surviving gatherer-hunter communities. In some such cultures today, especially sedentary ones, hunting confers male identity and social status. The Peruvian Cashinahua hunters are highly respected and "more even highly desired as a lover or as a husband and son in law" (Kensinger 1975 p.29). Hunting, next to sex, is a major passion for the Cashinahua male and no meal is complete without meat. But in other cultures, the correlation between hunting success and social status is minimal and tends not to be emphasised. "The (Kalahari) bushmen belittle individuals' success in hunting since the accumulation of goods, be it meat or anything else, can create potential inequality" (Kent 1989, p.4).

However, not all hunters in surviving gatherer-hunter communities hunt because it is pleasurable. Hill and Hawkes (1983) question the joys of hunting of the Ache' community, whose hunter-gatherers spend over 70 per cent of their time just searching for game. But then, some modern sport hunters claim that this is part of the fun. The concept of the pure joy of hunting in contrast to gathering needs to be objectively re-evaluated for, as Siskind noted, "after slogging through the tropical forest in the rainy season, wading through swamps up to the hips, picking off ticks, and avoiding stinging ants, I would question the idea that hunting is far more joyful than gathering or agriculture" (Siskind 1973a p.232).

But gatherer-hunters are a changing, if not a dying breed, and, as Burch and Ellanna wrote, the future of hunter-gatherer research is a bleak one: "the practical problems in the hunter-gatherer research are due to the fact that there are few, if any, societies of foragers left in the world that have not been profoundly affected by, and to some extent integrated into, much larger-scale systems. In short, the very subject matter of our investigations is disappearing" (Burch and Ellana p.442).

HUNTING FOR SPORT

The shift from subsistance hunting to sport hunting was a rather rapid one. Fiddes states that ever since the middle of the twelfth century, hunting in Britain has been a largely elitist pursuit, defended from poaching under threat of dire penalties, and limited to those with money or the connections required to gain access to the land (Fiddes p.73). Hunting rights were protected by stiff laws throughout most of Europe, so that the upper classes could enjoy their sport. The knights of St. John in Malta enacted hunting regulations before they actually arrived in Malta. Partridges and hares were reserved for the king, long close seasons protected birds and animals during the breeding season and no one could disturb falcon trappers who caught falcons for the Grand Falconer, who then sent some of them to foreign soverigns. Deer were imported and kept in private hunting grounds of the Grand Master.

Sport hunting today thrives as an activity where (principally) men pursue animals and birds, for sport. Causey (1989) argues that on examining the role of the kill in the various activities labelled hunting, there are two broad categories of participants: 'sport hunters' and 'shooters', excluding subsistence hunters. She argues that sport hunters participate in hunting for the pleasure of the hunt itself and not for any particular result of that effort, while the shooter always has a utilitarian motive which supersedes the sporting value of the hunt. "Whereas sport hunters have a genuine emotional commitment to the sport and all that it entails, shooters are seeking something else. It may be meat for the freezer, companionship with other hunters, male camaraderie, or exercise and fresh air, most often though, it is simply the kill they seek, the tangible proof that they have hunted...Many shooters would, if possible, dispense with the hunt altogether and go directly to the kill." (Causey 1989 p.332).

A number of people defend sport hunting on different fronts. Vitali, who considers sport hunting to be ethical, argues that subsistence hunting is justifiable by the sheer fact that humans in need must kill to survive. "But sport hunting is something else indeed. Even if the hunter eats the game taken, or even if he/she hunts for the meat, subsitence is rarely at issue. There are other ways for him/her to survive. Rather, eating the game is usually a secondary, though delicious, consequence of what is primary - the joy and thrill of hunting itself!" (Vitali p.73).

"To hunt means to kill wild, not tame or domesticated animals. It is an activity which, unlike farming or animal experimentation, directly interferes with undomesticated biotic communities. When people hunt, therefore, they step outside of the human-animal community established by human cultures" (King 1991 p.61). King argues that as environmental ethics has emerged in contemporary philosophy as a response to the destructive consequences of human interventions in the natural world, and as hunting presupposes the deliberate and intentional infliction of pain on individual animals and such killing affects not only the individual animal, but the species and the biotic community of which the individual is a member, "hunting stands out *prima facie* in need of moral justification" (King p.61).

Philosophical defence of hunting

Ortega's *Meditations on hunting* is perhaps the most influential philosophical defence of hunting (Ortega 1972). His arguments are echoed in Shepard's works (Shepard 1967, 1973). These works offer a sustained attempt to demonstrate that hunting has a place in the fully human life. The roots of the argument are both biological and cultural. According the Shepard, human beings retain their prehistoric, Palaeolithic nature beneath a thin layer of culture. Hunter-gatherer societies can give us glimpses into that "golden age" of human existence which can then serve as the basis for a critique of contemporary industrial-agricultural life. Hunting offers the possibility of returning to our own biological nature.

Ortega's argument starts with the importance of hunting to those who have had the leisure and fortune to be able to choose the life they wished to lead. On this view, hunting is an integral part of the happy life for a human being, because it is an activity which those who are able to choose, namely the nobility and aristocracy, consistently have chosen. According to Ortega, hunting has value as an activity. It is not simply about killing or capturing an animal, but the process of hunting down an animal: "To the sportsman the death of the game is not what interests him; that is not his purpose. What interests him is everything that he had to do to achieve that death — that is the hunt...Death is essential because without it there is no authentic hunting: the killing of the animal is the natural end of the hunt and that (is the) goal of hunting itself, not of the hunter...one does not hunt in order to kill; on the contrary, one kills in order to have hunted" (Ortega p.110-111). For Ortega, hunting has to be 'problematic', that is the outcome could not be guaranteed in advance (Ortega p.58). King argues that it is important to understand what constitutes hunting for Ortega, to be able to see clearly what he is defending. King argues that if hunting is essentially the search for and the taking of game animals in a context in which they may exercise their natural capacities of evasion so that the outcome is uncertain, then "much of what passes for hunting in contemporary industrial societies is irrelevant to Ortega's discussion. Those who go to shooting preserves where the animals are guaranteed to be plentiful and available will not be engaged in hunting, according to Ortega's definition. Nor are those who shoot from commercial hides or at watering holes along seasonal migration routes. "At best, these 'hunters' engage in target practice with live targets instead of clay ones, having reduced hunting to the kill, the easiest and most mechanical of the processes involved in what Ortega defines as hunting. Such practices, therefore, cannot find their moral justification in Ortega's defence of hunting" (King p.72).

THE 'BACK TO NATURE' CONCEPT

Both Ortega and Shepard claim that hunting will return us to nature by uncovering the natural within the human — the omnipresence of the prehistoric hunter in human nature. If the predator is naturally and unavoidably with us, then refusing to hunt is an anti-natural choice. To prove this point, Ortega cites a description of an encounter between a group of hunters driving to their hunting grounds and two wolves which cross the road near the car. The rifles are packed away and hunters are not prepared for this opportunity: "Braking, skidding, roars of 'Where's my rifle?' 'Give me my bullets.' Some jumped through a little door, others through a window...There was one enthusiast who, in the face of his inability to get his rifle out of the sheath, thought seriously of pulling his knife and tearing the leather case" (Ortega p.136-7).Ortega argues that this uproar signals "the automatic discharge of the predatory instinct" still present in the modern individual. As King notes, the use of this example is rather puzzling as there is nothing of the hunt in what Ortega describes here, only the wild ambition to destroy. There is no question of stalking, engaging with nature, of giving wolves a chance to exercise their natural talents to escape. "What is significant is that Ortega places the stimulus for this 'instinctual' response in the wolves themselves. The hunters are not the instigators of this encounter, rather, the wolves are" (King p.75). Ortega agrues that "it is not man who gives to those wolves the role of possible prey. It is the animal — in this case the wolves themselves — which demands that he be considered in this way, so that to not react with a predatory intention would be anti-natural" (Ortega p.137). As King remarks, "in other words, the animals which humans hunt 'ask for it', hence they are fair game" (King p.75).

The hunters' attitude of 'shifting the blame' has been noted by other authors: "nature has been blamed for being either seductive (and dangerous) or indifferent to man. Siren-like, she beckons and invites hooks and guns in the same way women are said to lure men and ask for rape. Or, like the cold, uncaring 'bitch', nature does not respond to man's plight and must therefore be punished" (Collard and Contrucci p.46). King argues that this rationalisation of the hunter's relation to prey places the responsibility for the harm that is done on the victim of that harm and thereby deflects the impetus to blame the perpetrator of violence. Ortega's work contains many examples in which the essence of the hunt is absent. "Despite the denial that killing is the main end of hunting and the purpose of the hunter, Ortega's examples demonstrate the opposite. The hunter in his discussions never does anything more than wait for the opportunity to kill" (King p.75). King argues that the fascination with lethal rather than life-giving power is a feature of the defence of hunting which requires further scrutiny. Shepard quotes Ortega: "the overpowering of the game, the tactile drama of its actual capture, and unusually even more the tragedy of its death nurture the hunter's interest through anticipation and give liveliness and authenticity to all the previous work: the harsh confrontation with the animal's fierceness, the struggle with its energetic defence, the point of orgiastic intoxication aroused by the sight of blood, and even the hint of criminal suspicion which claws the hunter's conscience. Without these ingredients the spirit of the hunt disappears" (Shepard 1973 p.151).

It is not only eco-feminists who debate the argument that hunting is an essential part of human nature and hence part of a healthy return to a natural way of life. King notes, such argument marginalizes women's relations to nature and substantiates the ecofeminist claim that sport hunting is a symptom of patriarchy's fixation on death and violence (King 1991). Hunting is an activity carried out primarily by males, and hunters often celebrate it for this very reason. Eco-feminism has drawn philosophical attention to the existence of parallels between the treatment of women and the treatment of non-human nature (Merchant 1980).

Haste argues that the power and symbolic significance of the 'man the hunter' metaphor becomes even clearer when we look at a contrasting cultural metaphor, the female hunter. There is only one mythic huntress, who becomes the metaphor for any female who actually does hunt. When one examines the metaphoric baggage she carries in our culture, it becomes obvious why she has not had the attentions of science. Diana or Artemis also hunted in a single-sex group, but she and her companions were virgins; they did not return home bloodstained and weary to the supportive male. Diana rejected men, and killed the one who approached too close — "she was not only a feminist, but a radical separatist. But she had the necessary skills of the male hunter; she was fleet of foot, sure of eye, strong of arm". The myth of Diana is a convenient metaphor for describing women who participate in the actual or symbolic hunting, but she is not really analogous to 'man the hunter', who is a creature of flesh and blood, even in myth. She is mysterious, odd, deviant from conventional female roles. She may hunt animals as men do, but without the male bloodlust — somehow it is a mystical communion with nature, rather than a conquest of it. 'Man the hunter' does not need Diana the huntress by his side; he needs his little gatherer back in the warm cave to approve, console, heal" (Haste p.28-9).

Collard and Contrucci (1988) attack hunting as a symptom of the violence and aggression inherent in patriarchal culture. "My purpose is not to understand hunters but to situate hunting in the culture that spawned it. Hunting is the modus operandi of patriarchal societies on all levels of life — to support one level is to support them all. However innocuous the language may sound — we hunt everything from houses to jobs to heads — it reveals a cultural mentality so accustomed to predation that it horrifies only when it threatens to kill us all, as in the case of nuclear weapons" (Collard and Contrucci p.46).

Daly characterises patriarchal culture as "necrophiliac — not in the sense of love for actual corpses, but of love for those victimized into a state of living death" (Daly 1984 p.59). In her view, patriarchal culture is necrophiliac because it displays an obsession with death and killing, giving value and status to those who are skilled in these, rather than in life-affirming practices. Daly extends the sense of the word necrophiliac to include instances in which men give value to dead simulations of living processes, while devaluing and destroying authentic creative and life-affirming processes. From the eco-feminist standpoint, "modern sport hunting is a symptom of this necrophiliac orientation" (King p.80).

PREY AS AN OBJECT

Collard and Contrucci suggest that there is an alternative way to conceptualise our relations with nature. They argue that a precondition of hunting is to objectify animals. Such a view is shared by Tuan, who states that "teaching a child how to hunt is primarily a matter of teaching him how to aim and shoot. The natural environment is reduced to an abstract space with two critical points, that of the hunter and that of his victim" (Tuan 1980 p.22). Collard and Contrucci argue that hunters must first deaden their emotional sympathies toward the animal's pain. The animal must be considered as an object, as prey, rather than as a living being with a life of its own. The hunter abstracts the animal from the web of its living relationships, from the familial ties which links parents and offspring, from the pack or herd relations that constitute the animal's sociality, and from the predator-prey relations that sustain a healthy wild community. The hunter must learn not to care what happens to the young animals deprived of the experience, guidance, or protection of older animals; he must ignore the effects on the survivor of a mating pair. In addition, he must ignore the effects of his own hunting on wild predators who are either deprived of prey or themselves hunted because they compete for the object of the hunter's sport. Collard and Contrucci counter Shepard's claim that "the hunter is the alert man" (Shepard 1973 p.147). By objectifying prey and forgetting all about the animal's context in the ecosystem, far from being alert, the hunter must in fact be blind to much that is present in the lives of animals. King states that "for Ortega and Shepard, predation is not just the primary animal relation; it is the only one which they notice" (King 1991 p.83).

Collard states that the objectification of prey, which is fundamental to sport hunting in our culture, is clearly expressed in the language used to refer to game animals. Game managers talk of replenishing the "stock" of some endangered game species, of "taking" or "culling" "surplus" animals, as if animals were tins in a supermarket or weeds that need to be pulled in a garden. Fiddes notes that the word "control" is one which is repeatedly used by hunters with respect to the hunting of deer. He argues that such a term indicates the assumed correct relationship between humans and other creatures and helps to explain why people continue to hunt for pleasure when it is no longer necessary for survival. "Hunting is an affirmation of the superiority of our technology and civilised skills over the wilderness; it is not primarily a pastime whereby we commune as one with nature, nor whereby we feed ourselves, although that may be the preferred imagery projected" (Fiddes p.76). Fiddes states that whereas in the past, hunting was principally an individual achievement with the assistance of cultural technology, today it has become increasingly a demonstration of technological power through the agency of society's hunters. Deer populations are controlled 'for their own good' and to reduce the damage to human resources, so must be killed 'cleanly'. Sportsmanship is sublimated to social duty" (Fiddes p.77-8).

Hunting is not a simple, biological necessary relationship between human beings and wild animals. It is a practice that gives priority to particular human potentialities while neglecting and marginalizing others. The alertness toward nature developed by hunting is a selective attention focused on killing and the prerequisites of killing. According to Daly (1984), this deadly alertness characterises necrophilous culture. Collard and Contrucci remark that "it is certainly a strange admiration that seeks triumphs in the death of the beloved" (Collard and Contrucci p.51). Such opposition to hunting leads to defence from the receiving end. Some, such as Vitali (1990) looked towards ethics to justify hunting.

IS SPORT HUNTING ETHICAL?

Vitali considers that hunting for sport to be ethical because "it does not violate any animal's moral rights, it has as its primary object the exercise of human skills, which is a sufficient good to compensate for the evil that results from it, namely the death of the animal and it contributes to the ecological system by directly participating in the balancing process of life and death upon which the ecosystem thrives, thus indirectly benefiting the human community. As such, hunting is not only a natural good, but also a moral good" (Vitali 1990 p.69).

Many have challenged Vitali's arguments. Various authors have dwelt at length on the moral rights of animals, which Vitali claims they do not have. Peter Singer is on the forefront of those philosophers currently drawing the attention to the moral status of animals. As a utilitarian, he claims that we have a moral obligation to minimise the pain and suffering that are the consequences of our actions. Singer offers strong grounds for taking the morality of sport hunting seriously. Since hunting involves the infliction of pain and death, he argues that it is up to us to question the arguments raised in defence of hunting. In the case of sport hunting, the hunter does not depend upon killing the animal in order to survive. For this reason, such hunting appears to be gratuitous and unnecessary (Singer 1975, Singer and Regan 1976). The aspect of 'clean kills', that is killing birds or animals outright with a single shot is stressed in hunting literature, yet, this is hardly the case in practice. Loftin states that hunters often overlook the instances of crippling, and "no matter how conscientious a hunter may be, he is always going to cripple some animals which escape to die a prolonged death in pain and agony" (Loftin 1984 p.245). Studies on Canada geese in Oregon showed that crippling amounted to 14.3 per cent in 1965-66 season. There are good shots, ones who have high success in shooting, and bad shots, those who hardly ever kill anything they shoot at. Both kinds of hunters frequently cripple animals they shoot. Studies in the United States show that for every duck bagged, another is wounded and that good shots are likely to wound or cripple more birds than bad ones (Anderson 1994). Another aspect which has started receiving attention relatively recently is lead poisoning in waterfowl. Sanderson and Bellrose (1986) concluded that waterfowl die when ingesting lead shotgun pellets deposited in the environment and that in most cases they die after ingesting one or two pellets. The authors found that most waterfowl ingest more leadshot and die after the shooting season, on their return to shotover areas where spent shot is abundant. They also noted that while crippling losses occur throughout the hunting season, losses from lead poisoning are most extensive after hunting ceases. This, they argue, affects the breeding population more severely than an equal number of crippling losses during the previous autumn as the birds dying from lead poisoning die nearer to the breeding season when birds are achieving breeding status.

The exercise of the hunting skills can be exercised without killing the animals, by tracking down animals, cornering them, even, but without killing them in the end, as Robert Deniro does in Michael Cimino's film *The Deer Hunter*. But Vitali argues that when a hunter does this, he is "only playing not hunting" (Vitali 1990 p.78). Neither can one accept the argument that by killing animals humans contribute to the ecological system by directly participating in the balancing process of life and death upon which the ecosystem thrives. As discussed earlier, the human being is not a natural predator, humans do not have neither the physiological nor the morphological adaptations of predators. To accept Vitali's arguments one might as well waver all the laws protecting animals, even during the breeding period, as natural predators take predators at all times of the year.

Causey, who states that hunting is not a moral issue, acknowledges that "the hunter does not hunt to manage, harvest, control, cull, or thin herds of game; he hunts to kill" (Causey 1989 p.336). She argues that "sport hunting that is purely recreational, i.e. in which animals are killed only for frivolous purposes such as trophies or sport and are not eaten or meaningfully utilised, borders on senselessness" (Causey 1989 p.343). Vitali too acknowledges that hunting for sport or for trophies is not an efficient form of predation, because unlike nonhuman predators, human predators take the best samples of the herd or species, not the sick, old or injured. Loftin (1984) remarks that modern sport hunting inverts the natural attrition and removes the largest and best conditioned animals from the herd. Hunters are after the record setting pair of horns, and the hunter deliberately selects the biggest male in the herd, the individual most fit to pass along the best genes. Vitali states that hunting clubs tend to emphasise hunter success and that success is measured by the size of the animal taken, only to shoot such statements down by saying that "most hunters are opportunistic rather than selective predators". That is they kill the first animal that presents itself rather than waiting for a better one which might never appear (Vitali p.70).

Collard and Contrucci argue that "hunters often pose as conservationists who love nature, giving rise to yet another contradiction comfortably entrenched in this culture" (Collard and Contrucci p.52). The authors argue that rather than loving nature, hunters love how they feel in it as they stalk and kill "her animals". "Dependent for their thrills upon what nature 'provides', they therefore spend a considerable amount of money to ensure that conservation lands as well as fish and animal preserves are regularly stocked. They return compulsively to woods and lakes, rivers and fields, marshes and oceans, to live through the power of their rods and guns. When rigorously challenged as to the morality of their predilections, hunters commonly resort to rationalisations that disguise their self-interest as 'concern' for animals and for other people. For example 'deer would starve to death if hunters did not cull the herds' or 'bears would cause too much damage if not kept in check by hunters' " (Collard and Contrucci p.52). The authors argue that it was man who exterminated predators of deer, such as wolves, and that both deer and bear did well when they were left alone. "Bears do not kill gratuitously for 'pleasure', status, profit, power, masculinity. Hunters do. Bears kill because they have to eat what they kill in order to survive. The overwhelming majority of the 20.6 million 'registered' hunters in the United States do not kill for survival. Bears kill the weak. Hunters take the biggest and the best. Bears give back to the earth. Hunters give back nothing" (Collard and Contrucci p.52).

Loftin argues that hunters give back to nature by managing land for hunting, thus helping other species in which hunters are not interested and one can "regard the game animals that fall to the hunter's gun as martyrs...The animals that die, some of them in fear and pain, are dying for a reason, though they are not aware of it, and their deaths should be seen as a sacrificial act in the best sense" (Loftin 1984 p.248). What Loftin forgets to mention is that, as Collard and Contrucci point out, natural predators are killed to keep 'game' populations artificially high and predators such as birds of prey, are still seen as competitors and killed illegally. From time to time, campaigns are made to legalise the killing of birds of prey as grouse moor owners claim that are losing up to 60 per cent of their stock in winter (Leake 1995). Such arguments bring into question the validity of the argument that the management of moors by hunting interest results in a better habitat for other species, as when other species benefit from such management, these are seen as competitors and there are calls for their removal. Loftin argues that the contention that unless hunters cull wild animals these would die terrible deaths from starvation, disease or old age cannot be used to cover all species in all times and places as there are many game species that will not overpopulate and stress their respective habitats (Loftin 1984). Hunters' arguments that they are doing animals, and nature, a favour by 'harvesting' or 'culling' the surplus populations raises another issue. Hunters do not just hunt animals with overpopulation tendencies. So why do they hunt these?

Wenz notes that modern hunters have a significantly different impact on the ecosystems in which they hunt than do hunter-gatherers. "They are more numerous per acre of land suitable for hunting because in modern society so much has been allocated for other purposes, farming and urbanisation...The modern methods of hunting facilitate considerably the successful consummation of the hunt. The result is that the modern hunter disrupts rather than helps maintain natural balances in the ecosystem. To keep hunters from decimating hunting populations, the natural predators of those populations are decimated" (Wenz 1983 p.193). Leopold describes this process: "wolves and lions are cleaned out of a wilderness area in the interest of big-game management. The big-game herds then increase to the point of over browsing the range. Hunters must be encouraged to harvest the surplus, but modern hunters refuse to operate far from a car; hence a road must be built to provide access to the surplus game. Again and again, wilderness areas have been split in the process..."(Leopold 1970 p.268). Leopold states that damage to plant life usually follows artificialized management of animals. He states that overabundant deer have made it impossible for deer food plants to survive or reproduce, when deprived of their natural enemies. The composition of flora is gradually impoverished and both quality and quantity of fauna decrease. Wenz argues that the argument that hunting is ecologically beneficial is "entirely unsound" and that the "overall ecological effect of hunting is, in fact, very negative" (Wenz 1983 p.194).

HUNTERS 'LOVE' THEIR PREY

In the 'civilised world', hunters hunt because they enjoy it. But it is not really clear what they enjoy. Tuan (1980) states that in Western society hunters have guns. The power of hunters lies in their implements, and their skill is manifest in the precision of their aim. Some argue that the satisfaction of pitting man's brain against that of an animal is part of the fun. Fiddes argues that "when the element of skill required of the hunter is so diminished by aid of technology that the animal has little chance in the contest it is proportionally less of a personal achievement to kill, so less prestige accrues" (Fiddes p.77). In Malta, hunters claim that they are not pitting their brains with the birds' but competing with each other as to who manages to bag the bird first.

Hunters say they feel deeply in love with the animals they kill, and they identify that love as one of their reasons for wanting to kill them. William Thompson, one of the founders of bow hunting in America wrote about deer "I have been their friend and mortal enemy. I have loved them that I longed to kill them" (Pope 1925 p.114). Many Maltese hunters and trappers say 'love' is the driving force behind their pastime: "they love birds so much that they want to own them" (Sultana and Gauci 1979 p.83). Hunters shoot birds and then take them to taxidermists to have them stuffed and mounted in a life like manner. This murderous amourousness does not characterise all the hunters. But feelings of guilt pervade the art and literature of hunting. Some hunters became conservationist 'penitent butchers'. Aldo Leopold and Sir Peter Scott, are perhaps the most classic examples of converted American and British hunters, respectively. It was not only hunters who shot birds. Many of the first ornithologists were keen sportsmen themselves. One can note the sensitivity of the pioneers of ornithology, who frequently show regret about the birds that were killed and about having to use the gun to study birds. The following passage is about an extremely rare visitor to Maltese shores, a snow bunting which Charles Wright shot at Salina in the late 1800s: "On shooting it I could hardly believe my eyes at the unexpected sight of a snow-bunting lying before me a traveller, possibly from the icy shores of Spitzbergen! It was a male in one of its most attractive states of plumage - pure white predominating. Sitting down beside it and gazing upon it with mixed feelings of surprise, admiration and delight, not unmixed with regret that the pursuit of our favourite study should involve the occasional destruction of such pretty creatures, it was some time before I raised it from the ground; then, carefully smoothing its finely varied plumage and plugging the shot holes, which fortunately, were not extensive or numerous, I walked on with a light step, excogitating on the strange chance that had brought me across this waif from the north" (Wright 1870 p.490).

Cartmill notes that feelings of guilt are clear in the writings of Montaigne and in anti-hunting propaganda produced by reformed hunters like Seaton and Galsworthy (Hooton 1946). The hunter's guilt is more guarded, but still unmistakable, in Renaissance hunting manuals and in the works of animal-loving hunters like Oudry, Courbet, Landseer, Bonheur and Salten. "It attains bizarre intensity in the fiction of T.H. White — who spent the autumn of 1938 alternately shooting geese and working on a novel, *Grief for the grey geese*, about a reformed hunter who loves wild geese and tries to save them from being shot" (Howells 1946 p.102). Cartmill states that this "sort of inner conflict is usually a sign that something wrong is going on. The wrongeness itself is sometimes part of the attraction to hunters. Some men seem to enjoy feeling evil. They may enjoy their sport because it makes them feel wild, wicked and crazy. Hunters sometimes offer the same excuse for hunting as rapists do for rape: they insist that they are not to blame as the victim was asking for it" (Cartmill p.239).

The language used by hunters often hides reality and euphemisms are frequently used. In Chapter 3 there is a discussion about how Maltese hunters use a certain type of register when talking between peers, yet they speak of catching (instead of killing) when speaking to non-hunters. It is worth pointing out that the monthly newspaper for shooters and trappers *Il-Passa*, photographs of dead birds are a rare occurance. Even when discussing a particular quarry species, photographs of living, rather than dead birds are published. The vocabulary of the local hunters' association is also changing. The association often uses the terms "sustainable hunting" and "harvest" in relation to hunting. The use of the latter term is peculiar, as although the verb "to harvest" may be more socially acceptable than "to kill", the symbolic reaper associated with the harvest signifies death. Sultana (1996) argues that the term "sustainable hunting" cannot be applied where migratory birds, whose populations are in decline, are concerned.

The careful use of language in hunting magazines was highlighted by Leslie Pine, managing editor of *The Shooting Times*, who resigned his post and used "knowledge so hardly gained" and with such a "cost" to his feelings to write a book called *After their blood* (Pine 1966). Pine wrote that there were a number of words which were never used such as 'blood sports', animals are never destroyed or killed, but 'put down'. The term 'to cull' was always used instead of 'to kill'. He noted that in articles about hare coursing, there was not a single mention of the hare, "leading one to think that a harmless trial between greyhounds had been in progress" (Pine 1966 p.20). The author quotes a British Field Sports Society booklet *You and your press* stating that "when writing press reports, it is wise to avoid stressing details which may provide anti-hunting organisations with ammunition to attack field sports...avoid stressing details of the kill...the wisest expression to use is that a fox was 'accounted for'" (Pine p.21).

HUNTING AND CONDITIONING

Causey states that "sporting hunting is a modern activity largely shaped by the existing cultural, societal, and familiar forces to which the sport hunter is exposed" (Causey 1992 p.378). Many hunters in Malta shoot because it is their childhood pastime, which besides filling their time and providing a topic of conversation, it gives them a certain status among their peers and provides them with trophies in the form of stuffed birds. Parallels exist in many countries. Writing about hunters in a South Carolina community in the United States, Marks noted that "for men, hunting is the quintessential masculine activity, for it links their youth, when they were just learning about becoming men, with their present. It recalls that early hunting, often under the tutelage of their fathers, the close associations of men engaged in a common pursuit, the triumphs over subjects capable of evasion, the mastery over technology and dogs, and the pleasures associated with the land. It recasts stories of wild animals, of dogs, and of landscapes, and of people deeply etched into the conceptual imaginations of youth. To engage in hunting is to emulate, to defend, and to advocate what is a tried, proven, and proper way of becoming and being a man. Hunting is also a way by which some men reaffirm their masculine identity" (Marks 1991 p.6). Marks quotes one hunter as saying "the best part of hunting and fishing was the thinking about going and the talking about it after you got back. You just had to have the actual middle as a basis of conversation and to put some meat in the pot...Southerners, like sportsmen everywhere, hunted for pleasure, for the joys of companionship, for the freedom of the field, and the excitement of pursuit. Yet, as with any cultural expression, their narratives of their exploits were constructed in a way that was consistent with their assumptions about human nature, society and the world" (Marks p.7, 17).

Hunters in general feel shooting is fun, and for some, anything can be a target. Colonel Peter Hawker, who lived between 1786 and 1853, was labelled "a great game shot" (Parker nd [1844?] p.v.). He was one of the best sharp shooters of his time, often killing more than a single bird in flight with a single shot, which is quite a remarkable feat considering the weapons available in his time. In spite of his relatively large bags of game birds, Col. Hawker could not resist the temptation to shoot and his diaries contain entries such as: "a ridiculously good double bag this evening at a bat and a stag beetle" (Parker p.xii). On another occasion he shot a swallow, "just to say that I had shot wild geese and a swallow on the same day", and at the age of 42, while trying out a new stock for his gun, he "knocked down, in seven shots, six bats and one moth" (Parker p.xii).

Writing about his 'duck' shooting experiences on the swamps of the Mississippi river in the mid 1800s, Donaldson vividly describes how first he approached a large flock of coots resting on the water and only opened fire when he was within fifteen yards off them. A friend of his killed 153 birds by firing both barrels of his gun. Donaldson noted that "prairie hawks were very numerous, and followed closely in the track of where much destruction was going on". These hawks often took birds crippled by hunters, and in spite of having "as much sport as I (he) could desire", Donaldson described how he "quickly stretched at full length alongside the duck" a falcon which tried to take a duck he had just shot. Donaldson also recounts how he shot "and wounded" a frog which tried to snatch a flycatcher he shot (Mabey 1995 p.103-106). In the late 1800s in Britain, it became fashionable to set about the business of making record bags. Lord Walsingham shot 1,070 grouse single handidly on Blubberhouse moor on 30 August 1888. Prince Duleep Singh, the Maharajah of Lahore, shot 789 partridges to 1,000 shots in Elveden, a Norfolk shooting estate (Brader 1971).

Closer to our times, there are grim accounts of worldwide extinction of a number of species. Many of these are due to hunting. As stated in the chapter dealing with environmental impacts, a number of breeding birds in Malta have been shot to extinction by local hunters. The last jackdaw was shot in 1956 (Anon 1963). The last known breeding pair of barn owls was shot in 1988 (Fenech and Balzan 1988). Peregrines and kestrels do not breed regularly because of hunting pressure while any breeding attempts by many species fails when the adult birds are killed.

The relation of humans to the natural world has been summed up by Washburn and Lancaster: "hunting changed man's relations to other animals and his view of what is natural. The human notion that it is normal for animals to flee, the whole concept of animals being wild, is the result of man's habit of hunting. In game reserves many different kinds of animals soon learn not to fear man, and they no longer flee..... With the origin of human hunting, the peaceful relationship was destroyed, and for at least half a million years man has been the enemy of even the largest mammals. In this way, the whole human view of what is normal and natural in the relation of man to animals is a product of hunting, and the world of flight and fear is the result of the efficiency of the hunters" (Wasburn and Lancaster p.299).

The behaviour of birds losing fear of humans is most evident in species such as ducks and geese, which are hunted throughout the world. It has been noted that ducks quickly learn which areas are safe for them and they fly at a high altitude on approaching nature reserves, and lose height as soon as they cross the border into the reserve. The same birds which are weary of human presence in the countryside where they are hunted, do not fear people in parks and gardens over most of Europe and even in North Africa. In many places, such birds even accept food thrown to them and some are also prepared to feed from people's hands. Such behaviour can be noticed even in Malta. The warden at the Ghadira nature reserve, has observed that several species of duck flying in from the sea will settle in immediatly with resident ducks and temporarily lose their fear of humans, even in such a hostile environment to birds (C. Gauci pers. comm.).

LEARNT VS INNATE BEHAVIOUR

In this chapter, it has been shown that the importance of hunting has been overemphasised in evolutionary theories. Cartmill states "the killer ape story has roots in older tales....scientists have been the chief tellers of that story" (Cartmill 1993 p.xi). Washburn and Lancaster (1968) wrote that "hunting has dominated human history". Laughlin was even more categorical: "hunting is the master behaviour pattern of the human species" (Laughlin 1968 p.1). Thus, our intellect, interests, emotions, and basic social life are all evolutionary products of the success of the hunting adaptation. Man's life as a hunter supplied all the other ingredients for achieving civilisation. Tuan states that human beings were hunters and gatherers through most of the course of their biological evolution. "The human body and mind are well adapted to chase down and killing game" (Tuan 1980 p.22). Such a view is shared by Washburn and Lancaster who wrote: "The extent to which biological bases have been incorporated into human psychology may be measured by the ease with which boys can be interested in hunting, fishing, fighting and games of war. It is not that these behaviours are inevitable, but they are easily learned, satisfying and have been socially rewarded in most cultures. The skills for killing and the pleasures of killing are normally developed in play, and the patterns of play prepare the children for their adult roles" (Washburn and Lancaster 1968 p.300).

The ease by which these behaviours can be learnt may also be explained by the role of role models and with social rewards associated with them rather than the "biological bases" mentioned by Washburn and Lancaster whose notion has been repeatedly challenged. "The nineteenth-century idea that children went through stages recapitulating the evolution of man has been criticised by modern anthropologists for the same reasons that biologists no longer subscribe uncritically to the cliché 'ontogeny repeats phylogeny'. The past is not encapsulated. Play in children is not a dramatic enactment of the prehistoric daily struggles...Given health, place, and social sanction, play emerges. Instinct inclines but does not force children to play" (Shepard 1967 p.35). It is rather puzzling how Washburn and Lancaster attribute biological bases to the ease with which children learn to hunt, as they noted that "the whole youth of the hunter is dominated by practice and appreciation of the skills of the adult males, and the pleasure of the games motivates the practice that is necessary to develop the skills of weaponry" (Washburn and Lancaster p.300).

Writing about the Cashinahua of Eastern Peru, Kensinger notes that "as soon as a boy can walk unassisted, and sometimes before, his father or paternal grandfather gives him a small bow and arrows with which he learns to shoot banana trees, papayas, leaves, insects, lizards, etc. His successes are lauded, his failures are either ignored or gently responded to with instruction". During their childhood, such children are shooting just about anything that moves in the garden surrounding the village, and cooking and eating any birds, lizards, and rodents shot during these expeditions. They occasionally accompany adults on short hunts in the forest where they learnt to read animal spoor, to identify animals by sound and smell, and to locate animals as they move through the forest. They learn identify those things, both natural and supernatural, that pose a threat to the hunter and to avoid them or neutralise their potential danger. By thirteen years of age the child has learned how to site and build a hunting hide and begins to hunt independently and by the age of 15 he is generally able to hunt like any adult male. He has no obligation to provide meat for his family, but his catch is widely acknowledged and praised. With the killing of his first tapir, he is recognised as an accomplished hunter and he proudly supervises the butchering. Kensinger notes that "the greater his success as a hunter the wider the swath of his amatory pursuits and the greater his chances of arranging a marriage" (Kensinger 1989 p.21).

As Tuan states, children "model themselves after adults and adopt the attitudes and values of the adult world" (Tuan p.28), and one could hardly expect such children to engage in other activities if all their childhood is dominated by the practise of hunting. Children tend to learn some skills very fast: they master computer skills and learn to operate electronic remote controls much faster than adults and one can hardly attribute such learning to evolutionary process, as Washburn and Lancaster did.

Wenz argues that an evolutionary explanation of hunting that postulates that hunting comes naturally to us because it is ingrained during our evolutionary history is misleading because it fails to consider (at least) differences between modern and prehistoric human environments (Wenz 1983). But even if hunting were so important in pre-historic and historic times, it can hardly be an excuse to justify sport hunting practices today. Hunting is not "natural", and being natural is not a good enough reason why it should be performed in our times. Human beings often have natural desires to do a number of things, but some of them have to be controlled if we are to live in society.

Shepard quotes and concurs with Ortega's claim that hunting is "a deep and permanent yearning in the human condition", adding that as a result "there is a chronic fury in all people to whom it is denied" (Shepard 1973 p.150). Wenz (1983) argues that if hunting comes naturally to us, the frustration of natural tendencies is detrimental to people's mental, and sometimes physical health. He further argues that hunters can shift their hunting 'instinct' to other activities such as photography. "In an age of increasing complexity and artificiality, it is easy to sympathise with a view that people will only be at peace and feel comfortable with themselves and others if the conditions of their existence more closely approximate those present during the major part of our evolutionary history. Surely a society without extended family ties suffers greatly. Nor can humans expect to find fulfilment working on assembly lines in modern factories. But to admit this is not to admit that because people used to hunt animals, they must do so now in order to promote their mental health. A mean must be found between the extremes of slavery to our distant past and acquiescence in whatever conditions of life are dictated by the need for efficiency in a growth economy.....Given the unparalleled adaptability and flexibility of human beings among animals, attention should not be focused on detailed similarities between specific activities or relationships in the modern and pre-historical human environments. Rather, the basic human needs met by a specific activity or relationship in the pre-historic period should be sought. Then we should consider what substitute activities or relationships might fill these same basic needs" (Wenz p.195).

Wenz argues that wilderness photography is an adequate substitute for hunting as the photographer has to study the animals' habits just as a traditional hunter-gatherer. The major difference, he argues, are the consequences of 'shooting' and the nature of the trophy obtained. "Given the massive differences in myriad areas between modern and hunter-gatherer life, it is implausible that the differences between hunting and wilderness photography are the ones that the human psyche cannot tolerate" (Wenz p.196). Wenz also argues that the argument that one should not refrain from hunting because this would cause hardship to ammunition manufacturers, distributors and retailers is weak as all changes in technology and consumer tastes have similar effects. "We do not have an obligation to arrest change simply to avoid inconveniencing those benefiting from the status quo. And we reject such an obligation for the sound reason that its acceptance would have a stultifying effect upon society and thereby doing a great deal of harm" (Wenz p.196).

Collard and Contrucci describe hunting as an "exercise of power on the part of one who feels overwhelmed, fragmented and frightened and it explains the pathetic urge to kill anything bold enough to be alive...I have no sympathy for hunters. Their habit repels me as being senselessly brutal. Their language embarrasses me as sounding piteously immature. They remind me of irresponsible little boys driven to savagery out of boredom, a boredom so desperate that relief comes only from the thrill of hunting that culminates in the kill. Quite simply, hunters need to be 'turned on' to life. One of them expressed his inability to respond to nature unless he controlled/killed it when he said to me, 'Walking in the woods doesn't turn me on unless there's purpose to it. Marking trees. Shooting deer. That's really living'" (Collard and Contrucci p.45, 47). These words may seem harsh but the same experience can be said of many Maltese hunters who can only enjoy birds when they shoot them.

Hunters often argue that the hunting way of life is the most environment-friendly one. But for humans, conservation is seldom an evolutionary strategy. The romantic idea that people in the past were more 'environmental friendly' may be due to the rapidity with which environmental degradation has taken place during the past century or so and the wish to return to 'nature'. Environmental degradation may have been slower in the past for three main reasons. Firstly, the population was much smaller and the ecology could, more or less, sustain the impact. Secondly, primitive technology was slow and did not have large environmental impacts, especially in the short term. Thirdly, closer to our times, people were less affluent and had less money to spend. The principles of re-use (now termed re-cycling), were employed by people who found ways of re-using things for other purposes, primarily for saving money, whereas in a consumer society, practically nothing is indispensable.

THE WAY WE NEVER WERE — IN HARMONY WITH NATURE

The notion that primitive people were careful not to overexploit or over-hunt natural resources is incorrect. As Simmons argues, "any picture of hunter-gatherers simply as responsive children of nature living solely off a provident usufruct is part of a myth of a Golden Age" (Simmons 1993 p.8). Upper Palaeolithic hunting and gathering peoples inhabited many environments that have no equivalent in the historic or modern world. Hunting was 'sustainable' because the number of hunters, and their effectiveness, was limited. They took from each season what each season provided, without much thought about the future. The cave of La Reira, in Cantabria in north eastern Spain, shows evidence for the beginnings of marine resource exploitation at around 20,000 B.P., and for over-exploitation of shellfish by the end of the Pleistocene (Straus 1991). Straus states that Upper Palaeolithic hunters employed mass killing techniques and gives a number of examples where herds of animals such as reindeer, red deer, horses, bison, aurochs and mammoths were trapped and mass killings took place. Sites such as Milovice, southern Moravia, a Gravettian deposit dated to about 22,000 BP contains the massed bones of about 100 young mammoths. At Solutre in east-central France, a site was apparently used to trap bands of migrating horses for 20 millennia during most of the Upper Palaeolithic (Strauss 1993). Kay (1994) argues that native Americans had no effective conservation practices and the manner in which they harvested ungulates was the exact opposite of any predicted conservation strategy. American Indians are among the most revered 'primitive' people for their conservation policies and posters and books with sayings from such people are widespread. Their role in nature, especially American Indians, has often been viewed as that of conservationists who were too wise and knowledgeable to overexploit their environment (McCabe and McCabe 1984). This belief, which dates back to Rousseau's concept of the 'noble savage', has a long history of popular press (Speck 1913, 1939a, 1939b, Roberts 1932). The environmental movement in the late 1960s and early 1970s further romanticised the image of hunter gatherers as original conservationists (Steinhart 1984). The idea that aboriginal people did not damage their resource base, which has been implicitly assumed by most anthropological theory since the beginning of that discipline (Heizer 1955), is still popular in some circles, even though it is untrue (Feit 1987).

Others contended that the Native Americans' religious beliefs prevented them from over utilising resources (Speck 1939b, Nelson 1983). Native Americans tended to view wildlife as their spiritual kin and scarcity and hunting failures were not viewed as ecological phenomena but rather as a spiritual consequence of circumstances. "If a native American did not find any game, it was not because he had over-hunted, but because he had done something and displeased the gods. Religious respect for animals did not equal conservation" (Kay 1994 p.379). Native Americans hunted in a co-operative manner, drove animals with various methods including fire, used traps and corrals to take species of ungulates and killed animals at a distance with spears, bows and arrows, thus reducing the risk of physical injury that carnivorous predators face each time they attempt a kill. Key (1994) also notes that aboriginal people's ability to kill prey did not depend only on their behaviour, but also on that of their prey. He notes that moose which stand and hold on their ground when tested by wolves have a higher probability of survival than those that attempt to flee. This behavioural strategy, evolved through time, may be adaptive when encountering wolves, but is fatal when used on encountering humans who kill at a distance.

Brightman notes that the Cree Indians believed that hunting did not affect animal populations since they were an "infinitely renewable resource" (Brightman 1983 p.384). Such a notion is also held by Yup'ik eskimos, who inhabit Nelson Island on the Bearing Sea in north west Alaska. It was only if a hunter was disrespectful or wasteful that animals would be hard to find (Fienup-Riordan 1990). Yet, on a trip to Hooper Bay in 1911, a missionary wrote about the irrational wasteful attitude after a successful belukha whale drive, where only select cuts of meat were taken and commented that eskimos were acting according to their time-honoured custom that the more they kill, the more whales will return the following year. The missionary also noted that in their ceremonial distributions of meat, the Yup'ik people acted "as if there was no tomorrow" (Fienup-Riordan p.174).

Yup'ik eskimos and Athapascan speaking Kutchin Indians, who inhabited the Yukon Flats by the Chandar River in North America hunted large quantities of ducks and geese by chasing and herding them when they were flightless (Fienup-Riordan 1990, Nelson 1973). Although such goose drives have often raised issues of long term conservation, such hunters view them as the most practical way to harvest meat. Nelson Island Yup'ik peoples admit they do not see as many geese in spring as in the past, but they do not attribute this to overkill on their part or by hunters in California or Texas, who hunt the same populations during their southern migrations. They simply argue that fewer geese are evident because birds are not receiving "proper treatment and respect". Old women blame restrictions on egg collecting for the decline, as traditionally, the fertility of geese was believed to be enhanced when women spat in the nest and overturned it upside down after gathering its contents (Fienup-Riordan 1990). For many Nelson Island hunters, a conservationist's argument that advocates reduced or controlled hunting to increase herd population makes little sense because such a measure does nothing to change the number of animals or the operation of the system as they conceive it. "Having no concept of limiting the harvest, only prohibitions against waste, coastal hunters explain reductions in animal populations not by overhunting but by claiming that the animals have simply gone somewhere else" (Fienup-Riordan p.181).

Variations of such arguments are also used by Maltese hunters seeking to explain the decrease in the former flocks of turtle doves migrating in spring. They blame the use of pesticides abroad, development and changes in the migration routes for the decrease of day migrants while lights at night, are blamed for the decrease in the number of night migrants which were formally seen at day break. In Malta too there is a notion that hunters in the past shot only at 'game birds'. This notion is only true if one considers all birds as game. Ornithological accounts written in the late 19th century and early this century show that everything was considered fair game and all sorts of birds ended up at the poulterers' stalls in the market. In 1870, Wright noted that "all kinds of birds from an eagle to a nightingale are sent to the market as 'game' " (Wright 1870 p.493). In the same year, Adams noted that the poulterers' shelves were stocked "with all manner of birds great and small" and that anything from a stork to a swallow could be found on the market (Adams 1870 p.90).

The most significant difference between hunters in the 19th century and today's hunters is that hunters in the past shot birds primarily for food, while today, they do it for sport. This is not to say hunters in the past did not enjoy hunting. But hunting did provide an additional source of meat for the table and hunters tried to account for every shot. When shooting birds such as skylarks, hunters used to try and kill as many as possible with a single shot and even people who could afford to shoot used muzzle loaders rather than shotguns when hunting skylarks to save the costs of the cartridge (Guzeppi Vella, Vincent Said, pers. comm.). Hunters in the past did not have the free time modern hunters have and many birds were taken in nets, which were set in trees and left unattended. Another difference is that in spite of remarks that Maltese hunters "waged war against feathered creatures" (Despott 1917a), and that they killed anything that flies (Payn 1938, Wright 1870, Cooke 1892), the number of hunters was small compared to what it is today, their technology was limited and they had limited means of transport with which they could not venture far into the countryside.

Environmental degradation and hunting

Pro-hunting philosophies argue that both industrialisation and agriculture cause environmental degradation and that the hunting way of life is the most ecologically sound. Wenz (1983) states that contemporary thinkers often consider environmental degradation to be a by-product of the industrial revolution and its aftermath. Shepard (1973) states that the transition from hunter-gatherer or horticultural societies to agricultural societies caused good ecosystems to be degraded through the agency of the increase of human population. "Subsequent expansion of agricultural systems and the growth of industrial civilisations, accompanied by unprecedented growth in the human population, simply made matters worse and worse" (Shepard 1973 p.20). But Wenz (1983) argues that although industrialisation exacerbated environmental difficulties, it did not create them. An analysis of Shepard's arguments shows that they leave out more than they say. While it is undeniable that environmental change occurred with the changing lifestyle of early human beings, the argument cannot be stretched to justify hunters' activities in our times. Sport hunters today are part of society. They live in cities, towns and villages, like non-hunters do. Hunters consume and produce waste as much as non-hunters do, and they are part of society which can be blamed for most of the environmental degradation and pollution existing today. Hunters are more 'guilty' than others because apart from all the usual human impacts, they also kill and destroy nature for their own pleasure, or as a result of it. In Greece, forest fires coincide with hunting periods. Hunters often forget to extinguish small fires they set at campsites and the results are often woodland fires (Costas Tsipiras pers. comm.; Kostopoulous 1993). In Malta, hunters modify the landscape by building trapping sites. Due to stiff competition in hunting, trees are often burnt to make land unattractive to birds so that birds will have to go to the adjacent hunter's land instead. This, not to speak of the killing of animals and birds and other environmental impacts.

Wenz (1983) argues that people have a moral obligation to avoid destroying good ecosystems and since hunting is one of the environment damaging ways, hunters have a moral obligation to cease this practice. Shooting is a pastime, it is done solely for fun. As various people defending hunting have wrote, the pleasure is in the killing. Morally speaking, killing can never be allowed to become a pleasure in a civilised world. Faced with this argument, shooters deny that their fun is derived from killing. George Bernard Shaw had very strong ideas about this: "The sportsman shooting quite skillfully and coolly without the faintest sense of any murderous excitement, and with no personal feeling against the birds, is really further from salvation than the man who is humane enough to get some wickedness out of his sport. To have one's fellow feeling corrupted and perverted into a lust for cruelty and murder is hideous; but to have no fellow-feeling at all is to be something less than even a murderer. The man who sees red is more complete than the man who is blind" (Shaw 1915 p. xxxii).

One may, or may not agree with Shaw's way of thinking. But his words may give plenty of food for thought: "Even as it is, there are now so many other pastimes available that the chic of killing is becoming more and more a disgrace to the chooser. The wantonness of the choice is beyond excuse. To kill as the poacher does, to sell or eat his victim, is at least to act reasonably. To kill from hatred or revenge is at least to behave passionately. To kill in gratification of a lust for death is at least to behave villainously. Reason, passion, and villany are all human. But to kill, being all the time quite a good sort of fellow, merely to pass away the time when there are a dozen harmless ways of doing it equally available, is to behave like an idiot or a silly imitative sheep" (Shaw 1915 p. xxxiii).

Shaw was writing at the turn of this century — a time when the pastimes available could not match what is available now. Today hunters not only have clay pigeons and guns which shoot infra-red beams at moving targets, thus avoiding the use of lead and noise pollution. There are also computer games which enable shooters to kill as many birds as they like on their computer screens, without depleting the natural populations. Hunting in Malta is not really a tradition and even if it qualifies as a tradition, one has to see whether it is socially acceptable and justified in today's times. We are in the ambiguous situation where if a person mistreats and animal, he could be charged with cruelty to animals, but then there are laws allowing hunters to shoot certain species of birds. As the greatest defender of hunting, Ortega Y Gasset argues, reason is the greatest danger to the existence of hunting.

Conclusion

In this chapter, an overview of the hunting related philosophies and trends of thought, have been discussed. The arguments brought by those who believe in the 'hunting hypothesis', which claims that hunting was the deciding factor in the evolution of human beings, were contrasted with the evidence brought by those who do not attach so much importance to hunting in evolutionary theories. The various connotations of hunting were discussed, and the relationship between hunting and warfare and imperialism and hunting have been discussed. The idea of 'man's dominion', and the counter concepts of 'man's place in nature' have also been discussed. Since hunting pervades art and literature, a discussion on the representation of hunting in such media has been discussed and it was shown how the sentiments shifted from pro-hunting to compassion towards the hunted animals.

The philosopical defence of hunting, particularly that of Ortega Y Gasset and Paul Shepard have been quoted and debated. It has also been shown that the 'back to nature' concept which some hunters use to justify their activity is nothing but a screen. The ideas of eco-feminists on hunters and their arguments about how hunters render their prey as an object, are discussed. Finally, the role of religion in hunting is also discussed and examples are given to show that, contrary to popular belief and current practices, the Roman Catholic Church was one of the anti-hunting establishments, especially in the Middle Ages.

It has been shown how hunting has lost its importance as a food procuring activity for most peoples. Even the isolated pockets of gatherer-hunters existing today subsist more by gathering than hunting. Hunting today survies as a 'sporting' activity, and, as the next chapter will show, the practice of hunting in the Mediterranean region is decreasing. Although it remains an important (practically all male) activity in the developed world, both its importance and significance have changed.

The younger generation in most developed countries are, generally speaking, more environment conscious. This, coupled with the fact that people are losing touch with the rural way of life, may well be the two prime causes for the decline in hunting practices in the developed world. In the following chapter, the hunting situation around the Mediterranean basin is analysed and the current practices in Malta are placed in this context.

CHAPTER 2 MALTA IN THE MEDITERRANEAN AND EUROPEAN CONTEXTS

INTRODUCTION

Hunting continues to be practised throughout the world, but today it is a 'sporting' activity rather than an occupation which ensures that hunters and their families do not starve. 'Sport hunting' developed throughout the world as a result of affluence: historically kings of various civilisations hunted wild beasts for pleasure and the practice of hunting changed in both significance and importance. The term 'hunting' has different meanings in different countries. In the United Kingdom, hunting is associated with fox and deer hunting, in which hunters on horseback follow packs of hounds which chase the animals. In many European countries where "the chase" is not practised, hunting implies the shooting of game animals. In France, the word *chasse* (hunting) is a generic term which is usually followed with qualifiers to identify what kind of hunting one is talking about: *chasse aux oiseaux d'eau* is for instance, hunting of waterfowl. The same applies to Italy, where the term *caccia* (hunting) is always qualified. It is only in Malta that the term *kacca* (hunting) implies almost exclusively the shooting of migratory birds. In Malta there are no resident game birds and the only game animal is the rabbit, but as will be discussed later, the number of rabbit hunters (i.e. those who hunt rabbit with net, dog and ferret) is insignificant compared to the number of bird shooters, who may also shoot rabbits during the open season. Apart from hunters, there are also bird trappers, who trap finches and other birds with clap nets during spring, autumn and winter. Trapped birds are primarily caught to be kept as song birds.

As the Maltese Islands lie in the centre of the Mediterranean and the southern periphery of Europe, the aim of this chapter is to place the Maltese hunting situation in the context of the situation prevailing in its surroundings. Most of the Mediterranean countries to the north of Malta are members of the European Union (EU) and since Malta is seeking closer ties with this political union, the analysis of the hunting situation in these countries becomes even more relevant. The EU has common legislation as far as bird protection is concerned and member states have to enact local legislation in line with the EU Birds Directive.

Lying in the narrow channel joining the eastern and western basins of the Mediterranean, the Maltese Islands have been and are still deeply influenced with what goes on around them. In the hunting issue however, Malta differs widely from neighbouring Mediterranean and European countries.

As Table 2.1 shows, Malta has the highest concentration of hunters in the Mediterranean, followed only by Lebanon. Malta has a density of 51 shooters per square kilometre, while Lebanon has 39. If one had to make a few extrapolations from Table 2.1, one would conclude that while the average number of hunters per square kilometre in the Mediterranean is 4.24, the number of hunters in Malta is almost 12 times higher. While Gozo has a smaller land area and a relatively smaller number of hunters, the density of hunters in Gozo is 57 hunters per km^2 while in Malta the density is 42 hunters per km^2. But it is not only in the density of hunters that Malta differs from the rest of the Mediterranean countries. Maltese hunting laws differ significantly from those in most of Europe. Maltese legislation enacted in 1980 and the subsequent regulations in the same year (Legal Notice 68 of 1980) stipulated a close season between May 22 and August 31, and species such as herons and egrets were still listed as game. The main differences between current regulations which first came into force in 1994 and were amended in 1996, and those of 1980 is that herons became protected and that hunting in spring was limited to quail and turtle doves only. Finch trapping in spring was banned for two consecutive years after the 1993 regulations (Legal Notices 143 to 146 of 1993), but trappers are now allowed to trap four species of finches in spring following amendments to the regulations (Legal Notice 44 and 45 of 1996). If hunters have it their way and the regulations are amended again to be in line with an agreement signed between the Malta Labour Party (which is now in government) and the hunters' association, the hunting and trapping season in spring will be made longer and shooting from sea-craft will be extended to February. Due to an overlap of various hunting and trapping seasons for birds and rabbit, the only real close season will be between 22 and 31 May. The trapping of finches and the shooting of birds on their way to the breeding grounds after January is the principal difference between hunting legislation in Malta and the EU Birds Directive.

International Conventions

Apart from EU legislation, there are a number of other multilateral and bilateral agreements which are of relevance to bird protection. Some are 'protection treaties', aimed at avoiding the extinction of wildlife threatened by various causes, not necessarily by over-exploitation; others are 'conservation treaties' which usually aim to regulate the exploitation of a not yet endangered resource without causing its depletion. Conservation treaties have 'negative' obligations i.e. reduction of catches, while protection treaties contain 'positive' obligations namely those for restoring the conditions necessary for the survival of the endangered species or the maintenance of their habitats.

Table 2.1

Population, land area, number of hunters and international legislation in the Mediterranean region

Country	Area km2	Population	Population per km2	Number of hunters	Hunters per km2	Hunters / 1,000 pop	EU Birds Directive	Berne Convention	Bonn Convention	CITES Convention	Ramsar Convention
Albania	28,748	3,199,233	111.3	10,000	0.35	3.13					
Algeria	2,381,740	26,666,000	11.2	?	?	?				Yes	
Cyprus	9,251	562,700	60.8	45,000	4.86	79.97		Yes		Yes	
Egypt	997,738	47,000,000	47.1	5,000	0.01	0.11			Yes	Yes	Yes
France	543,965	56,555,700	104.0	1,700,000	3.13	30.06	Yes	Yes	Yes	Yes	Yes
Gibraltar	5	29,600	5584.9	0*	0.00	?					
Greece	131,957	9,740,417	73.8	350,000	2.65	35.93	Yes	Yes	Yes	Yes	Yes
Israel	20,699	4,410,300	213.1	5,000	0.20	1.13			Yes	Yes	
Italy	301,301	57,504,691	190.9	1,500,000	4.98	26.08	Yes	Yes	Yes	Yes	Yes
Lebanon	10,230	2,126,325	207.9	400,000	39.10	188.12					
Libya	1,759,531	3,772,600	2.1	?	?	?					
Malta	316	360,000	1139.2	16,000	50.63	44.44		Yes		Yes	Yes
Morocco	458,730	23,770,000	51.8	30,000	0.07	1.26			Yes	Yes	Yes
Portugal	92,390	10,305,000	111.5	250,300	2.71	24.29	Yes	Yes	Yes	Yes	Yes
Spain	504,783	39,541,782	78.3	1,000,000	1.98	25.29	Yes	Yes	Yes	Yes	Yes
Syria	185,200	14,887,000	80.4	?	?	?					
Tunisia	164,148	7,769,900	47.3	10,000	0.06	1.29				Yes	Yes
Turkey	779,451	56,969,109	73.1	1,000,000	1.28	17.55		Yes			
Yugoslavia	102,172	23,690,000	231.9	220,000	2.15	9.29					

? denotes that the number of hunters is unknown or uncertain.
* In Gibraltar there are a few hunters who hunt in mainland Spain, as shooting on Gibraltar is forbidden
Source: Area and population figures from World Almanac and book of facts, Funk and Wagnalls, USA; number of hunters compiled from questionnaires while information on convention accession was obtained from the secretariat of the respective convention.

Among the most important international treaties, one finds the Washington Convention on Trade in Endangered Species, known as the CITES convention, the Convention on Wetlands of International Importance, which aims to preserve wetland habitats (Ramsar Convention 1971); the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979) which protects birds and migratory species respectively and the Berne Convention (Berne Convention 1979) which aims to protect European wildlife and natural habitats. The amount of importance attached to nature conservation can be seen from the number of countries which are parties to the above-mentioned conventions. Apart from EU member states, over 44 countries have become parties to the Ramsar Convention, 133 to CITES, 30 to the Berne Convention and 40 to the Bonn Convention. Malta is a party to three of these conventions, having signed and ratified them in the early 1990s.

The most powerful convention related to migratory birds is the Berne Convention. Although the Bonn convention deals with migratory animals, including birds, the Berne Convention covers the same birds included in the Bonn Convention. The Berne Convention lists in separate appendices, species of flora and fauna which are strictly protected. It also lists prohibited means and methods of killing, capture and other forms of exploitation. The European Union 'Birds Directive' (EC 1979) is another important legislative tool in the field of bird protection. Although the Berne Convention is similar to the said EU directive, the former lists less species of birds than the EU directive, but is more international in scope as it is also open to countries other than EU member states. Hence, a number of Mediterranean countries which are non-EU members are parties to the Berne convention.

The laws in EU member states are in line with the EU Directive on the conservation of wild birds, popularly known as 'The Birds Directive' (EC 1979). The directive has a number of annexes and species listed therein have different degrees of protection. The directive states that the species listed in Annex 1 "shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution" (EC 1979 p.74). Species listed in Annex 2/1 may be hunted in countries under national legislation, but may not be hunted during the period of reproduction or during their journey to the breeding grounds. The species listed in Annex 3/1 may be hunted while those in Annex 3/2 may also be hunted following consultation with the Commission. Annex 4 lists the methods of capture or killing which may not be used within the EU.

Literature about hunting in the Mediterranean is not easily available, even though historically, the region was a favourite hunting ground not just for the local people, but also for visitors, mainly officers serving on naval vessels which operated in the Mediterranean. The only references of relevance are *Sporting notes in the Levant* (Davies 1893 [?]) and *Notes on shooting in the Mediterranean* (Anon 1926, Anon 1932). Lieutenant Dayrell Davies was an officer who was serving on a Royal Navy vessel stationed in the Levant Division. His book contained information about various hunting haunts in the region and mentions record bags made by various officers. The *Notes on shooting in the Mediterranean* had limited circulation and came in the form of leaflets meant to update an 85 page book containing notes with information on shooting in all the areas in the Mediterranean visited by Royal Navy ships. It could not be ascertained when these pamphlets started to be issued, the earliest copy seen is dated 1926 (Anon 1926) and already has observations by officers who had used a previous version. The Office of the Commander in Chief of the Mediterranean station kept issuing updates at least until August 1932 (Anon 1932). These notes were "an entirely unofficial publication" and gave valuable information on shooting places with details ranging from how to get there to the type of shooting licence needed as well as which game could be expected in different seasons. Officers were invited to submit their proposed amendments and additions as a result of their experience gained during cruises.

The chronic dearth of information about hunting in the Mediterranean is even a current one. Individual articles sometimes appear in specialised publications and a few paragraphs may be dedicated to the hunting situation in bird books describing the avifauna of particular countries. But such information is often very generic. The only collective information available on hunting in the Mediterranean is a report by Woldhek (1980), which is now somewhat dated for most of the Mediterranean countries. To obtain some more up to date information, a 12-page questionnaire was devised to be sent to agencies involved in the fields of bird protection and hunting in the Mediterranean. The questionnaire had 13 sections starting with a series of questions regarding the local hunting legislation and the international bird protection legislation effective in the country the questionnaire was sent to. The second section contained questions related to the use of firearms for hunting purposes, open-seasons, cost, importation and manufacture of ammunition as well as questions related to hunting holidays involving foreign hunters who go to hunt in that country. Another aspect of the questionnaire dealt with other hunting methods, such as falconry, trapping and snaring and hunting from seacraft. Respondents were asked to estimate the amount of birds killed each year and whether there are bag limits for any species. One of the sections dealt with information about hunting licences, while another dealt with the calls, decoys and lures used. Other sections dealt with law enforcement, trade in dead, stuffed and live birds. The final sections dealt with aspects ranging from "why do hunters hunt?" to questions related to the hunters and nature protection organisations and their influence on a political level as well as conservation measures and the level of awareness in their country. A copy of the questionnaire is found in the Appendix.

Before the questionnaire was sent, a pilot study was made with a number of people involved in the nature protection movement in Malta. This was done because knowing the local situation, one would be in a position test the validity and clarity of the questions from the respondents' point of view. The questionnaire was afterwards discussed with the people involved to identify any possible problems and some minor modifications were made to some of the original questions as a result of these discussions. A total of 100 questionnaires were sent to a number of agencies, organisations and individuals involved in the fields of hunting and bird protection in all Mediterranean countries. In countries such as France, where there are a number of bird protection, anti-hunting and hunters' organisations, questionnaires were sent to each of these organisations, as well as to the official regulator of hunting in the country, be it the Ministry of the Environment or the Ministry of Agriculture, as the case may be. A covering letter was sent with the questionnaire spelling out why the information was required and setting a deadline for returning the questionnaires. A second letter was sent giving a second deadline to those who had not replied. Response to the questionnaires was 73 per cent. There were countries for which more than one questionnaire was received, and others, such as Syria and Algeria, from which there was no response. The information taken from the questionnaires forms the backbone of the information in this chapter, and unless references are given, the information given was taken from the replies given. Reference is also made to other existing literature as well as personal observations in some of the countries. In compiling the information, Italy was discussed first both because of geographical proximity as well as because Malta imports most hunting paraphernalia from this neighbouring country. France, being another major exporter of hunting goods, as well as being one of the most influential pro-hunting countries historically, was dealt with second. The other Mediterranean countries are then treated touring the Mediterranean basin in a counter-clockwise manner. Some countries are dealt with at more length than others, depending both on the information available and the relevance to the local scene.

Another reason for choosing to start with Italy, followed by France is because these countries have or had hunting practices similar to those found in Malta. Maltese habits may well be the result of influence of French and Italian knights, nobles and traders which were present in Malta from the 16th century up to 1800, when the British came to Malta. The Italian and French influence on the local hunting scene can be seen through the use of a number of bird calls and lures of French and Italian origin, which date back to the 1700s, of which there are Maltese equivalents. The Maltese names for such gadgets are also derived from the Italian or French. The quail call, called *quagliarino* in Italian, is called *kwaljerin* in Maltese. The names of many species regarded as game are also very similar to French and Italian ones. The skylark, called *alouette* in French is called *alwetta* in Maltese; lapwings are called *vanneau* in French and *venew* in Maltese, plovers, *pluviers* in French and *pivieri* in Italian are called *pluvieri* in Maltese. Although Malta was a Crown colony until the mid-1960s, when Malta gained Independence, and in spite of the fact that the practice of hunting slowly increased during the British rule, local practices seem to have been influenced little both by British hunting practices, as well as by nature protection legislation which in Malta lagged behind, while on the continent there were dramatic changes, as already discussed in the introductory chapter.

Italy

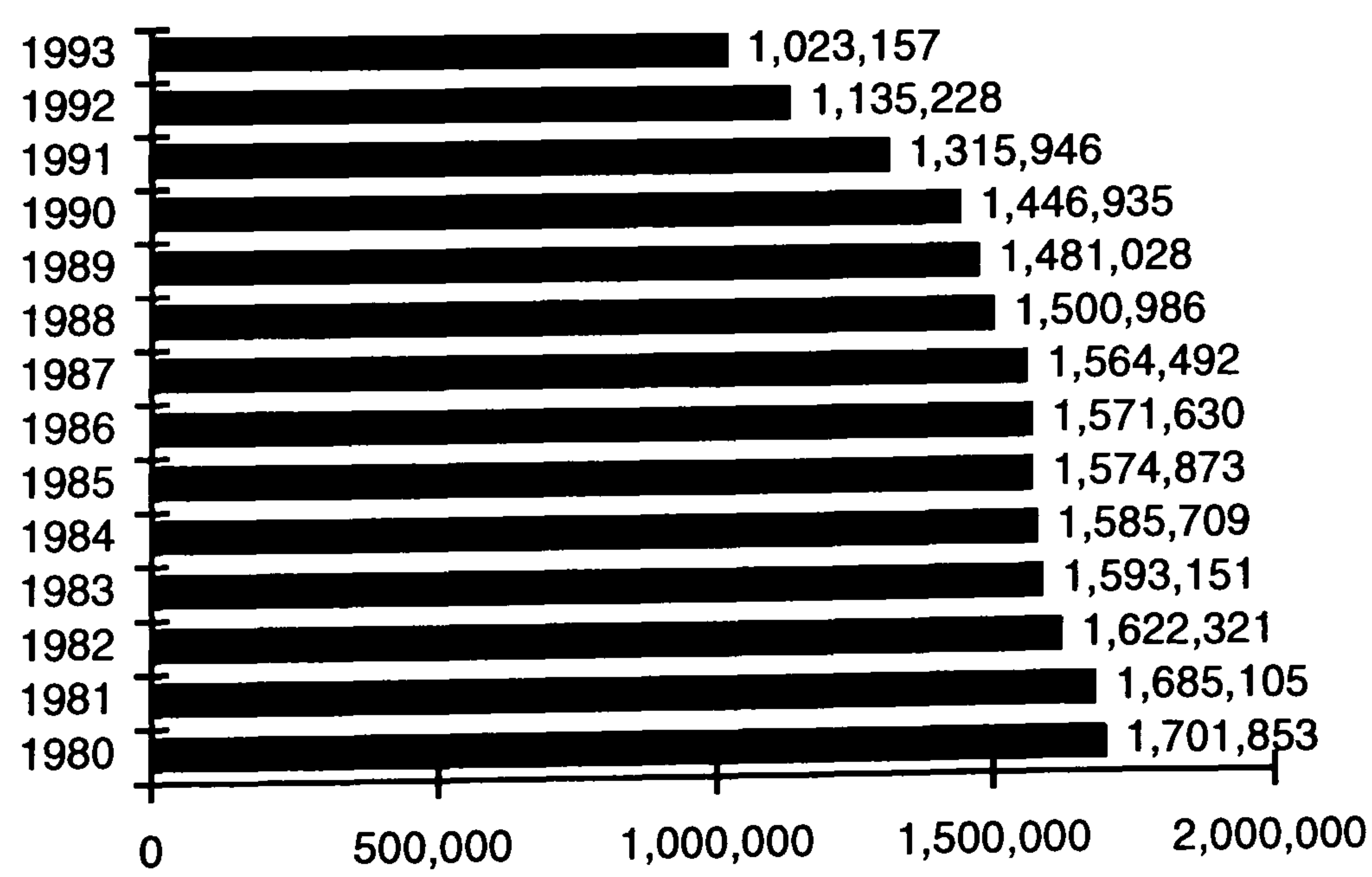
The Ministry of Agriculture and Forests is responsible for administering the principal law — Law No. 968 of 27 December 1977, which establishes the framework of hunting regulations in Italy. The Regulations for wildlife protection and hunting management of 11 February 1992 are the principal regulations. This law introduced a new concept that game is state property, contrary to the previous principle that game was nobody's possession. Italy is also a signatory to and has ratified the Berne, Bonn, Ramsar and CITES conventions. As in France, the responsibility of applying the law is decentralised to the regions which provide regional plans for protection, restocking, rearing, limitations to the list of huntable species and the length of the hunting seasons. There are various different corps involved with monitoring hunting and other laws related to the environment, but law enforcement is considered "ineffective" by environment groups. The main corps related to enforcement of hunting regulations are the *Guardia Forestale* (Forest guards), which has some 6,000 officers. There are also some 2,250 hunting guards distributed unevenly all over Italy. In some regions, such as the Valle d'Aosta, there is a hunting guard for every ten hunters while in Sicily, there is guard for every 2,800 hunters. Gamekeepers are employed at regional level. It is estimated that there are over 10,000 gamekeepers, many of whom work on a voluntary basis (Lambertini and Tallone 1990).

Hunters are not allowed to hunt on Tuesdays and Fridays during the hunting season. All kinds of guns, except air rifles, may be used. Hunting by means of bow and arrow is also permissible. The average cost of a gun is £400. Cartridges are both manufactured in Italy and imported. Cartridges cost some 350-500 Italian lire (14 to 20 pence) each. Foreign hunters rarely go to hunt in Italy, but Italian hunters go to hunt in Austria, Scotland, Spain, Eastern Europe, Ireland, Tunisia, Egypt and southern Africa. Falconry is practised, but restricted. Peregrine, lanner and saker falcons as well as sparrowhawks are used. Birds are mainly taken from the nest or smuggled, although some are legally imported. Netting is allowed in specific cases, such as for the catching of crows, sparrows and starlings, which may be trapped under special circumstances. The use of traps, mist-nets, manually operated nets, bird lime, poison and the use of powerful lights at night for hunting, which are all illegal, are reported to be in use in different parts of the country.

The minimum age for obtaining a hunting licence is 18, but one does not need an area where one can shoot to have a licence. A hunting licence costs £90 and one has to undergo a test before obtaining a licence. Italy is the only place in Europe where hunters can shoot on private land even against the owner's will. The number of licensed hunters in 1993 was 1.02 million. Between 1980 and 1993, the number of shooters decreased by almost 40 per cent (Cianciullo 1995). People do not hunt for food; some hunt for sport while others hunt "because they have nothing better to do" and because it is an activity which runs in the family. Very few women hunt.

Fig 2.1

Number of hunting licences in Italy against years



Source: adapted from *La Repubblica* 16 Spetember 1995 p.15.

Quail, turtle dove, sparrow, skylark, partridge, hare and rabbit may be hunted between the third Sunday of September until the end of December. Starling, thrush, duck, woodpigeon, snipe, woodcock, jackdaw, various crows, lapwing, black tailed godwit and some finches may be hunted (or trapped) between the third Sunday of September and 31 January. Ptarmigan, grouse and deer may be hunted between October and November. Trade in both live and dead birds takes place. Dead quail, thrushes, partridges, pheasant, duck, woodcock and coot are sold. Bird stuffing is popular with a number of hunters and stuffed birds may sometimes be seen in shooters' shops, bars and restaurants. Some illegal trade in stuffed birds or skins takes place.

Hunters often use bird calls or lures to draw birds within range. In Italy, several types of mouth blown calls are used for various species of birds. Tape recorded and electronic bird calls, the use of which is illegal, are used. These gadgets are also manufactured in Italy. These calls are used for practically all species ranging from thrushes and finches to ducks and birds of prey. Live bird decoys are used, as well as plastic decoys for ducks, woodpigeon and thrushes. These decoys are both manufactured locally as well as imported from the USA. Locally manufactured lark mirrors and mechanical owls are sometimes used for luring skylarks in certain regions.

Italy has a huge hunting related industry. It is estimated that in 1987 alone, the hunting industry generated a turnover of over 1,000 billion Italian Lire (£450 million) (Lambertini and Tallone 1990). The production of guns, cartridges and bullets involves some 8,000 companies which employ over 32,000 people. The bulk of these, 94 percent, are found in the Brescia province and between 65 to 70 per cent of what is produced, is exported. The industry had a crisis in 1988 and the turnover dropped by 18 per cent, but Italy still remained the biggest hunting manufacturing industry in Europe (Lambertini and Tallone 1990).

Italy has been twice charged before the European Court of Justice for infringing the EU Directives. The first case was brought before the Court of Justice of the European Communities on 2 May 1989 by the Commission of the European Communities (Case 157/89, 89/C144/11). The second case was taken before the same courts on 30 October 1989 (Case 334/89, 90/C 7/02). In the first case, Italy was found guilty of failing to fulfill its obligations under the Birds Directive by permitting the hunting of various species of birds during their rearing season and during the period in which they return to their rearing grounds. In the second case, Italy was found guilty of failing to adopt the measures needed to comply with the Commission Directive 85/411/EEC of July 1985 which amended the Birds Directive of 1979 (Official Journal of the European Communities 1991).

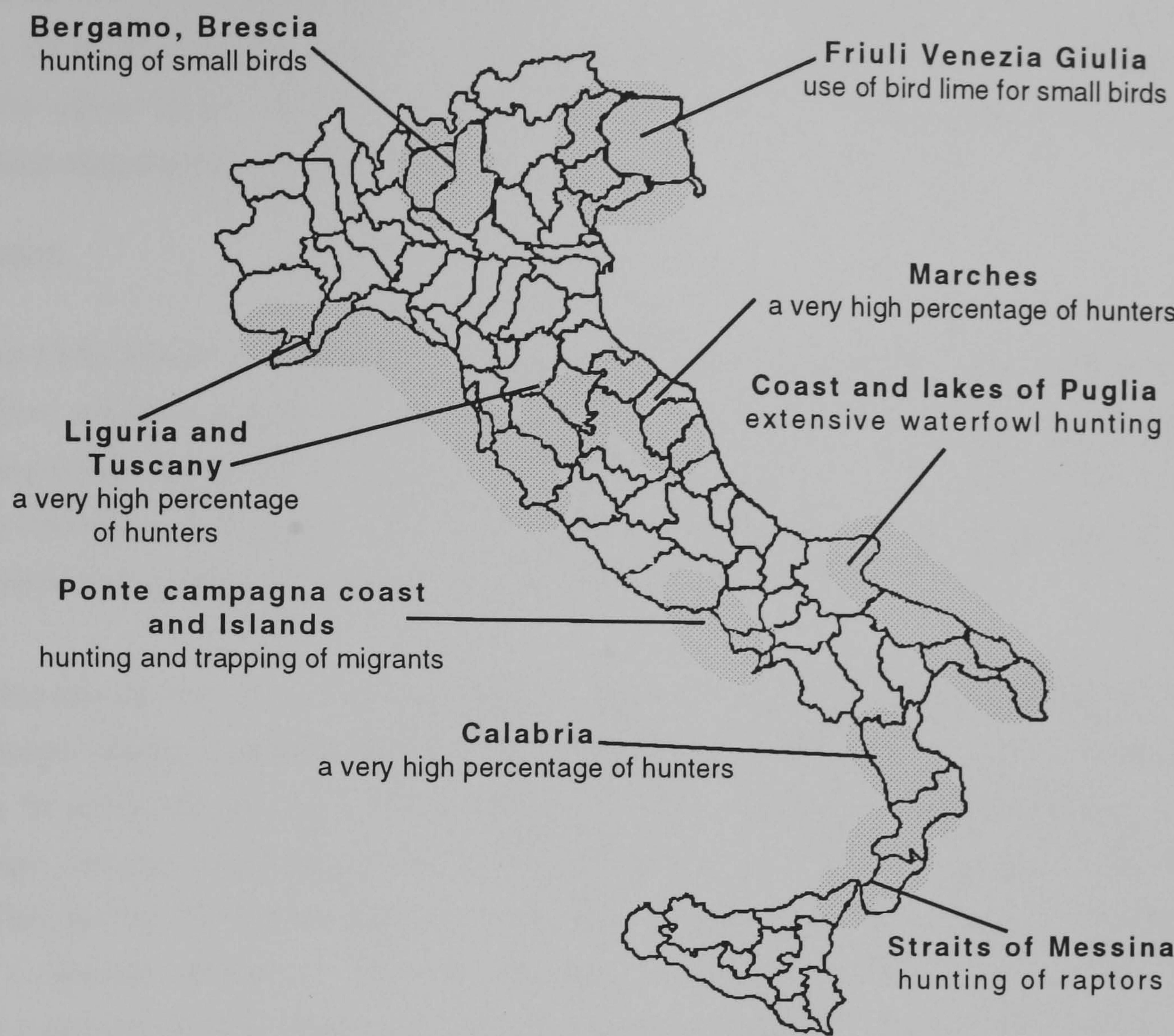
There are a number of areas where illegal hunting still takes place on a relatively large scale. Although strict law enforcement and stiffer penalties have resulted in better protection in areas known for high incidence of poaching, such as the Sicilian and Calabrian sides of the Straits of Messina, the area around Brescia in the north, and Friuli Venezia Giulia in the North east (Lambertini and Tallone 1990). At the straits of Messina, between 200-300 raptors are killed in spring. The number of poachers in the area is "estimated to be about 100" (Lambertini and Tallone 1990 p. 72). The figure of shot birds was much higher just ten years ago, when it was estimated that some 2,000 raptors were killed. The reason for the decline in the number of raptors shot is international pressure which brought more enforcement. Bird watching camps are organised each year in the mountains and bird watchers from Europe attend to monitor both migration and the extent of poaching. The problems in Reggio Calabria still persist and the number of poachers there is estimated to be between one and two thousand. There are over 1,000 fixed hunting huts in the region. For the hunters in Reggio, those who did not shoot a honey buzzard in spring signified that they were being cuckolded (Anna Giordano pers. comm.). Law enforcement is not easy in a place where the Mafia is hyperactive. On the eve of a protest scheduled against the killing of birds of prey in Reggio Calbaria in May 1984, a bomb was planted at the office of the bird protection organisation. The protest took place just the same, with a heavy police presence.

In 1982 in Archi-Carmine, Reggio, the owner of 'Saracene' a bar where hunters met, organised a competition and a prize was given to the hunter who shot the first honey buzzard in the season, the hunter who shot the largest number of honey buzzards, the biggest honey buzzard and the prettiest buzzard. The hunter had to take the dead buzzard to the bar on the day it was shot. The contest opened on 20 April and closed on 5 May. Prizes were given in special ceremony at the bar on 6 June (*Regolamento per la caccia all' adorno* 1982). In the Brescia and Bergamo provinces, passerines are trapped with bow like traps called *archetti*. The traps are baited with insects or berries and birds are trapped by their legs as they try to sit on a perch to take the bait. The majority of birds caught are robins. Over half a million such traps were seized in raids in 1989. Roughly 2,000 restaurants cook *polenta e osei*, a rice dish with illegally caught songbirds. Over ten million *archetti* are believed to be in use in the region.

Friuli Venezia Giulia is another area where passerines are caught with set ups of nets and bird lime (glue). Birds are sold alive as live decoys and to restaurants, although the law officially forbids the killing of birds caught. Special set ups of nets include those known as *roccoli*, *bressanelle*, *prodine* and

Figure 2.2

'Problematic areas' for migratory birds



Source: adapted from Lambertini and Tallone (1990)

clap nets. The *roccoli, bressanelle, prodine* involve the use of specially planted groves of trees, around which vertical nets are set up. Birds are lured to these areas with decoys and the birds are then flushed into the nets. Clap nets are nets set horizontally on the ground, which when triggered by the trapper, either close against each other in mid-air or sweep through the air in semi-circular motion and come at rest on the ground overlapping each other by a small amount. Birds are lured by other decoys and trapped as they fly in the netting area. It is estimated that in Italy between 100 and 150 million birds are killed by shotguns and a further 15 to 25 million are trapped in traps and nets (Lambertini and Tallone 1990).

The oldest society, *Pro Natura*, is still active. There are now various other groups including the *Lega Italiana Protezzione Uccelli* (Italian League for the protection of birds), which, like its sister organisation the Royal Society for the Protection of Birds in the United Kingdom, has branches all over the country and runs a number of nature reserves. Other groups involved in the hunting issue include the *Lega per l'abolizione della caccia* (League for the abolition of hunting), and the Italian branch of the World Wide Fund for Nature. The Italian Green Party is involved in the fight against hunting. Both anti-hunting groups and hunters are influential politically. In an anti-hunting referendum held in 1992, 18 million people (43 per cent) voted in favour of the abolition of hunting. On the other hand, shooters have a number of organisations and specialised hunting magazines are available.

FRANCE

The *Code Rural — Protection de la nature* (Rural code, protection of nature) is the law which regulates hunting in France. Published on 10 July 1976, and subsequently amended, it lists the protected species and game birds, of which there are three categories: sedentary species, waterfowl and migratory species. It also lists the maximum shooting seasons for different species of birds.

Whereas in the EU, hunting stops on the 31 January, with the exception of Germany where hunting stops on the 15 January, France is the only member state to allow the hunting of migrants until the 28 February. This will have to change as the amendment to the Birds Directive which stipulates that all hunting in the EU must cease on 31 January comes into force. France is divided into a number of regions and the shooting seasons in these regions are set by local authorities. The dates however, hardly ever vary by more than a few days and migratory species may not be hunted after 28 February (Bertelsen and Simonsen 1989). In France, hunting rights belong to the landowner and he can transfer these rights to a hunting society or to individuals. The minimum age of obtaining a hunting licence is 16 and hunters have to pass an examination before they can obtain a licence. One does not need to have an area in which he can hunt to obtain the licence. A shooting licence costs 400 French francs (£51) annually.

Shooting and falconry are the only methods allowed for bird hunting. Goshawks are trapped and taken from the nests for falconry purposes. Other falcons are imported and some are smuggled, although generally speaking, falconry is regulated. Shooting during the night is prohibited. In a few areas, the trapping of pigeons and larks with nets is permitted. Individual traps for thrushes are allowed in the Ardennes. Bird lime and glue as well as mist nets are used illegally in certain areas. Hunting from seacraft is not allowed but fishermen are known to hunt while some hunting from boats also takes place in the bay of Somme, where seabirds, ducks and waders are shot. Both live and plastic (or wooden) decoys may be used. During the hunting season, hunters can hunt every day. Hunters from other European countries, especially Germany, Britain, Spain, Italy, the Netherlands and Belgium, go to hunt in France. These may go individually, although tours are also organised. Environmentalists in France believe that foreigners go to hunt in France both because there are more birds as well as because of lack of enforcement. On the other hand, French hunters go to hunt in Morocco, Tunisia, Spain, Scotland, the Balkans and West Africa, mainly in Senegal.

The police are responsible for enforcement of hunting laws, although 1,500 guards are also paid by the *Office National de la chasse* (National Hunting Office). Each of the 36,000 communes has a hunting society which has a voluntary gamekeeper. It is estimated that a total of 10,000 game keepers are employed in France. There are some 1,700,000 hunters in France and trade in live birds and dead game birds is common. The stuffing of game birds is permitted and stuffed birds can sometimes be seen in shooters' shops, bars and restaurants. Hunters often collect stuffed birds. Although it is illegal to stuff protected birds, it costs from £125 to £250 to stuff a falcon or a heron. The majority of hunters hunt for sport and public opinion does not favour hunting, especially in the cities. Rural people accept it more and in several regions, farmers hunt as they remain tied to the land. "There are always things to do on a farm, even after a harvest, animals have to be fed and attended to all year round and farmers are often unable to take holidays. And hunting provides them with a leisurely local activity" (Woodsworth 1995 p.3). In south west France, men hunt as it gives them social status. The younger generation, even in rural areas, are less interested in hunting. A French hunter is reported as telling a journalist who accompanied the groups on a boar hunt: "(Young boys today are) more interested in music and discos and pretty girls than wild boar...I do not push him (his son), but I would be happy if he took an interest in hunting" (Woodsworth 1995 p.3). For some, hunting provides additional income when they sell the carcasses to meat shops or restaurants. The average cost of a gun varies from £300 to £500, while cartridges cost 12 to 36 pence each.

On the international level, France has signed and ratified the Berne, Bonn, Ramsar and CITES conventions. Infringements to these conventions occurs in some provinces. The shooting of turtle doves in spring takes place in the south west France. This is not only in contravention of the Berne Convention, but also of French National Law. Actions against such shooting take place every year, and frequently end up in violence as hunters attack environmentalists who picket in the Medoc region (Newsweek 1990). There are a number of environment groups in France which actively oppose all forms of hunting, while others oppose only the hunting of protected species. According to one of the French anti-hunting groups, the French proverb *'Tout ce qui cour au four; tout ce qui vole, a la casserole'* meaning anything which runs, to the oven; anything which flies, to the saucepan, epitomises the French hunters' mentality.

Spain

The hunting law of Spain, which was amended as recently as July 1990, is the principal law governing hunting. Spain is also party to the Berne, Bonn, Ramsar and CITES conventions. ICONA (the national institute for the conservation of nature), which falls under the Ministry of Agriculture, fisheries and food, is responsible for administering the law. Being a member of the EU, Spain has the Birds Directive in force. Hunters are allowed to hunt every day during the hunting season and all kinds of guns may be used, except for automatic repeater shotguns, which may not have more than two cartridges in the magazine.

The average cost of a gun is £360, cartridges, which are both manufactured in Spain as well as imported, cost about 35 pesetas (18p) each. A hunting licence can be obtained at the age of 18 and the hunting licence costs £10. Hunters have to undergo a test before obtaining the licence. Hunters from the United Kingdom, Italy and France often go the shoot in Spain. Foreign hunters go on organised tours and spend up to three days shooting. Spanish hunters go to Roumania and African countries.

Falconry is practised and birds are both trapped locally and taken from the nest. Traps are also used to catch songbirds. Bird calls as well as live decoys are used for certain species. Trade in dead game birds and animals takes place. Some hunters keep stuffed birds, but the practice is not very common. Stuffed birds may be seen in shops selling shooters' goods and sometimes also in bars and restaurants. There are many people employed in the shooting industry and many shops sell shooters' goods. Hunters shoot mainly for sport. In some areas it gives men social status. Many of those who hunt are simply following in their father's footsteps. The attitude of the general public is that they don't like hunting. The Spanish have a proverb which is similar to the French one mentioned earlier: *Ave que vuela a la cazuela,* meaning everything which flies goes to the saucepan.

Gibraltar

All forms of bird hunting, except for falconry, are not allowed in Gibraltar. The Nature Protection Ordinance of 1991 is the principal legislation related to hunting. Hunters from Gibraltar go to hunt in Spain. The Police, Nature

Conservancy Council, the Gibraltar Environmental Health Department and the Customs Department are all related in different ways to enforce the bird protection laws. The Gibraltar Ornithological and Natural History Society, set up in 1978 is still active. Public attitudes are anti-hunting. Gibraltar has ratified both Bonn and CITES conventions.

PORTUGAL

Portugal is a party to the Berne, Bonn, Ramsar and CITES Conventions. The principal hunting law in Portugal is *Ley de Caca* No 30/86 of 27 August 1986, which was amended in 1991. It is divided in seven chapters which range from the general principles of the law, the hunting act, sites where hunting is allowed or prohibited, the hunting periods and means of hunting, criminal and civil responsibility, possession of species and the role and responsibility of hunting organisations.

The Ministry of Agriculture is mainly responsible for the administration of the law. The law contemplates fines ranging between 10-20,000 pesetas (£60-100) or more in certain cases. Imprisonment for a year is also contemplated for certain crimes. But law enforcement is considered ineffective by the environment groups. The average cost of a gun is £600. Cartridges are both locally manufactured and imported and cost between ten to 14 pence each. All types of guns are allowed for hunting, except air rifles. The use of bow and arrow and crossbow are also allowed for hunting. Falconry is practised and a special permission from the Forestry Service is required. Most falcons are imported but some are illegally trapped, taken from the nest and smuggled. The use of traps, mist-nests, manually operated nets, bird lime, powerful lights at night, poison and the taking of birds from the nest, all of which are illegal, take place. Hunting from sea craft is allowed and sea birds and ducks are shot.

The species which can be shot are ducks, pheasant, partridge, quail, woodcock and snipe, pigeons, turtle doves and thrushes. Most species have an open season between October and December. Some species, such as waterfowl and turtle dove, can also be hunted between August and September. Thrushes may also be shot in January and February. The Forestry Service of the Ministry of agriculture sets the open seasons. From time to time, an open season for the little bustard is established. There are bag limits of a maximum of ten quails, snipe and water birds, 20 turtle doves, five red-legged partridges and three woodcock on each hunting day. Hunters are only allowed to hunt on Thursdays, Sundays and public holidays.

The hunting licence can be obtained at the age of 18 and one does not need to have shooting rights to get the licence. The hunting licence costs £15 and one needs to undergo a test before obtaining the licence. In 1991, there were 250,300 licensed hunters. Hunters hunt mainly for fun and because it gives them social status. Bird calls are used for ducks, thrushes and pigeons. Tape recorded bird calls, the use of which is illegal, are also used. Live decoys are used for pigeons and songbirds. Plastic decoys are used for ducks and pigeons. Decoys are imported mainly from Spain, France and Switzerland. Trade in live and dead birds takes place. Partridges are sold to restaurants while taxidermy is popular with hunters. Birds of prey, owls and colourful birds are the most collected species. Stuffed birds are often displayed in bars, cafes and shooters' shops. A stuffed buzzard may cost between £40 and £60.

Hunters from Spain, France and England often go on organised short hunting tours to Portugal. These hunters go mainly between October and December. Some 1,200 licences to foreigners were issued in winter of 1990/91. On the other hand, Portuguese hunters go to Spain, Russia and Italy. Estimates for 1991 show that the hunting industry generates some 9,000 direct jobs and another 2,300 indirectly. There are many shops selling hunters' goods.

The oldest environment group is the *Liga para a proteccao da natureza* (League for the protection of nature) was established in 1948, and is still active. There is no group which radically opposes hunting and the general public accepts hunting.

MOROCCO

Hunting is an expensive affair in Morocco and until recently, only rich townspeople could afford to hunt, but improving standards of living mean that country people are also beginning to indulge in hunting. The main game species are quail and turtle dove, but hoopoes are killed in large numbers, especially in the north, due to superstition. Little owl and woodpeckers suffer from the same fate. Birds of prey are sometimes shot, especially when there is nothing else to shoot. Children use air rifles to shoot small birds and many boys use traps to catch passerines as a pastime. It is the police and game keepers' task to enforce the hunting law, but the law is violated openly. Hunting is permitted on two days a week. The law protects many species of birds, including all birds of prey, egrets, ibises, some ducks, bustards and cranes as well as gulls and "all birds smaller than a blackbird" (Woldhek 1980 p.58).

Algeria

Little is known about the hunting situation in Algeria as nature conservation groups do not exist, and if they do, they are active locally and are unknown on the international scene. Woldhek (1980) states that there are hunting rules controlling the game species, shooting seasons and protected areas but no precise information could be obtained. Attempts to obtain more recent information failed as no questionnaires were returned from Algeria.

Woldhek (1980) states that song thrush, Barbary partridge, quail, waders and waterfowl were favourite quarry species and that wetlands attract many hunters. Children "who have nothing else to do all over the country" try to catch birds with methods ranging from glue to snares and stone-throwing. There is a limited trade in cage birds, mostly in goldfinch, but there is hardly any other trade going on. Small birds are not served in restaurants.

Tunisia

There are few hunting related problems in Tunisia, although the number of hunters is increasing steadily as standard of living improves. The number of licensed hunters is estimated to be just over 10,000, a figure which has practically doubled since 1975. However hunters hunt mostly for food. Some illegal hunting of waterfowl (mostly ducks) takes place in some of the protected salt marshes. Foreigners, mostly French, Italians and Germans, also go to hunt in Tunisia, but foreign hunters tend to focus more on big game such as wild boar.

Female sparrowhawks are trapped with vertical nets set up in trees and with small clap nets at Cap Bon. These are used for falconry purposes and hunting quail. Most birds are said to be released after a falconry festival held in late June. A quota of 50 sparrowhawks may be trapped each year, but it is not certain that this is adhered to. Birds which get caught in the nets, apart from female sparrowhawks, have to be released. But even whether this is observed, is not certain. Young boys catch insectivorous birds in small spring traps, while greenfinches and goldfinches are sometimes trapped by mixing chewing gum with water and coating a spine from a tree called *Acacia spinosa*. The spiny end of the thorn is then inserted into the frame of a cage with a decoy bird inside it and when a live bird sits on this perch, it gets stuck with chewing gum. Although the effects are only temporary, the gum affects the bird long enough enabling the boy to catch it by hand. There are 18 game keepers and some 600 guards. The police and the National Guard are responsible for enforcement of hunting laws. All birds except for duck, partridge, quail, some waders pigeons and crows are protected. The hunting season for all species is between the end of October to the third week of March. Crows, starlings and sparrows may be hunted all year round.

Libya

Libya is a signatory of the Berne, Bonn, Ramsar and CITES convention. Its national hunting law was enacted in 1968 (Law 28 of 1968). It establishes the hunting season, protected species, hunting methods, shooting licences and contemplates penalties which range from the withdrawal of the licence to fines and prison sentences for infringements.

Hunters are allowed to shoot every day during the hunting season. Ducks and geese may be shot between 1 January and 15 April. Starling may be shot between January and 31 March, quail between January and 30 April. Barbary partridge, black bellied sandgrouse and houbara bustard may be shot all year round. Foreign hunters do not go to hunt in Libya, neither do Libyan ones go to hunt abroad. Falconry is practised and permitted by law. Falcons are trapped locally, and some are also taken from the nest. Traps and manually operated nets are used to catch birds. All kinds of guns from automatic repeaters to rifles may be used. The average cost of a gun is £400 while cartridges, which are imported, cost some £2 for six cartridges. Hunting licences are issued to persons over 21 years of age and a licence costs £7. One needs to undergo a test before obtaining a licence. Hunters are allowed to shoot on public land, but must have shooting rights to hunt on private lands. The Ministry of Agriculture is responsible with administering the hunting law while police and wardens are responsible for its enforcement. Law enforcement is considered to be effective and shooters generally observe the laws, although some illegal hunting takes place. Trade in birds is illegal and taxidermy is not popular. Some hunters keep stuffed birds such as storks and flamingos. People hunt for sport and shooters normally take their children with them.

Founded in 1991, the Wildlife Conservation Society is the oldest society. The general public is indifferent to hunting. The media promote environmental consciousness and environmental awareness is growing. Literature on nature conservation is available, but uncommon.

Egypt

Bird hunting and trapping in Egypt have been part of the Nile Valley cultural tradition since time immemorial and fowling scenes are depicted in many ancient Egyptian tombs (Houlihan and Goodman 1986; Goodman and Meininger 1989). Quail netting for local consumption had been a well known phenomenon since the Old Kingdom (c.2650-2150 BC) (Houlihan and Goodman 1986). Trapping intensified after the British occupied Egypt in 1882 and quails were exported to European markets.

Duck hunting was a popular sport among Egypt's European community in the early 1900s (Goodman and Meininger 1989). Water bird hunting now takes place throughout the Nile Delta and valley, the Faiyum region, Aswan and other lakes such as Lake Manzala. There are two main groups of hunters: the market hunter and sport hunters. Large clap nets are used by market hunters to catch ducks and coots and the method is widely used in several lakes (Goodman and Meininger 1989). Near Port Said, children catch birds with fish hooks baited with small fish. The terns are then sold locally for consumption. Ducks, gulls, terns, grebes, herons and waders are commonly sold on the market.

There are two principal public shooting clubs, one in Alexandria and one in Cairo. These maintain shooting reserves and the club in Cairo, which is the biggest of the two, allows hunting for only 16 days per year between December and mid-March. It is estimated that some 30,000 ducks are shot in this period. A considerable number of Egyptian sport hunters do not hunt in these reserves, but they hunt in various areas around the fringes of the Delta takes and at the Faiyum. Foreign hunters frequently go duck hunting especially in the Faiyum region.

Large bags of water birds and other species are registered. A group of Maltese hunters who went there on a week's hunting tour boasted of shooting "10,000 palm doves" in just five days (*Il-Passa* 1988). The Ministry of Tourism widely promotes sport hunting and Egyptian tourist offices abroad promote hunting tours. A two year ban on hunting in the Faiyoum region was imposed in 1990 after protests following an article in *BBC Wildlife Magazine* on the destruction of birds by Maltese hunters (Taylor 1990). Maltese hunters started going to hunt again in Egypt in 1995 and although it was reported that they are more controlled both by the agent who takes them there as well as by Egyptian authorities who carry out inspections to ensure that protected species are not shot (Zammit 1995), individual hunters are still occasionally found in possession of protected species (*The Malta Independent* 1996a). In May 1996, the customs and police officers found close to 400 birds, mostly protected birds of prey in suitcases belonging to five hunters who had just returned from Cairo (*The Times* 1996a).

Turtle dove shooting takes place in both spring and autumn and daily bags in spring may exceed 100 birds (Goodman and Meininger 1989). Falconry and falcon trapping are increasing in popularity because of the high prices paid for falcons by other Arabs. Quail netting takes place on an extensive scale, especially in autumn. The Egyptian Law 28 of 1967 states that quail nets should not be longer than 30 metres and an opening of 20 metres should be left between successive nets. The law also states that nests may not be placed closer than 500 metres from the shore, but reports of nets practically on the foreshore are not uncommon. In September 1980, it was estimated that 61 km of the 131 km of shoreline between Baltim and Port Said was spanned by nets (Goodman and Meininger 1989). Quail shooting is also gaining popularity with members of the shooting clubs.

Passerines are taken for food on a large scale in the autumn migration. Large nets, air rifles, shotguns and traps are used to take such species. The capture of these birds occurs mainly along the north coast, although a large number of passerines are also trapped in the quail nets. Golden orioles are persecuted in the oases of the western desert as they are considered a pest to ripening mulberry and date crops (Goodman and Meininger 1989). On the international scene, Egypt is a signatory of the Ramsar, CITES and Bonn conventions.

ISRAEL

The Israeli law stipulates that all animals are protected except "pests and game". The hunting of game birds is permitted between September 1 and February 1, during which time, hunting is allowed on every day of the week. However hunting is prohibited in a security or military area. Bag limits exist for most species. The law is enforced by police and by wardens in the reserves. Some poaching occurs, but it mainly involved mammals such as wild pigs and gazelles. Law breakers are prosecuted and convicted (Woldhek 1980).

LEBANON

In Lebanon there is currently a three year total ban on bird hunting which came into effect on 1 January 1995 (Birdlife 1994). But it cannot be ascertained whether the ban is being properly enforced. Lebanon has not ratified any of the conventions for wildlife protection and has only national legislation in the field of bird protection. Prior to the ban, the Law of classification of Game Birds and Animals with their hunting season in Lebanon of 2 November 1965, which has been amended in 1974 and 1985, was the principal law regulating hunting. The Ministry of the Interior is responsible for administering the law and the police are responsible for law enforcement. The law divides birds and animals into three broad categories: "Harmful birds and animals", hunting of which is allowed to keep their populations low, "game" which may be hunted in specified periods and birds "beneficial to agriculture", the hunting of which is prohibited at all times. Birds deemed "beneficial to agriculture" include colourful species such as roller, hoopoe, golden oriole, as well as storks, birds of prey, warblers and passerines. Amongst the "harmful" species one finds crows, jays, sparrows, starlings and mammals such as fox, jackal and wild boar. The huntable species are: rock dove, which may be shot between 15 September and 15 January, partridge and hare may be hunted between September and February, outside the breeding season. Turtle dove, quail, duck, geese, snipe and woodcock which may be hunted all year round.

Lebanon has a reputation for the indescriminate shooting of wildlife, the laws are not enforced and penalties are marginal. The number of hunters is estimated to be 400,000. The hunting licence may be obtained at the age of 16, but one does not need to have an area where one can shoot to have a hunting licence. A hunting licence costs £2 a year and one does not need to undergo a test before obtaining a licence. Young eight year old boys may be seen shooting small birds with air-rifles. Falangist soldiers and villagers may be seen with their booty, which may include anything from a finch to an oriole, tied to belts around their waists (*Animals International* 1983). Automatic weapons are used to gun down large birds such as storks and birds of prey. Hunting is practised all over Lebanon, even in marine and nature reserves and public streets.

Hunters are allowed to hunt every day during the open season, and as most 'game' species may be hunted all year round, hunters ignore the Koran which states "don't harass birds while breeding", and hunt throughout the year. All kinds of guns, from air guns to automatic repeater shotguns, may be used. The prices for guns varies from £23 to £1,000, depending on the type of gun. The price for 20 cartridges is about £4.50. There is one major Lebanese factory making cartridges, but cartridges are also imported from Cyprus, European countries and the US. Foreigners do not go to hunt in Lebanon, but Lebanese hunters go to Syria, Turkey, Iraq and Africa. Calls and decoys are used for most species. Tape recorded bird calls manufactured in Italy are used. Live bird decoys are used, especially during the liming and shooting seasons. Plastic decoys are also used for waterfowl. Such decoys are imported from Italy, France and the US.

Falconry is not practised, although legally permissible. Birds of prey which are locally trapped, taken from the nest or imported, are often kept in captivity.

Traps, mist nets, manually operated nets, lime and glue, as well as poisons are used. Hunting from sea craft is allowed and fishing boats, rubber dinghies and other boats are used. Sea birds, gulls, pelicans, terns, geese, ducks and herons are shot along other species. Song birds and passerines are trapped with manual nets, bird lime and lights at night. Chukars and partridges are trapped by nets and special traps. Birds of prey are also trapped by traps and nets. Ducks, geese and thrushes are killed by poisons. Sparrows are poisoned and trapped. Quails are trapped by mist nets. The National Hunting Council estimates that over 10 million birds are shot annually and that another 15 million birds are shot in Syria by Lebanese hunters. Trade in live and dead birds takes place. Species traded range from exotic species to birds of prey, storks and game birds. It is estimated that some 15,000 birds are imported. Stuffed birds are collected by shooters. Stuffed birds are exhibited in shops, bars and restaurants as well as gift shops. They are also sold to locals and exported.

There are many people involved in the hunting industry and there are several shops selling shooters' goods. Hunters hunt for sport and because it gives them social status. Hunters shoot birds as target practice and many species such as birds of prey, storks and other large birds are shot and left where they fall.

Syria

Very little information on hunting in Syria is available as there are no resident bird watchers, no bird books are available and the media pays no attention to bird protection. Hunting is practised by wealthy adults and the number of resident hunters is small, except in the mountainous coastal strip. Lebanese hunters visit Syria regularly as there are more birds to shoot in Syria than in Lebanon.

There is no preferred quarry species on the coastal strip, where everything may be shot. Water birds are shot on Lake Qattine and in the northern desert, various species of sandgrouse are shot. Birds are occasionally sold at the roadside or to restaurants. Bird catching is an uncommon activity and taxidermy is not popular (Woldhek 1980).

Cyprus

The Game and Wild Birds Protection and Development Law of 1974, amended in 1982, 1989 and 1991, is the principal hunting law in Cyprus. Wild duck, thrushes, doves, quail, black francolin, chukar, woodcock and crows may be hunted. Doves can be shot between August and September, thrushes and woodcock from January to March while chukar and francolin can be shot from mid-November until the end of December. Hunters are only allowed to hunt on Wednesdays and Sundays during the hunting season, but in some small areas, hunting is allowed every day.

Automatic repeater shotguns are not allowed, but otherwise, rifles, shotguns as well as air rifles are allowed. A shotgun costs between £550 and £800 and cartridges cost some 10 Cyprus cents (13p) each. There is a cartridge manufacturing industry in Cyprus but foreign loaded cartridges are also imported. Hunters have a bag limit, they may shoot up to five partridges, one francolin and two hares a day. Traps, mist-nets and bird lime are used in certain areas, even though they are prohibited. Bird calls are used, primarily for song thrush. Tape recorded calls, which are illegal, are also used for thrushes. The minimum age for obtaining a hunting licence is 21, and hunters need not undergo a test. Neither does one need hunting rights to obtain the licence. The licence costs about £30.

The Police and Game Wardens of the Ministry of Agriculture are responsible for administering and enforcing the law. The law contemplates fines of up to £250 and six months imprisonment for contravention of the laws. Shooters generally observe the laws but enforcement is considered ineffective, especially with regards to the use of mist-nest and bird-liming activity in autumn. There are some 45,000 hunters in Cyprus and between 50 and 100 are charged in court every year. Environmentalists say that hunters shoot for sport and in some places, they hunt "because they have nothing better to do". It is predominantly an all male sport although 0.5 per cent of licensed hunters (some 250) are females. Foreigners do not go to hunt in Cyprus, but Cypriot hunters go to Egypt, Bulgaria and Hungary.

Trade in game birds is legal and chukar, partridges, thrushes, woodcock and woodpigeon may be seen for sale during the shooting season. Pickled warblers (mostly garden warblers, blackcaps and robins) are commonly seen for sale in supermarkets, even though they are protected. A number of people are employed in the hunting industry and many shops sell shooters' goods.

The oldest conservation organisation is the Cyprus Ornithological Society established in 1970. Now there are other ornithological and conservation groups involved, such as Friends of the Earth Cyprus. The general public is indifferent to hunting, although many do not like it as environmental awareness is growing. Cyprus has signed and ratified the Berne and CITES conventions.

The Turkish hunting law dates back to 1937 and is considered "totally outdated" by environmentalists. Each year a committee decides on huntable species, open seasons, prohibited means of hunting and protected areas. Turkey is a party to the Berne Convention, and has made exception for wolf, which may be hunted all year round. Crows, magpie and jay may be shot all year round. Hunters may hunt every day during the hunting season. Quail, turtle dove, black-bellied sandgrouse may be shot between September and February, partridge and rabbit may be shot between September and October. Fox, waterfowl, black headed gull, woodcock and blackbird may be shot between mid-October and February.

Semi-automatic repeaters, and all other forms of guns may be used, except automatic repeater ones. The average cost of a gun is £360. Cartridges, which are both locally manufactured and imported, cost some 30p each. Foreigners such as Germans, Americans, Austrians, Spaniards, Belgians and French hunters go to hunt big game in Turkey. Hunting tours to Turkey started being advertised in Malta in 1996. Wild boar is hunted all year round, while chamois and bear are hunted between September and March. The number of foreigners who go to hunt is Turkey is estimated to number about 100. They spend some five days each and are the tours are organised by travel agencies. Foreign hunters have special permits, special regulations and special hunting areas. Turkish hunters go to hunt in Bulgaria and Africa. There are organised tours, but hunters also go on their own to such countries.

Except for falconry, no other means of hunting is allowed, but traps, mist nets, manually operated nets and powerful lights at night are used. Hunting from sea craft is not allowed, but it is practised. Rubber boats are used and ducks, geese and divers are shot. Bag limits exist for all huntable species. The maximum number of birds killed may not exceed three partridges, four geese, six ducks, eight coots, eight turtle doves and ten quails a day.

A shooting licence may be obtained at the age of 18, but one does not need to have an area where he can hunt to get the licence. There is no need for a test before obtaining the licence, which costs £3.50. The use of bird calls, except for electronic ones, is allowed. Duck calls are the most commonly used calls. Tape recordings of quail, ducks and geese are used illegally. Plastic decoys of ducks and geese are used. They are both manufactured locally and imported mainly from USA and Germany. Falconry using sparrowhawks is practised in north-eastern Turkey. The hawks are trapped in vertical nets using a red backed shrike as a decoy. The decoy shrikes are in turn fed on meat of other raptors which are shot or trapped while trappers are trying to catch the hawks. Sparrowhawks are mostly trapped in September and early October. Magnin (1987[?]) estimates that about 40,000 sparrowhawks are trapped in this region. Apart from the hawks, an estimated 15,000 raptors are trapped or shot to be fed to the decoy shrikes. The Ministry of Forestry, which has a Directorate of Wildlife and Game, is responsible for administering the hunting law. The responsibility for enforcement is shared between local forestry stations, police, local government authorities, village governments and village guards. Fines, confiscation of firearms and equipment are contemplated in the law for infringements, but law enforcement is considered ineffective. Some 500 hunters are charged in court each year.

There is some illegal trade in exotic species such as parrots and love birds, quail and finches. Birds of prey are also involved in illegal trade, mainly in open air pet markets. Bird stuffing is not popular, but some hunters have private collections of stuffed birds. Although it is illegal to have stuffed protected birds in hunters' shops, stuffed birds of prey have been seen in some shops in Istanbul. Trade in bird skins with dealers in other countries is not known to be practised. There are approximately 1,000,000 hunters in Turkey, although statistical data on the number of hunters is deemed "unreliable' by conservationists, who estimate that there are one to two million licensed hunters and a similar number who keep a shotgun without a licence (Magnin 1987[?]). People are employed in the hunting industry and there are many shops selling shooters goods. Hunters in villages hunt rabbits for the table, but generally, people hunt for sport. It is an all male sport, although more women are taking it up as well. Hunting is generally accepted, but in recent years an anti-hunting feeling stated to develop gradually. A Turkish proverb related to hunting stresses the hardship endured by hunters: "forty days you eat from your feet, one day, you eat game meat."

GREECE

Greece is one of the most recent members of the EU and its track record in bird protection in the past was not a negative one. This was mainly because the country is made up of a number of islands and the level of information for many of them was poor. For instance, Woldhek (1980) wrote: "although it is difficult to make generic statements about a country with so many islands, the restrictions concerning the hunting period, time of day and places, are well kept. There is very little hunting outside the seasons, during the night or in places where it is not allowed," (Woldhek 1980 p.33). Recent information is showing that hunters in various parts of Greece, especially in the southern peninsulas, bear similar traits of the Italians in the Calabria region and the French hunters of the Medoc region.

The sixth Chapter of the Law Ordinance No. 86 of 18 January 1969, deals with hunting. Hunting with guns or bow and arrow are allowed, but the use of traps, nets, poison and artificial light are not allowed. There are 400 hunting and forest officers attached to the regional offices of the Ministry of Agriculture. Some 3,000 persons are charged in court every year, of which some 50 per cent are convicted (Bertelsen and Simonsen 1989). There are some 350,000 licensed hunters and they are obliged to join an organisation. Hunters form an important political factor. Apart from some exceptions, the hunting pressure is most severe in the Peloponessos, the southern peninsulas and on some of the Docedanese Islands. The Island of Chios is one of the worst places for the killing of migratory birds in Greece (Choremi and Spinthakis 1990). While the percentage of hunting licences in Greece amounts to 3.5 per cent of the population, in Chios 8.5 per cent of the population have a hunting licence. During the beginning of the hunting season, many species are also shot in the plains around the cities. As in other Mediterranean countries, birds are shot mainly for fun. Although many are eaten after shooting, they are not an important part of people's diet.

ALBANIA

The law on "Hunting Economy" of June 1977 is Albania's principal law on hunting. It regulates prices of game animals and wildfowl as well as recompensation for hunting damage. The keeping of hunting guns is also regulated by another law. Only single and double barrelled guns are allowed. The cost of a gun is approximately £200. The cost of ten cartridges is £2.50.

Hunting by foreigners is a new concept introduced in 1991. Italian and Greeks are the most common hunters so far and these hunt for an average of three to four days a week. Falconry is not practised, but traps and poison may be used under special circumstances. A hunting licence may be obtained at the age of 18, but it is not necessary to have shooting rights over land to get the licence. A hunting test is mandatory before getting the licence. Bird calls, live and plastic decoys are not used. The administration of the hunting law lies with the ministry of agriculture and the directorate of forestry. Wardens are responsible for the enforcement of hunting laws. The number of licensed hunters stands at around 10,000 and some ten hunters are charged in court every year. Bag limits exist for game species. Hunters have smaller bag limits when hunting in reserved areas. In open areas they can hunt over twice as many birds. The bag limit of pheasants in a reserved area is one per hunter while in open areas, a hunter may shoot two. Ten wild ducks may be shot in reserved areas while 15 may be shot on open land. Bag limits of turtle doves, quail are ten in reserved areas, and 20 outside; bag limit for snipe is five and ten; partridge two and five; geese two and three; one fox, marten and wild boar irrespective of the area while bag limits for hare are one in reserved areas and two outside.

Pheasants are the only game species which are traded. It is estimated that some 30,000 pheasants are traded each year, each of which sells for about £5. The birds are sold under licence between December and March. People hunt both for food and for sport, and hunting is an all male activity. There are no environment groups in Albania but a hunters' and fishermens' association has been active since 1950. The general public is indifferent to hunting. Illegal hunting in hunting reserves and protected areas takes place. Albania is not yet party to any of the international conventions of wildlife protection.

YUGOSLAVIA

Before the breakaway republics and the outbreak of war in former Yugoslavia, different regions had different hunting regulations. Geese, duck, partridge, pheasant, doves and crow were listed as huntable species in most regions, and with the exception of pest species (crows, magpie and jay) which could be hunted all year round, the hunting season varied between August and October the end of February for most species.

The main interest of law enforcers were pheasants and partridges, and these were effectively protected against poaching. Other protected species were often hunted illegally, and sometimes prosecutions took place. Most of the pheasants shot were bred in captivity and hunters who shot them were organised in hundreds of hunting clubs, membership for which cost between £23 to £65. Bag limits were set each year. The price of a shotgun ranged between £230 to £260 while cartridges cost £2 a dozen. In addition to the 220,000 local hunters, some 20,000 Italians used to visit Yugoslavia each year.

Bird catching was restricted to a narrow strip three to five km wide along the coast in Istria near Zagreb and Split where lime sticks were used to trap finches in autumn and winter. An estimated 50 trappers, each trapping some 1,000 birds operated from Zagreb. In poorer regions in the south, small boys used primitive stone traps which crush the birds (mainly thrushes) foraging for food. The birds are usually eaten (Woldhek 1980).

CONCLUSION

In this chapter, the hunting situation in Mediterranean countries was discussed with a view to provide an outline of hunting practices and legislation in each country and to asses both their similarities and the differences. For countries for which data is available, there is a discussion on both the economic aspects of hunting as well as the social aspects. Countries such as Italy and France have a strong hunting lobby which is often financed by the hunting related industry.

In spite of the stark contrast in the socio-economic situation prevailing in Southern Europe which forms the northern Mediterranean border and the North African countries forming the southern edge of the Mediterranean, the differences in hunting practices are not as pronounced as one would expect them to be. The similarities should not come as a surprise as although the Mediterranean basin is large, the species of birds sought by hunters in the western part of the Mediterranean are often the same species hunted in the eastern part and hence the catching methods need not vary much. One significant difference is that whereas hunters in the northern Mediterranean hunt primarily for sport, and hunters speak of a hunting ethic whereby one should not shoot a sitting duck, an Egyptian hunter does his best to stalk a sitting bird as it betters his chances of securing the meat.

The economic realities are often the principal reasons behind the main differences in hunting practices between the north and southern shores of the Mediterranean. If one were to group separately the countries bordering the northern and southern shores of the Mediterranean and calculate the average area, population and number of hunters, the results would be stark. While the average area for countries in the south of the Mediterranean works out at about 747,000 km^2, the density of hunters is 0.08 hunters per km^2. In the north of the Mediterranean, the average area of a country works out at about 277,000 km^2, roughly 2.5 times smaller than the size of a North African country. Yet the density of hunters per km^2 is 25 times more, working out at an average of two hunters per km^2. The number of hunters per 1,000 of population in the north of the Mediterranean is 212, whereas in North African countries it is 28.

This discrepancy is mainly the result of the difference in wealth. Europeans have a better standard of living and can afford to indulge in activities such as hunting more than their North African counterparts. This can also be seen by the fact that reared game is shot by European hunters but not by North African ones. In the North African countries, birds are taken primarily for consumption. Children in such countries tend to indulge more in bird catching than their counterparts in Europe. More free time, proximity to or living in the countryside, lack of things to play with as well as limited education are among the factors contributing to such a phenomenon. Being poorer, North African countries tend to try to cash in on their resources and hunters from the northern Mediterranean are welcomed as tourists in some of the North African countries where hunting holidays are organised. This is particularly true of Egypt, which has seen a dramatic decline in its tourism, mainly due to terrorist attacks by Fundamentalists and is sparing no effort to attract tourists.

One noticeable difference between EU member states, including those with a long hunting 'tradition' and industry such as Italy and France and North African countries is that in the former, the same standard of living which brought hunting more accessible to a larger section of the population also brought more awareness on the need for environmental protection to the extent that today the number of hunters is declining while in North African countries, the concept of conservation is still limited to very restricted circles and the prevailing socio-economic situation keeps people occupied with their livelyhoods rather than with that of their surroundings.

The similarities in the Mediterranean are also reflected in the hunting laws, which do not differ too much in the region. This is mainly due to international conventions such as the Berne convention which aims to safeguard migratory species. The major differences are some variations in the open seasons for various species. But the major differences arise in the issue of law enforcement, which in some countries is totally lacking while it is seen as lax in some regions within European countries. The use of nets, lights and other illegal means of capture are reported to be in use throughout the Mediterranean. In most countries, hunters have to undergo a test, but they do not need to have hunting rights over a tract of land before they can obtain a licence. The Ministry of Agriculture is the regulatory body in most countries.

The implications of the EU Birds Directive has also been discussed in this chapter since many of the Mediterranean countries are also members of the European Union. In any country, legislation and its enforcement are, very often, two different matters, and the compliance or otherwise, to hunting laws, have been discussed. It has been shown that where infringements of international treaties are concerned, countries have been taken before the European Court. It is also noted that countries which have joined the EU only recently, such as

Spain, Portugal and Greece, are still lagging in their conservation measures when compared to other European countries. Also discussed were the international commitments emerging from various nature protection treaties and their bearing on hunting practices in the countries concerned. From the information provided, it emerges that Maltese hunting legislation still differs substantially from the principles of EU legislation in that local legislation still allows the hunting and trapping of species in spring, when birds are on their way to the breeding grounds.

The analysis of hunting practices in various Mediterranean countries is necessary as there are various social aspects of hunting common to hunters in the Mediterranean basin. Most countries had relatively uncontrolled hunting practices a mere century ago and it was only after the 1960s that governments began to ponder more seriously on the need to apply restrictions to hunting practices. There are wide differences between developed countries and developing and third world countries in this respect. But very often, hunting practices found in one country are practically identical in spite of being separated by many geographical barriers.

Hunters in Egypt use duck decoys to lure waterfowl just as Spanish hunters do on the other side of the Mediterranean. Maltese hunters use quail and thrush calls similar to Italian and French hunters. They socialise in bars frequented by other hunters, just as hunters in other countries do. Hunting related proverbs can be found in most countries, and hunting permeates European literature and art. A discussion about such matters with particular reference to Malta is found in the next chapter which deals with the social aspects of bird hunting and trapping.

Chapter 3 Social considerations

Introduction

Hunting permeates through all aspects of life in Malta. Until recently, the small number of hunters were part and parcel of a rural way of life. Men had little idle time and recreational activities were limited. Thus hunting not only provided them with a form of recreation, but also helped to procure meat for the table. Until the early 1970s, the educational system helped to entrench hunting further in children's minds. A story about a hunter shooting a skylark as well as another about a father who bought his son a linnet as a gift were part of a primary school textbook studied in all state schools between the 1930s and the early 1970s. For children brought up with this kind of education, there was no inconsistensy between what they learnt at school and what they saw at home.

Images of hunters can be seen on a number of houses in the form of weather vanes. These vary from a simple image of a hunter shooting to others where the hunter is accompanied by a dog and is seen shooting at a flying bird. One may also see weather vanes with images of various birds ranging from birds of prey to woodcock to ducks. There are a number of houses which bear names of birds or which are hunting related. The most popular appears to be *id-dura*, which means the shooting hide, but names such as "Hunter's house" and "Shooter's house" are not uncommon.

One cannot do a proper study of hunting practices without looking into the significance of hunting to those who practise it, the relationships between the hunters and the hunted and how the non-hunting sector of the public looks at hunting practices. For hunters themselves, hunting is one of the most important activities. Competition fuels their passion for shooting and collecting stuffed birds. Wherever hunters meet, be it in the village bars and in other traditionally "men only" clubs such as band and football clubs, shooting is one of the main topics of conversation. Hunters talk, quarrel, and mock each other about hunting. They talk about feats, argue over the performance of guns, cartridges and their users, and mock each other about the misses. The deep involvement into hunting practices involve ritual-like activities which further cement hunters into their pastime. Before the hunting season, hunters are engrossed in activities which get them both mentally and physically prepared for the hunting season. A monthly paper for shooters and fishermen keeps them up to date with what is happening on various fronts ranging from the political scenario to new products. The hunting shop which shooters frequent is a focus point from where one can get the latest news and information both before and during the migration season. Before the hunting season starts, hunters start buying and try out new cartridges. Those who load their own, have to start thinking about it even earlier. When the hunting season starts, hunters fall into a sort of daily routine. Most take time off from work to be able to spend more time in the field.

The hunters way of life during the hunting season has been documented by Fenech (1992). Their daily routine can be summarised as follows: the hunter watches the next day's weather forecast, sets the alarm clock for the following morning and sleeps with anticipation and hope for a good migration the following morning. Waking up, getting a feel for wind direction as coffee brews and then drives off to the his favourite hunting haunt. The drive is often interrupted by a stop to check wind direction again at a reliable weather vane on the road. Arriving at the hunting place, the shooter takes position and waits for the break of dawn. After the sun rises and the shooting of the first birds subsides, the hunter usually tours the area in an attempt to flush any birds which may be in the cover around. Then there is the usual chat with other hunters in the field, and the drive back home, often interrupted by a stop at a coffee bar, which serves as a meeting place for hunters returning home. At home, the hunter is likely to phone other hunters he knows to see how successful they have been and what they saw. The cleaning and oiling of the gun is part of this ritual-like behaviour, which not only enhances the hunters' experience but also helps to cement them further to their pastime.

Since hunting in Malta almost exclusively implies the shooting of migratory birds, the relationship between hunters and birds has to be examined. Historically hunters were probably the most avid watchers of birds and they studied their behaviour in order to be able to hunt them more successully. It is very probable that the people who gave names to birds were hunters. The earliest Maltese dictionaries dating back to the late 1600s and early 1700s contain a number of bird names which are practically identical to those in use today. Birds' names also ended up on maps: in Malta there are various place names bearing names of birds. These earliest recorded links to birds are mapped and their significance discussed in this chapter. Since social aspects are investigated, reference is also made to nicknames with avian connotations, which may have had a bearing on place names. The earliest descriptions of bird migration in Malta date back to the early 17th century and these illustrate that there was already an association of migration with wind direction. This proves that a certain element of observation has been present much earlier.

The significance of hunting and its symbolism as the hallmark of nobility in continental Europe has already been discussed briefly in the first chapter. This was also the case in Malta between the 15th and 17th centuries, after which, an improvement in the standard of living started to permeate Maltese society. However there are still various aspects which point to hunting as a status symbol, and these are discussed in this chapter. Behavioural studies throw a lot of light on the significance of hunting to those who practise it, and these are looked into through an analysis of the hunters' language. It is known that different groups of people use different registers when speaking to their peers or when speaking to people outside their group, and Maltese hunters are no exception. Various examples of how shooters camouflage their discourse when talking to strangers, as opposed to the hyperbolic terms they use when discussing their favourite subject matter with their peers, are given. The imagery and metaphors of power employed in hunting and in shooting implements are investigated and discussed.

As the popular perceptions of the people are reflected in songs, rhymes, poems and other forms of literature, these are examined along with folkloristic aspects. Any implication or mention of hunting and trapping in these forms of culture are discussed, as all of these help shed light on the importance, or otherwise, of hunting in everyday life. The various conclusions drawn from similar themes running through the examples cited show that Malta does not have a pro-hunting tradition in any of the arts and that a streak of compassion for birds which emerged at the turn of the century later culminated in an anti-hunting outcry in the 1980s. A detailed analysis of all hunting related cartoons carried in the Maltese newspapers from 1869 to 1996 was carried out. These cartoons are subdivided into four categories to facilitate their dissemination. The imagery of hunting in art is also looked at from the earliest bird symbols in pre-history, to present day representation of hunting in art. Proverbs which mention birds or hunting and trapping are also discussed and their significance is placed in context. It is significant to note that while there are nine proverbs which mention birds in the oldest collection proverbs dated 1828, only two are related to bird trapping and one to the 'taking' of plover.

The involvement of religion in hunting is also dwelt upon. In the introductory chapter, it has been shown how the legend of St Hubert originated on the continent when hunting was under fire from various quarters within the Church. A parallel from Malta is discussed, with the exception that although the legend is recorded in a 1670 manuscript, it was given a pro-hunting interpretation only in the 1950s.

The presence of migratory birds in Malta has attracted man's attention for a long time. Symbols with birds appear in pre-historic art and the presence of bird names in the earliest known Maltese dictionaries which are practically identical to those in use today, a selection of bird names are tabulated in Table 3.1, shows that birds were important to the early Maltese people.

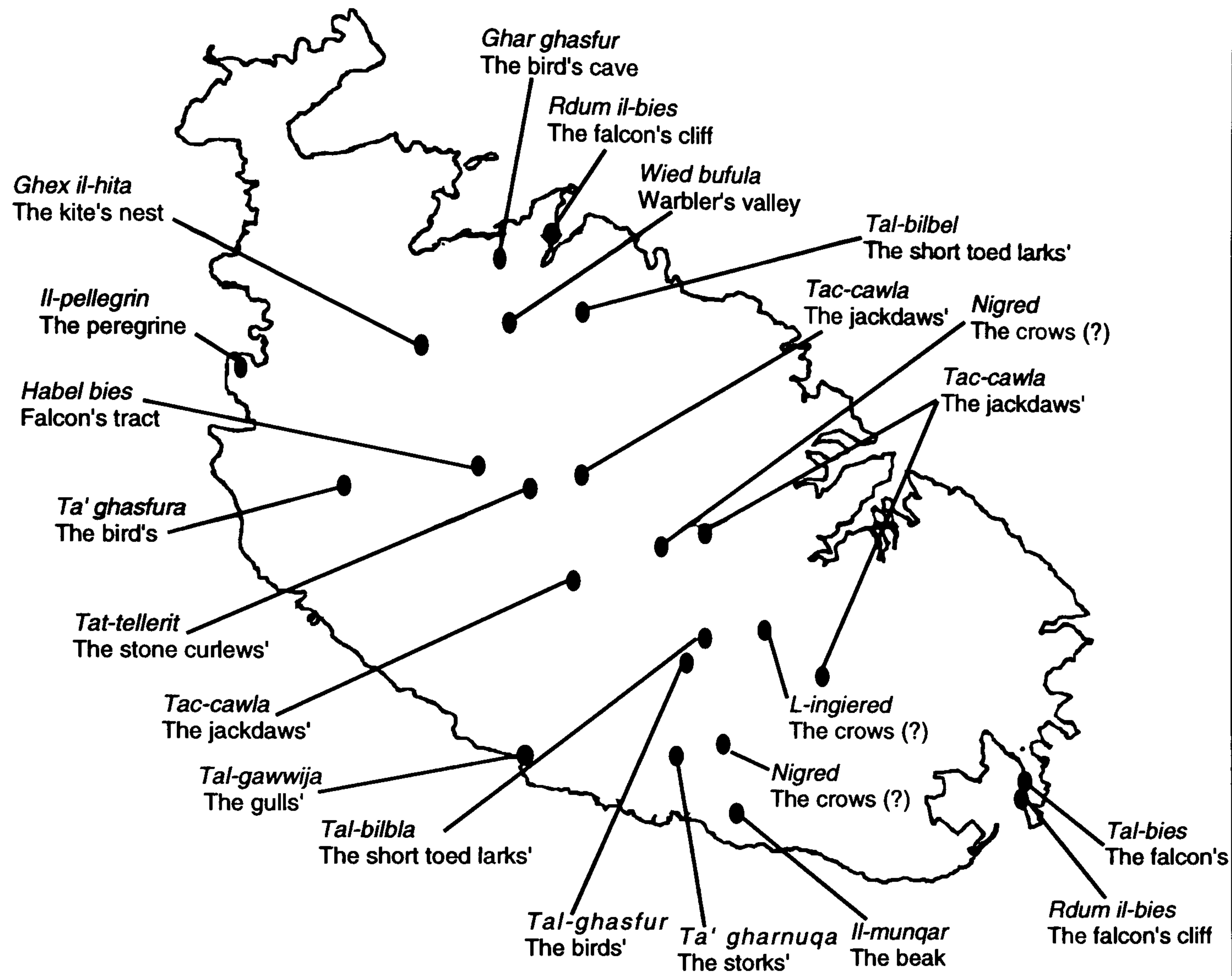
Table 3.1
Bird names in early and contemporary Maltese dictionaries

1600	1700s	1750	Current Maltese	Current English
-	Aluet	-	alwett	skylarks
gamiema	gamiema	-	gamiema	turtle dove
somiena	sommien	-	summien	quails
-	gurlini	-	gurlini	curlews
-	cucciarda	-	kuccarda	honey buzzard
tallarida	tillirit	-	tellerita	stone curlew
-	veneu	-	venew	lapwings
seger	secher	seker	seqer	falcon
hutafa	chuttaf	chottafa	huttafa	swallow
-	chert-innahal	-	qerd in-nahal	bee-eater
-	ciaula	caula	cawla	jackdaw
-	coche	-	kokk	owls
-	bukraik	-	buqrajq	nightjar
-	bilbole	bilbil	bilbla	short-toed lark
-	dorrais	-	durrajs	corn bunting
-	dacchuca-chala	-	daqquqa kahla	cuckoo
-	merilla	merilla	merill	blue rock thrush

Source: Cassola 1992, MS 1187, Agius De Soldanis 1750, Sultana and Gauci 1992

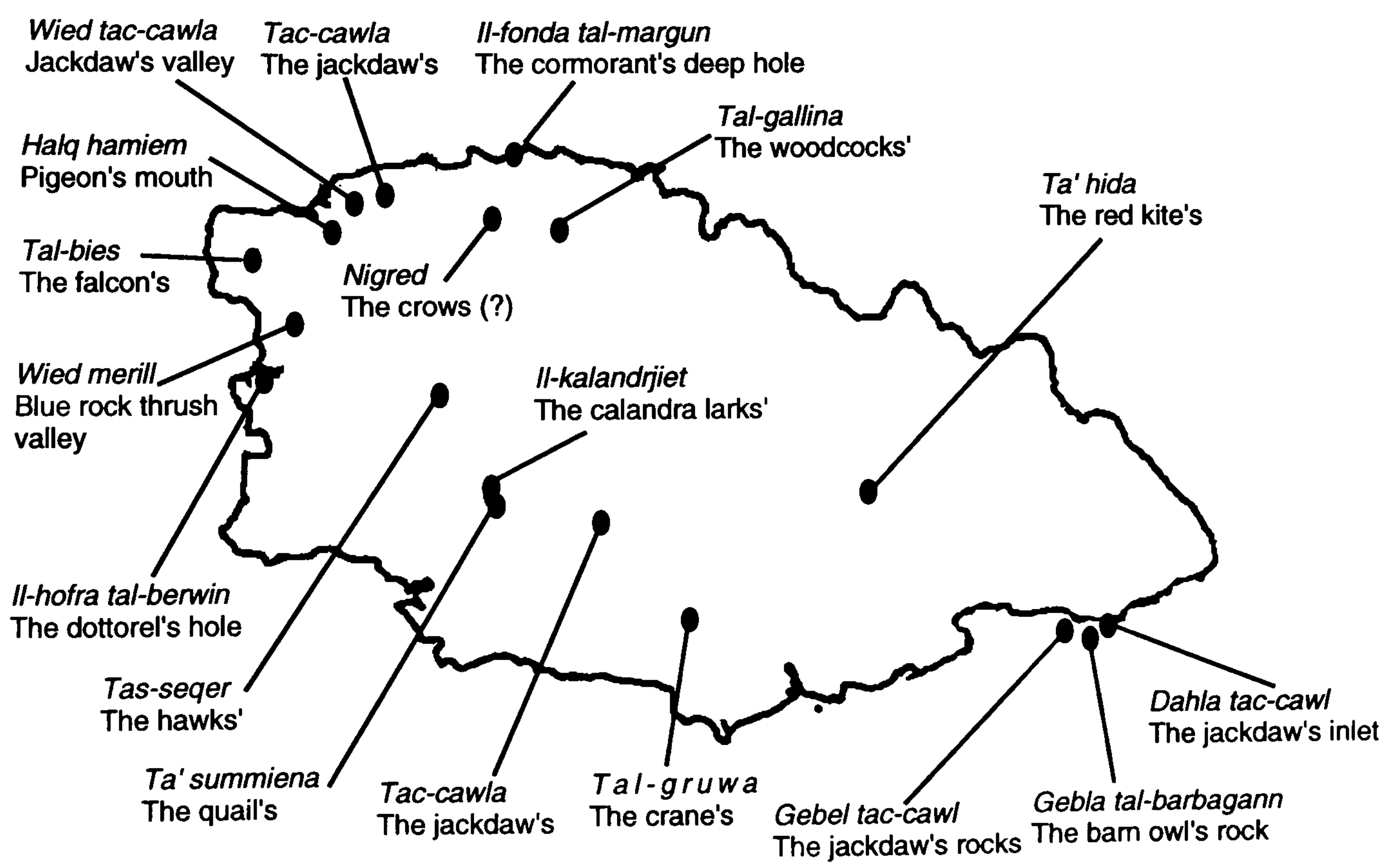
The first documented reference to bird migration in Malta dates back to 1647, when the historian Gianfrancesco Abela wrote his description of Malta. Abela noted that various species of birds of prey migrated over the Islands and mentions various species such as the peregrine and saker falcons, merlin and sparrowhawk. He also speaks of 'fat' garden warblers, an implication of autumn migration when these birds have large amounts of fat fuel, of quails "twice a year", turtle doves, thrushes and "other species" (Abela 1647). Ciantar (1772), who updated Abela's work, elaborated more on migration and mentions kites and vultures among the migratory raptors. Ciantar lists various winds and what species of birds they are likely to bring in all months of the year. But well before these historians, the locals knew about birds. This can be seen from place names, some of which bear names of birds. The maps shown in Figures 3.1a and 3.1b show the places with bird names plotted on the maps according to where they feature on the Ordinance Survey sheets of Maltese Islands (1958) while Figure 3.2 is after Zammit Ciantar (1979) who lists a number of place names with avian connections in Gozo, many of which are no longer used.

Fig 3.1a
Malta map showing places with bird names



Source: Ordinance Survey Sheets, 1958

Fig 3.1b
Gozo map showing places with bird names



Source: Ordinance Survey Sheets, 1958

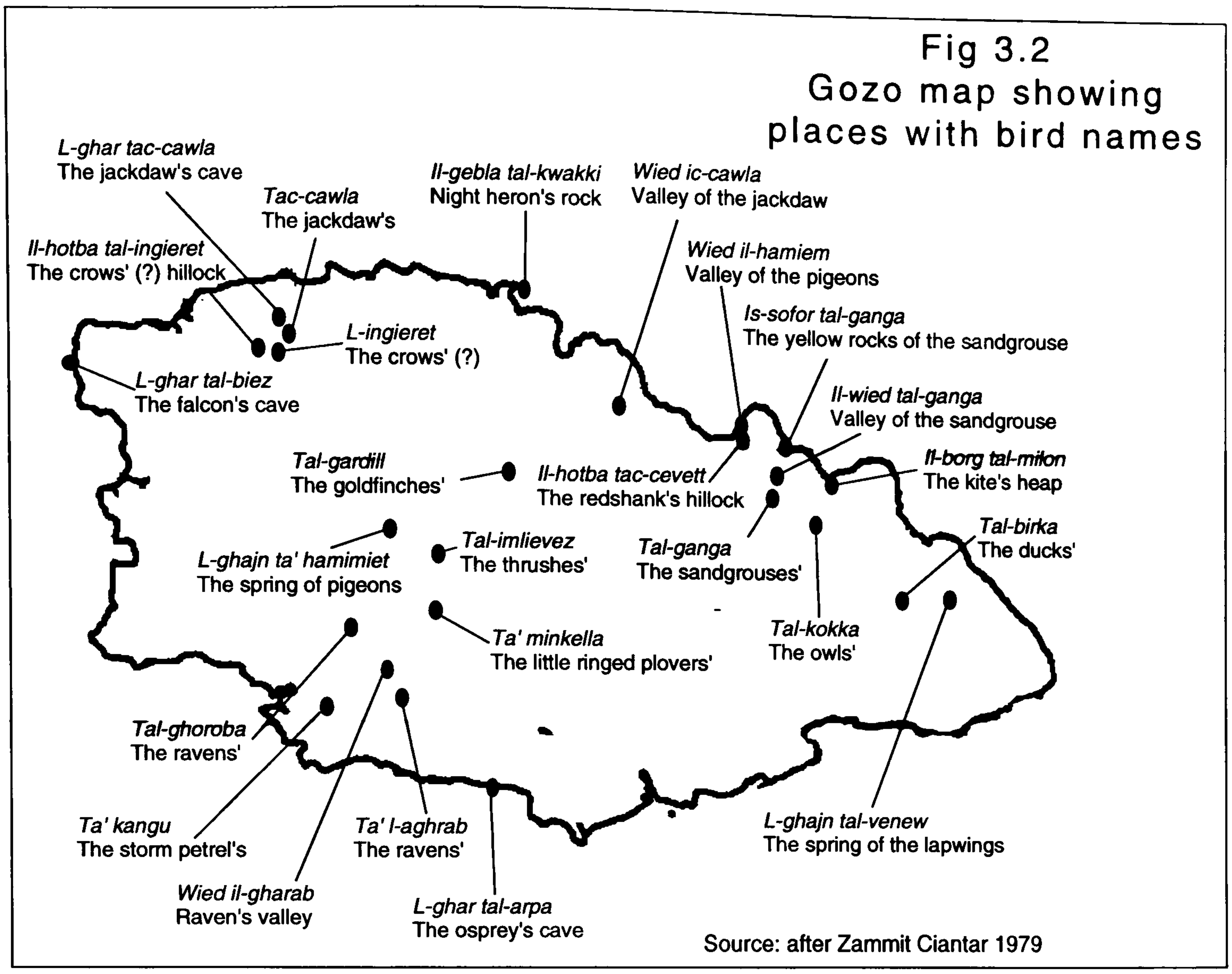


Fig 3.2
Gozo map showing
places with bird names

Zammit Ciantar (1979) observes that no Teutonic vocable is present in the ornithological toponyms, which indicates that these place names were all established or at least had taken shape before British rule. A number of place names composed of words of pure Semitic origin indicate that these place names were coined during Arab rule between 870 to 1223 A.D. He further argues that place names featuring the word *nigret* or *nigred* (meaning blackish) were associated with the jackdaw (in Maltese *cawla*). Zammit Ciantar argues that the name *cawla* came into Maltese from Neapolitan and replaced the word *nigret* and cites a document dated 1580 showing that a stretch of land Gozo was called either *'ta ciaula'* or *'ta nigret'*.

Some of these places were probably named with the nicknames of the farmers who tilled the land or the owners. However, historical evidence indicates that places like *Ta' Hida* and *Ghex il-hita* are probably called so because the red kite used to breed there. Abela (1647), Agius De Soldanis (1746) and Wettinger (1976) mention a number of places called *osc el Hida, Hosc el Hida* and *Ghux il-Hida* respectively. The word *Ghoxx* today stands for female genitalia, which is of Arabic origin and means nest, and these place names were called "the kite's nest". It could also be that a number of place names were coined due to the presence of a particular bird. A number of cliffs and headlands which are suitable breeding habitat for peregrine falcons today bear the bird's name. A number of localities in the central part of Malta, and the north and central parts of Gozo are called *tac-Cawla* (the jackdaw's). This could be both because the landlord was called so, but could also be a result of the birds' habits of breeding or congregating there.

A number of families still have a bird's name as a nicknames. At Attard there are families known as *tal-bufula* (the warblers') and *tal-pespus* (the pipits'). *Il-baghdun* (the harrier) is the nickname of a man in Luqa. In Gozo, there is a family called *tac-cawla* (the jackdaws') in Rabat, there are men known as *il-bies* (the falcon) in both Marsalforn and Xaghra. Zammit Ciantar (1979) states that the nicknames of *gardill* (goldfinch) could be found in Xewkija, *cevett* (redshank) in Rabat and *merill* (blue rock thrush) in Sannat, all in Gozo. Salvu Vella, residing on Comino, is known as *tal-venew*, a nickname he got from his father who used to have a caged lapwing (*In-Nazzjon Taghna* 1993). A hunter from San Gwann is known as *hexa kacca*, which literally means he "fucks up game". There are also a number of expressions which involve similes with birds, *qisu pespus*, (he's like a pipit) is used for a fragile person; *jghid daqs tellerita* (he rattles like a stone curlew) or *qisu kalandra* (he is like a calandra lark) is said for one who talks incessantly; *ghandu ghajnejh ta' seqer* (his eyes are like a falcon's) is said for one who has a good eyesight; while *tiekol daqs ghasfur*, you eat as little as a bird is said for one with a small appetite. The date and origin of these expressions is not known, but they have been used since time immemorial and are a testimony of the relationship between humans and birds.

A STATUS SYMBOL

From the middle ages up to the early 1900s, hunting was a privileged characteristic of the aristocracy; it was an assertion of social superiority. When hunting became a pastime of a wider strata of society, social superiority was maintained through the keeping of *Riservatos*, areas which are rented by or which belong to shooters. In such areas, only the tenants of the land or their guests are allowed to shoot. The rising standard of living enabled the average income shooter to rent small tracts of *riservatos* and social superiority is now retained through the location, size and type of the *riservato* a shooter has. The best areas for shooting and the largest *riservatos* are usually in the hands of those who can afford to pay most.

The number of guns a shooter has, their type and make, are also signs of social standing. People who are well off usually have more expensive guns which are often engraved by hand. Such shooters usually use foreign loaded cartridges, which are slightly more expensive than locally loaded ones. The use of imported loaded cartridges is no longer a prerogative of privileged classes as shooters from all strata of society can now afford them, but affluent people have been using them for a very long time and they could afford to buy them when the average shooter could not. In fact, many old time shooters will readily tell how much they treasured those single foreign-loaded cartridges which they used to obtain in exchange for some dead rare bird or following some other favour. Farmers looked up at prominent people, such as the family doctor or the village lawyer, and they frequently allowed them to shoot in their fields. The favour was returned by giving the farmer that box or two of imported loaded cartridges as farmers would not accept other kinds of payment.

Social factors

In the past, recreational activities were few, more so for people with limited means. Up to the mid-1900s, wine shops were the only meeting places in villages, where men met after work (Cassar 1988). A British author who wrote about the Maltese Islands noted that besides music, politics, and the parish church, the youths and men had another passion, catching birds. "One of Gozo's principal sports...Everyone at the Ginevra Bar went on talking often all at once, louder than normal in order to drown the television, whose sexy films and Italian custard-pie plays in Victorian dress were completely ignored but not switched off. Game hunting and bird catching shared pride of place with football and even those emigrating to Australia took their shotguns" and "the young sheperds and farm boys, the plasterers and taxi drivers, the barman and village schoolmaster all had one interest in common. They not only talked about birds, but the London Bar closed early so that they could be up and out of doors by three o'clock next morning to go netting" (Bryans 1966 p.216, 232). Preparing for the hunting season helped many fill their little spare time while shooting migratory birds during the spring and autumn migrations providing something for the pot. Leisure activities developed as a result of the gradual increase of free time. But as free time increased, so did the popularity of bird shooting and trapping. As will be discussed in later chapters, there is a direct link between the increase in the number of hunting licences and the increase in the standard of living. A keen shooter himself, Albert Gauci wrote that a better standard of living not only brought hunting within reach of everybody, but also simplified it to an extent that took away its sporting element (Gauci 1974b, Gauci 1973c).

Gauci also remarked about the 'craze' for hunting: "it is indeed astonishing how even unto our day and age, so many thousands of otherwise sensible people from all walks of life, skilled and unskilled workers, professionals and priests included, low and high, young and old, fair and dark, simply toss off behind their shoulders their very livelihood, renounce their normal family life, just to dedicate themselves entirely to the craze of game" (Gauci 1973a). Gauci argued that the shooting fraternity perpetuates the shooting mania: "we see youngsters, hardly out of their cot, showing unmistakable signs of things to come. They prop their left hand out as if pointing a gun at some target and with their pouting lips they try to imitate the popping of guns. They follow their imaginary quarry round the room swinging their left arm and banging with their lips still wet of their mother's milk. They are the shooters of tomorrow" (Gauci 1973b). Such behaviour is not instinctive, but learnt and it is usually both common and encouraged in houses where the father, or elder brother, is a shooter. It is not difficult to see or hear parents of small children pointing at a sparrow or pigeon in the street or at a caged bird and asking the child "What do we do to the birdie?" The child that says 'Bumm' (reproducing the sound of a gun) receives encouragement.

Shooters often take their young children with them when they go out to shoot birds and in no time they develop the desire to shoot. Many children are introduced to shooting using catapults and air rifles, with which they kill lizards, geckos and small birds. For families who have shooters, family outings are seldom without guns. Thus, from a tender age children not only play with their own toy gun, see dead and stuffed birds and accompany their father on shooting excursions, but even learn to perceive shooting as a family affair. Such activities help shape the child's mind into the shooting routine of the adults around him.

Hunter satisfaction

No studies have yet been undertaken in Malta to see why hunters hunt migratory birds. During informal conversations with a large number of hunters, whenever the subject of shooting at reared birds is brought up, few are those who show enthusiasm. This may partly be because most of them know that to shoot such birds one needs to pay, while migratory birds come for free. But most hunters say that the excitement from shooting at migratory birds is that "it is like a lottery", you participate without knowing whether you are going to win or not. The same with hunting migrants, you go in the field full of anticipation, but the birds may not come, or they come, but not your way. Many argue that if they were certain they would shoot a lot of birds each time they go to shoot "like foreign hunters do", that would not be fun. Using Maslow's hierarchy of needs (De Vito 1982), which may be summarised into social, psychological and physical needs, one can identify the sources of hunter satisfaction. Shooters tend to describe hunting as a 'recreational activity'. Like hunters elsewhere, most Maltese hunters deny it is the actual shooting of birds that pleases them. They claim that they get satisfaction from the challenge and excitement of hunting, from feeling primitive by being in nature and seeing sunrises and sunsets, getting away from home and work. Hunting provides a form of escapism, relaxation and physical exercise. It is easy for hunters to obtain all these benefits, which are central to their satisfaction, without killing birds. The sun rises and sets irrespective whether a hunter carries a gun or not. A walk or a run through the countryside relieves one from work and provides physical exercise. The only thing which would be missing for shooters is the anticipation of firing a shot. In Malta, it is clear that without birds, hunting would not exist, because the main reason why shooters hunt is to kill birds to keep as trophies.

Shooters usually hunt alone. Most of them go to the hunting place with a close friend, but while they are in the field, they distance themselves from each other and unite again if migration is neither good nor promising. Outside the hunting areas, shooters tend to seek each other's company. They meet in village bars and often segregate themselves to talk about their favourite pastime wherever they meet. This friendship introduces a social dimension. It encourages their commitment to hunting and to the satisfaction they obtain from it. It also creates a strong element of competitiveness. Shooting activity would decrease considerably were it not for the rivalry, amicable and otherwise, which exists between hunters.

Many shoot and trap birds because it is their childhood pastime, and having grown with it, hunting is the main activity they enjoy in their free time. Their social fabric is woven around hunting and some are introduced to the "sport" by friends at work who invite them to a shoot to see what it feels like. Others shoot because it is a metaphor of masculinity, the natural step from the catapult days of boyhood to the man's world of real guns. Most shooters collect stuffed birds, which are kept as trophies. The showcase with stuffed birds is usually kept in a prominent room where it cannot be missed by guests. In Malta it is very difficult for people to see live wild birds. Most shooting takes place while people are still asleep, and there would be little left for them to see by the time they go for a walk in the countryside. Irrespective of the time of the day or year one goes to the countryside, one cannot fail to see the ubiquitous shooter or at least evidence of his presence in the form of spent cartridges. Very often, birds get shot before people have a chance to have a second look. Thus a guest to a shooter's house will be impressed at the diversity of birds that visit Malta. People who never had the opportunity of seeing birds in the wild enjoy looking at stuffed birds. For many, it is their closest encounter with nature. Such situations favour shooters who diligently explain how hard it is to "catch" so many birds. It is significant to note that when talking to lay people, shooters do not talk of killing birds, but of "catching" them, but between their kind, shooters use strong phrases to describe their kills.

Shooters' language

As discussed in the introductory chapter, hunters camouflage their speech when talking to non-hunters about hunting. Indeed, even magazines aimed at hunters on the continent do not speak of 'kills', but of 'catches'. Maltese hunters are no exception and they have their own vocabulary. The word *dilettant*, which in the Maltese language stands for 'amateur', has a different meaning to the shooting community. To them, *dilettant* implies one who is fanatically interested in birds, that is, a shooter, a trapper, or a combination of both. The same can be said for the word *namra*, which means 'passion'. To shooters and trappers, the word signifies one who has a passion for shooting or trapping birds, so much that a shop selling hunter's goods in Zebbug, Malta, is called *In-Namra*.

Social historian Peter Burke wrote that different social groups use different varieties of language in different situations (Burke and Porter 1987). This is very true of shooters. They use strong words to describe their kills when discussing the subject amongst their kind — but talk with equivocation when conversing with others who do not form part of the shooting fraternity. While talking to strangers, shooters talk of birds falling from the sky — *tajtu tir u waqa* — 'I shot it and it fell' they say. The verb 'to kill' is hardly ever used. Instead, shooters use the verb *taqbad* which means 'to catch', which does not imply killing. The birds which they shoot are either 'caught' or 'captured'. The emphasis is on the skill, a sense of fair play and the gentlemanly conduct of the shooter, and on his honest affection for and admiration of the beauty of nature, which, they contend are the real reasons why shooters enjoy their 'sport'. Amongst their kind, the rituals of contemporary shooters betray uninhibited delight in the capture and killing of birds. The jestures and phraseology shooters use to describe their catches differs significantly from that used with laymen. They use distinctly sadistic vocabulary and speak in an emotionally violent way. According to their descriptions, the birds they shoot are not simply killed, but blasted out of the sky. Apart from boasting about the altitude at which the bird was shot and its speed in flight, shooters use hyperbolic verbs which emphasise their performance in shooting. Shooters have been heard uttering phrases like *qbadt seqer, thantu*, 'I shot a kestrel and made mincemeat of it'; *tajjart daqquqa, gibta tabakk*, 'I flushed a hoopoe and made mincemeat of it'; *Li jidholli fit-tir, niskumnikah*; 'I destroy whatever comes within range'. Other statements are even more crude: *hargitli summiena, gibta hara* meaning 'I flushed a quail and turned it into shit!'; *Sparajt ghal gamiema, mank basset* which means 'I shot a turtle dove and it didn't even have time to fart'(ie it was killed instantly). Words like *qridtu* (I destroyed it), *dahhantu* (I smoked it), *fqajtu* (I busted it), *farraktu* (I smashed it), *kissirtu* (I broke it to pieces), *nixxiftu* (I dried it), *biccirtu* (I butchered it), *tertaqtu* (riddled it with shots), *gibtu rmied* (I turned it to ashes), *inhataf bit-tir* (it shrunk with shot), *intiftu fl-arja* (I made its feathers fly off in the air, or its feathers were plucked in flight with shot), *damdamtu* (tore it open with shot), gibtu gharbiel (peppered it with shots), *kahhaltu* (I plastered it), *sammartu* (I hammered it), *inxartu* (I shot dead) *imbuttajtu* (I pushed it), *xkanajtu* (I tripped it violently) and *baqqantu* (I pick-axed it) are frequently used to signify the way in which a bird was shot. The word *hraqt*, which means I burnt, has become very popular and has substituted the word *sparajt*, which means 'I shot', in many shooters vocabulary. These strong phrases are nothing but a clear sign of a violent mentality. The verbs used, if taken literally, can be described as crude, but the intention is not so much an expression of crudeness as an expression of vulgar boasting. More such expressions are listed in Table 3A.1 in the appendix.

IMAGES OF SEXUALITY

Eco-feminists are not the only ones to comment about the sexual metaphors in hunting. Duffy (1975) sees hunting as satisfying sexual needs and points out the sexual imagery in hunting and shows the hunt as a sexual pursuit. She argues that "the point of hunting is to conquer by catching or killing. Whether fishing, fowling, coursing or the chase, it has, like a masturbation fantasy, two parts, the hunt and the kill even when that is symbolic as in the landing of a fish that is than thrown back" (Duffy 1975 p.115). The sexual connotation is found in Maltese bird names. It is interesting to note that all species of birds which were and are still considered as 'game' — with the exception of thrushes — which are also considered as songbirds and snipe — have a feminine name: hence a turtle dove is called *gamiem*a, a skylark *alwetta*, a golden plover *pluviera*, a lapwing *venewwa*, a woodcock *gallina*, a honey buzzard *kuccarda*, a pigeon *hamiema*, and a goose *wizza*. The generic name for duck is *borka*, also feminine. It is interesting to note that if a different word exists for the male, as in the case of the male turtle dove or quail, which can be called *gamiemu* and *summienu* respectively, the male name is hardly ever used. Somehow, the shooters always seem to catch a female. On the other hand, all falcons, harriers, herons, finches and colourful birds bear male names. With finches, it is evident that they bear male names because it is the males which are most sought for their song. Birds of prey were probably given male names due to their association with falconry and manliness.

MACHO IMAGES

Today the manly attitude is much more evident in shooting. The younger generation of shooters is much more macho than shooters of a mere thirty years ago. This can be seen by both what the shooters wear and use, as well as their behaviour and vocabulary. While shooters used to wear plain khaki clothes and carry a twin barrelled shotgun, today's younger generation wears camouflaged jackets, which can be bought from shops selling shooters' goods or which are made to measure. A double cartridge belt and five shot repeater shotgun are a common feature. The macho image of shooters was noted also by the late Albert Gauci, then secretary of the Shooters and Trappers Association, who wrote: "How can you recognise this pest? Easy. He strolls like a mighty rebel through the countryside undaunted and unafraid of passer-by, children and women who may be taking their share of God's fresh air on their days off. He shoots with a fearlessly straight aim at eagles, sparrows and swallows without the least fear of the possibility of being attacked in turn. Nothing which moves escapes his fire spitting gun. His arms hug the shining automatic gun and a hundred and one peculiarities which he carries on and with him distinguishes easily this pest from all other mortals, peaked cap, gaudy shirt and commando trousers, ammunition belt or belts, heavy boots, bag and all the rest" (Gauci 1974a). The macho mentality can be also seen through the exhibition of things related to shooting. Guns, cartridges and cartridge belts are frequently left in places in shooters' cars where they can be seen by passers by. Trophies, in the form of stuffed mounted birds, are often displayed in windows overlooking the street. Some shooters even hang stuffed heads of birds, especially birds of prey, from the rear view mirror of their car, while others hang cartridges. In village bars, one can often see shooters with cartridge belts on; they are shooters on return from a shoot, who keep their sign of manliness on while stopping for a chat, a boast and a coffee.

HUNTING AND WARFARE

Thomas (1983), who wrote extensively about man's relationship to nature, concluded that hunting simulates warfare. Focusing on the situation in Malta, one can find such associations. Adverts for shooters' clothes often contain words like 'army clothes' and 'commando-style' while words printed on cartridges often have subtle and overt connections with military equipment. On more than one occasion, shooters have been heard saying that the shooting of large birds like honey buzzards, would be more fun if the birds were armed with machine guns under their wings. Apart from what the shooters say and wear, some shotguns which one sees advertised are shaped more like military weapons, than conventional shotguns. Dr Michael Mallia, a magistrate who is a practising shooter, wrote, 'even the conventional five-shot repeater is aesthetically more connected to the military than to the traditional game shooting gun' (Mallia 1989).

Writing about the current situation, Magistrate Mallia wrote: "many times have I seen a poor bird being shot at by at least a dozen shooters and still being shot at while falling. The foul language and blaspheming that follows can best be imagined. This is not to say that this is the only source of argument; even the positioning of the shooter in the field is made with arrogance and selfishness" (Mallia 1989). There is no respect towards other shooters and arguments leading to serious quarrels and fights frequently arise when more than one shooter shoots and kills the same bird. There has been a number of cases were persons where charged in court with attempting to seriously injure each other following quarrels over shot birds (*Malta News* 1973, *l-orizzont* 1982, *l-orizzont* 1991). Hunters shooting from dinghies at sea have clashed with hunters on land and shots were exchanged (*The Times* 1991e). Gozitan hunters do not seem too happy with the strong presence of Maltese hunters, especially in spring. Leaflets saying "No to Maltese hunters in Gozo" were thrown on the streets in Gozo in April 1991. The leaflets contained a number of arguments to justify why Maltese shooters should not be allowed to hunt in Gozo, including damage to crops and the ever increasing density of shooters (*The Times* 1991c).

In certain areas shooters do not allow shooters from other villages to shoot, even if the land is public property. Signs warning shooters, except those from Qrendi village, to keep out, can be seen daubed on the perimeter wall around the oldest free standing prehistoric temples of Hagar Qim in the south of Malta. Soon after the Government announced that it was considering turning the area around these temples into a national park, unknown persons daubed a message on the ground *namur jew ntajru*, meaning 'it's either our hobby, or we'll blow up the temples' (*The Times* 1991f). Acts of vandalism by shooters, aimed at discouraging other shooters from going to shoot in 'their' areas are quite common. Vandalism, ranging from punctured tyres and scratches to the paint-work of cars to the throwing of hydraulic fluid, paint remover or acid on the cars of shooters who are new to areas where they are unwanted, are quite common practices. In extreme cases, windscreens have been smashed and cars shot at. In some places, nails are strewn on certain parts of the road so that the unwanted shooters end up getting flat tyres. At Mizieb, the land which is 'managed' by the shooters' association, pieces of wood with nails pointing out were buried in the parking area while more nails were strewn around the place. People who went to the picnic areas in Mizieb ended up with multiple punctures (*Alternattiva* 1991). Poisoned bait aimed to kill other shooters' dogs is often strewn in some places, especially in Gozo (*The Malta Independent* 1996b). Such acts of vandalism do not affect only shooters, but also other people using such areas. The demolition of shooting hides used by shooters and the burning of trees and other vegetation are amongst other forms of vandalism which occur before, during and after each migration period.

Metaphors of power

The manufacturing industry which provides paraphernalia for the shooting community, has long sensed this trend of machismo. If one were to take a look at cartridges produced some 60 years ago, one would find most of them were plain, without any motifs or else having just the brand name and the name of the powder with which they are loaded. Some time later, animals and birds which were considered as game, such as deer, rabbits, duck or partridges, started appearing on cartridge cases. Birds of prey, too featured, as they still do, on some of the cartridges. Gradual changes started taking place and cartridges were then being loaded by 'The best smokeless powder and chilled shot'. Words like 'Super', 'Heavy Load', 'Long Range' and 'Express' were soon to find their way on to cartridge cases too. Thus, if one were to compare cartridge cases, one notes significant changes. Manufacturers use words which attribute special characteristics to the cartridge. The emphasis today is on speed and impact: cartridges with the words: 'high velocity', 'special load', 'long range', 'super calibre', 'super match', 'super chasse', 'grande chasse', 'flash', 'concorde', 'victory', 'saga', 'turbo', 'anvil', 'semi or baby magnum' or 'magnum', are very easy to come by. Names with obvious military connections are also common: 'mirage', 'super jet', 'speed fire' and 'challenger'. Locally made cartridges are no exception and words like 'Super', 'Special' and 'High velocity' also feature prominently on them. One particular shop produces cartridges called Pattern. Names associated with birds, such as Flamingo, Pelican and Wings are also popular. Brand names such as 'Punch', 'Tarzan', and 'MX', are amongst the most popular of locally loaded cartridges. It is interesting to note that the cartridges called MX appeared on the local market during the mid-1980s, shortly after the controversy which ensued when the Reagan administration gave the go ahead with the production of the intercontinental ballistic Missile X, known as MX for short in 1983 (Keesings 1983). History repeated itself during the Gulf crises. Stories about Iraqi Scud missiles being shot down by Patriot missiles filled the news in the first quarter of 1991. Cartridges with the name Patriot appeared on the local market in March of the same year (*Il-Passa* 1991).

During the shooting season, the bars where shooters meet are very much alive. Men can be seen flapping their arms imitating the flight of a bird before and as they shot it. Others listen attentively or pass sarcastic remarks while waiting for their turn to narrate. Shooters tend to exaggerate while narrating. They invent colourful stories, they make themselves and try to make others believe that what they are saying is gospel truth. Yet, in Malta everyone knows that shooters like to brag (and lie) in the process, so much so that there is even a saying which goes *il-kaccaturi u n-nassaba giddibin* which means 'hunters and trappers are liers'.

The few short stories or tales involving shooters, albeit showing lack of knowledge about the subject, underline the same thing — that shooters get their fun out of boasting about their feats and that birds can affect their ego. The tense shooter, who is usually frustrated by the long waits, is humiliated when he misses a bird and in his mind he seeks revenge on the next bird. The humiliation is bigger if his action is witnessed by others, more so if they know each other or if they frequent the same bar. Shooters mock each other — if someone misses a large bird, one can hear remarks that "the bird was as big as a 45 gallon drum, and he missed it" or "the harrier floated like a large sack barely 20 paces away, and he shot so wide that he didn't even scare it away!"

HUNTING IN SONGS, RHYMES, FABLES AND TALES

It is not only shooters who pull each others' legs. A Maltese song released in the 1960's spoke of *Martin il-kaccatur*. The song goes that Martin, the champion of shooters, shot his donkey when he mistook its ears for a bird (Grech and Zammit 1962 [63?]). The song was based on a story recounted by shooters at Zejtun, where a short sighted teacher was reported to have mistook the ears of a donkey for a bird (Joe Grech pers. comm.). Another song in the form of a duet between a trapper and a shooter, released in the early 1970s, also makes fun of shooters and trappers. The trapper calls the shooter "blind" for missing "a honey buzzard which touched the barrels of his gun" while the shooter accuses the trapper of catching sparrows instead of finches (Abela and Abela 1971). A song called *in-nassab* (the trapper) speaks of a trapper who always boasts of his catches, and who is finally ridiculed by a young boy who shows that he never traps anything (Grech and Cassola 1971). Grech, who composed the song, based it on hearsay that a child had opened the trapper's sack while the latter was boasting about his catches in a bar, and seeing nothing in the sack, he told everybody in the bar that the trapper was a liar (Joe Grech pers. comm.).

Songs written in the middle of the 1970s mentioned hunters as part of the rural landscape, as in *L-ahhar bidwi f'wied il-ghasel*, a song about 'the last farmer of Wied il-Ghasel', which speaks of the movement of people away from the countryside and into towns. The singer notes that the land is no longer tilled, but is rented out for guns and dogs and hunters during the turtle dove shooting season. Songs which refer to hunting or birds written in the 1980s have clear anti-hunting sentiments. The only exception is a song released in 1993 (Spagnol 1993). The song is an *ghanja tal-fatt*, a 'song based on a fact' and recounts the story of two brothers, aged 22 and 13 respectively, who went hunting together on a stormy day on 23 November 1983, and died tragically. The younger boy missed school to accompany his brother, who had been married for only a month. The elder shot a cormorant, which fell in the sea. The younger one dived in to fetch it and found himself in difficulty and his elder brother jumped in to save him, but both died. The song recounts the tragic event and advises shooters not to jump in the sea to fetch a bird as "a bird comes and goes" but one's life does not (Spagnol 1993). But apart from this song, those written after the 1980s contain either overt anti-hunting messages, or at least jibes against hunting.

Two songs by Micallef (1981, 1990), speak of the birds' fate at the hands of hunters. In the first song *Lil dik il-povra krejatura*, (to that poor creature) Micallef deals with a bird's migration, which brings many birds to the Maltese Islands, where "the innocent are massacred each season", where "hunters brag about their catches", and take to boats to shoot birds before they reach land. Micallef describes birds as "offering no resistance" and of being "victims of violence", which are shot to be stuffed and placed in showcases, along with other victims (Micallef 1981). In the second song, the author is awakened by the sound of a gun, and associates himself with a bird whose life that shot has taken at the very first light of day (Micallef 1990). Another song written in the early 1980s by Cassar deals with a bird which gets trapped after a long flight. The bird recounts its days of freedom and the hardships it goes through in the cage (Cassar 1980?). Before he emigrated at the age of 15, the singer was a trapper. While abroad, he realised that it is "not right to trap birds" and wrote the song on his return to Malta (Joe Cassar pers. comm.). In one of the series of songs composed for the satirical television series *Ahn' ahna jew m'ahniex* in 1988, a song about the environment, goes that hunters love to enjoy themselves in nature and get a kick out of shooting, their way of enjoying nature (Fabri 1988). In a song composed and sung by Mifsud at the Youth Travel Circle song contest in May 1993, there is a reference to hunting in the song called *Din l-art* (this land). Amongst other pro-environment verses, the singer makes a plea against treading on Malta "with the destructive hunters' weapons" (Mifsud 1991). Another song *Pajjiz tal-Mickey*

Mouse (Mickey Mouse country) pokes fun at hunters for calling themselves 'conservationists' (Attard 1995). The only song which makes reference to robin trapping is one called *il-pitirross* (the robin) (Briffa 1984). The song, like most poems dealing with robins, describes the life of a "harmless robin", which is trapped and destined for a "cruel life behind bars".

Rhymes

Hunting related words sometimes feature in a number of rhymes. Rhymes, or one stanza poems, were often sung by women while doing housework before the introduction of radios. Some were also sung by men in village bars. Some of the rhymes are very localised and are fast being forgotten. Some of such rhymes hardly make any sense and the mention of hunters and hunting could be simply incidental and was inserted only as the words at the end of the verses had to rhyme. The following are rhymes from Ghasri, Gozo, compiled by Attard (1993).

U sparajt ghal tajra fl-ajru *u lqattha fl-istonku taghha* *u ara marret qalet 'l ommha* *li jien kont il-kagun taghha*	I shot at a flying bird and I hit it in its stomach it went and told her mother that I caused its death.
U fejnek tal-libsa sewda *jiena hsibtek xi wirdiena* *u ma nihdokx ghall kacca mieghi* *ghax tikolli xi summiena*	Where are you, the one in black I mistook you for a cockroach I will not take you hunting as I fear you may eat my quails

Another rhyme is similar to the proverb which says that poor is the bird hatching in the wrong nest:

Dik it-tajra serpentina *li trabbiet go post hazin* *'k ma joqtluhiex il-kaccaturi* *zgur joqtlouha l-hallelin*	That snake like (bad) bird reared in a bad place if it is not killed by hunters it will be killed by theives

Another rhyme shows the hunters' urge to shoot, a motive recurring in songs and literature.

Dak fardalek ja hanina *qieghed jinxef fuq il-hajt* *jien hsibtu hamiema bajda* *il-grillu rfajt u sparajt.*	Your apron, my beloved is hanging on the wall I mistook it for a pigeon cocked my gun, and shot it.

Two rhymes by Xuereb (1994) illustrate the shooters' and trappers' commitment to their pastime: *L-gharusa tistenna fuq ix-xwiek, u l-gharus jaqbad l-ghasafar bl-ixbiek* (the girl waits impatiently at home, while her lover is trapping birds). The other rhyme goes *il-mara haduha l-isptar ghax ghalqilha z-zmien, u r-ragel mar fid-dura ghall-gamiem* (A woman was taken to hospital to give birth while her husband went to hunt turtle doves). Rhymes were also recited by children. A particular one in which children sung while holding hands and going round in circles to the tune of "A ring a ring a roses" mentions shooters, but is otherwise unrelated to shooting. The rhyme, which was quite popular with children up to the late 1960s goes: *"Iz-zunzana ddur iddur, fuq il-bejt tal-kaccatur..."* meaning "The wasp goes round and round, on the hunters' roof...". Lanfranco suggests that the use of the word *kaccatur* (hunter) is simply used as it rhymes with the word *"iddur"* (Guido Lanfranco pers. comm.). The mention of hunters simply because the word happens to rhyme with a word at the end of another verse is evident in the following rhyme where it is evident that the word *kaccatur* (hunter) is there to rhyme with *misjur* (unripe).

Ajma zaqqi kemm tugghani	I've got a tummy ache
kilt il-gheneb mhux misjur	Through eating unripe grapes
iddendilt mal-kannizzata	I hang to the vine trellis
qisni kelb tal-kaccatur	Like a hunter's dog.

Cassar Pullicino (1983) states that such verses awaken the child's sense of action and adventure. They may tell of some childish escapade.

The fact that the mention of shooters is practically absent from folklore implies that shooting is not really an ingrained cultural attitude, but one which has developed over the past hundred and fifty years or so. There is hardly any mention of hunting, except in ornithological works of the late 1800s, and occasionally, in travellers' accounts, while Maltese folklore and travellers' accounts are littered with anecdotes and information about aspects ranging from donkey races and wine pressing to dowry. Although hunting was part of the rural way of life, as discussed later in this chapter, it was not as widespread as it is today. At the beginning of this century, hunting was practised by less than one per cent of the population and there were about ten licensed hunters per thousand of population up to the 1940s. Hunting was an accepted practice and the local institutions simply reinforced it. A story about a shooter who shot a skylark (Fig 3.3) was part of a Maltese textbook which was still used up to the early 1970s (Vella 1934).

Fig 3.3
"I wish", a story about a hunter shooting a lark in a primary school textbook

Source: Vella 1934

9. NIXTIEQ!

"Twitt, twitt; twitt, twitt;" qalet alwetta tittajjar.

— X'ferħ tittajjar u tgħanni fil-beraħ. Nixtieq kont alwetta!

— Imma inti ma jonqsok xejn, għandek kulma trid u tixtieq qalbek.

— Uff, kif dejjaqni kollox. U le, aħjar mitt darba li kont flok dik l-alwetta, bla ħsieb ta' xejn u dejjem tiġġerra!

Fil-ħin sewwa jinstama': Bumm! u l-alwetta taqa' mejta fl-art. Kien il-kaċċatur li spara tir u qatel dik it-tajra!

In the same book, there is a story about a man who bought his son a linnet and wrapped it in a handkerchief, but the bird escapes when, against his father's advice, the curious son went to see what was wrapped in the handkerchief. His father returned with a cage soon after, but the linnet had escaped (Vella 1934 p.70-73). Such stories reinforce the idea that hunting and keeping caged birds were accepted practices and for children who came from families where there were hunters, such reinforcement helped as there was no inconsistency between what they learnt at school and what they saw at home.

Hunting in Literature

The same trait discussed in songs can be seen in literature. Works written before the mid-1900s are hardly ever harsh in their condemnation of hunting. But this should not come as a surprise because romanticism, which as Cartmill (1993) states, resented hunting, is practically absent from Maltese literature. Romanticism in Maltese literature developed in the early 1900s and it was not until late that Maltese literature started to distance itself from Italian literature (Friggieri 1979). Maltese literature suffered from the same symptoms which stifled art. Cutajar argues that nineteenth-century Malta was excluded from the socio-cultural life of the continent as a result of its new colonial status: "the general stagnation of Maltese art throughout the 19th century was conditioned by general cultural considerations and socio-political developments. Isolated from the increasingly emancipated culture of Europe, local efforts were confined within traditional and insular limits — for the great part condemned to a sickly, stunted growth" (Cutajar 1988 p.231).

Maltese literature of the early twentieth century is dominated with characteristics of accepting established norms rather than creating new ones. In a country which was under foreign rule since the Middle Ages, it is not surprising that the earliest examples of Maltese literature were aimed at creating the nationalistic feeling, and later started writing about nature in a Maltese context. But their vision was rather limited and restricted by the cultural lenses of the time. Nature is used as a metaphor, its beauty was used as a tool to convey a message and there are hardly any works celebrating nature for its own sake. In Maltese literature, there are no examples of poetry such as Thomson's 'The Seasons'. As discussed in the first chapter, British poets in the 18th century saw nature as something in which to glory. At a time when anti-hunting sentiments can be found in British poetry, Maltese literature was in its infancy and it was after the birth of nature protection movement in the early 1960s that such sentiments could be met with in Maltese works. The few earlier attempts in praise nature, not only show a shallow knowledge of the subject, but also display nature as being there to be used. In a poem about the narcissus by Anton Buttigieg, the Maltese 'poet of nature' speaks of meadow pipits nesting in apple trees, when these pipits are ground nesting birds which do not breed in the Maltese Islands. He also speaks about, without condemning, the cutting several "baskets full of wild narcissus" (Buttigieg 1978 p.21). The only poem written about a bird by Malta's national poet Dun Karm Psaila is about his canary, which sings from his cage and keeps the author company (Aquilina 1979).

Trapping and hunting are hardly ever the central elements of Maltese literature. Such activities seem to have failed to impress writers in any way and it is worth noting that while farmers and the rural way of life, as well as fishermen, feature in literature, shooters hardly ever do. It is only occasionally, they appear in children's stories, such as those published in the early 1970's under the name of *Fra Mudest* (Casha 1971). In such stories, the hunter is usually the scapegoat of some silly joke. The earliest mention of hunting in Maltese literature is found in the dialogues of De Soldanis written in the mid-1700s. In a dialogue between a farmer and a hunter one reads that rabbits were abundant to the extent that a hunter could easily bag 50 rabbits a day. The farmer indicates to the hunter a place where rabbits abound and asks him to return home the same way and leave him a rabbit to eat. The hunter says that he has a ferret to help him catch the rabbits (Cassar Pullicino 1947[?]).

HUNTING IN FOLK TALES

Although undated, the folk tales published by the Jesuit priest Manwel Magri are probably the earliest chronological reference to hunting that one comes across in popular literature. Magri collected a series of folk tales he heard between 1894 and 1907. He used to publish them with a Syro-Phoenician interpretation which was already a dying trend in his time (Mifsud Chircop 1994). Magri used to write down particular expressions and the general plot on hearing the folk tale and then went to the convent where he wrote the tale as he remembered it. Although Magri did most of his work during the late 1800s, it is obvious that the folk tales he published were much older as they were orally handed from one generation to the next. In Magri's tales, one comes across a number of references to hunting and trapping. This is not surprising since many of the tales are oriented in the open countryside or in the woods. It is unlikely that the folk tales are of Maltese origin as their plot is rather international. Parallel versions of these tales may be found in many Mediterranean and European countries ranging from Morocco to Syria and from Portugal and Germany to Bulgaria and Finland (Aarne and Thompson 1961; Mifsud Chircop 1994). Most of the tales, have Maltese customs kneaded in them, but when one compares them to the foreign folk tales, one finds that the references to hunting are also present in the foreign tales. Some of the scenery described confirms that Magri's tales are not local in origin. There is frequent mention of large woods, which Malta always lacked. There is also a mention of a train *(vapur tal-art)* which was absent from Malta at the time. The tales do not depict real life situations and are saturated with fantasy. They contain references to trappers (a literal translation of the term used by Magri is "those who fish for birds" (*sajjied l-ghasafar*). It is possible that Magri could have heard the word *kaccatur*, meaning hunter, but since he preferred to use the Arabic words, he may have opted for the Arabic word for hunter *say`ya:d* (Mifsud Chircop pers. comm.). One also comes across mention of the words hunting (*kacca*), muzzle loader (*xkubetta*), sling (*wadab*) and the use of bow is implied when he uses the term *jigbed fuqha, jigbed* meaning "to draw". Direct or implied references to hunting is found in eight out of the 70 of the tales published by Magri. Hunting is never the central element in any of the tales and in all cases, the reference to hunting is found in the variations found all over Europe.

Apart from these tales recorded by writers, old hunters in villages throughout Malta and Gozo have their own stories which they like to recount time and time again but which are never written and are likely to die with their narrator unless they are recorded. These stories are often full of fantasy and are narrated by hunters to fellow sportsman. The more fantasy they contain, the more likely they are to be remembered. Most of these tales usually either dwell about the abundance of game in days gone by, or feature a particular hunter, making him the subject of a joke or dwell on his feats. One such story was recorded in the village of Luqa during the Second World War by Cassar Pullicino. The story goes that a man called Luqa nicknamed *ta' cinelli* slept with the plover call in his mouth and started calling while breathing. When he woke up he heard the sound of wind, but it was a flock of plovers. He tossed around and woke up and heard a plover calling beneath him and found a few more dead ones and another one injured. He tossed himself again, and killed another three plovers. Then he could not sleep anymore, woke up and went to work in the field. On another occasion, the same person had four streamers. He tied a lark whistle to each and started turning them round. Skylarks started coming towards him and when he went back to his hut, he found a large quantity of dead larks, filled seven sack fulls and returned home (Cassar Pullicino 1967).

Other stories are told in a joking vein. Gauci (1973d) wrote he recalled his grandfather talking about a hunter who had been inviting his landlord for a rabbit lunch as he wanted to show him how tasty the rabbits on his land were. When the landlord finally agreed to go to lunch, the hunter went out to try and shoot a rabbit for the next day's meal, but he could not even find one. To save himself from the embarrassment, he went to a friend of his and bought a farm rabbit off him, but as he was about to kill the rabbit, it occurred to him that if the landlord would want to see the shot holes, there would not be any to show him, so he took his gun and tied down the rabbit, then walked off to shoot at the rabbit from a distance. When the dust cleared after firing the shot, the rabbit was gone as the hunter had hit the rope with which the rabbit was tied.

Other stories deal with the shooting achievements. An old hunter from Attard used to recount how in his youth, turtle doves migrated "on four levels", one on the ground, one within shooting distance, another out of the guns' reach and another high up in the sky. He was shooting close to Mellieha, when an older hunter advised him to stop shooting at individual birds and shoot only at flocks. He waited: "a flock came, I shot twice. I cannot recall how many I shot, but the land was covered with doves", he used to say (Wenzu Attard pers. comm.). Another hunter used to boast of shooting so many larks with just two shots that he sent a friend of his, who asked him for a few larks to make a pie, to the place he had just been shooting. The man collected half a sack of winged birds (Ganni Borg pers. comm.). A hunter from Zejtun recounts that on one occasion, his brother was situated a short distance away from a turtle dove trapping site. A flock of turtle doves alighted in a carob tree next to the nets. Another flock swooped down from the sky and settled in the same tree, and another flock, and another one swarmed into the tree, which was crowded in such a way that another flock could not find space to alight and the whole flock of birds flew through the trapping site. The trapper flicked the nets, but there were so many turtle doves that they lifted his nets back. But there were so many birds that 13 birds got caught when the nets were thrown back in their original position (Paul Vella pers. comm.). These narrations have very little literary value, no morals and hardly any information. They are simply fantastic statements which have value for the hunters who narrate them and for those who like to listen to them. Very often, such stories are the basis of conversations between hunters and such stories are repeated *ad nauseam* in village bars, but most die with their narrators.

HUNTING IN LITERATURE OF THE 1900S

If the scanty literature dating to the pre-1900s contained only fleeting glimpses, most of which without a comment on hunting, the literature of the twentieth century provides a sharp contrast. The authors lament about the way the birds are treated and often compare hunters and trappers to other animals which are not considered friendly at best and a nuisance at worst. In other cases irony is used to portray the writer's feeling while in some writings hunters are ridiculed for shooting the wrong prey. In works prior to the 1970s, one finds examples of sensitivity towards birds, as well as simple hunting related references. One finds a mention of "fried thrushes" in a parody written in 1930 by Mamo (1984 p.91). But such references do not shed any new light on the actual situation because as early as 1870, the noted ornithologist Charles A. Wright had already noted that all kinds of birds were taken to be eaten (Wright 1870). Mamo's parody is about the Maltese who at the turn of the century emigrated to America where they thought they would become wealthy overnight. Mamo uses the term fluttering decoy used by trappers as a metaphor for people being treated like puppets on a string by politicians. Other references in literature simply record daily events without making any statements in favour of or against such activities. In a story written by Dun Xand Cortis, who like Magri, wrote the tales he heard, there is a reference to the early mass which used to be said for hunters (Mifsud 1991 p.10).

But in the works of a few writers, one can start detecting a streak of sentiment towards birds. In a short article about the trappers, Sir Temi Zammit compares trappers to spiders by giving vivid descriptions of how they trap other forms of life. He gives a narrative account of what the bird trapper does, how birds are attracted to the nets, and how the happy trapper places finches in cages while larks, pipits and warblers are killed and thrown in a sack. The author laments at the way birds are enslaved for life or thrown lifeless in the sack (Zammit 1931).

In *Leli ta' Haz-Zghir*, written in 1938, Guze Ellul Mercer, mentions rabbit hunting and describes how hunters used to go to hunt rabbits on moonlight nights *bis-sokta*. The section ends by hunters killing a dog when they mistook it for a rabbit (Ellul Mercer 1990 p.24). Ellul Mercer himself, who was known to be fond of hunting (Cassar Pullicino 1985 p.xix, 170), seems to have had an ambivalent stand about it. In an article with an ironical bent entitled *Malta Genna tal-art* (Malta, heaven on earth), the author writes "amidst all this peace and this magic life, amongst this tranquillity, nature lives happily in silence. ...Game (birds) live and nest unmolested by hunters..." (Ellul Mercer 1930). Writing about autumn, he noted that the season is the time "when creation moves. Animals move. Birds move. And the quail and the sweet finches visit us from distant lands, and half way on their long voyage, they rest on this tiny island, and those amongst them which avoid the trappers' nets and the hunters' barrels, continue their flight to distant lands" (Ellul Mercer 1927).

More recent works contain statements which are clear in their anti-hunting message. In an article about the birds of Malta forming part of a four volume series of a historical biography entitled *Rajt Malta tinbidel* (I saw Malta changing), Ganado, states that the islands do not only suffer from a lack of trees, but hunters and trappers and their children "cannot stand seeing a bird without shooting or trying to catch it". The author questions whether this is the correct way to treat birds and states that "in the world of birds, Malta does not have a very good reputation" (Ganado 1977 p.87). In a write up about trappers found in a series of childhood recollections Spiteri (1993) describes how bird trapping takes place and how some men (including two of his uncles) become obsessed during the migration period. The author says that God created birds with wings, but trappers devised the cage and that the songs of caged finches are not songs of joy and love, but cries of those who have lost hope. The author also notes that on Sundays, hunters pass by the streets with glittering guns, cartridge belt and hunting bag. The author says that he does not know why, but these men appear to walk more upright when they are dressed for hunting — they feel more manly. He ends by saying that he does not want to become a trapper, nor a shooter "to destroy the magic of songs from the fields".

In one of his short stories in the book *Fil-Gzira taparsi jikbru l-fjuri*, (In the Island where no flowers grow) Friggieri mocks the Church for its lack of commitment towards bird protection. In the story, Saint Francis of Assisi went to the rescue of a wounded quail, and while in Malta, he went to speak to the bishop to ask him to intervene on behalf of the birds. The sacristan who opened the door did not recognise Saint Francis and would not let him in without an appointment, but went to tell the bishop of the man who wanted to see him. The bishop was at first worried that Saint Francis might go back and report him in Heaven, but soon agreed with the sacristan that "the words of Saint Francis do not count and God never speaks, only the bishop does". Ironically, the bishop's dinner that night's was quail (Friggieri 1991b p.19-22). In another short story in the same book, Friggieri writes about a bird which laments about the fact that in spite of never harming anyone, it had many enemies ready to kill it. The bird was shot, and fell in a convent's courtyard where it saw a crucifix. In the conversation which ensues, Christ promises the bird a place in heaven, where there is no hatred and were there are none of those who kill birds (Friggieri 1991b).

Most contemporary works which deal with hunting have focused on particular aspects and exposed the hunters' traits. A short story called *il-kaccatur* (the hunter), mimics all that hunters say and do. The novel, written by Mikallef, shows how birds tend to boost or deflate shooters' ego (Mikallef and Kassar 1982). A novel by Buhagiar refers to an old man who in his younger days used to hunt, and depicts him as a proud man in the village square but at home, he is completely dominated by his wife, giving the allusion that by hunting he was getting his own back (Buhagiar 1980). In a guide book about Malta, which, as the author puts it is "a breezy account of laid-back people", the author ridicules shooters as primitive hunter-gatherers. The satiric account covers most topics from hunters clad in army clothes fighting over prey to trappers netting birds and selling them on the market (Abela 1988). Two short stories by the late Paul Xuereb, who at one time was acting President of Malta, speak against robin trapping while another speaks about an irresponsible hunter who shoots at anything that flies. The latter ended up killing a farmer who requested compensation for killing his pigeons (Xuereb 1989). The hunters' eagerness to shoot is reflected in novel by Buhagiar (1979) where one of the characters is out hunting and saw a movement in a field. He thought it could be a rabbit, but was not sure. Still he pointed his gun and shot, but there was nothing except a mound of soil.

The idea that hunting shatters the tranquillity of the countryside is expressed in short stories by both Zahra and Labour MP Lino Spiteri. In the story by Zahra, two families who went for a family outing were frightened by the sudden sound of gunfire. The hunters are described as "holding the guns in their arms as if holding a baby, caressing it...they proudly pass through the streets as if they were rendering some special service to society" (Zahra 1981). The story by Spiteri (1982) underlines the peace one finds in the countryside, the beauty in which one seeks to escape when under stress. In one of his forays, the author sees a pair of pigeons courting each other. For a moment he wishes he was one of them, without the troubles of life. He refrains from looking at them, "to leave them in peace". He takes a fleeting look again before he walks off to face the troubled world again, and the sound of a gun and flapping wings made him look back, only to see one of the pigeons flying up scared and the other with a blood stained head and beating its legs and wings in agony (Spiteri p.78-80).

The conflict which frequently occurs when hunters and non-hunters meet in the countryside is dwelt upon in a story meant to be used as a topic for discussion in a teachers' journal. Cauchi (1993) describes a scene which is rather common, especially in autumn. In the story called *kuccarda* (honey buzzard), the author describes a family in the countryside. A honey buzzard they see is shot and both the father and son run towards the fallen bird, which dies in their hands. A hunter appears on the scene and thanks them for retrieving the bird, but the son argues that he had no right to shoot it. The hunter argues that "even cows and pigs have a right to live, but we kill them just the same". The father defends his son, saying there is a difference between killing to eat and hunting for fun. Another hunter appears on the scene, and an argument ensues between the two hunters over the bird. While the hunters continue to argue, the man leaves the dead bird on the ground and until a hungry dog snatches it. The story is accompanied by a number of questions aimed to provoke discussion about whether hunting and environmental protection go hand in hand and whether animals should be killed for fun.

In a recent Carroll-like adventure story book, Zahra (1994) wrote a lengthy piece dealing with hunting and trapping. In the adventure, children find themselves on an "isolated rock", a reference to Filfla off the south west coast. Filfla is renowned for the number of seabirds which breed there. In the story, a solitary jackdaw speaks to the children and tells them that the "savage race of those who destroy the countryside" had destroyed all her ancestors. The children are invited to participate in a pastime "but not one of those with firearms as those are left for savages". The children are invited to play *haga mohgaga*, in which one recites a rhyme with a number of clues and the other would have to guess what the item is. The rhyme is about a "fish which is not a fish, which spits fire, in whose belly there are a thousand graves and has a heart of steel". The children guess the obvious reference to Malta. The island of Malta, is in the shape of a fish, the hunters' guns spit fire, the graves symbolise the birds killed and the heart of steel implies a heart without feelings for the birds. The story speaks about the "thousands of licensed killers who pay a fee to kill birds and who call themselves conservationists" and about trappers. The children are taken to see the "temple of remembrance", a cave full of pillows, on each of which there is engraved a bird. They are told that each pillow is filled with a feather from every bird killed in Malta (Zahra 1994 p.6-76).

Robins are a popular subject both in poetry and in short stories. In one such story, published in a school text book, two children go robin trapping and a robin they caught died after four days. The child vowed not to trap anymore robins and enticed his friend to break his robin trap by giving him a brand new cage for a canary — which is an aviary bred bird (Bugeja 1988).

Hunting in poetry

Although a relatively small number of poems on birds and hunting are written, practically all share the same concern for the birds' fate. As in novels and other forms of literature, contemporary works contain strong overt anti-hunting sentiments, while earlier works have a softer anti-hunting stance. In a poem written in 1963, Philip Sciberras writes about birds being shot "by the intelligent enemy" (Sciberras 1984 p.29). In one of his early poems, Anton Buttigieg, who later became President of the Republic, wrote about the harrier and stresses the harsh, cruel qualities birds of prey posses, but eulogises the benefit such birds do. He states that farmers should not mind it if, occasionally the birds take a pigeon, as "they too can have a small share from all the wealth" (Buttigieg 1978 p.174).

Concern for the killing of birds is found in a number of poems and verses published in the literary pages of daily newspapers. In a four stanza poem about the jackdaw, Cassar (1978) outlines the fate of the bird which was once common, but which is now extinct from the Maltese Islands. The underlying message of a nine stanza poem about 'Tony the hunter' is that hunters do not need to kill birds to survive (Briffa 1983). In a poem about turtle doves, Baldacchino (1973) highlights the stress of migration and describes the decimation of flocks of birds. The author urges the surviving birds to fly away and tell the other birds to lengthen their journey across the sea and avoid coming to the island bristling with guns. The noise of gunfire shattering the tranquillity of nature is expressed in a poem by Cauchi (1983), who describes the beauty of early morning: "a magical orchestra of lights, sounds, tranquillity. But the sound of gunfire sounds like a swearword in a silent temple" (Cauchi 1983 p.41). Buttigieg (1988) associates hunting with death and draws parallels between the death of his wife and the shooting of a female thrush while the pair were flying together. Other poets show sensitivity to birds dying as a result of hunting (Cauchi 1982, Borg 1993, Psaila 1993, Montebello 1996). In more recent poems, Azzopardi comments about the sky reddening with bird's blood and shattered hopes of spring. In another poem about an artist who is constantly trying to paint a bird flying over a stream, but metaphorically, the brush always breaks on the birds' wings (Friggieri and Azzopardi 1994 p.43).

The national bird of Malta, the blue rock thrush, is the subject of a number of poems. Some of these invariably speak against the "destruction" of this thrush (Farrugia 1973). Trapping and birds in cages evoke poets' sentiments (Cutajar 1988a, 1988b). Some authors refer to "birds deprived of freedom, in tiny cages were they can hardly stretch their wings" (Chircop 1994) and "birds enslaved in tiny cages" (Valletta 1983 p.31). Magro (1995) takes a different twist and invites trappers to fly with the birds and savour freedom. Buttigieg also dwelt about birds in cages and argues that trappers "take the fresh air of the sky, of the fields, of the valleys and the happy freedom of flying wings" each time they put a bird in a cage. He states that all the birds are left with is their song, which the birds sing in desolation (Buttigieg 1969 p.42). The last paragraph of this poem is a parallel to the Italian proverb which states *l'uccello in gabbia, se non canta per amore, canta per rabbia*: meaning 'if the caged bird does not sing out of love, it sings of despair'. In a poem *it-tellerita* (the stone curlew), the Friggieri states that the bird calls incessantly in the barber's shop and constantly hits its head against the cloth of the roof of the cage. The author notes that the bird has ample food and water and asks "if the bird lacks nothing, why is it hitting the roof of the cage?" (Friggieri, J. 1992). The poem is a reaction to trappers' arguments that birds in cages are comfortable as they have food and water for free while they have to work to earn a living. In the poem, the author is referring to the quail but probably mistakes the name as one who rambles is called *tellerita*, but the description of the cage in which the bird is kept is more likely to be a quail.

As mentioned earlier, robins are the subject of a number of poems in which the authors bemoan the fate of robins and question the motive behind the trapping of such birds. In a poem written in 1937, Valletta states that "merciless children" trap them and advises robins to keep away from Malta (Valletta 1983 p.24). Other poems speak of "enslaved robins" and question why "cruel hearts" deny the birds their freedom. Some beg robins to seek an alternative migration route (Mifsud 1974, Grech 1988, Attard 1992, Caruana 1995). In a "diary of a robin", Zahra (1990) gives a week's diary of a robin in Malta and trapping crops up. The inside cover of the booklet also contains a robin song which may be sung to the tune of 'Jingle Bells' and has messages against robin trapping. Similar thoughts are also found in a poem by Theuma (1993), which also has a number of details which show that the author is well aware of the trapping methods employed to take robins in Gozo — where robins are often caught in nets at night or by placing a mirror in a trap, instead of a live robin as a decoy. The seven stanza poem also speaks of the widespread killing of other birds and engages in a monologue asking the robin the rhetorical question: "why did you return to Gozo, don't you know that there is a war going on?". He informs the robin that the kestrel and the barn owl, as well as other birds are killed for "sports and fun", that birds are shot to be kept as trophies. The author concludes by making a plea to let the heart-broken bird "fly with the wind".

A number of limericks ridicule hunting and hunters. Some use double meaning to drive the point home (Azzopardi, J. 1992, Cutajar 1993, Lanfranco 1995). Massa too uses satire to highlight hunters' actions when in a poem called *id-difiza tal-ambjent* (the defence of the environment), he writes that hunters, descendants of the heroes who fought off the Turks in the Great Siege in 1565, now lengthen the barrels of their guns and from rubber dinghies, defend Malta from ducks (Massa 1989 p.81). In one of the strongest and most eloquent hunting related protest poems written so far, Friggieri take up the cudgels in the name of a honey buzzard. He says that the buzzard was born with its luck hinged to a gun. "No one wants you to live, except a few weak spirits like yourself. God, who created you, was also killed, so you too must die. Those who defend you are bound to loose votes, and the pulpit does not defend you either. Once there are no priests and no politicians supporting you, why do you keep pro-creating?", the poet asks (Friggieri 1991a).

Although most poets write on different themes, events sometimes prompt a number of them to write about particular subjects. A case in point was the shooting of swans in late 1993, about which, a number of poets expressed themselves. Spiteri (1994), Micallef (1994) and Mercieca (1994) wrote short poems paying tribute to the swans. Friggieri (1994) was the first to spark off the writers with a piece of prose entitled 'a prayer for the swan'. In the prayer, the author discusses the motives behind the creation of the swan and draws conclusions about what should be peaceful co-existence between man and animals. Friggieri ends his piece by asking God to forgive us, "as we know what we are doing". Borg (1994) wrote a poem in the form of an account of a group of swans migrating and one of them is shot, without knowing why. Borg's poem shows the irony of what happens in a "church ridden country" where people do not yet know how to appreciate nature.

The largest number of poems with anti-hunting sentiments in a single anthology are found in Mario Azzopardi's collection of poems written between 1984-1994 (Azzopardi 1995). Azzopardi, a 'social poet', is influenced by the concepts of Pope, Bentham and the great chain of being, where if one removes a single link, the whole chain disintegrates. The poet not only describes the birds' pain and anguish, but also raps the Church for keeping mum about the issue. In a poem called 'Fatal Flight', Azzopardi says that shooting "takes the virginity out of spring" (Azzopardi 1995 p.79). In another poem, the author gives graphic, metaphoric descriptions of fear and pain: a sparrow caught in a vertical net dies slowly, "crucified". To further evoke the sentiments, the author describes the "humble sparrow, which does not ask for much except a simple nest behind a drain pipe" (Azzopardi 1995 p.84-5). The poem *Offertorju*, the author criticises the ecclesiastical apathy and stresses the Church's responsibility in taking part in the destruction of birds. First he describes a hunter, with all his macho ways: "swearing and blasting birds out of the sky". Returning from the hunt, the now satisfied hunter meets a Monsignor, who praises him for "giving birds a tough time". "God is with him as he filled his game bag". Azzopardi concludes by saying that guns were blessed during mass and during the offertory, a magnum cartridge and the head of a quail were presented (Azzopardi 1995 p.140). It is not only established poets and writers who express anti-hunting sentiments. Contemporary poems written by school children also show strong, overt anti-hunting messages, even if some of the writings are naive. A number of poems published in the annual magazine of the Zebbug Primary schools pity the birds which are killed "on the way to Europe" and plead on behalf of birds kept in cages (Zebbug Primary School Council 1995). A poem by a twelve-year-old published in the children's comic starts off in a romantic mood saying "birds are sweet, with their "tweet, tweet, tweet", turns to reality "but 'Bang, bang, bang' you hear all day", and ends with a cautionary tone that "if we are not careful, there will soon be no more birds; so leave them free to fly" (Calleja 1995).

Although Maltese literature is young compared to literature in other countries, Maltese writers were not slow in catching up with the consciousness resulting from environmental awareness. As one can conclude from the works cited, most references to hunting and trapping in Maltese literature contain messages in favour of birds or strong doses of anti-hunting sentiments. Poems written by young children, although one can hardly describe them as pieces of literature, are often even more overt. One cannot but observe that in spite of the large number of hunters in Malta, the only poem exhaliting hunting is one written in 1996 in which the anonymous writer boasts of shooting, in a single outing, a kestrel (which fluttered like a butterfly), a woodcock, three quails, a stone curlew, an eagle (he says a small prayer as he sees the bird approaching), a duck (which drowned in its own blood when he shot it), and an owl. The author ends that this was not reality, but only a hunter's dream (*Il-Passa* 1996b). Apart from this poem, there are no poems exhalting hunting or trapping. Even the older works cited, such as rhymes, fables and tales do not glorify hunting, but simply mention or talk about it. The same trait is evident in looking at the representation of hunting in art.

HUNTING IN ART

In spite of the wealth of prehistoric remains in Malta, so far, no hunting scenes from these times have come to light. This is not surprising at all since Evans (1959) noted that people in the first eight separate phases of the prehistoric occupation of these Islands had no metal for tools and weapons. He also states that once the sea separated Malta from Sicily, there could have been little attraction for hunting societies. Both Evans (1959) and Bonanno (1986) support the theory that the first societies in Malta were already farmers who brought with them domestic animals and seed supplies for cultivation. The fact that the only weapons that may have been used for hunting were only some sling stones and only two spear heads, indicates that hunting was not an important activity in prehistoric Malta. This view is further strengthened by the lack of finds of wild animal bones and the lack of pottery incised with birds and wild animals. Nine bird pendants of sitting birds made of shell and stone were found at the hypogeum, a pre-historic subterranean burial complex and place of worship at Hal-Saflieni. Evans (1971) describes these bird pendants as having a short, oval shaped body and a long neck. Only one head is well preserved and the eyes marked. The size of these pendants ranges from 0.9 to 3 cm. The three 'clay' birds shown in Fig. 3.4, 3.5, 3.6 are 5-6 cm long and were found at the Tarxien Cremation Cemetery.

Fig 3.4
Prehistoric bird pendant

Fig 3.5
Prehistoric bird pendant

Fig 3.6
Prehistoric bird pendant

The only incised pottery with birds are a partridge like bird modelled in relief between a pair of horns on a pot sherd from Tarxien (Fig 3.7) and three rows of crested birds represented in flight on a sherd (Fig 3.8) which formed part of a bowl, from Ggantija (Evans 1959). Two crane like birds feature on an arch in an early Christian rock tomb in the limits of Gudja (Fig 3.9). These birds were described as pelicans by Zammit (1932) and Trump (1972) but the shape of the birds, their posture as well as the length of the neck and legs are more suggestive of cranes. It is postulated that the engraving may date back to prehistoric times (Mifsud and Mifsud 1997) and considering that a species of extinct Maltese crane as well as common crane bones have been found in Pleistocene deposits (Northcote 1984-85), it is more likely that the birds are

Fig 3.8
A row of crested birds in flight

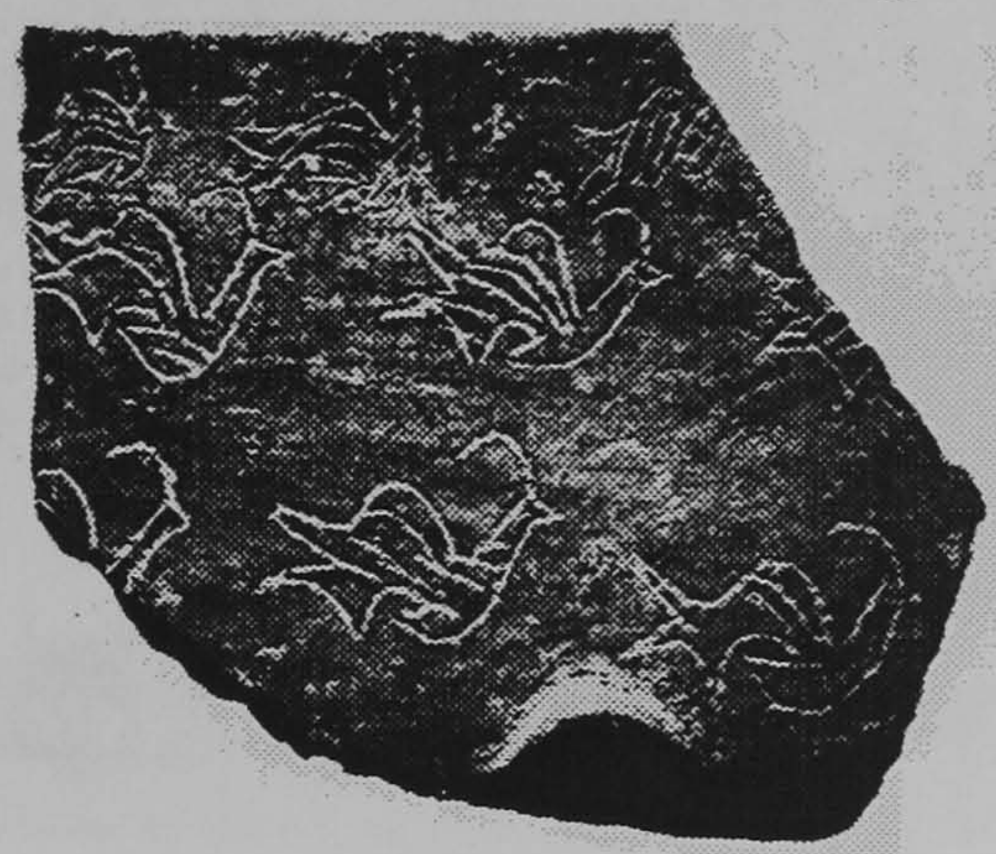
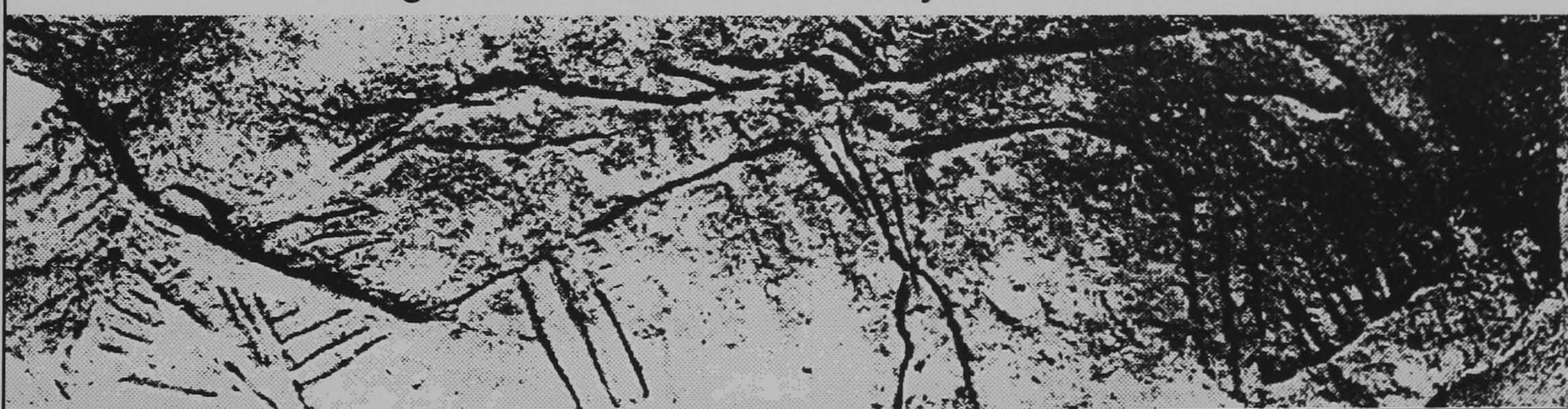


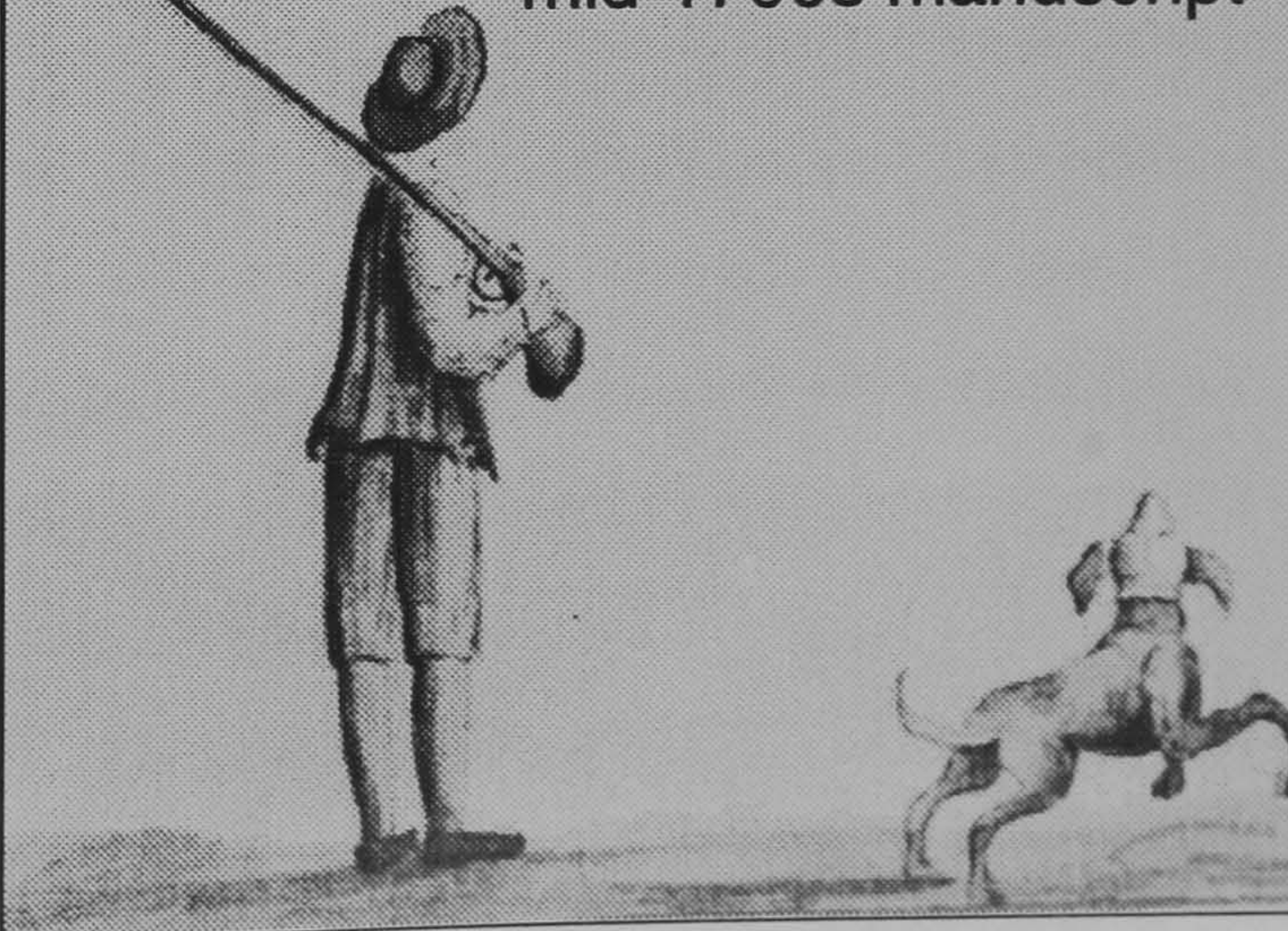
Fig 3.7
Partridge like bird in releif

Fig 3.9 Cranes from an early Christian tomb



cranes rather than pelicans. However all these symbolic engravings or models represented birds, not hunting or hunting scenes. The first time we see hunter is in a detail from a mid-1700s Treasury manuscript. In a water-colour showing some of the property of the Order, a well dressed man can be seen holding a long-barrelled gun on his shoulder (Fig 3.10). He is accompanied by a dog (NLM 290B). The way the man is dressed shows that he is unlikely to be Maltese.

Fig 3.10
Detail of a hunter from a mid-1700s manuscript

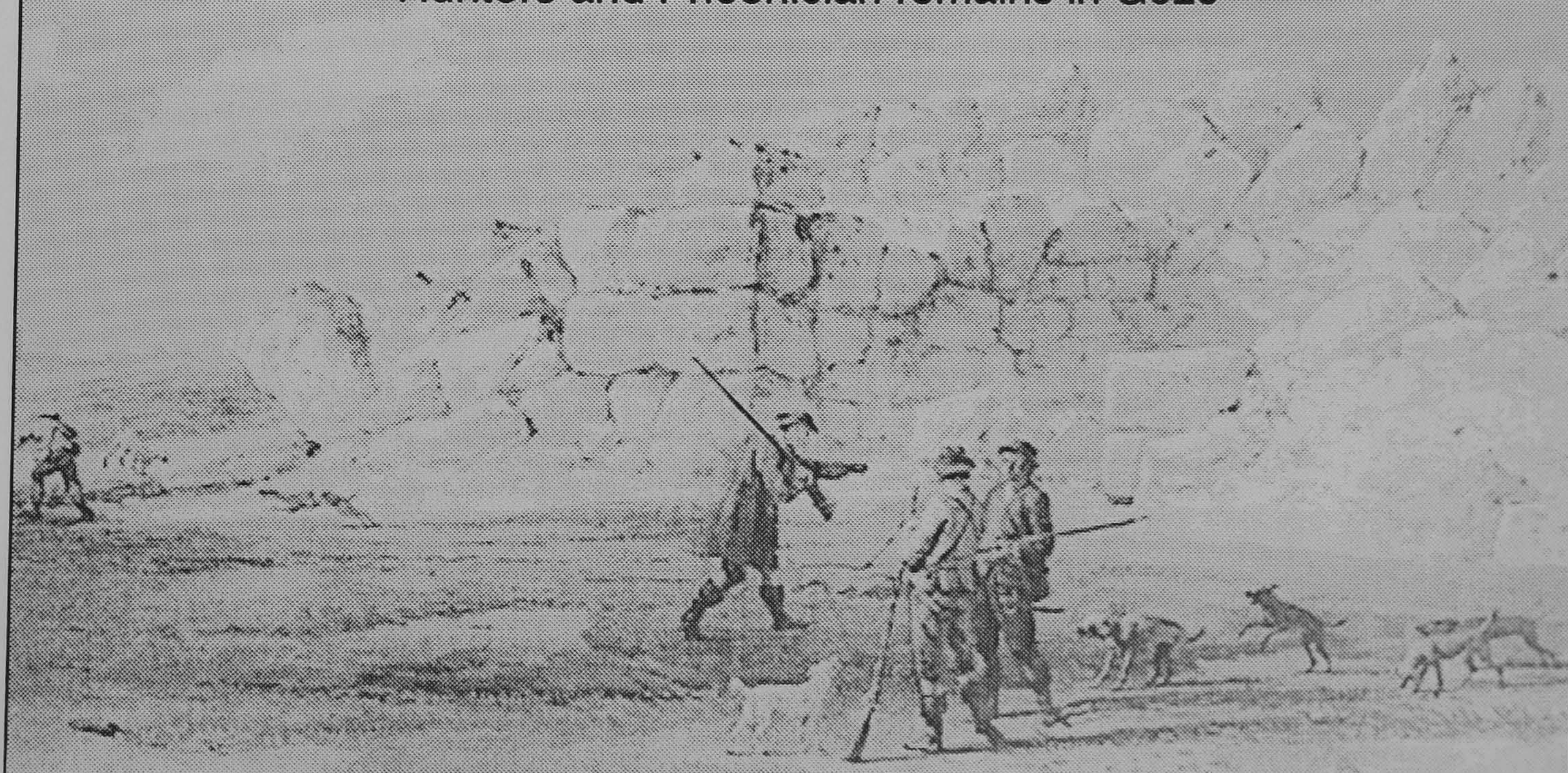


Hunters feature in two of Jean Houel's paintings depicting monuments (1780s). In one of the paintings (Fig 3.11), two hunters can be seen shooting at flying birds while another is loading his muzzle loader and nine dogs run around the remains of an old tower on the road between Marsaxlokk and Gudja (Ferraro 1989 p.249).

Fig 3.11
Hunters in a watercolour showing ancient remains at Gudja

In another painting featuring Phoenician remains at Xaghra (Fig 3.12), three hunters are seen talking to each other while a possible fourth may be stalking something on the left hand side. The three hunters have muzzle loaders and one has the stick used to press the powder while loading the gun in his hands and another is seen wearing a sort of sword. Six dogs are also pictured. Most of the hunters in Houel's paintings can be seen carrying bags over their shoulders.

Fig 3.12
Hunters and Phoenician remains in Gozo



The next time that one comes across another hunter is in Zimelli's water-colour series of 20 Maltese costumes and uniforms of the Order of St John. In one of these etchings (Fig 3.13), the Grand Falconer, the officer authorised to issue hunting licences and who had other hunting related responsibilities, is depicted. In the background there is a soldier of the Falconer's regiment talking to a hunter who is holding a dead rabbit (Zimelli c.1790). The dog next to the hunter in this etching is similar to the one seen accompanying the hunter in Fig 3.10.

Fig 3.13
The Grand
Falconer

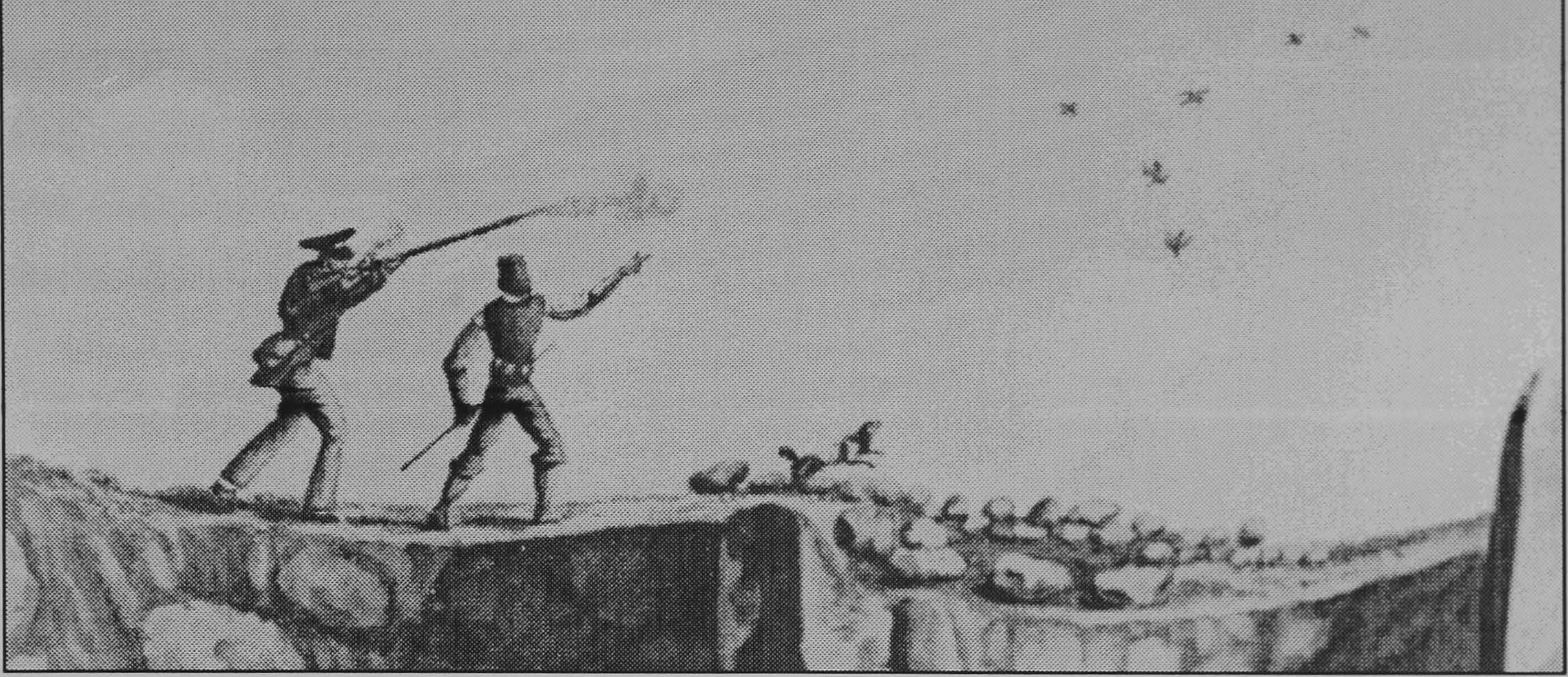
The series of water-colour depicting the excavations of the Ggantija temples, in Gozo, by Charles Brocktorff, shows hunters in different situations (Brocktorff c.1830). In one of the paintings (Fig 3.14) two smartly dressed hunters, carrying guns and the hunting bag, are seen walking next to each other and talking. In another scene (Fig 3.15), a hunter is sitting down while another is standing behind him and both are talking to each other. A dog lies down next to the hunter who is sitting on a large boulder. The hunter is seen carrying hunting bag similar to the one carried by the hunter in Zimelli's work.

Fig 3.14
Two hunters: a detail from Brocktorff

Fig 3.15
Two hunters and a dog, from Brocktorff

The third scene is the most dynamic one as it shows a hunter shooting at six birds (doves?), of which two can be seen falling to the ground (Fig 3.16). A local is seen standing and pointing towards the birds, next to the man who is shooting while the dog, shown lying down in another painting, is here seen on its hind legs, rushing in the direction of the falling birds.

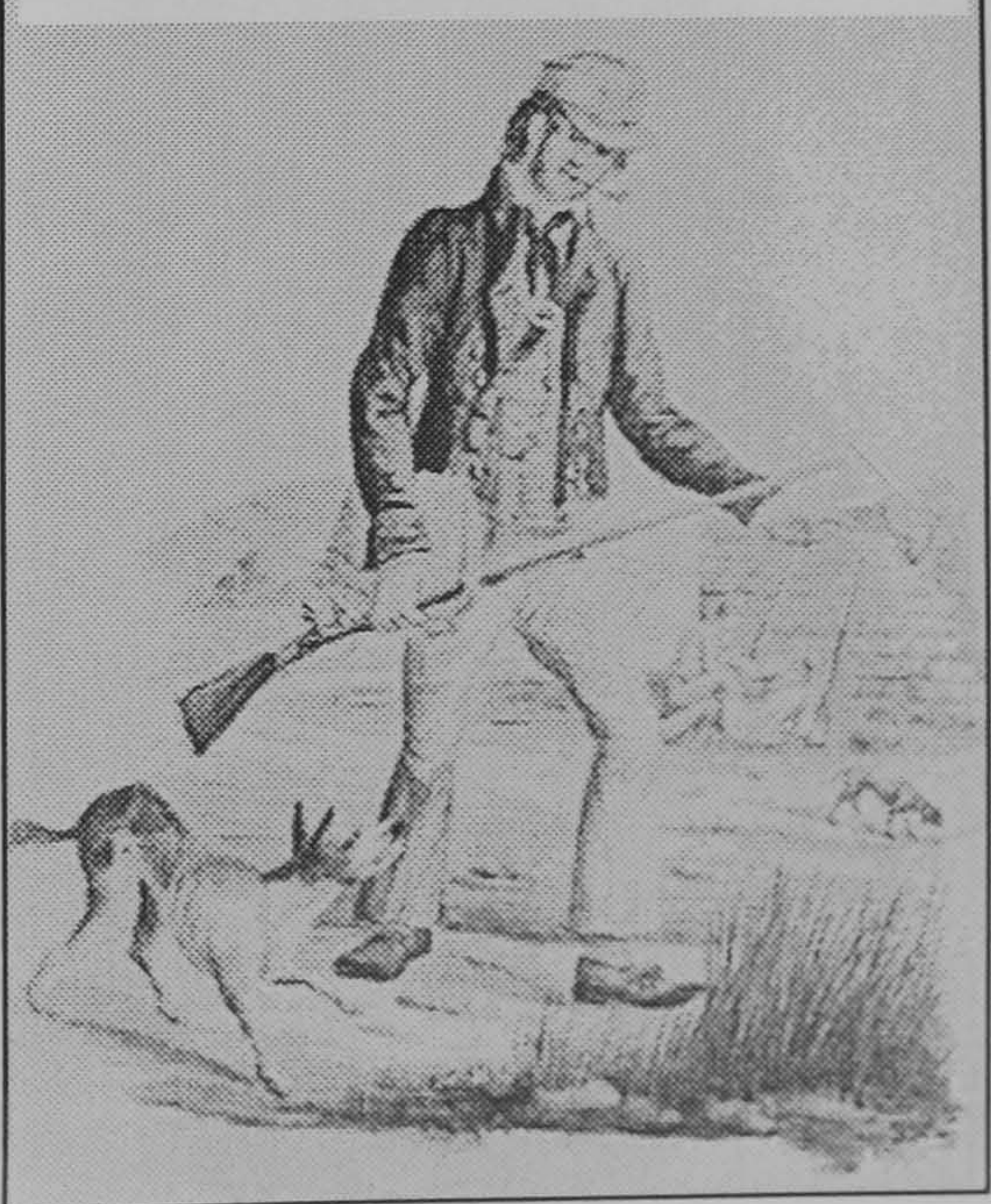
Fig 3.16
A detail of a hunter shooting from Brocktorff's watercolours of Ggantija, Gozo



All these hunters in Brocktorff's works are details from an entire picture, which mostly shows various parts and aspects of the Ggantija temples and the excavations which were going on at the time. In the water-colour where the hunter is seen shooting, which is by far the most extensive hunting scene of all, the hunting scene itself takes up less than one tenth of the entire water-colour. Hunters feature in only three of the watercolours forming the whole volume.

A hunter appears in the distance in a mid-1800s water-colour of the Grand Harbour by P.A. De Angelis (De Piro 1988), while an English looking "Maltese sportsman" features in an undated and unsigned water colour, attributed to Brocktorff (Fig 3.17). The late 1800s painting, shows hunter and his skinny dog in the foreground, and features three more shooters in the background, two sitting and one shooting at a flock of four birds (ducks?). As in Brocktorff's other paintings, the way the gentlemen are dressed show they are unlikely to be Maltese. The painting has a lot of detail, the man is smoking a pipe and wearing a smart hat and a scarf. He also carries a game bag which has a net for dead game and has a powder flask tucked under a belt and is pointing the way to his dog.

Fig 3.17
Maltese sportsman



In another mid-19th century painting, a hunter walking with a gun over his shoulder can be seen in an oil painting of Manoel Island by Giorgio Pullicino (Fig 3.18). Pullicino painted a number of panoramic views of the Maltese Islands, primarily intended for the souvenir market (Buhagiar 1988). The hunter in this painting is one of five characters who may be seen in the foreground.

Fig 3.18
Detail from Pullicino's view of Manoel Island

A number of churches and chapels have large collections of ex-voto paintings which are given to the church by a person who would have received a favour after making a vow to the saint to whom the particular church is dedicated. Most of the ex-votos represent people saved from disasters, accidents or miraculous healing. A single ex-voto painting featuring a hunter was a late 18th century oil on wood painting used to exist at the Church of *Santa Marija tal-Providenza* church in Siggiewi, but it was stolen along with other paintings. The only thing which remains of this painting is a description: a hunter kneeling in prayer, with his arms crossed on his breast. His shotgun drops and accidentally fires, wounding a passing peasant woman returning from the fields with her husband. She lies prostrate on the ground while the farmer, who carries a hoe and a spade on his shoulders, bends over her. The Virgin and Child appear above them among bright clouds (Buhagiar 1983).

Representation of hunters in pencil sketches are as rare as representations in other forms of art. A set of pencil sketches featuring hunters appeared in *The Illustrated Sporting and Dramatic News* in 1879 (p.480, 482). Unfortunately there is very little information about the sketches, except that they are from the pencil of Captain Nortcote, of the 101st Fusiliers. There are five sketches on a tabloid, the largest of which represents an angler catching grey mullet.

Fig 3.19
Shooting pigeons

Another shows a Maltese boat while the other three depict hunters. One shows "peasants shooting pigeons" from boats (Fig 3.19). This method of hunting was described by Ciantar (1774). Another shows a hunter "waiting for daybreak for flights quail" (Fig 3.20) while the last one shows a Gozo peasant after *beccaficos* (garden warblers) (Fig 3.21).

Fig 3.20
Waiting for quails

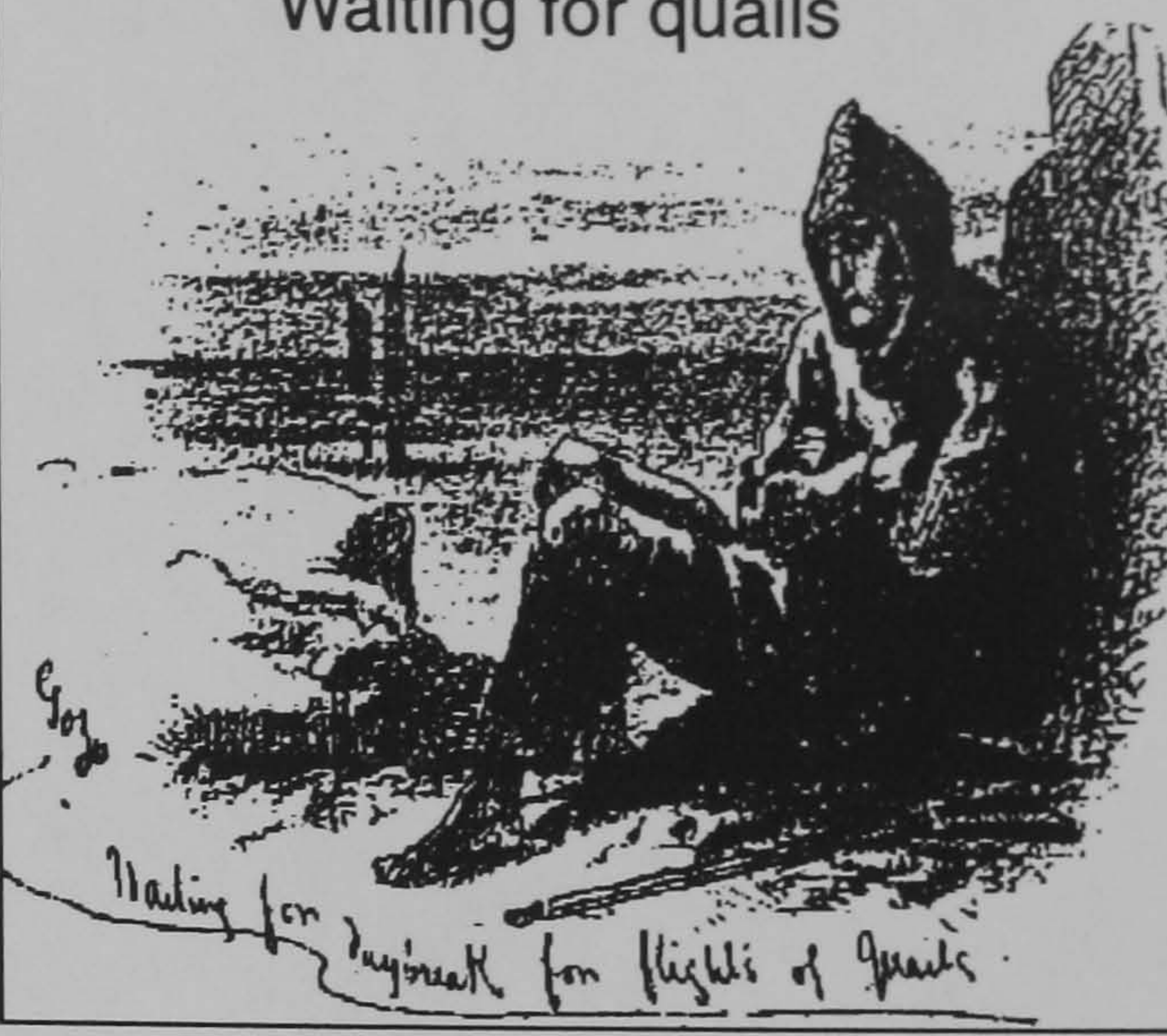


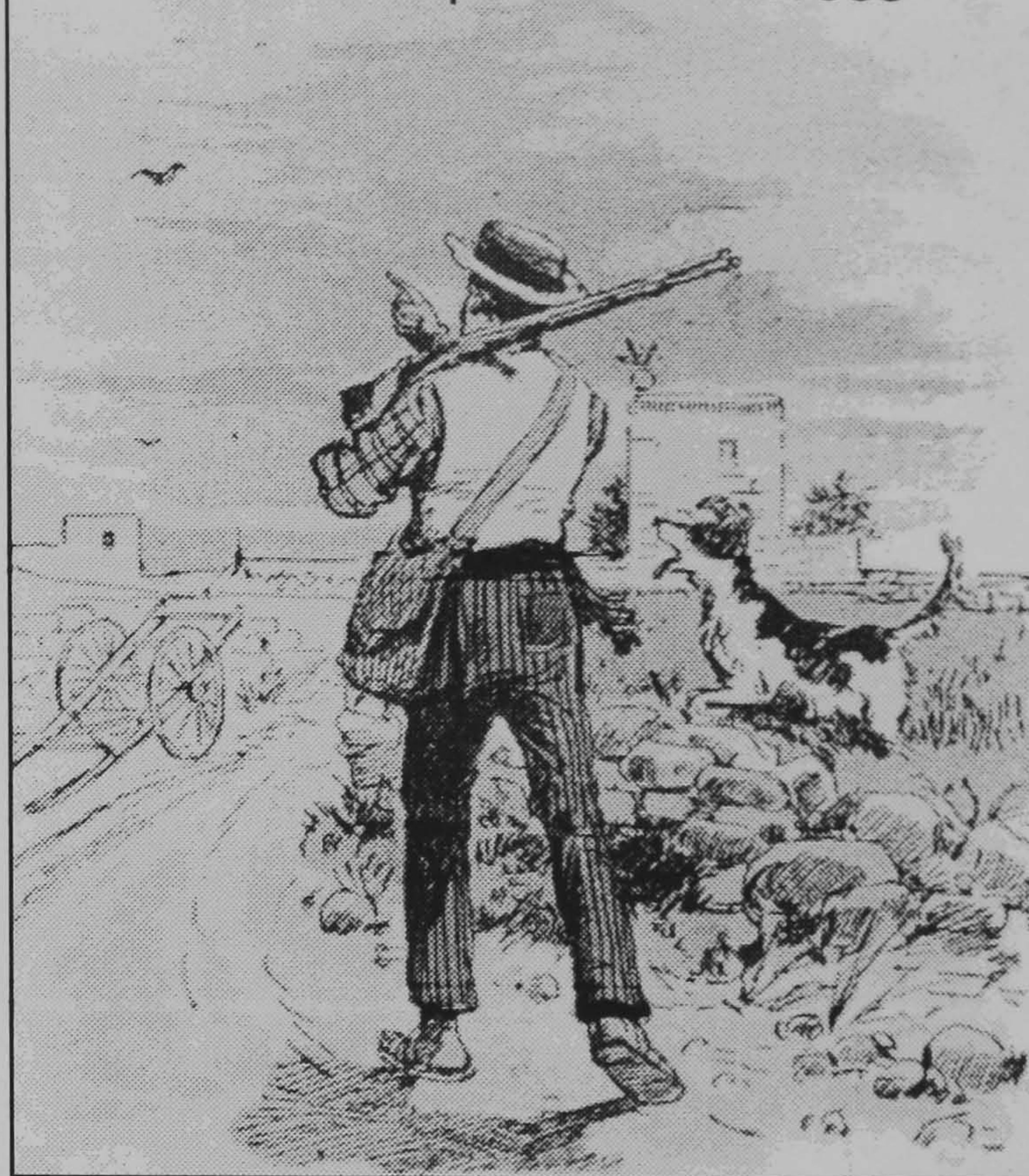
Fig 3.21
Peasant after garden warblers

A pencil sketch of a gentleman hunter is found in a book about the artist Giuseppe Calleja. The sketch is dated late 1800s (Fig 3.22) and depicts a certain Mr P. Dimech in his hunting attire (Calleja 1992). In those times, hunting was still a prerogative of the upper classes and from the way the gentleman portrayed is dressed, it is evident that the he hailed from the upper class.

Fig 3.22
Mr Dimech, by Calleja

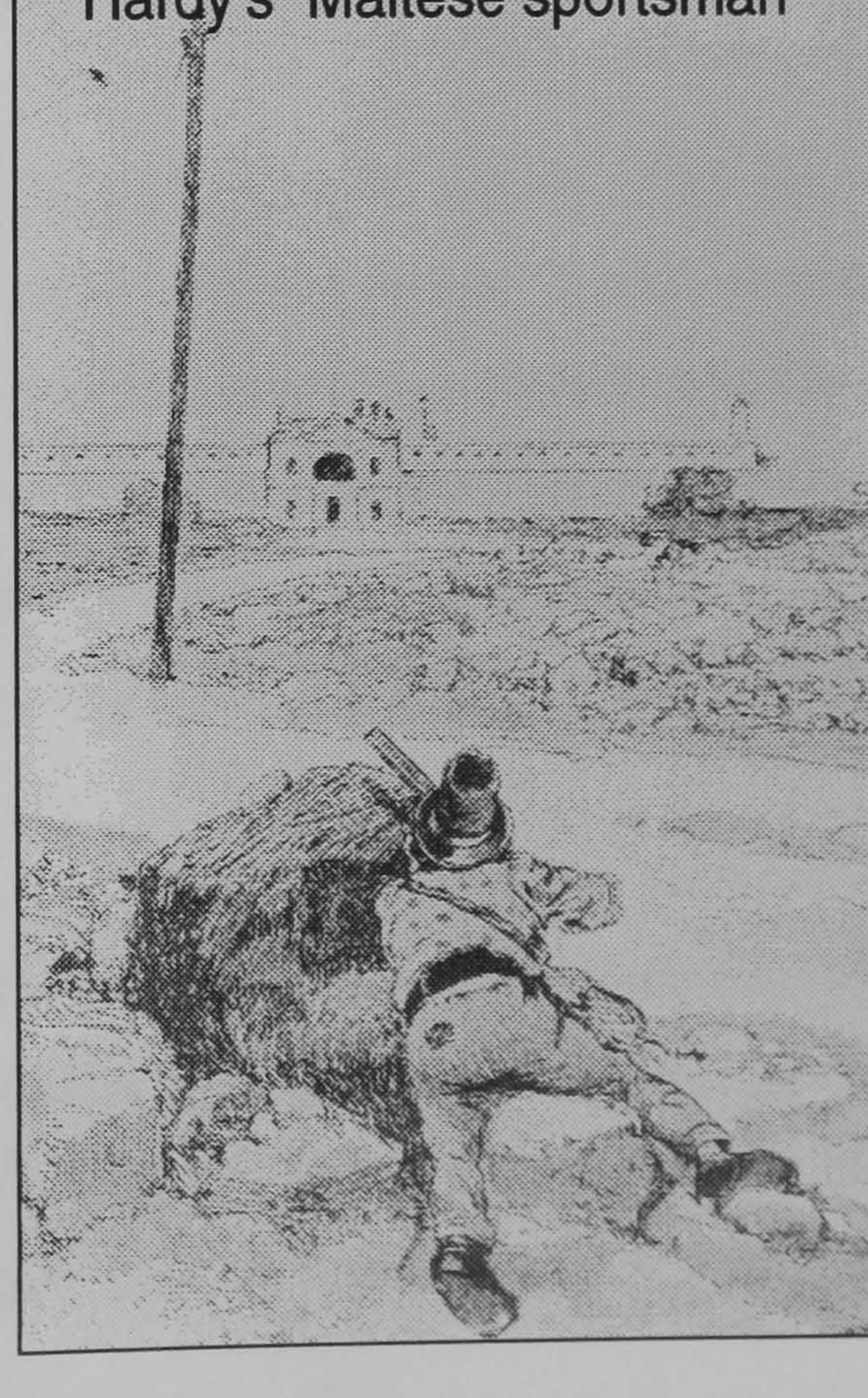
Another hunter features in a four page description of "A Subaltern's first impressions of Malta" containing 31 vignettes from life in Malta around 1885 (Fig 3.23). The nine by seven centimetre vignette shows a hunter which is drawn in the same manner as the "curry puff vendor", "milk seller" and one of the fishermen seen on the boats in the same narrative feature. The account says that it was rather dull for those "unfortunate ones posted in one of the outlying forts of the island". The officer says that if posted at Delimara fort, relief from this dullness can be sought by watching fisherman "while the sight of a Maltese sportsman who has spotted the first quail of the season is sufficient to raise great hopes of making a change in the everyday relaxations by securing a big bag of these oily birds, which when cooked in oriental fashion with rice, furnish a most agreeable change of diet at the mess-table." The drawing says little about hunters, except that they used game bags similar to the ones seen in Brocktorff's paintings. Such game bags are still in use today. Like the dog in the 1700's manuscript (Fig 3.10), the dog featured next to the hunter has no resemblance to a retriever or pointer used today.

Fig 3.23
A Maltese sportsman ca.1885



A rather interesting sketch is the one by Dudley Hardy in *The Sketch* of 1906. "Patience rewarded — A study of a Maltese sportsman" (Fig 3.24) is the title of a pencil drawing of a hunter lying on the ground and taking aim at a bird on the a telegraph wire. This drawing shows that the habit of shooting birds perched on overhead wires dates back quite a few years. The damage done to overhead wires is discussed in the chapter dealing with economic aspects. This drawing again shows a hunter with a game bag and the way the hunter is dressed shows that he is likely to be a working class man (*The Sketch* June 13 1906, p.281).

Fig 3.24
Hardy's Maltese sportsman



Apart from hunters, hunting dogs feature on a number of paintings, perhaps the best of which is represented in an early 1900s painting called *Caccia* by Giuseppe Cali (De Piro 1988 p.42). A pointer is seen searching for game in a typical setting. Although one expects portraits of hunters to be common, especially bearing in mind a large proportion of the number of hunting enthusiasts hailed from wealthy families, such portraits are rare. The same can be said for local representation of dead game. The best known portrait is an undated oil painting by Willie Apap depicting the Marquis Joe Scicluna wearing a hunting belt and is accompanied by his hunting dog (Fig 3.25). He holds a twin barrelled shotgun in the "noble" way: the gun is unloaded, broken and pointing downwards. The painting is believed to have been painted in the mid-1950s (Fiorentino and Grasso 1993).

Fig 3.25
The Marquis Scicluna by Apap

A number of local artists have attempted to paint *natura morta*, but their subjects are almost always foreign. The closest one to a local scene is also copied as it contains what looks like a thrush and a redwing hanging together with a bird which looks like a roller in the background (Spiteri 1993). While the first two are winter visitors, the latter is a spring and autumn visitor. Also, the birds are hung in the same way game is hung on the continent, a method which is not used locally.

Two more hunters feature in a book which is a compilation of 80 individually published plates by Saviour (Sonny) Xuereb, who is a hunter. The plate on the title page of the book, a scene called "shooting", (Fig 3.26) was selected for the exhibition 'The hunt and nature in present day art' at Tilbury's Art Gallery,

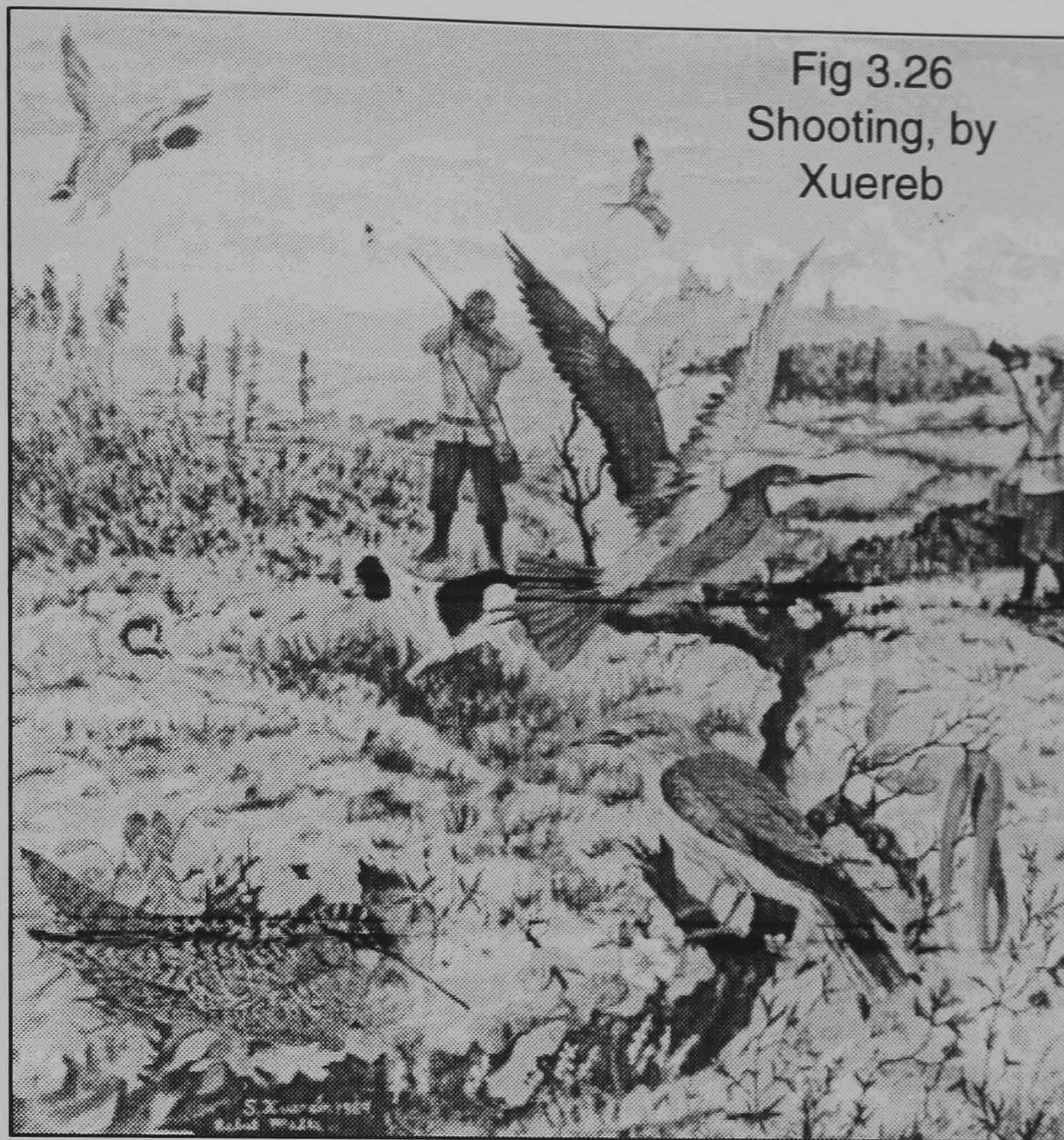


Fig 3.26 Shooting, by Xuereb

Belgium in 1989. In the painting, a hunter is shooting at a mallard while what looks like a tourist is filming a red kite (Xuereb 1991). Two individual hunters feature in a 1993 calendar called 'Country life in the Maltese Islands' by Saviour Xuereb. In the plate for the months of January and February, a hunter is part of a winter scene at Ghajn Rihana Valley (Fig 3.26). Another hunter is seen in the March/April plate. The hunter here is seen sitting beneath a rubble wall (Fig 3.28). Both plates bear the date 1991. Another shooter (Fig 3.29) features as a detail on the plate featuring doves and pigeons (Xuereb 1991 pl. 54).

Fig 3.27
Hunter at Ghajn Rihana


Fig 3.28
Detail from March/April


Fig 3.29
Detail from the doves plate


An undated painting reproduced with a write up by Kilin features two hunters in the foreground. Both are holding guns and looking at a flock of birds in the sky. The write up is an adaptation from a Spanish book and speaks of migrating ducks (Spiteri, M. 1991). Water-colours by various artists occasionally feature hunters as part of the landscape, but the accuracy of such works show that the artists are not conversant with hunting practices. Some still feature hunters with muzzle loading shotguns, such as the one in Fig 3.30 by Kenneth Zammit

Tabona. The various inaccuracies, even in the way the gun is depicted, shows that the artist has very little knowledge of the subject. Zammit Tabona has been described as "an incurable romantic" who portrays "jolly settings" where "Even hunters seem to sport a blissful serenity on their faces, out of keeping with the reality of their activity. I suppose their avian victims end up having a liking for them too! (Fiorentino 1995).

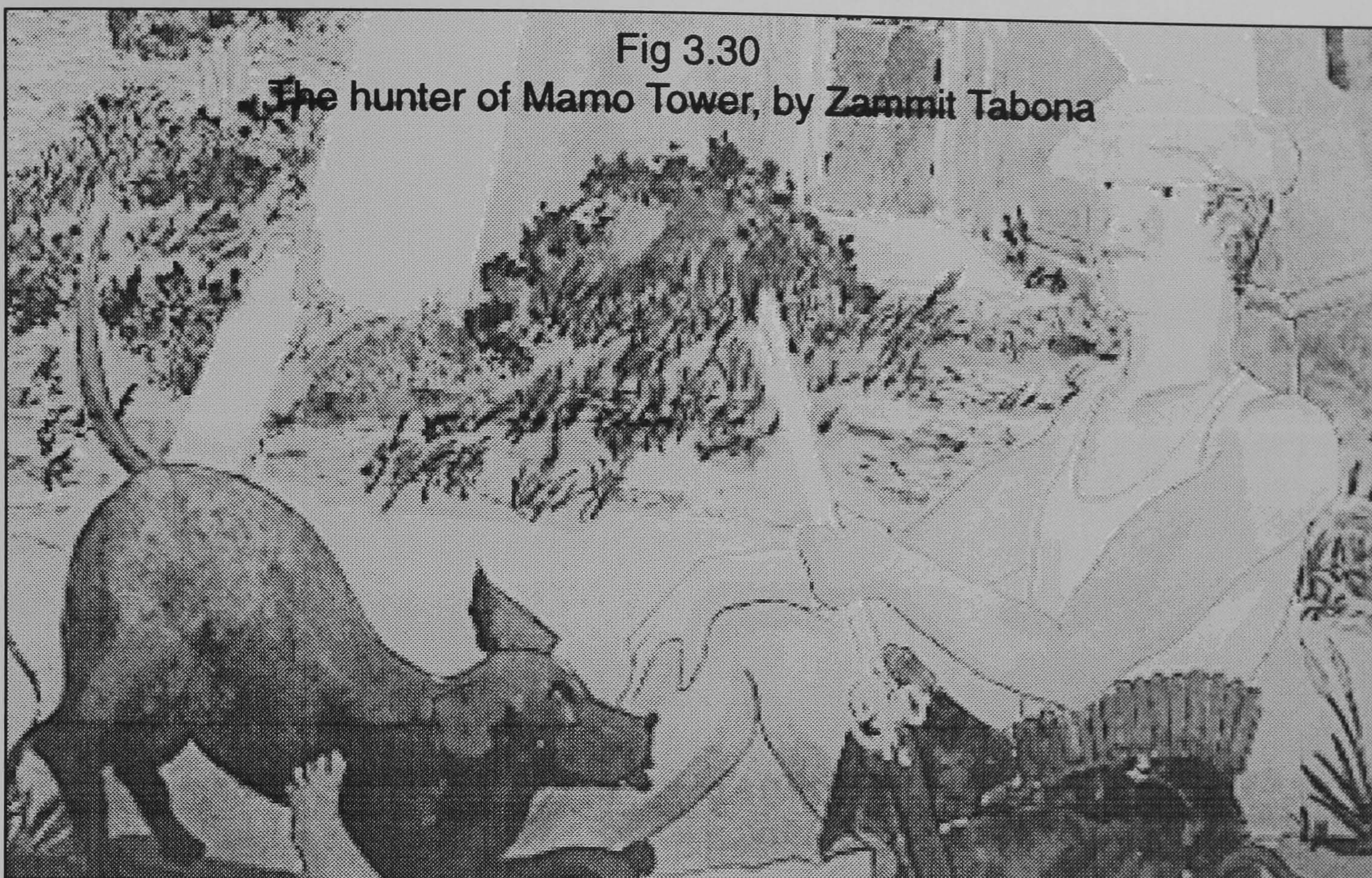


Fig 3.30
The hunter of Mamo Tower, by Zammit Tabona

Other artists depict real life scenes with plenty of detail, like the one by Eric Gerada (Fig 3.31). The water-colour is very accurate both in terms of the landscape depicted as well as the hunter. But it does not make any statements and is more like a snapshot of a place in time, than anything else.

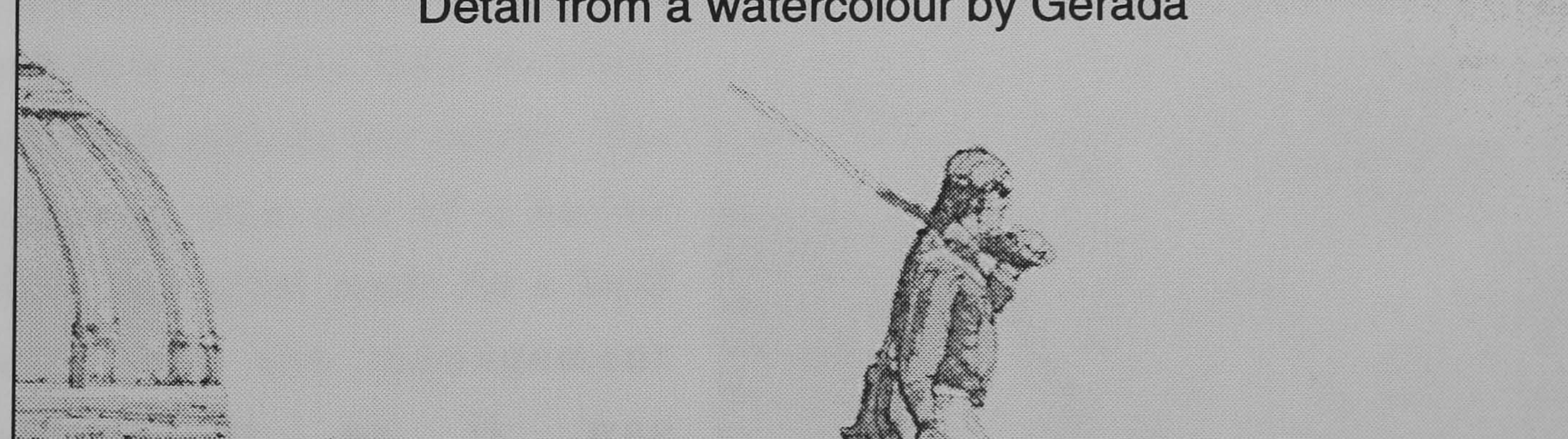


Fig 3.31
Detail from a watercolour by Gerada

Like contemporary poets, modern artists have begun making anti-hunting statements in their art as well. In an apt piece entitled *Ghaliex l-indifferenza* (Why does indifference abound?), Anthony Calleja uses mixed media and superimposes parts of a decoy bird cage and the rims of spent cartridges on a rural landscape where a peasant girl is working in a field and highlights the degradation of the environment through various ways, including hunting (Calleja 1994).

Fig 3.32 Hombre by Mallia

A very strong piece is the work *Hombre* (Fig 3.32) by Salvu Mallia. This painting is now in the collection of the National Museum of Fine Arts in Valletta. It depicts a bare breasted hunter, full of muscles, wearing a kind of cap which is often worn by hunters. Smoke is seen coming out of the barrel of the five shot repeater shotgun he is holding. The hunter is seen wearing a cartridge belt and a flock of birds flows from the left to the right above his head. The birds in his line of vision are seen falling to the ground, where some already lie at the hunter's feet (Mallia 1994). A more recent work is the one painted by Catherine Cavallo in 1995 called *Konservazzjonisti* (conservationists, Fig 3.33). The painting was exhibited as part of an exhibition entitled 'The opposite sex' in July 1996 shows a group of men, including a pot bellied hunter, a pharaoh hound and two other men, one of whom stands next to a hunters' hide on which the word *tidholx* (no entry). The painting was one of a series which the artist made for a local bank, but the management refused it as it was "controversial" (Catherine Cavallo pers. comm.). In the opinion of the artist, the painting is "a fun poking piece of typical Maltese life".

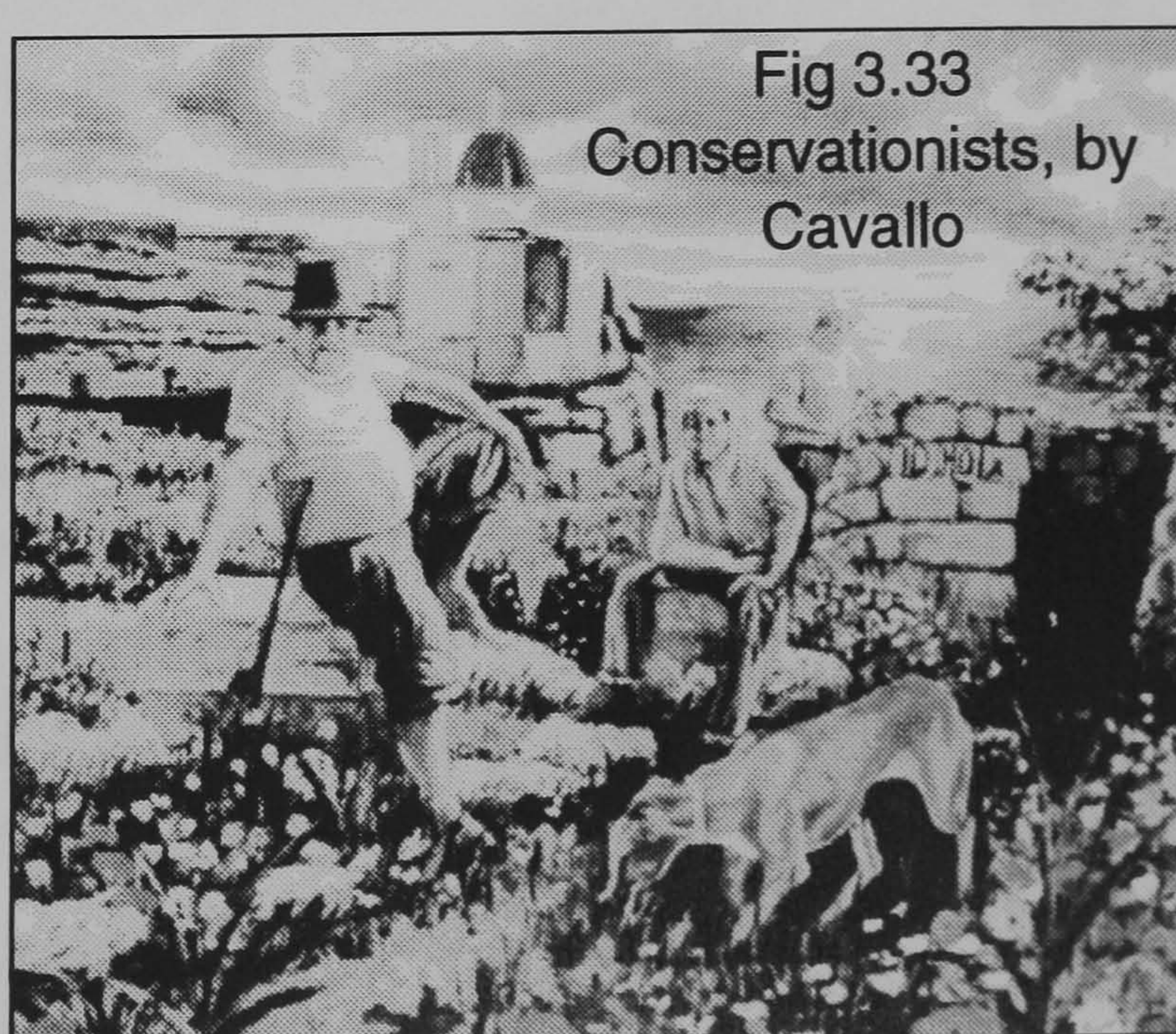


Fig 3.33 Conservationists, by Cavallo

Observations on hunting in art

When one looks through representations of hunters in Maltese art, one immediately realises there are three distinct phases. In the first phase, hunters are almost exclusively part of the landscape, as much a part of the landscape as a windmill or the herdsman. Barring one or two exceptions, they are details often used to fill a space or balance a picture.

The second phase is a rather short one — romanticism in the form of a portrait, a record of an event or a typical scene, hunting dogs or hunters in harmony with nature, as is the trend in the work by Sonny Xuereb, himself a hunter. In Xuereb's work, the hunter is hardly ever seen shooting. Indeed, most of the time he is walking in a place teeming with birds, but like Adam in the garden of Eden, he does not touch the forbidden tree. The only times one sees hunters in action in Xuereb's work is in one instance where the hunter is shooting at duck while a tourist is filming a bird of prey, also flying within the shooter's range and another time a coloured pencil sketch of a shooter killing a pigeon is the back cover of a book written by his brother Paul, who at one time was acting President of the Republic, who wrote a short story about a bad hunter who killed the farmer's pigeons, has been referred to earlier. The third phase is the one with over anti-hunting messages, which is the phase of the 1990s.

Hunters in pictorial maps

Up to the late 1970s, Maltese hunters featured also in a number of pictorial maps of the Islands. These maps are mainly for tourist consumption and feature attractions and items of particular interest to tourists such as lace making, carnival, traditional ploughing methods, churches, temples and catacombs as well as sailing and scuba diving. Hunters feature only in maps painted before the 1980s as the current trend in pictorial maps is to have birds depicted, and not hunters. A shooter walking with his dog can be seen on Gozo in a pictorial map by Renzo Borg Grech, published by ABC Stationers and Printers. The map is undated, but was in circulation in the 1970s. Three hunters feature in a map painted by Joseph Cardona and first published by Joscar in 1959. Two of the hunters are at Xewkija (Fig 3.34) and Zebbug (Fig

Fig 3.34
Detail of a hunter at Xewkija

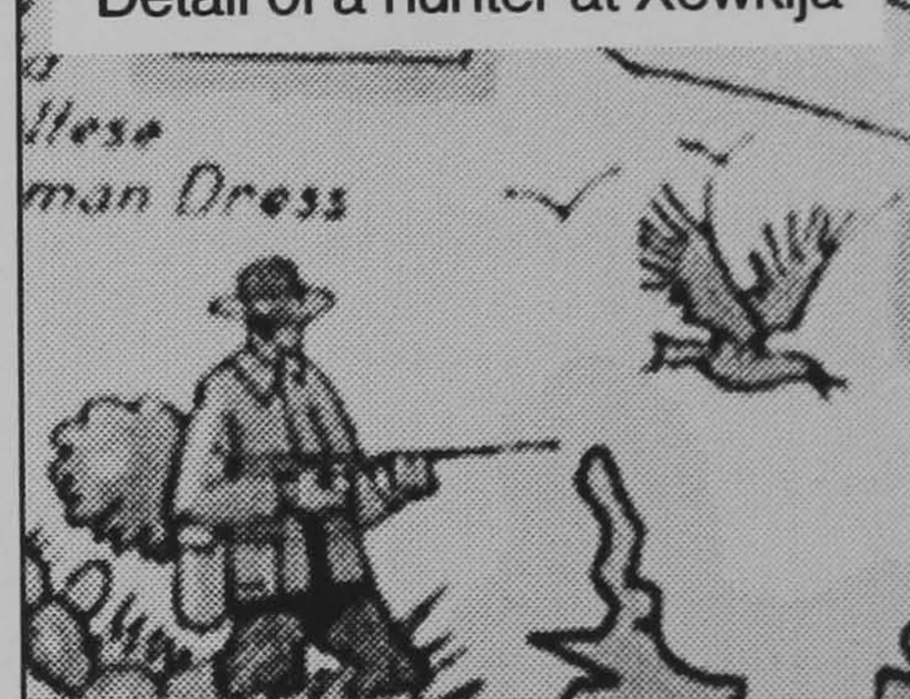
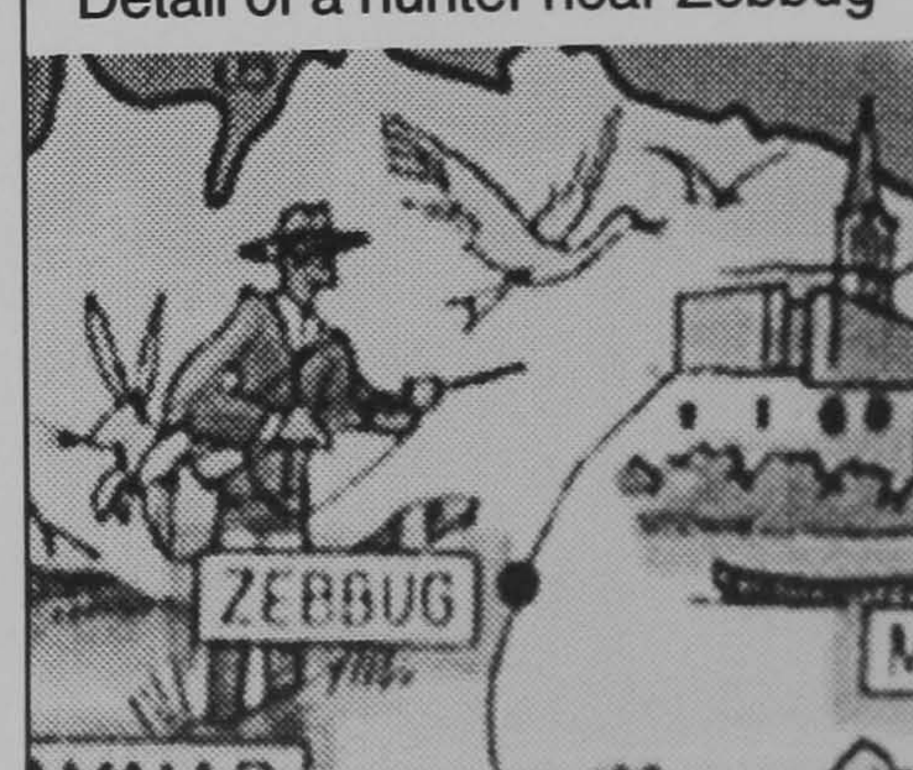


Fig 3.35
Detail of a hunter near Zebbug



3.35) on Gozo and another at Il-Kuncizzjoni in Malta (Fig 3.36). The map used to appear in the centre pages of the Air Malta in flight magazine *Malta this Month* (1973). Another shooter can be seen near Zebbug, Gozo, in a 1991 map published by Advantage Advertising (Fig 3.37). The map used to appear in each issue of the magazine Air Malta in flight Magazine (1979), which replaced the *Malta this Month* paper. This map has been replaced by another one in which live birds mark bird sanctuaries while hunters are no longer depicted. It is interesting to point out that while hunters feature every now and then, trappers never do.

Fig 3.36 Detail of a hunter near Kuncizzjoni

Fig 3.37
Detail of a hunter near Zebbug

Satire - hunters in press cartoons

Practically all local daily and Sunday papers publish cartoons, which may be satirical and subtle or an overt comment about a current event. Cartoons either feature in the same page with regular columnists or are a form of editorial comment. Cartoons are usually signed by pseudo names or just initials. As Table 3.2 shows, cartoonists in Malta paid far more attention to hunting than artists. *The Sunday Times* cartoonists were the ones who did most anti-hunting cartoons. Hunters have begun to feature more regularly in press cartoons in the past few years.

The majority of cartoons related to hunters in the local press poke fun at

Table 3.2
Hunters in news paper cartoons

Year	Mocking shooters	Shooters and politics	Shooters and the EU	Other	Total
1869	1	-	-	-	1
1964	-	-	-	1	1
1978	2	1	-	-	3
1980	-	-	-	1	1
1985	-	-	-	1	1
1987	4	-	-	1	5
1988	7	-	-	-	7
1989	2	-	-	-	2
1990	1	-	-	1	2
1991	2	2	1	1	6
1992	2	2	1	1	6
1993	21	1	4	1	27
1994	16	13	-	15	44
1995	6	4	-	3	13
1996	5	5	-	1	11
Totals	69	28	6	27	130

Source:daily and weekly newspapers

hunters. Those dealing with hunters and politicians are the next most common ones. Pro-hunting cartoons have never been published in local news papers, not even in the monthly paper for shooters and fishermen *Il-Passa*.

It is interesting to note that the first cartoon making fun at hunters was published in 1869 in the newspaper *Don Basilio* (Fig 3.38). The cartoon, probably the work of Cali, depicts a smartly dressed shooter walking over some boulders with a gun over his shoulder. The cartoon depicts the gun just at the point of firing and hitting the hunter's own dog, which is seen howling, while a flock of birds can be seen flying in the distance.

Fig 3.38
A caccia, the first cartoon poking fun at hunters

Source: *Don Basilio* 29 May 1869

A number of cartoons compare hunters to primitive men (Fig 3.39 to Fig 3.41). One such cartoon appeared as a paid advert in *The Times* by the environment group *Zghazagh ghall-ambjent* (Fig 3.36). It shows a pre-historic man carrying a club and a dead bird. Next to him was the same man dressed up as a hunter carrying a gun and a dead bird of prey. The comment read: "In primitive times it was a necessity, in modern times, just brutality".

Fig 3.39 Spot the difference

Source: *The Times* 5.10. 1987

Hunters have featured incidentally in a few

Fig 3.40 Prehistoric shotgunner

Source: *In-Nazzjon* 4.10.94. 1987

Fig 3.41
A member of the hunters' association

Source: *Banana* 5.88

cartoons, such as the one by Nalizperla (Fig 3.42) where Mintoff is seen shooting the Malta off the tag tied to a bird's leg. This cartoon was published when Mintoff enacted a law barring anyone from using the words Malta, National or their derivatives, in names of clubs, companies and publications. Although the few cartoons published in the 1970s were less elaborate that those being published currently, their messages were as overt and the irony as strong as it is today. Two cartoons represented in Figures 3.43 and 3.44 are a good example of this. These cartoons were published in a newspaper which is no longer in circulation.

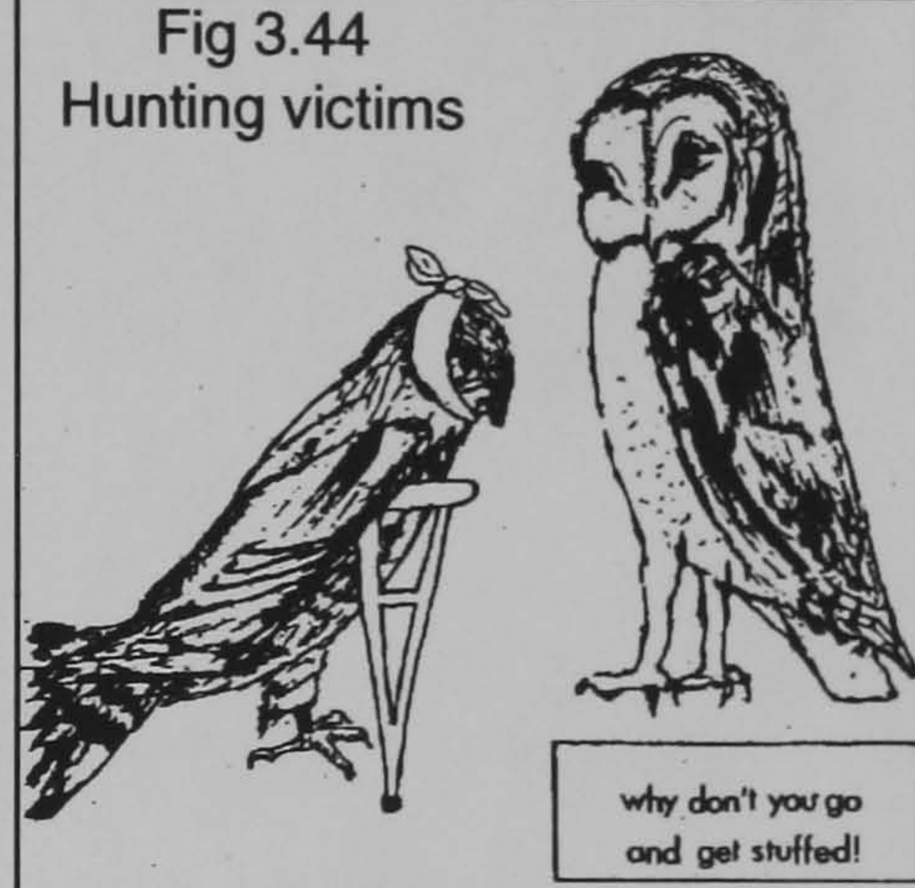
Fig 3.42
Mintoff and Malta

Source: *The Sunday Times* 5.11. 1978

Fig 3.43
Near miss

Source: *Malta News* 27.2.78

Fig 3.44
Hunting victims



Source: *Malta News* 1.5.78

The hunter's attitude of blaming everything else, for the destruction of birds, except their activity, was represented in a cartoon in a satirical paper, which is also no longer in circulation. In the cartoon (Figure 3.45), an environmentalist is showing a hunter a series of carcasses of birds starting with the jackdaw, the peregrine falcon, and the barn owl, and the hunter blames farmers, pesticides and poison for their death. In the last frame, the hunter says that as he does not have any of them in his collection, and he was willing to buy them and asks about the price.

Fig 3.45
Who's fault?

Source: *Banana* 7.88

The strong cartoon featuring shooters by Nalizperla, the regular cartoonist who accompanies Roamer's column in *The Sunday Times* commented about the addition of the word 'Conservationists' to the name of the local hunters' association, when it became the Association for Hunting and Conservation. The cartoon (Fig 3.46) features two robins, one of which has a gun and a cartridge belt and is standing on a shot man's body. The caption ridicules the use of the word conservationist, which the Maltese hunters' association had added to its name. Another carton featuring shooters, but with political overtones was the one carried in *The Sunday Times* (Fig 3.47) where two shooters are seen wearing T-shirts one saying "shoot birds not heroin" and the other sporting the message "I love Caritas", Caritas being a local institution involved in drug rehabilitation. The cartoon was published following statements by Dr Karmenu Mifsud Bonnici, then leader of the opposition, who reiterated one of the hunters' justifications for shooting, that hunting kept youths away from vices such as drugs (*The Times* 1991a, 1991b).

Fig 3.46 Bloodlust

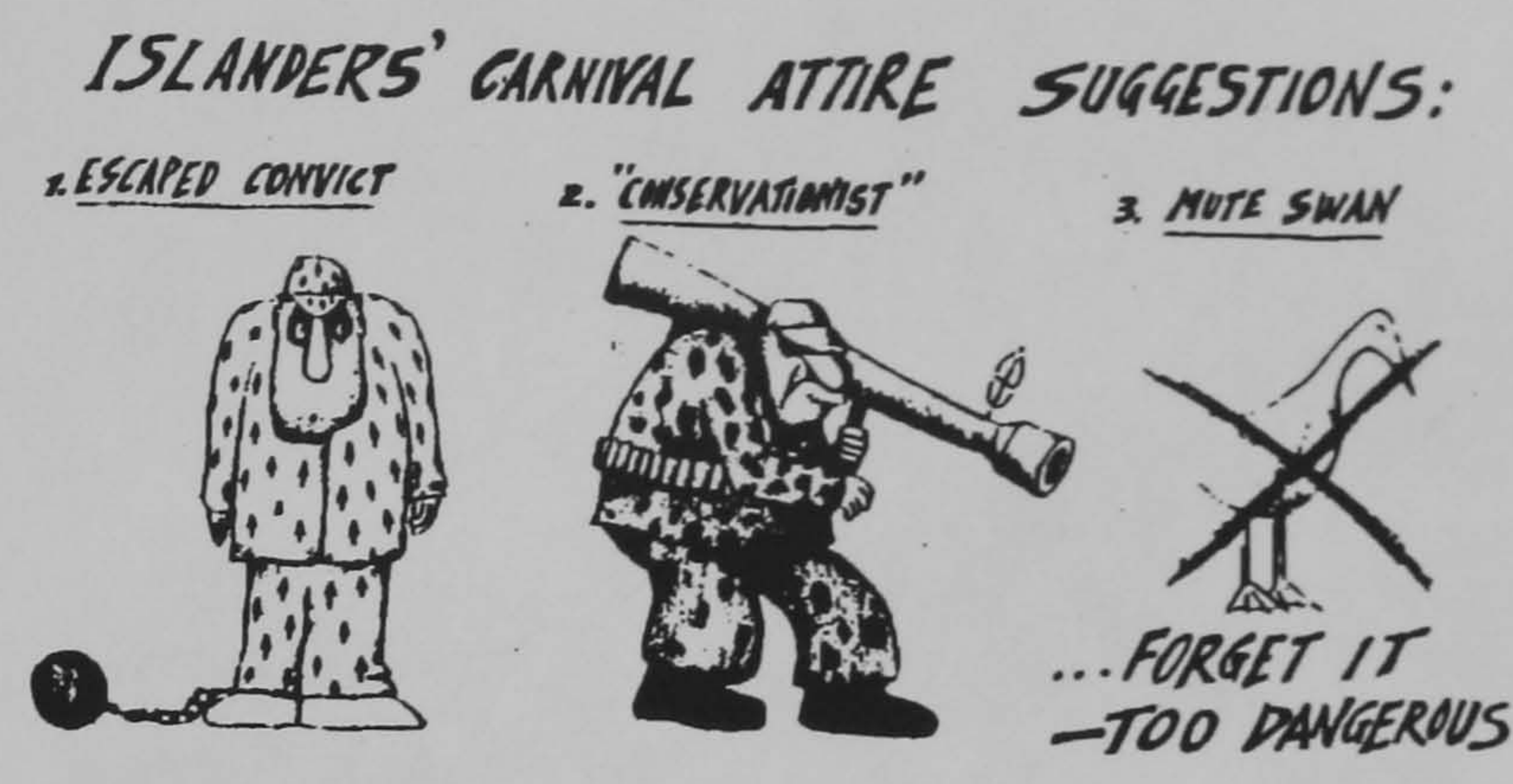
Source: *The Sunday Times* 13.11. 1988

Fig 3.47 Of drugs and hunting

Source: *The Sunday Times* 24.3.1991

The shooting of mute swans in January 1993 prompted *The Sunday Times* cartoonist to indulge in another anti-hunting cartoon (Fig 3.48). Three alternative carnival costumes are given: an escaped convict, of which there were a few instances at the time, a "conservationist", dressed up as a shooter training a bazooka on a swan, which is the third carnival costume. The cartoonist's advice is "...Forget it — too dangerous".

Fig 3.48 Alternative carnival cosutmes



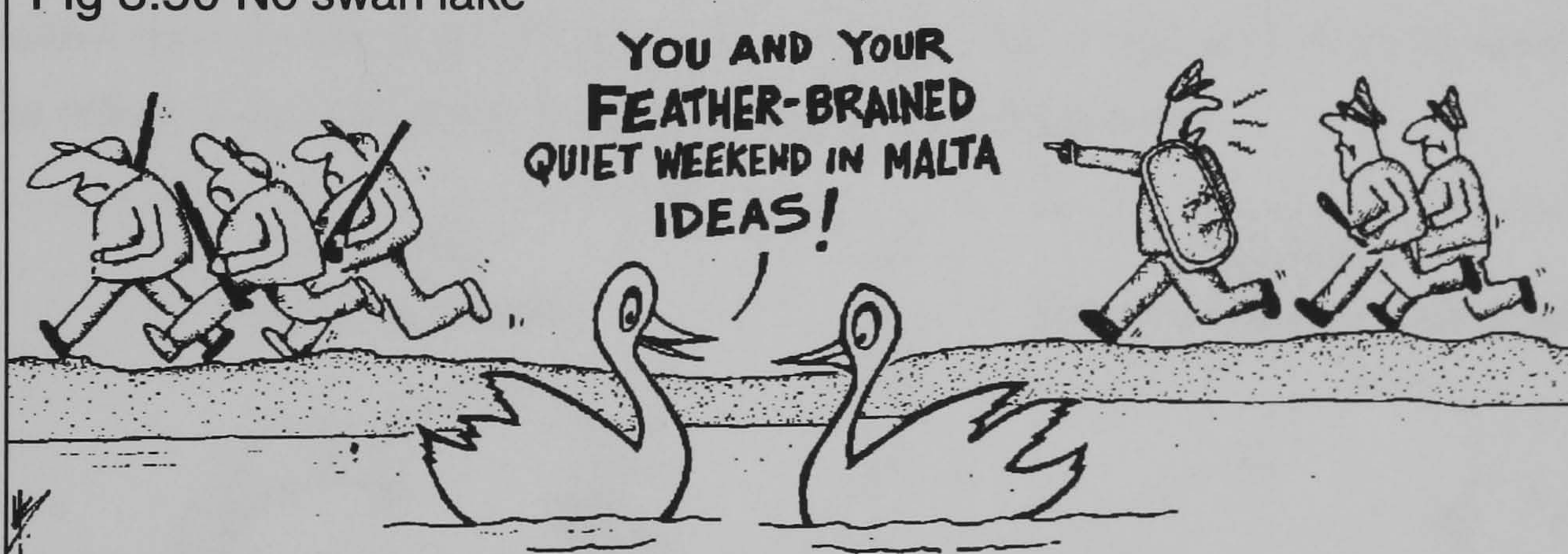
Source: *The Sunday Times* 21.2.1993

Fig 3.49
Pot shot

Source: *Alternattiva* 31.12.1993

Swans were again shot in December of the same year in spite of police vigil over them in certain areas. The police later found two dead swans in a freezer at house in Bingemma (*The Times* 1994a). Five swan related cartoons were published in the first ten days of January 1994, four of which are reproduced in Figure 3.49, Fig 3.50, Fig 3.51 and Fig 3.529.

Fig 3.50 No swan lake

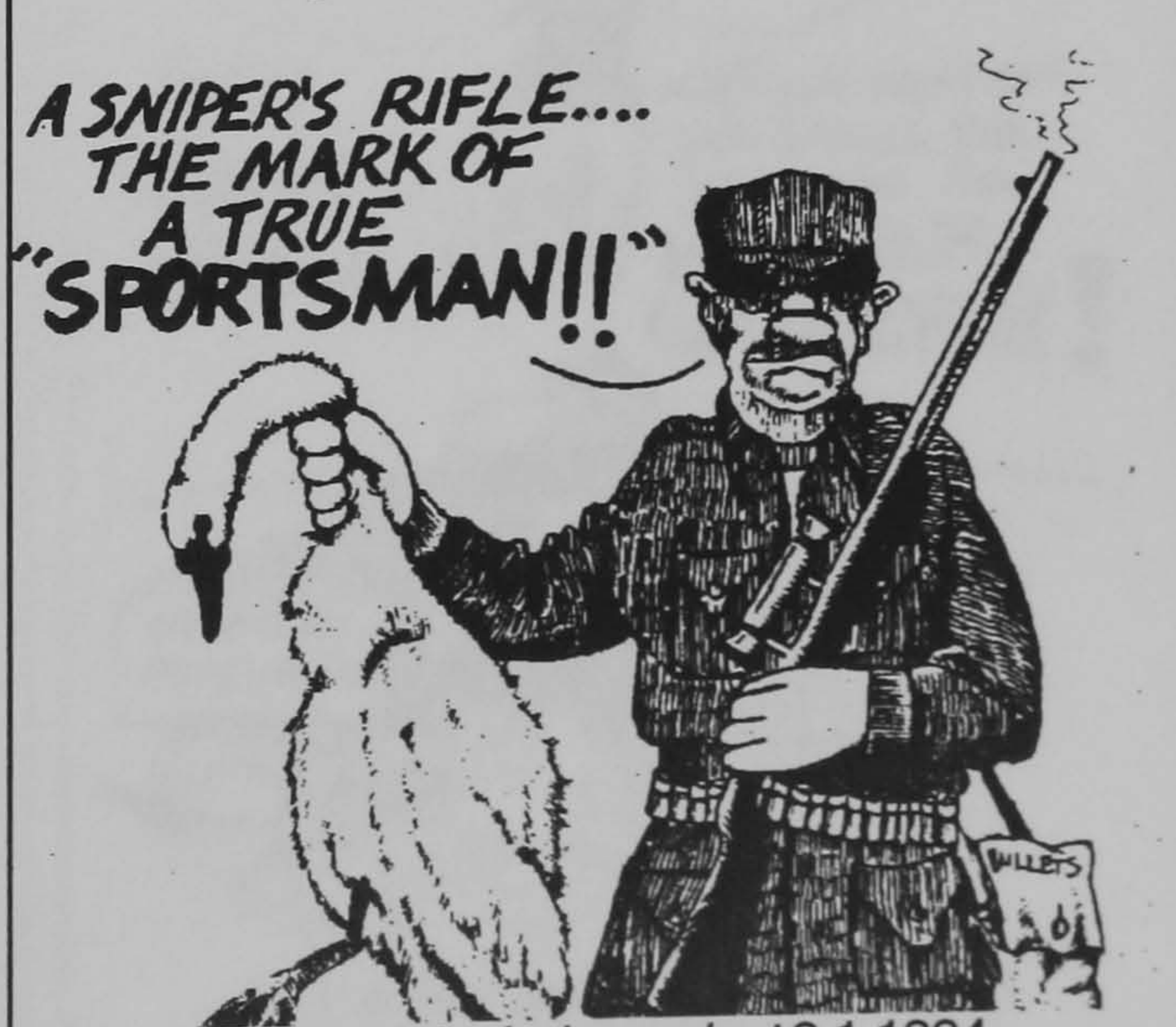


Source: *The Sunday Times* 2.1.1994

Fig 3.51 Mute swans, not mute public

Source: *TheTimes* 1.1.1994

Fig 3.52 Real sportmen



Source: *The Malta Independent* 9.1.1994

The hunters' argument citing the bible as giving man dominion over all creatures became a cartoon subject (Fig 3.53) which is a variation of the famous Michealangelo painting of God creating Adam. But God is seen giving Adam a shotgun. According to the cartoon, the new revised bird shooters' version of the bible reads "And God blessed man saying increase and multiply and fill the earth and subdue it and rule over the fishes of the sea and massacre the fowls of the air (for sport) and all living creatures that move upon the earth".

Fig 3.53 Man's dominion

Source: *The Malta Independent* 5.9.1993

Two other cartoons with similar tones appeared in *The Times* (Fig 3.54, Fig 3.55). One appeared after a statement by the former Labour Prime minister Dr Karmenu Mifsud Bonnici, when he said that hunting is "God's gift to the poor" (*The Times* 1994b) and the other after the police seized some 2,000 birds from a taxidermist (*The Times* 1994c). The cartoons are practically identical, in one, a primitive man is being given a gun by a divine hand and told to go to hunt while in the other, is told that he shall be called 'hunter gatherer'.

Fig 3.54
Man the hunter

Source: *The SundayTimes* 10.4.1994

Fig 3.55
Man the hunter gatherer

Source: *The SundayTimes* 6.6.1994

The statement by the former Labour Prime minister that hunting is God's gift to the poor was used again at the start of the hunting season. In Fig 3.53, the former premier is seen reading a ficticious paper, *The howler*, which gives news of birds killing humans, trappers saving birds and other headline news of tame beasts killing wild ones.

Fig 3.56 Hunting as God's gift to the poor

Source: *The Malta Independent* 10.4.1994

The cartoons associating hunting with politics express the same concept that hunters blackmail politicians with votes and that some politicians try to please hunters in return for votes (Figures 3.57 to 3.62). In a number of cartoons, hunters are seen holding the leaders of the political parties at gunpoint.

Fig 3.57 Blackmail

Source: *The Times* 3.9.1991

Fig 3.58 At gunpoint

Source: *Alternattiva* 12.1.1996

Fig 3.59 Backscratching

Source: *The Malta Independent* 6.2.1994

Fig 3.60 Forced to comply

Source: *The Suinday Times* 25.10.92

Fig 3.61 Significant changes on a silly date

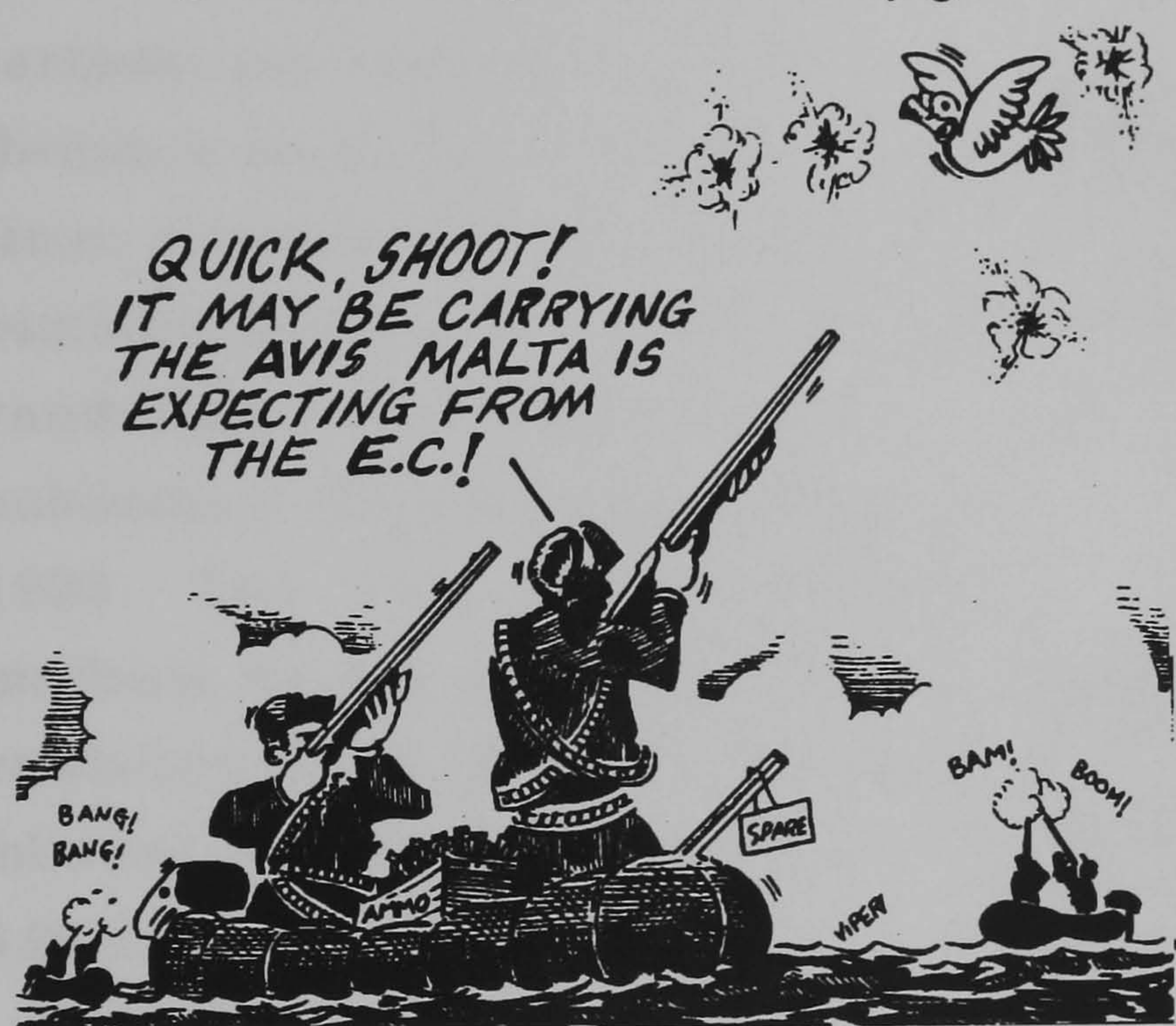
Source: *The Malta Independent* 7.4.1996

Fig 3.62 Vote hunting

Source: *The Sunday Times* 6.2.1994

The cartoons shown in Figures 3.63 to 3.66 are related to shooters and the EU. All cartoons on this subject express the basic concept that hunters oppose EU membership because of the stricter rules Malta would have to adopt.

Fig 3.63 Dowing the EU carrier pigeon

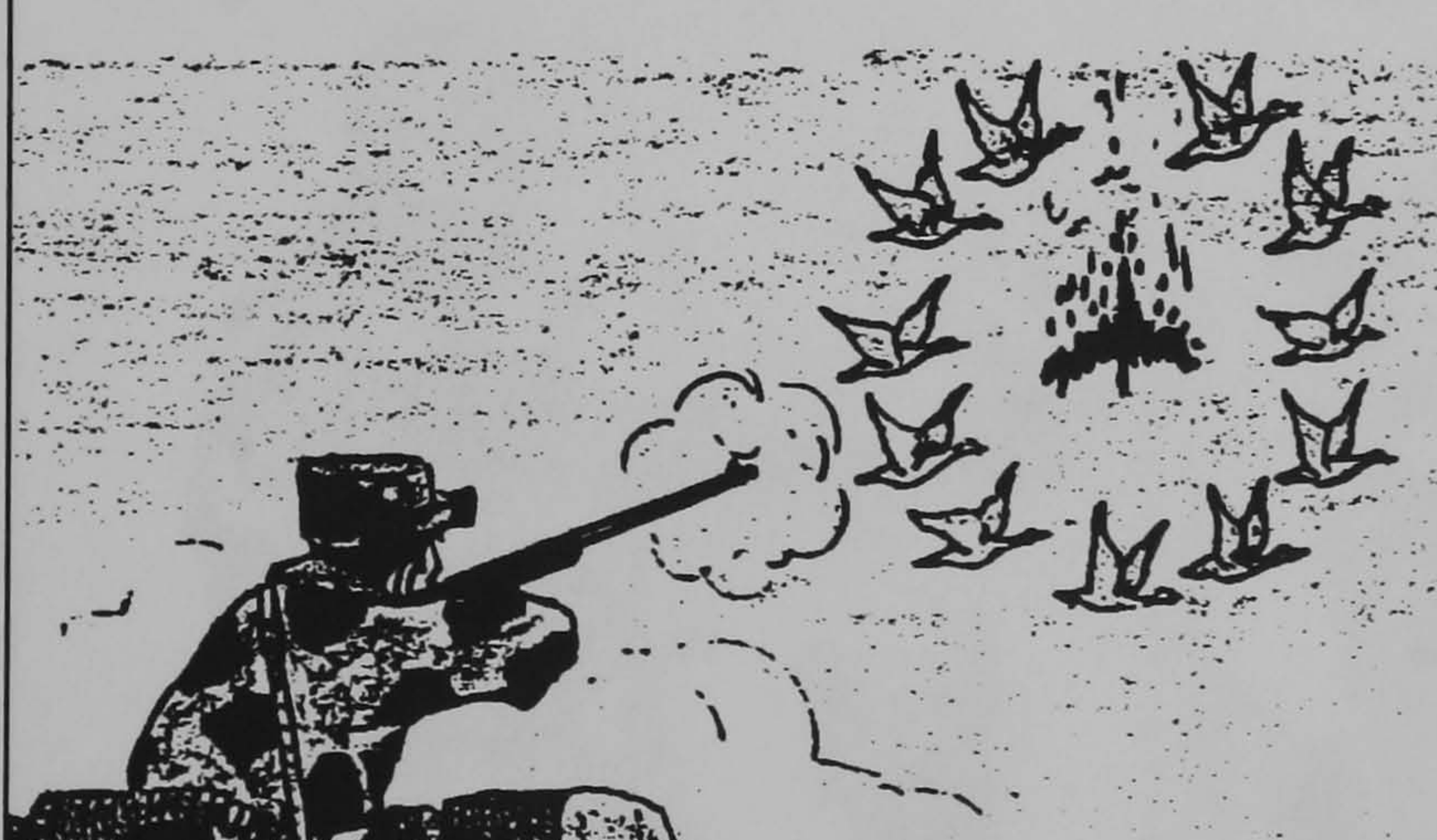


Source: *The Malta Independent* 18.3.1993

Fig 3.64 Hunters no to EU

Source: *The Times* 7.6.1993

Fig 3.65 Malta shot out of EU flock



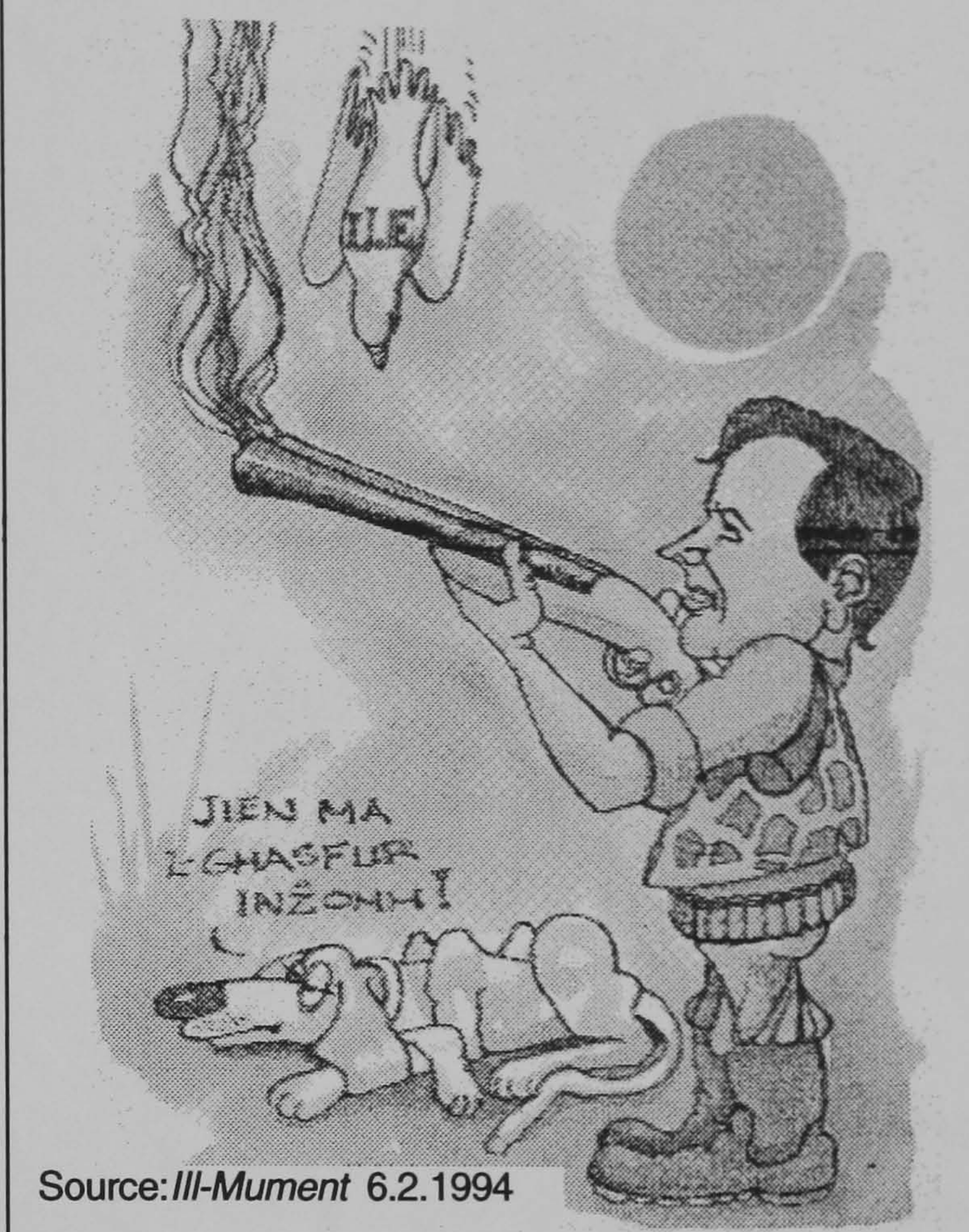
Source: *The Malta Independent* 31.1.1993

Fig 3.66 "Stop shattering my EU dream"

Source: *Alternattiva* 20.11. 1993

The Malta Labour Party, being against EU membership and adopting a 'pro-hunting' stance, became a subject of a number of cartoons, of which Figure 3.67 is an example. It features the leader of the opposition, Dr Alfred Sant, then leader of the opposition, dressed as a hunter and shooting down a pigeon symbolising the European Union. The dog on the left hand side is saying it sides with the birds. Very often, cartoons are related to current themes or events happening at the time. A number of cartoonists commented on the wave of vandalism which followed the publication of hunting regulations in 1993. The cartoonists captured incidents ranging from paint throwing vandalism (Fig 3.68) to violence which followed hunters' demonstrations (Fig 3.69, 3.70).

Fig 3.67
MLP leader shoots down EU



Source: *Il-Mument* 6.2.1994

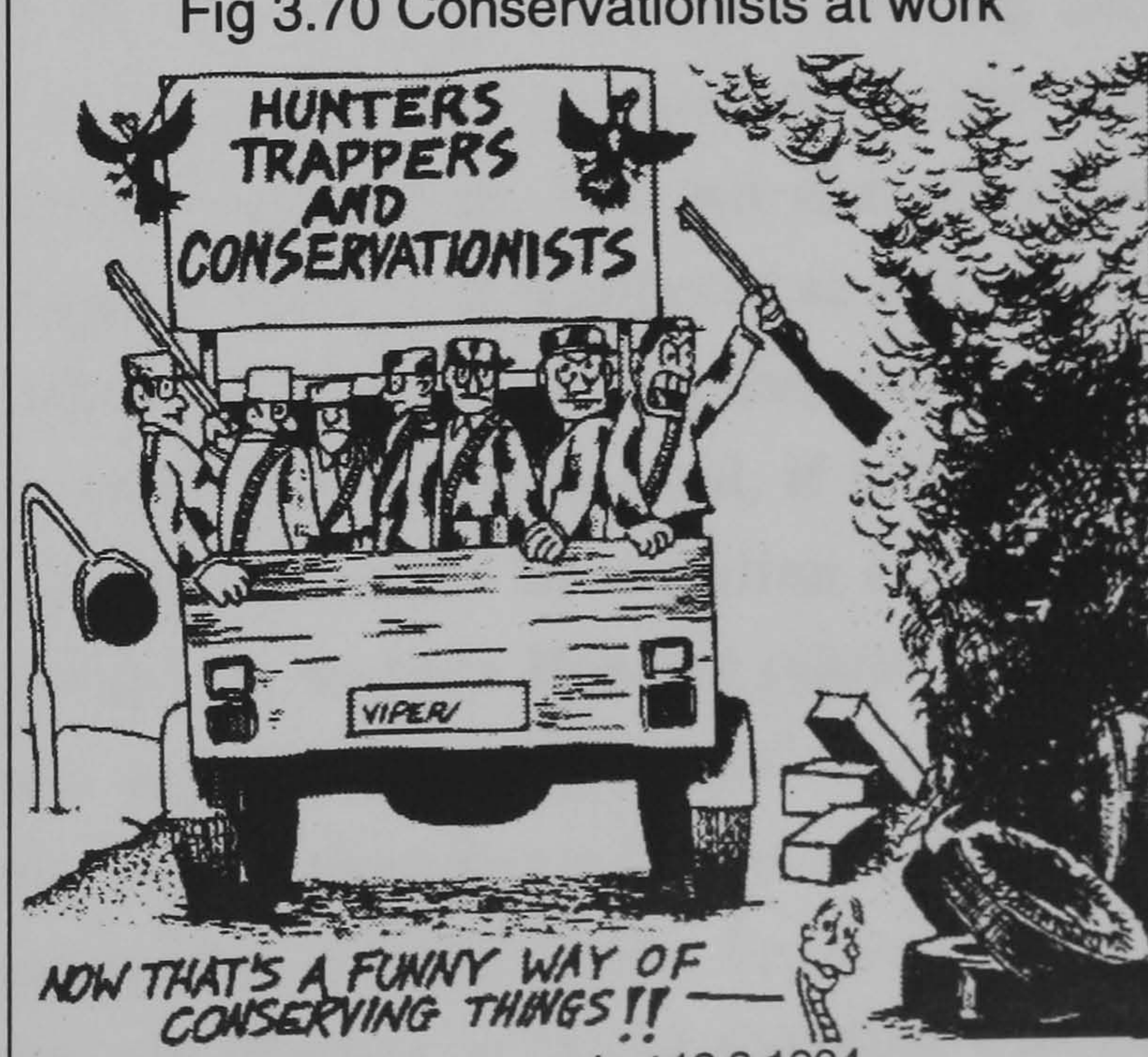
Fig 3.69 Wrong target

Source: *The Malta Independent* 23.1.1994

Fig 3.68 Rambo tactics

Source: *The Times* 12.3.1994

Fig 3.70 Conservationists at work



Source: *The Malta Independent* 13.3.1994

A cartoonist was inspired by some of the placards carried during the hunters' demonstrations and took licence to fuse together events which were happening at the time, when there were persistent rumours that hunters were about to form their own political party and contest the general elections (Fig 3.71). The connections between hunting and politics are further discussed in the Chapter 5, which deals with hunting and the local institutions.

Fig 3.71 Might is right

Source: *The Sunday Times* 13.3.1994

MAN, BIRDS AND PROVERBS

Proverbs, being popular sayings, are often a source of information tapped by anthropologists, ethnographers, historians and students of other disciplines. Proverbs can provide information about behaviours and customs, some of which may be long lost. Thus it would be opportune to look at Maltese proverbs and analyse the relationship between humans and birds. The earliest collections of proverbs of De Soldanis of 1750 (Gatt 1984) and Vassalli (1828) list nine proverbs which mention birds. Of these, only two are related to trapping and one to the "taking" of plover. The proverbs about bird trapping imply the use of vertical nets which were set and left unattended. As stated earlier, trapping with clap-nets, although known to exist in the mid 1700s, became widespread over the past forty years.

The contemporary works of Aquilina (1972) and Manduca and Mifsud (1989) list 62 proverbs which mention birds. Of these, 16 are related to hunting and trapping. As with the earlier collections, most proverbs are metaphoric, the rest are related to weather and a few deal with migration. The fact that proverbs related to hunting are absent from the earliest works is significant as although it does not necessarily mean that they did not exist, the fact that they escaped the authors' attention signifies that they were not commonly used, if indeed they existed at all. In all probability, the proverbs listed by Aquilina (1972) and subsequent works came into being during this century. Hunting related sayings are still being currently coined. Some survive, and some are invariably lost, however those which are written down, even if they are no longer used, survive at least in print. A cartoon published in the monthly paper for shooters and trappers recently featured two hunters, one of whom is telling the other that he had invented a new hunting-related proverb *"Il-Hadd fil-ghaxija, igri x'hin tara pulizija"* meaning: on Sunday afternoons, run away as soon as you see a policeman (*Il-Passa* 1996a). The 'saying' is not a proverb one hears everyday, but has been originated as a result of the 1993 regulations which made illegal hunting on Sunday afternoons.

Without any exception, the proverbs which speak of or imply finch trapping, refer to the autumn migration as trapping of finches in spring is another recent development (Joe Attard pers. comm., Fenech 1992). The proverb which states that "when you hear the bee-eater pack your nets and go home" is related to turtle dove trapping, as bee-eaters appear at the end of the spring migration of turtle dove. Azzopardi (1985) lists a number of "proverbs", most of which are not found in any of the major works about proverbs. It may be that these are not really proverbs, but sayings which were coined and may have been used is restricted circles. A list of hunting related proverbs with a translation into English is found in Tables 3A.2 -3.A7.

Of saints and men

The calendar of saints is a calendar whereby saints's feast days provided points of reference with certain days of the year. Shooters too made use of such calendar and there are a number of dates which are linked with shooting and trapping. Aquilina (1972) and Azzopardi (1985) list a number of sayings associated with saints and birds. According to this calendar, it was believed that redwings appeared between 25 January and 10 February, feasts of St Paul. The feast of St Gregory on 12 March marked the start of quail shooting, while the nightjar appears on the 19 March, feast of St Joseph. The feast of the Annunciation on the 25 March saw the departure of the skylark and the arrival of the short-toed lark. The first migration of turtle doves took place on 23 April, feast of St George. The second migration took place on the feast of the Holy Cross on 3 May, while the third migration took place on 12 May, the feast of St Philip. According to the Saints' calendar, turtle doves could still be seen until the *Imnarja* — the feast of St Peter and St Paul, celebrated on 29 June. It was said that in autumn, turtle dove migration started on 8 September, the feast of Our Lady of Victory, while our Lady of Sorrows on the 15 September saw the departure of the short-toed lark and brought the skylark. Another saying went that on St Michael's day (29 September), the skylark appeared. According to the Saints' calendar, finch trapping started on 16 October, the feast of St Theresa and by St Leonard's day (6 November), it is difficult to trap chaffinches. All Saints' Day on 1 November brought thrushes, while St Catherine on the 25 November marked the end of the season for woodcock. Christmas day marked the end of rabbit shooting. In a study about bird catching in Italy, Bondietti noted that the Italian shooters have a similar calendar in Italy too (Bondietti 1974).

It is worth noting that in the sayings relating migration to feasts of certain saints, there is often a conflict of dates of departure and arrival of migrants. According to sayings, there were three migrations of turtle doves in spring: on 23 April, feast of St George, on 3 May, feast of the Holy Cross and the third migration of turtle doves occurs on the feast of St Philip, celebrated on the 12 May. Yet another proverb says that turtle doves may be seen until the feast of Our Lady of Pompei, celebrated on 8 May, while another proverb says that turtle doves can be seen until the feast of St Peter and St Paul, celebrated on 29 June. Two other conflicting sayings are related to the migratrion of golden plover: while one states that the full moon of November is the best time for plovers, another says that one should not expect to see plovers before 15 December. In the calendar of saints, there are two dates for the arrival of the skylark: one is the feast of our Lady of Sorrows on the 15 September, while another saying gives the date of the arrival of the skylark a fortnight later, on St Michael's day, celebrated on 29 September.

The origin of such sayings is not known, but although they were not recorded by compilers of proverbs and other works in the past, this does not automatically imply that they did not exist. It may well be that their use was restricted so much that unless one was a hunter or trapper, one would not get to know them. What is pertinent to note is that the calendar of saints refers only to species considered as 'game' or rather edible and some sayings refer to the opening and closing of hunting seasons which are shorter than what shooters and trappers lobby for today. It is also worth noting that there is no reference to trapping in spring.

Of saints and legends

Apart from the calendar of saints, there is another link between hunting and religion. As discussed in the first chapter, there are religious legends linked to hunting, although these legends often emerged many years after the death of the saint around which the legend centres. In Malta too there is one such legend which is interpreted as associating religion with hunting. An apparition of the Virgin Mary to a hunter is said to have taken place before 1452, but the legend about it was written about 220 years later by Fr. F. M. Azzopardo. One must point out that the legend, which talks about a dream and not an apparition, is recorded in Azzopardo's manuscript of 1670.

The legend goes that two noble youths, who were also hunters, left their houses at Mdina and went hunting as usual. When they arrived at the place where the hallowed cave is found, they saw a rabbit, which they tried to hunt. The rabbit dodged the hunters and their dogs by going into a hole in the cave. Both hunters did their best to make the rabbit re-emerge, but with no success. One of the hunters gave up and left, while the other decided that he should catch the rabbit and went into the cave. As he was very tired, he lay down to rest. The other hunter waited for him at the usual place where they used to meet to go home together, but he waited in vain. He went looking for him at his parents' house, but he was not there. They were very worried and after he failed to return after three days, they thought that he had died. It so happened that after fifteen months, while the other shooter was passing in front of the cave, he saw his friend walking out of the cave. At first he thought it was a ghost or an illusion, but he soon realised that it was his friend he was seeing. He was surprised to hear him say that he had slept for a few hours when he knew he had been missing for fifteen months. He was even more surprised to hear that he had seen a noble looking well dressed lady holding a child. And this vision made him feel certain sweet feelings and he could not but conclude that the lady was the Blessed Virgin Mary, mother of God (Nastasi and Fsadni 1957). After the 'apparition', the Maltese placed an image of Our Lady in the crypt, and later the Dominicans decorated the walls with various paintings. The original paintings had been destroyed by dampness through time. The mosaic medallions which are in place include one of Our Lady and a sleeping hunter. They are the work of a Maltese artist and were made at the turn of this century (Fsadni 1980).

Like most legends, this legend raises some questions as to its credibility. It is doubtful how one can sleep for fifteen months without nourishment and remain alive. But if one were to attribute this to some divine intervention, one could still question the legend on other grounds. Why, for instance, did the relatives of the hunter conclude that he had died when he did not return home after three days? Is it possible that the other hunter did not return to look for him in the small cave in which they had been together? Furthermore, what makes it more suspect is the fact that the legend is without any message and, as mentioned before, the legend is about a dream, not an apparition. Some shooters maintain that Our Lady of the Grotto is one of their patron saints because it is claimed that there was an apparition to a sleeping shooter. One can also argue that the shooter was made to sleep so that the rabbit could escape death at the hands of the hunter — in which case, one can also interpret the legend as one for the protection of nature.

Conclusion

Although birds have attracted the attention of the early Maltese, as attested by the bird pendants and motifs found in some archaeological sites, hunting seems to have been an unimportant activity as it is unrecorded in Maltese prehistoric artifacts. Prehistoric peoples could not have depended only on hunting as they would have faced extinction with the animals they hunted. A number of place names bearing names of birds are of pure Semitic origin indicates that these names were coined during the Arab rule sometime between the ninth and 13th centuries. These names show some form of relationship with birds, which does not necessarily imply hunting since some of the bird names pertain to birds, such as swallows, which could not be easily hunted at the time they were coined.

The pastimes of hunting and trapping are fundamental to those who practise them. Children are socialised into the hunting fraternity from their early days. In rural areas, up to half the males may be actively involved in such pastimes. Although hunting is more a "working class" pastime, it cuts across the board and a kind of brotherhood exists. Hunters and trappers often meet in particular village bars to talk about their favourite pursuit. It has been argued that the fact that hunters speak with uninhibited delight when talking to their peers while they talk with equivocation when speaking to non-hunters, shows a certain inner feeling of guilt about the activities. It has also been shown that the sexual innuendoes and metaphors of power ascribed to hunting abroad have various parallels in the Maltese hunting scene: bird names of traditional game species are female while locally manufactured cartridges too emphasise the element of "power". A unique aspect of some Maltese cartridges is that they sport names of missiles.

The social aspects of hunting discussed in this chapter illustrate that while hunting and trapping as activities are important for those who practice them, there are few traces of them in the national culture. This view is sustained by the lack of mention of hunting in both 'popular', as well as 'intellectual' culture. The reference to hunting in some of the popular rhymes is incidental and it is almost certain that hunting is mentioned simply because the word rhymed, not because it had any significance to the meaning of the rhyme itself. The reference to hunting in various folk tales hardly ever has any local flavour and whenever hunting is mentioned, the reference is not of Maltese origin as there are various topographical and other elements which show that the tales are not of Maltese origin. The oral stories sometimes recounted by hunters about various hunting feats or anecdotes are all recent in origin and these die with their narrators. There are no 'tales' of any national significance which most hunters know about.

There are no noteworthy representations of hunting in local art. Hunters are conspicuous by their absence in Maltese art while other occupations, such as fishing, abound. This indicates that hunting was not perceived as an important activity. While in Malta there are hardly any forms of literature and art from the romantic movement, which might have brought the Maltese closer to nature, on the other hand, there are no works in praise of hunting. The trend since the birth of the conservation movement in the 1960s has been first to show compassion for the migratory birds, while literature and art since the 1980s do not simply move away from referring to hunting and trapping, but actually condemn them.

It is significant to note that cartoonists, who have focused their attention to hunting practices more than other writers or artists, have never designed a pro-hunting cartoon. It is also interesting to recall that even the monthly newspaper for hunters did not carry any pro-hunting cartoons. Most cartoons poke fun at hunters and ridicule hunting. Some highlight their impact on politicians. An analysis of the proverbs related to birds and hunting illustrates a hunting ethic which has been lost. The defined hunting seasons in proverbs are not adhered to and the birds considered "fair game" have increased from those named in the proverbs. Hunting has changed from a food procurement activity to a purely leisurely one. Hunting is no longer an activity taking place in one's free time but rather an activity for which time is made available.

The trend of thought of this and the following two chapters is to illustrate first the thoughts about hunting through examining literature, art and popular culture; then a discussion on hunter demography, including the increase in the number of hunters and trappers and then a discussion on hunters and the local institutions, particularly the influence of hunters on local politics. The following chapter discusses aspects of hunter and trapper demography and throws light on the trend in hunting activity through an analysis of changes in hunting licences and population during this century as well as a discussion on future trends based on age structure of hunters and trappers paying the relative licences during 1995.

Chapter 4 Aspects of the demography of the hunting and trapping population

Introduction

As all the social aspects discussed in the previous chapter are about hunting and trapping, it would only be pertinent to discuss those who indulge in the activity itself: hunters and trappers. A distinction is being made between trappers and hunters as although a number of trappers also carry guns with them, trapping as an activity differs substantially from hunting as trappers set up nets and try to capture birds alive. Most trappers catch finches, which they keep as song birds and some try to breed them. A small number of trappers trap golden plovers in winter while in spring, a number of trappers trap quails and turtle doves. Other birds such as starlings and thrushes are caught in winter. While trappers catch birds to keep them in cages as song birds, hunters shoot birds either for the pot or to have them stuffed and mounted for collection purposes.

To be able to understand better the sphere of influence of hunting practices, a detailed investigation of hunter demography including the rate of growth of hunters in the Maltese Islands, is warranted. This will not only put into context the discussion about the large density of hunters already discussed in Chapter 2, but will also help one understand better the relationship between hunting and the local institutions discussed in the next chapter.

The demography of hunters and trappers has never been studied, even though such studies are essential elements of any decision making process. In this chapter, the number and distribution of hunting licences are analysed and comparisons are made to the population of the Islands. At village level, the number of licensed hunters is compared to the village population and to the male population in respective villages. Age structures of hunters in key villages are plotted and discussed with a view to obtain indications on the future of hunting within the next generation. Hunting licence statistics quoted support the theory that the recent growth of hunting licences is not related to the growth of the population. This implies that many of the new hunters do not come from families with a hunting ancestry. This, in turn, might be one of the factors why hunting practices changed from hunting for the pot to trophy hunting.

A number of references to hunting in literature reinforce the idea that at the turn of the century, hunting was practised mostly by people from the upper classes of society. In a satirical novel written in 1930 describing the social and political situation at the the time, when many Maltese were emigrating to the United States hoping to make a better living there, on the very first page of the novel one comes across a passage with one of the characters saying: "I'll get the hunting licence, buy a muzzle loader to carry around on my shoulder and start hunting duck and quail, like Damajju, the dentist of Hamrun" (Mamo 1983). The man is discussing his future after making money in America and returning to Malta. In one of a series of short stories compiled by Dun Xand Cortis between 1856 and 1916, there is a similar allusion to hunting by well-to-do people. A village lad sought a lawyer's help when he landed himself into trouble after selling the same pig to different butchers. As he had no decent clothes with which to appear in court, he asks the lawyer to lend him "one of his jackets, even one which he uses for hunting" (Mifsud 1991 p.4). People who did not have jackets were perceived as hailing from lower classes, and an expression *"ta' bla glekk"* literally means "those without a jacket" but was used to describe people from lower classes (Aquilina 1987). The way hunters are dressed as depicted in various landscapes shown in Figure 3.11 to Figure 3.14 in the previous chapter also confirm that hunters mostly hailed from upper classes.

The increase in the number of shooters can be attributed to the rising standard of living. There is a correlation in the increase in the number of hunting licences and the Gross Domestic product (GDP), which is discussed in detail in Chapter 6, dealing with economic aspects. A better standard of living meant better salaries, which brought guns and cartridges within everybody's reach. Better conditions of work such as the concept of the 40 hour week introduced in the 1970s and more holidays gave people free time. Shooting provided many with a manly activity which kept them occupied during their spare time and gave them social status within their respective peer groups. The proliferation of cars also made it easier for people to go to areas one could hardly reach on foot.

As the late Albert Gauci, then secretary to the Shooters' Association wrote, "the real curse came with the ever-increasing high standard of living which brought within reach of everyone gunpowder and guns before minds had evolved sufficiently with the necessary intelligence in the proper exercise of this sport" (Gauci 1974b) and "the coming of the automobile brought an upheaval in the sport of shooting and brought it within reach of almost everybody. Out of a sport which required perseverance and stamina it made a game for kids" (Gauci 1973c). In 1902, there were 1,709 hunting licences, or 9.2 licences per thousand of population. The number had increased to a mere 5,138 by 1968, or 19.2 licences per thousand of population. The average increase over the 66 year period was of 51 licences per year. The number of licences started to soar in the 1970s, when Malta experienced significant changes in the standard of living. By 1981 there was an average increase of 447 licences per year and the number of licensed shooters rose to 10,953, or 33.3 licences per thousand of population. In 1989, the number of shooting licences stood at 16,133, or 47.3 licences per thousand of population — an average increase of 647 licences per year (Reports on the workings of Government Departments). These figures are represented in Table 4.1.

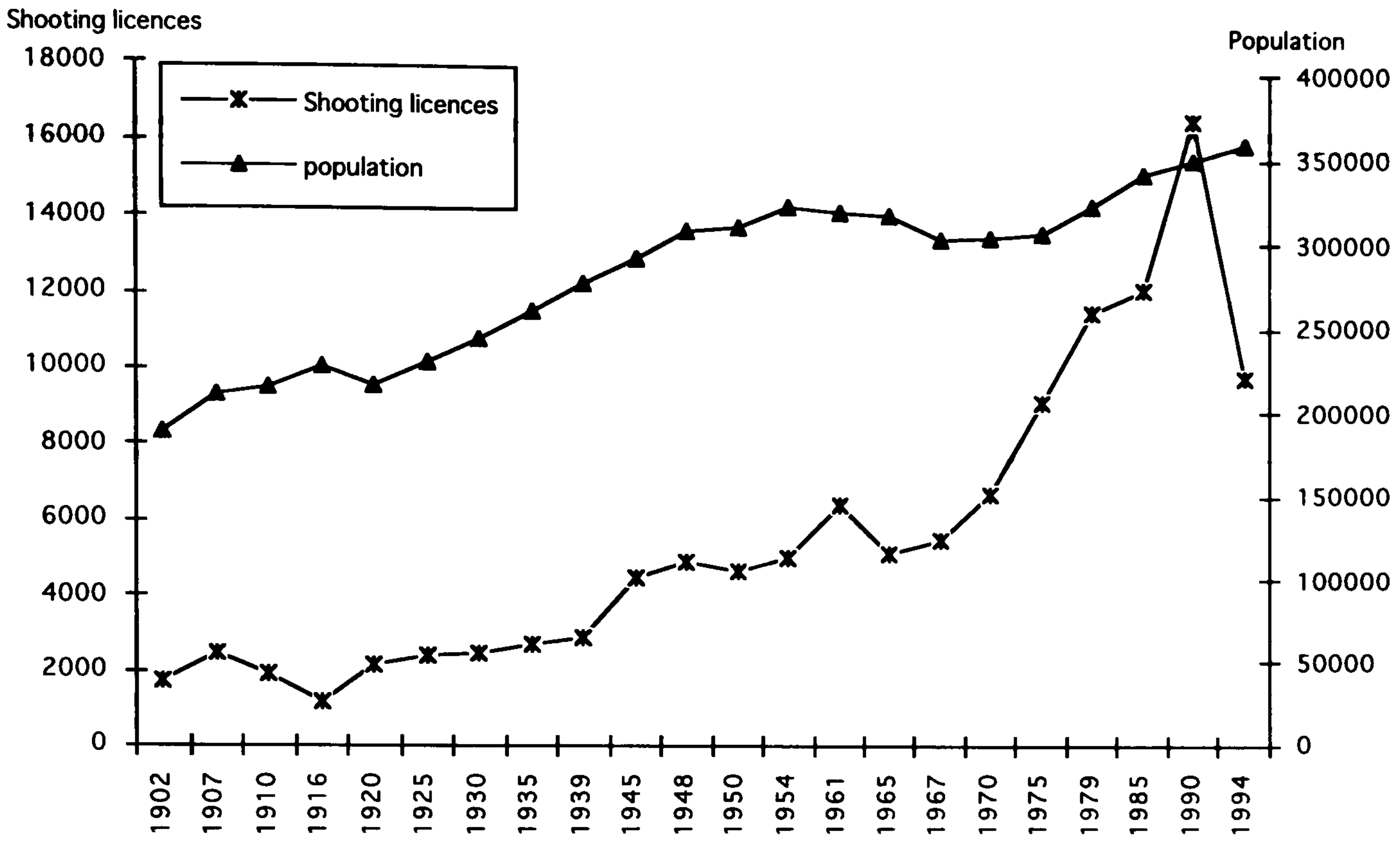
Table 4.1
Hunting licences and population figures for the years 1902-1994

Year	Number of hunting licences	Population	Licences per 1000 of population	Licences as a percentage of population
1902	1,709	185,000	9.2	0.9
1907	2,442	206,689	11.8	1.2
1910	1,900	211,000	9.0	0.9
1916	1,169	223,741	5.2	0.5
1920	2,159	212,000	10.2	1.0
1925	2,384	226,000	10.5	1.1
1930	2,472	240,000	10.3	1.0
1935	2,727	256,300	10.6	1.1
1939	2,878	272,500	10.6	1.1
1945	4,510	288,700	15.6	1.6
1948	4,960	305,000	16.3	1.6
1950	4,716	307,000	15.4	1.5
1954	5,069	319,000	15.9	1.6
1961	6,471	317,400	20.4	2.0
1965	5,173	315,800	16.4	1.6
1967	5,548	302,218	18.4	1.8
1970	6,801	302,820	22.5	2.2
1975	9,226	306,551	30.1	3.0
1979	11,640	322,535	36.1	3.6
1985	12,286	340,900	36.0	3.6
1990	16,760	350,000	47.9	4.8
1994	9,923	360,000	27.6	2.8

Source: Reports of the workings of Government departments

As Figure 4.1 shows, the increase in the number of licences had little to do with the increase in population. The growth of both hunting licences and population were similar up to the late 1960s. But from the 1970 onwards the rate of growth in the number of hunting licences was far greater than the increase in population.

Figure 4.1
Population and shooting licences 1902-94



Source: Report on the workings of Government Departments, Demographic Review

As the results summarised in Table 4.2 illustrate, the population growth between 1985 and 1990 was under five per cent, the increase in the number of shooting licences was of almost 38 per cent. The biggest percentage increase was in Gozo, where the number of shooting licences practically doubled when the population increase was over seven per cent.

Table 4.2
Percentage increase in population and shooting licences between the years 1985 — 1990

	Total population	Male population	Shooting licences
Malta	4.5%	4.7%	27.2%
Gozo	6.7%	7.6%	92.1%
Overall	4.7%	4.9%	37.7%

Source: adapted from hunting licence statistics and Demographic review of the Maltese Islands

Like shooting, finch trapping too came about and increased as a result of a better standard of living. Trapping was even more restricted that shooting as besides having little time to spare to indulge in shooting and trapping, every patch of soil was cultivated. Thus space for trapping sites was limited to areas which could not be cultivated as they were too rocky or not easily accessible. Today trapping sites can be found all over the Islands and quite a large number of trapping sites are situated on land which could be tilled. As in the case of shooters, the construction of new roads and the availability of vehicles capable of driving on rough terrain enabled trappers to reach areas which would be practically impossible to reach on foot, carrying all the trapping gear. The number of trapping sites spiralled during the last forty years. In places such as Ghar Lapsi, in the south west, where trapping sites practically touch one another, there were a mere three trapping sites in the mid-1950s (Victor Mamo pers. comm.). In Gozo there were less than 100 finch trapping sites in 1944, while in 1991 there were over 1,600 (Fenech 1992). Lack of knowledge about birds left trappers in the dark about when birds migrated. The few trappers who lived then did not know that finches migrated in spring as well as in autumn and trapped finches only in October (Joe Attard Tabone pers. comm.). Even the proverbs discussed in the previous chapter show that trappers indulged in their pastime only in autumn. One of the proverbs states that finch trapping starts on the feast of St Theresa, which falls on 16 October. Three proverbs indicate that finch trapping came to an end in November: two proverbs associate St Leonard's day (6 November) with the end of the trapping season, one saying that on St Leonard's day, the chaffinch does not rest its feet on the ground while the other, more directly states that St Leonard's day marks the end of the trapping season. Another proverb states that on St Martin's day (11 November), the nets are stored away while another saying goes that one puts away the cages in the cellar on St Catherine's day (25 November).

As Table 4.3 shows, the number of trappers seems to be more linked to the areas where trapping sites are common and intensive trapping takes place. The Western and Southern regions in Malta and the island of Gozo had the largest number of licensed trappers and the highest concentration of trapping sites in 1990. The Southern region had the highest concentration with 25.2 trapping sites per km^2, closely followed by Gozo, which had 24.7 trapping sites per km^2. However, Gozo had some 300 more trapping sites that the Southern region. In the Western region, there were 1,172 trapping sites, which is equivalent to 16.5 trapping sites per km^2. The Harbour region was the only region which had more licensed trappers than trapping sites. This region is a heavily built up area with few open spaces. This implies that the trappers living in this region trap birds in other localities on the Islands.

Table 4.3
Number of trappers and trapping sites per region

Region	Area km2	Number of trapping sites in 1990	Trapping sites/km2 in 1990	Number of trappers in 1990	Number of trapping sites in 1995	Trapping sites/km2 in 1995	Number of trappers in 1995	% change in number of trappers	% change in number of trapping sites
Harbour	13.7	59	4.3	160	65	4.7	185	15.6	9.2
Central	52.6	414	7.9	366	317	6.0	409	11.7	-30.6
Western	71	1,172	16.5	966	1,368	19.3	493	-49.0	14.3
Northern	55.2	643	11.6	121	759	13.8	41	-66.1	15.3
Southern	53.2	1,343	25.2	399	1,576	29.6	538	34.8	14.8
Gozo	67.1	1,658	24.7	392	1,939	28.9	313	-20.2	14.5
Total	313	5,289		2,404	6,024		1,979		37.5
average	52.1	881.5	16.9	400.7	1,004.0	19.3	329.8	-17.7	6.3

Sources: trapping sites counted from aerial surveys, Planning Authority. Trapping licence statistics from Malta Police.

As trappers usually have their trapping sites either within the region in which they live or in a nearby region, the surplus number of trapping sites indicates that the number of trappers paying a licence does not reflect the number of trappers. There are over twice as many trapping sites as there were were trappers in 1990. Although one might argue that a trapper may have more than one trapping site in different localities, and he would use the one which is most suitable according to the weather conditions prevailing, this is the exception, not the rule. The situation in Gozo is a clear example of this as while only 392 paid a trapping licence in 1990, there were over 1,600 trapping sites, over four times the number of licensed trappers.

The situation in 1995 exhibits a similar pattern. In the Western region, the number of trappers who paid a licence was 493 (showing a 49 per cent decrease in the number of trappers who paid the licence) while the number of trapping sites increased. While the situation in Gozo remained more or less the same, the overall situation showed that while there were six times as many trapping sites as there were licensed trappers.

Although the figures of the number of licensed trappers in 1995 show a decrease of 425 trappers over the 1990 figures, the number of trapping sites increased by 735 during the same period. The decrease in the number of trappers and the increase in the number of trapping sites may only signify that a large number of trappers do not pay a trapping licence. This may partly be the result of the introduction of a close season for trapping in spring in 1994, which has now been changed and trappers may again trap finches in spring. The increase in the number of trapping sites may only be attributed to an increase in the number of trappers and as Table 4.3 shows, there has been a substantial increase in the number of trapping sites even where there was a significant drop in the number of trappers who paid the licence.

DISTRIBUTION OF HUNTERS

Since hunters paid a single hunting licence before 1994, it is easier to show trends of hunting licence ownership before that time. The hunting regulations of 1993 (Legal Notice 143-6 of 1993) and the subsequent amendment to the Police Licences Act in November 1993 (Legal Notice 151 of 1993) changed completely the hunting licence system. There are now seven different types of hunting and trapping licences (Table 4.4), whereas before 1993, hunters who paid a licence "to carry a firearm for sporting purposes" could hunt birds and rabbits during all the seasons permitted by law while trappers paid a single licence (Legal Notice 68 of 1980). Although official statistics for the number of licences are available for practically every year since 1902, the number of licences paid by hunters in each town and village is available only for a limited period: statistics for shooting licences are available from 1983 to 1991 and data for trapping licences from 1987 to 1992. Data for shooting licences in 1992 is available for every 'Police district', but is not broken down for each village, while the data for the number of hunters per village in 1993 and 1994 is not available.

Table 4.4
Types of hunting licences issued in 1995

Licence	Purpose of licence
A	For the hunting of birds on land between 1 September and 31 January.
B	For the hunting of quail and turtle dove between 1 April and 20 May.
C	For the hunting of birds from seacraft up to 3 km offshore between 1 November and 31 January.
D	For the hunting of rabbit between 1 September and 31 January.
E	For the trapping of finches between 1 September and 31 January, and between 19 March and 31 March.
F	For the trapping of quail and turtle dove between 10 April and 20 May.
G	For the trapping of rabbit by net, dog and ferret between 1 June and 31 December.

Source: Legal Notice 151 of 1993, Legal Notice 45 of 1996

Data for the various hunting licences per village in 1995 is available but incorporates only the licences paid between January and September 1995. However, these statistics, although partial, have been used as the data is broken down by age for every licence in every village and this may provide an insight into the trends of hunting licence ownership over the next few years. But before discussing the number of hunters and trappers in different age categories, it is worth looking first at the fluctuation of hunting licences in villages around Malta and Gozo the period 1985-1990 as these years saw the largest growth rate in the number of hunting licences granted. Tables 4.5a-d give the number of hunters per village in Malta and Gozo, the population and male population in each village as well as the number of shooting licences expressed both as a percentage of village population and male population as well as per 1,000 of population. As the figures show, there has been a marked increase in the number of licences in most villages and a minor decrease in others over the period reviewed and as various graphics discussed later will show, the increase in the number of hunters does not correspond to the increase in the male population of the respective villages.

The number of hunting licences reached a peak in 1990 and has since began to ebb off. It is difficult, however, to do a comparative study of the fluctuations in hunting licences per village over a long period of time, because, as stated earlier, data regarding the number of hunters per village is not available after 1990 and the structure of the hunting licences has changed. However, a discussion about the fluctuations in the five year period between 1985 and 1990 may help shed some light on the situation. If one were to divide Malta in a number of regions which group together villages both in terms of geographical affinity as well as similar geographical characteristics, certain patterns begin to emerge. For the purpose of this exercise, the island of Malta has been divided in five regions while Gozo is discussed as one whole region. The regions shown in Figure 4.2 are divided as follows: **Region 1**, the towns and villages forming the urban conurbation around the Grand Harbour which occupy an area of 13.7 km^2: Valletta, Floriana, Marsa, Paola, Hamrun, St Venera, Cospicua, Senglea, Vittoriosa, Kalkara, Sliema, Gzira, Msida, G'Mangia and Pieta. **Region 2**, the villages forming the central region in Malta, covering 52.6 km^2: Attard, Lija, Balzan, B'Kara, Naxxar, Mosta, Gharghur, St Julians and San Gwann. **Region 3**, the villages forming the west of Malta which have a collective land area of 71 km^2: Qormi, Zebbug, Siggiew, Dingli, Rabat and Mdina. **Region 4**, the villages forming the north, whose boundaries contain 55.2 km^2: St Paul's Bay, Mgarr and Mellieha. **Region 5**, the villages forming the south of Malta, whose land coverage amounts to 53.2 km^2: Zabbar, Fgura, Tarxien, St Lucia, Luqa, Gudja, Ghaxaq, Mqabba, Zurrieq, Safi, Kirkop, B'Bugia, M'xlokk, M'scala and Zejtun.

Table 4.5a

Comparative figures of population and hunting licences in the Harbour and Central regions during the years 1985 and 1990

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
MALTA															
Harbour region															
Valletta	9302	9199	-1.1	4403	4368	-0.8	18	26	44.4	0.4	0.6	0.2	0.3	1.9	2.8
Floriana	3290	3220	-2.1	1622	1575	-2.9	10	15	50.0	0.6	1.0	0.3	0.5	3.0	4.7
Vittoriosa	3540	3542	0.1	1782	1791	0.5	29	26	-10.3	1.6	1.5	0.8	0.7	8.2	7.3
Cospicua	7692	7895	2.6	3833	3936	2.7	104	89	-14.4	2.7	2.3	1.4	1.1	13.5	11.3
Senglea	4110	4224	2.8	2044	2080	1.8	24	18	-25.0	1.2	0.9	0.6	0.4	5.8	4.3
Kalkara	2057	2126	3.4	1026	1057	3.0	92	72	-21.7	9.0	6.8	4.5	3.4	44.7	33.9
Marsa	7927	7994	0.8	3956	3991	0.9	93	187	101.1	2.4	4.7	1.2	2.3	11.7	23.4
Paola	11691	11912	1.9	5657	5777	2.1	168	339	101.8	3.0	5.9	1.4	2.8	14.4	28.5
Hamrun	13622	13697	0.6	6604	6627	0.3	84	233	177.4	1.3	3.5	0.6	1.7	6.2	17.0
St Venera	7785	8101	4.1	3751	3931	4.8	91	154	69.2	2.4	3.9	1.2	1.9	11.7	19.0
Msida/Ta'Xbiex	7983	6136	-23.1	3862	2975	-23.0	149	219	47.0	3.9	7.4	1.9	3.6	18.7	35.7
Gzira	8367	10454	24.9	4117	5150	25.1	468	136	-70.9	11.4	2.6	5.6	1.3	55.9	13.0
Sliema	13745	13542	-1.5	6528	6412	-1.8	243	117	-51.9	3.7	1.8	1.8	0.9	17.7	8.6
G'Mangia/Pieta	4318	4460	3.3	2149	2230	3.8	26	76	192.3	1.2	3.4	0.6	1.7	6.0	17.0
Total	105429	106502		51334	51900		1599	1707							
average	7530.6	7607.3	1.0	3666.7	3707.1	1.1	114.2	121.9	6.8	3.1	3.3	1.5	1.6	15.2	16.0

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
MALTA															
Central region															
Attard	5595	6045	8.0	2728	2970	8.9	102	200	96.1	3.7	6.7	1.8	3.3	18.2	33.1
Balzan	4619	4816	4.3	2238	2367	5.8	86	150	74.4	3.8	6.3	1.9	3.1	18.6	31.1
Lija	3010	3207	6.5	1457	1568	7.6	81	181	123.5	5.6	11.5	2.7	5.6	26.9	56.4
B'Kara	20187	21218	5.1	10012	10546	5.3	598	453	-24.2	6.0	4.3	3.0	2.1	29.6	21.3
Mosta	11978	12812	7.0	5872	6299	7.3	511	990	93.7	8.7	15.7	4.3	7.7	42.7	77.3
Naxxar	6310	6823	8.1	3215	3479	8.2	480	486	1.3	14.9	14.0	7.6	7.1	76.1	71.2
Gharghur	2259	2390	5.8	1158	1216	5.0	281	257	-8.5	24.3	21.1	12.4	10.8	124.4	107.5
San Gwann	7958	8516	7.0	4083	4364	6.9	241	274	13.7	5.9	6.3	3.0	3.2	30.3	32.2
St Julians	9728	10285	5.7	4832	5145	6.5	141	289	105.0	2.9	5.6	1.4	2.8	14.5	28.1
Total	71644	76112		35595	37954		2521	3280							
average	7960.4	8456.9	6.2	3955.0	4217.1	6.6	280.1	364.4	30.1	7.1	8.6	3.5	4.3	35.2	43.1

Table 4.5b

Comparative figures of population and hunting licences in the Western and Northern regions during the years 1985 and 1990

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
MALTA															
Western region															
Dingli	2028	2157	6.4	1032	1109	7.5	175	235	34.3	17.0	21.2	8.6	10.9	86.3	108.9
Mdina	409	414	1.2	187	189	1.1	10	15	50.0	5.3	7.9	2.4	3.6	24.4	36.2
Qormi	18223	19330	6.1	9068	9611	6.0	402	462	14.9	4.4	4.8	2.2	2.4	22.1	23.9
Rabat	12782	13192	3.2	6218	6449	3.7	919	1446	57.3	14.8	22.4	7.2	11.0	71.9	109.6
Siggiewi	5846	6212	6.3	2875	3063	6.5	237	460	94.1	8.2	15.0	4.1	7.4	40.5	74.1
Zebbug	9743	10325	6.0	4774	5088	6.6	753	589	-21.8	15.8	11.6	7.7	5.7	77.3	57.0
Total	49031	51630		24154	25509		2496	3207							
average	8171.8	8605.0	5.3	4025.7	4251.5	5.6	416.0	534.5	28.5	10.3	12.6	5.1	6.2	50.9	62.1

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
MALTA															
Northern region															
Mgarr	2186	2336	6.9	1111	1196	7.7	244	254	4.1	22.0	21.2	11.2	10.9	111.6	108.7
Mellieha	4388	4640	5.7	2192	2334	6.5	195	276	41.5	8.9	11.8	4.4	5.9	44.4	59.5
St Paul's Bay	4273	4717	10.4	2160	2365	9.5	180	241	33.9	8.3	10.2	4.2	5.1	42.1	51.1
Total	10847	11693		5463	5895		619	771							
average	3615.7	3897.7	7.8	1821.0	1965.0	7.9	206.3	257.0	24.6	11.3	13.1	5.7	6.6	57.1	65.9

Table 4.5c

Comparative figures of population and hunting licences in the Southern region during the years 1985 and 1990

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
MALTA															
Southern region															
Zabbar	12835	13735	7.0	6490	6972	7.4	526	680	29.3	8.1	9.8	4.1	5.0	41.0	49.5
Fgura	8183	9070	10.8	4114	4554	10.7	128	280	118.8	3.1	6.1	1.6	3.1	15.6	30.9
Tarxien	6690	7088	5.9	3456	3516	1.7	183	150	-18.0	5.3	4.3	2.7	2.1	27.4	21.2
Sta Lucia	3202	3348	4.6	1651	1728	4.7	45	99	120.0	2.7	5.7	1.4	3.0	14.1	29.6
Luqa	5568	5633	1.2	2737	2788	1.9	280	660	135.7	10.2	23.7	5.0	11.7	50.3	117.2
Gudja	2157	2335	8.3	1042	1127	8.2	149	140	-6.0	14.3	12.4	6.9	6.0	69.1	60.0
Ghaxaq	3649	3843	5.3	1804	1914	6.1	187	204	9.1	10.4	10.7	5.1	5.3	51.2	53.1
Mqabba	2268	2349	3.6	1130	1170	3.5	111	127	14.4	9.8	10.9	4.9	5.4	48.9	54.1
Zurrieq	7963	8435	5.9	3912	4142	5.9	299	281	-6.0	7.6	6.8	3.8	3.3	37.5	33.3
Qrendi	2186	2319	6.1	1093	1151	5.3	107	143	33.6	9.8	12.4	4.9	6.2	48.9	61.7
Safi	1298	1381	6.4	617	658	6.6	60	235	291.7	9.7	35.7	4.6	17.0	46.2	170.2
Kirkop	1557	1744	12.0	771	884	14.7	86	97	12.8	11.2	11.0	5.5	5.6	55.2	55.6
B'Bugia	5593	5979	6.9	2797	2983	6.6	243	301	23.9	8.7	10.1	4.3	5.0	43.4	50.3
Marsaxlokk	2368	2539	7.2	1176	1280	8.8	119	138	16.0	10.1	10.8	5.0	5.4	50.3	54.4
Zejtun	11281	11952	5.9	5603	5937	6.0	441	467	5.9	7.9	7.9	3.9	3.9	39.1	39.1
Marsascala	1864	2159	15.8	963	1107	15.0	78	101	29.5	8.1	9.1	4.2	4.7	41.8	46.8
Total	78662	83909		39356	41911		3042	4103							
average	4916.4	5244.3	6.7	2459.8	2619.4	6.5	190.1	256.4	34.9	7.7	9.8	3.9	4.9	38.7	48.9
Total (Malta)	315613	329846	4.5	155902	163169	4.7	10277	13068	27.2	6.6	8.0	3.3	4.0	32.6	39.6

Table 4.5d

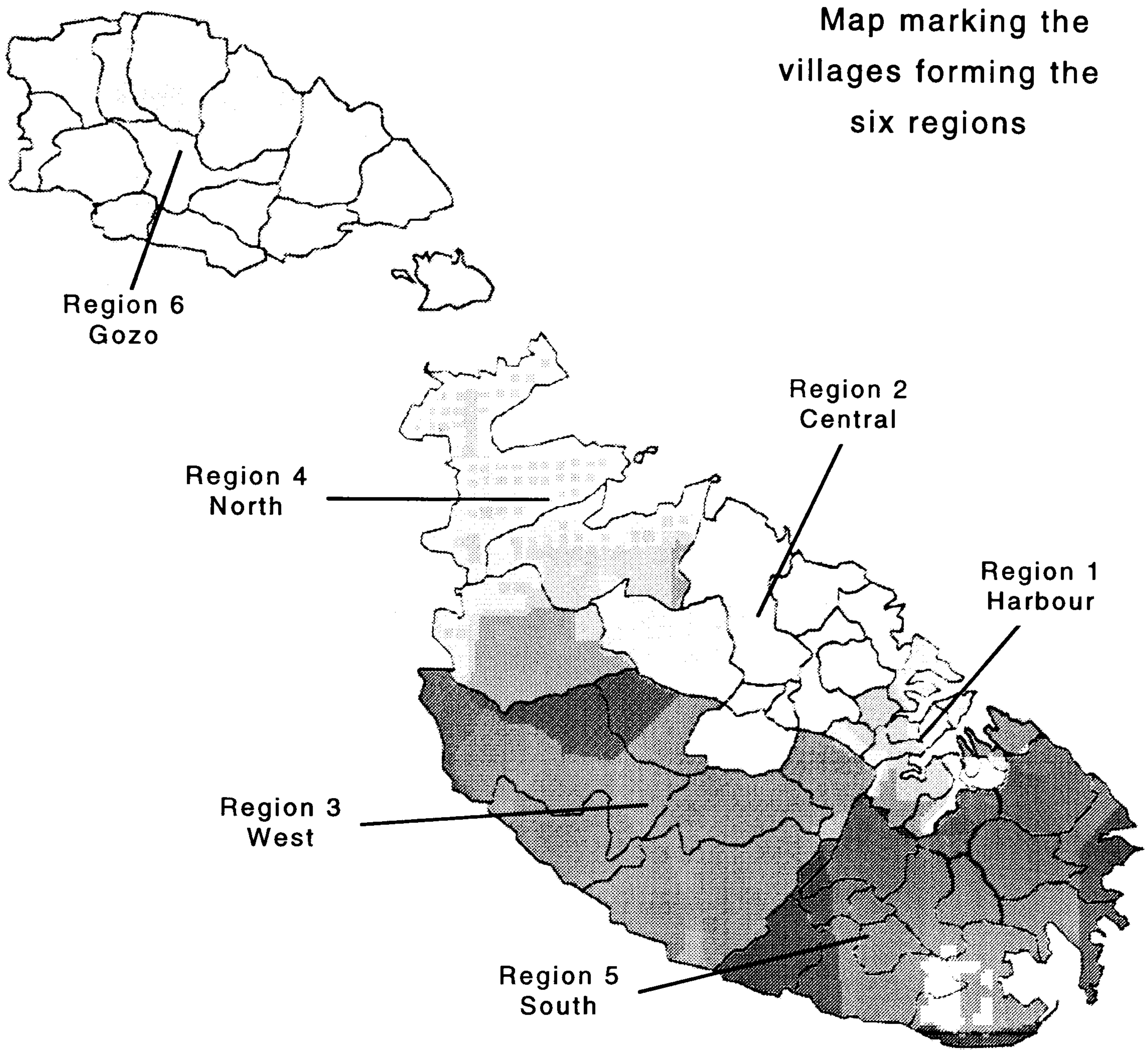
Comparative figures of population and hunting licences in Gozo during the years 1985 and 1990

Locality	Total population 1985	Total population 1990	% change	Male population 1985	Male population 1990	% change	Number of shooters in 1985	Number of shooters in 1990	% change	Hunters as a % of male population in 1985	Hunters as a % of male population in 1990	Hunters as a % of village population in 1985	Hunters as a % of village population in 1990	Hunters per 1000 of village population in 1985	Hunters per 1000 of village population in 1990
GOZO															
Ghajnsielem	1720	1790	4.1	856	888	3.7	82	211	157.3	9.6	23.8	4.8	11.8	47.7	117.9
Gharb	956	967	1.2	444	457	2.9	82	197	140.2	18.5	43.1	8.6	20.4	85.8	203.7
Ghasri	334	342	2.4	149	157	5.4	24	63	162.5	16.1	40.1	7.2	18.4	71.9	184.2
Kercem	1391	1442	3.7	679	725	6.8	190	220	15.8	28.0	30.3	13.7	15.3	136.6	152.6
Munxar	489	531	8.6	228	253	11.0	29	72	148.3	12.7	28.5	5.9	13.6	59.3	135.6
Nadur	3271	3402	4.0	1507	1614	7.1	364	767	110.7	24.2	47.5	11.1	22.5	111.3	225.5
Qala	1282	1272	-0.8	597	580	-2.8	147	274	86.4	24.6	47.2	11.5	21.5	114.7	215.4
San Lawrenz	504	517	2.6	243	246	1.2	62	99	59.7	25.5	40.2	12.3	19.1	123.0	191.5
Sannat	1299	1372	5.6	651	687	5.5	108	193	78.7	16.6	28.1	8.3	14.1	83.1	140.7
Victoria	5883	6932	17.8	2797	3320	18.7	352	600	70.5	12.6	18.1	6.0	8.7	59.8	86.6
Xaghra	3132	3209	2.5	1525	1575	3.3	307	577	87.9	20.1	36.6	9.8	18.0	98.0	179.8
Xewkija	2727	2819	3.4	1317	1360	3.3	158	360	127.8	12.0	26.5	5.8	12.8	57.9	127.7
Zebbug	1173	1180	0.6	574	583	1.6	83	185	122.9	14.5	31.7	7.1	15.7	70.8	156.8
Total	24161	25775		11567	12445		1988	3818							
average	1858.5	1982.7	6.7	889.8	957.3	7.6	152.9	293.7	92.1	17.2	30.7	8.2	14.8	82.3	148.1
Grand Total	810976.59	845821.84	4.3	403303.38	421432.75	4.5	27381.659	35660.873	30.2	6.8	8.5	3.4	4.2	33.8	42.2

Source: Census '85; Demographic Review for the Maltese Islands; Parliamentary Question 12242 Sitting 194, Parliamentary Questions 28508, 28509 Sitting 544,

Region 6, Gozo. With an area of 67.1 km^2, Gozo was treated as one region because the setting of Gozitan villages is very similar from the point of view of the amount of rural areas around villages and the availability of land for hunting in close proximity to all villages is practically similar to that in the other regions of Malta.

Figure 4.2
Map marking the villages forming the six regions



During the period under review, the harbour area was the region with the smallest increase in the number of hunting licences: the male population increased by just over one per cent while the number of registered shooting licences increased by 6.8 per cent. The area in question has the lowest rate of hunters per 1,000 of population in the Maltese Islands; there were only 16 hunters per 1,000 of population in 1990. On the other hand, Region 6, Gozo, experienced the highest increase where in spite of a 7.6 per cent increase in the male population, the number of shooting licences practically doubled. Hunters make up over 30 per cent of the male population in Gozo and almost 150 of every

1,000 Gozitans are hunters. As Table 4.5d shows, there are villages in Gozo where hunters accounted for 47.5 per cent of the males in 1990. The Southern region in Malta experienced a 26 per cent increase in the number of hunting licences while the male population increased by just 4.4 per cent. The Southern region compares well with the Central region in the percentage of males with a hunting licence. There were 8.6 per cent of the males with a hunting licence in the Central region while eight per cent of the males in the south were hunters in 1990. The growth rate in both the Central and Southern regions was also similar: the south experienced a 4.4 per cent increase while the Central region saw a 6.6 per cent increase. There were less hunters per 1,000 of population in the Central region than in the south, however. While in the south, hunters accounted for practically 66 persons per 1,000 of population, in the Central region, there were only 16 hunters for every 1,000 persons.

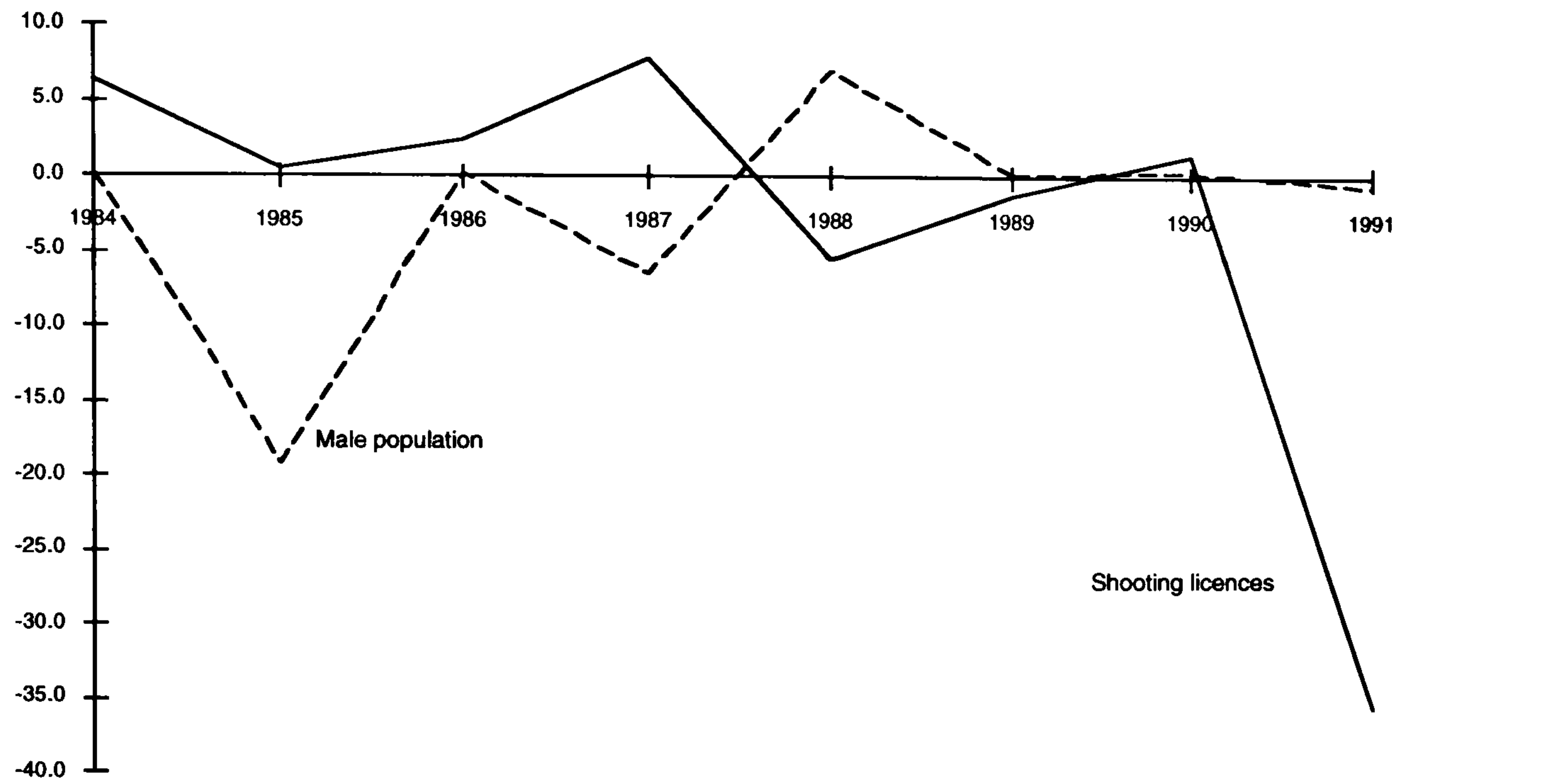
The Northern and Western regions had comparable growth rates in the number of hunters. While the number of males in the northern region increased by almost eight per cent, the number of hunting licences increased by almost 25 per cent while a growth rate of less than six per cent in the male population of the western region saw an increase of over 28 per cent in the number of hunting licences. The number of hunters as a percentage of male population in the Western region was 12.6 per cent while in the north it is 13.1 per cent. In both regions, hunters account for over 60 per 1,000 of population.

The increase in the number of hunting licences is hard to explain. While the five regions in Malta experienced an average increase of 27.2 per cent, when the male population increased by 4.4 per cent, the number of hunting licences in Gozo increased by over 92 per cent when the male population increased by 7.6 per cent, that is twelve times lower. The average increase in all the six regions is of 37.7 per cent while the increase in the male population was practically eight times lower. The age structure of the hunting population shows that the number of licence holders in the younger age groups is very small compared to middle-aged ones. This may imply that a large number of males who took up hunting during the past ten years were middle aged and may have either come from families where no one was a hunter or were returned migrants. The preliminary results of the 1995 Census notes that there has been "an influx of returned migrants pertaining to relatively old age groups" between 1985 and 1995 (Preliminary report of the 1995 census on population and housing 1996).

If one were to look at the changes in the male population and the number of shooting licences from 1983 to 1991, one will clearly see that the fluctuation in the number of hunting licences is not related to the changes in male population. As Figure 4.3 shows, although the number if hunters who paid the hunting licence in the harbour region decreased as the male population decreased between 1984 and 1985, and increased again between 1985 and 1986 as the male population increased slightly, the increases in the male population between 1988 and 1991 are not matched by a similar fluctuation in the number of shooting licences.

Figure 4.3

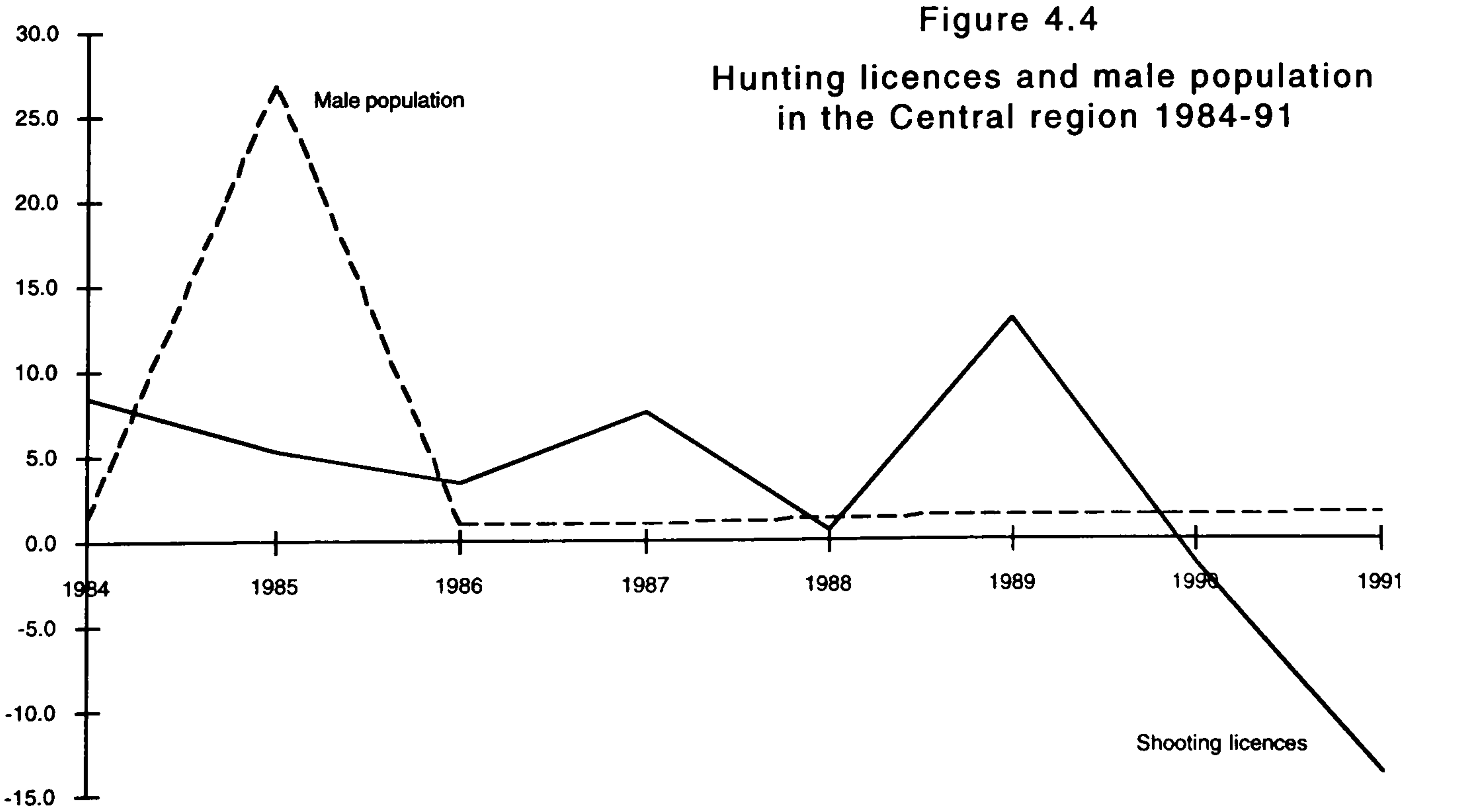
Hunting licences and male population in the Harbour region 1984-91



The results summarised in Figure 4.4 show the changes in the number of licensed hunters and the male population in the Central region. Here again, a sharp increase in the male population between 1984 and 1986 is accompanied by a decrease in the number of shooting licences. While the number of licence holders fluctuated from ten per cent to -15 per cent between 1986 and 1991, the male population retained a steady increase of about two per cent.

Figure 4.4

Hunting licences and male population in the Central region 1984-91



Figures 4.5, 4.6 and 4.7 illustrate the relationship between hunting licences and male population between 1984-1991 for the Western, Northern and Southern regions. The three figures portray similar traits in both hunting licence holders and male population. But the Western region sees a sudden increase of 15 per cent in the number of shooting licence holders while the male population increases by only about two per cent. Then, as the male population increases by 15 per cent, there is a marked decrease of ten per cent in the number of licensed hunters in the 1990s. In the Northern region, the increase in shooting licences is bigger than the increase in the male population between 1984 and 1989, except for a drop in 1987. But after 1989, the number of hunting licence holders dropped by three per cent while the male population increased by three per cent. In the Southern region (Figure 4.7), the patterns of increase in both male population and the number of hunting licence holders show similar traits between 1984 and 1989, when the male population soars to an increase of 80 per cent while the number of licence holders starts dipping.

Figure 4.5 Hunting licences and male population in the Western region 1984-91

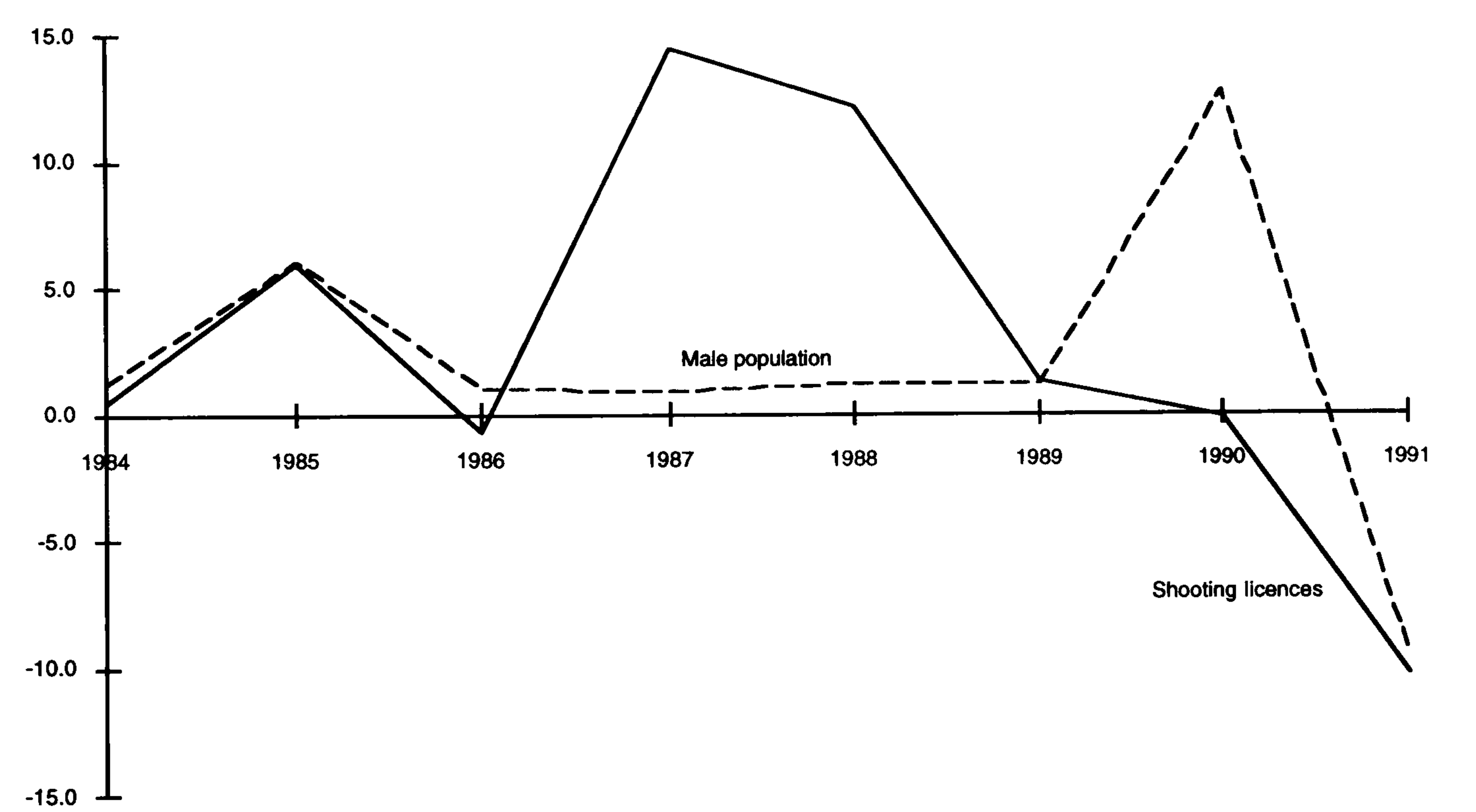
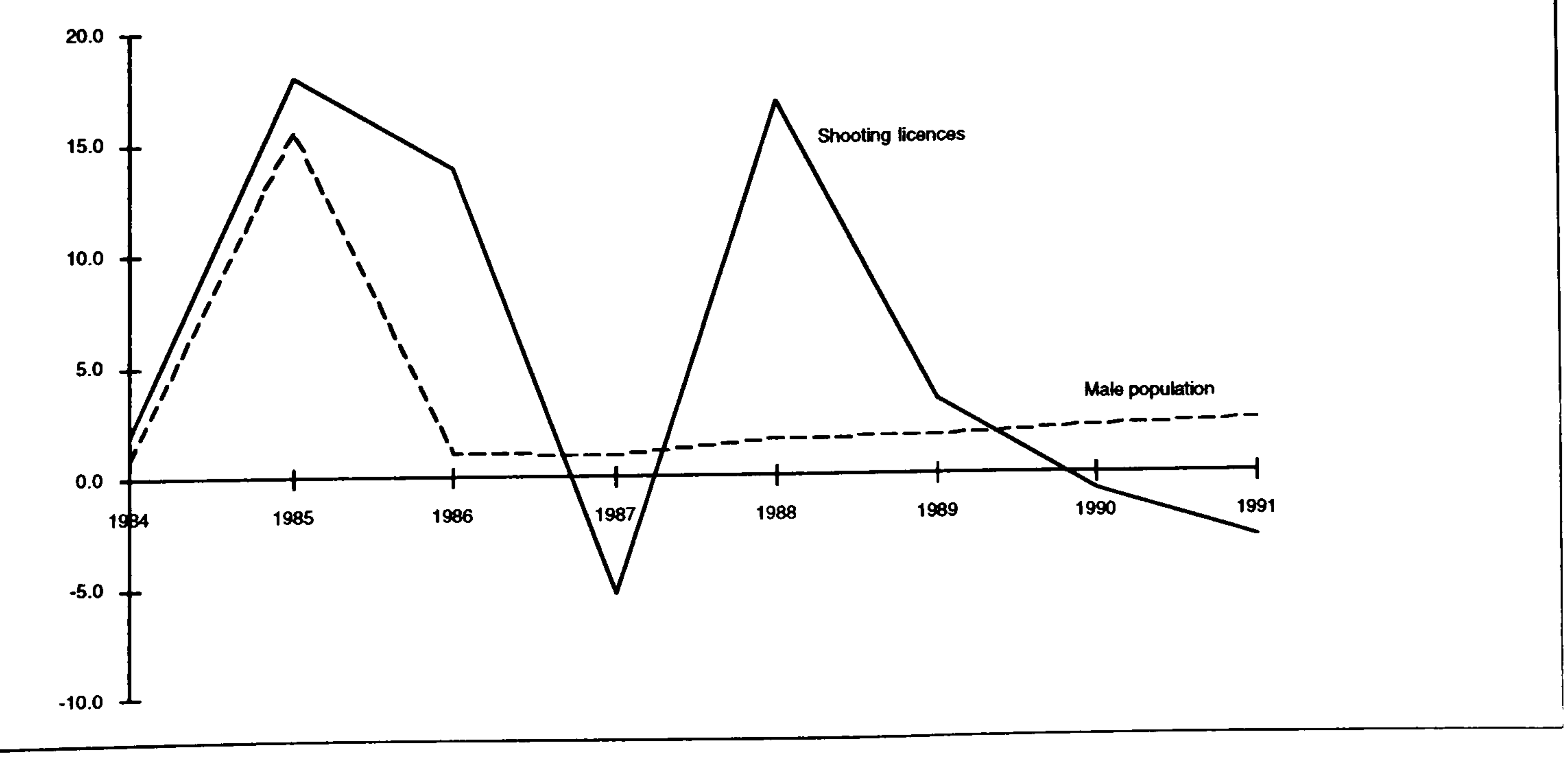
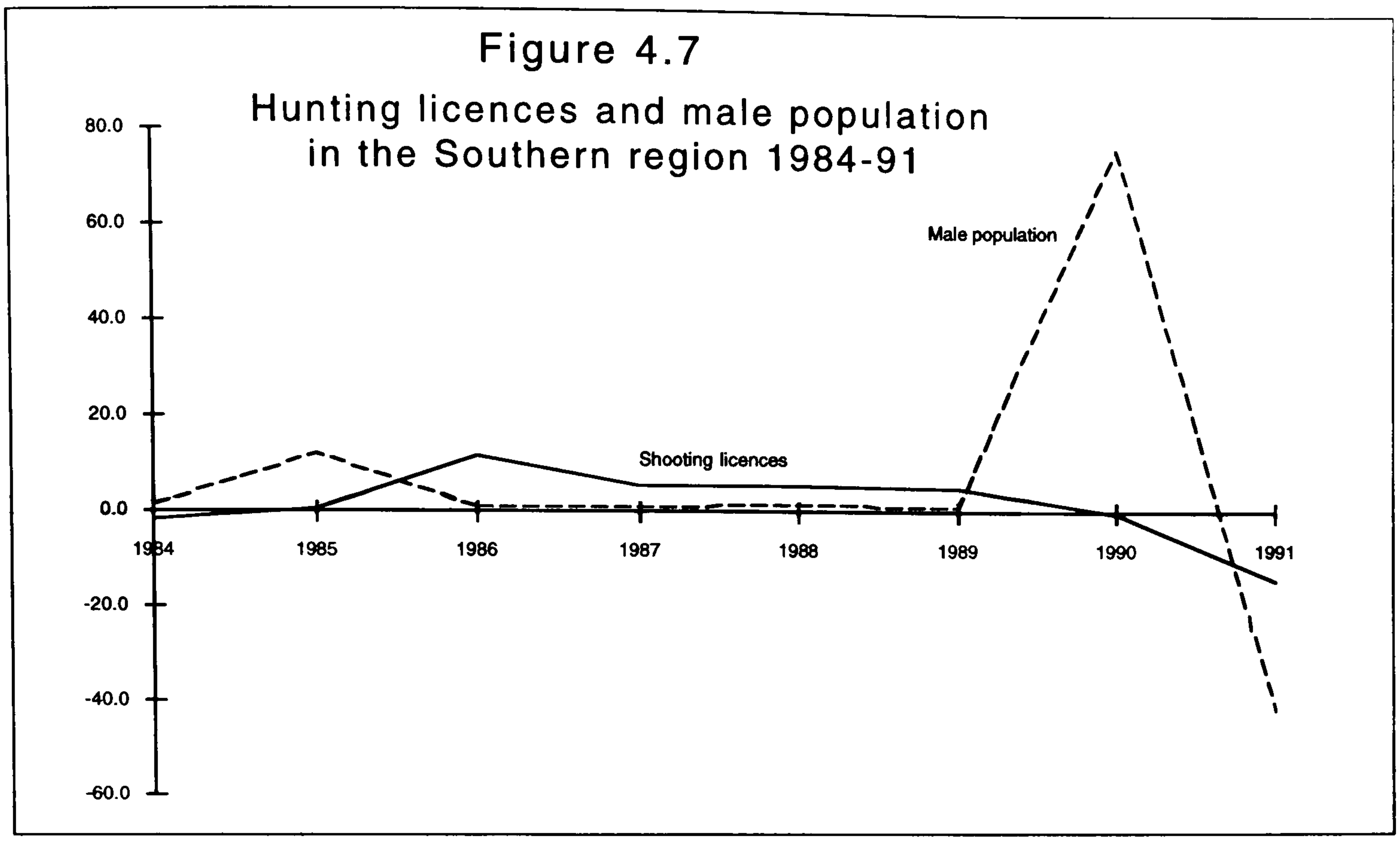
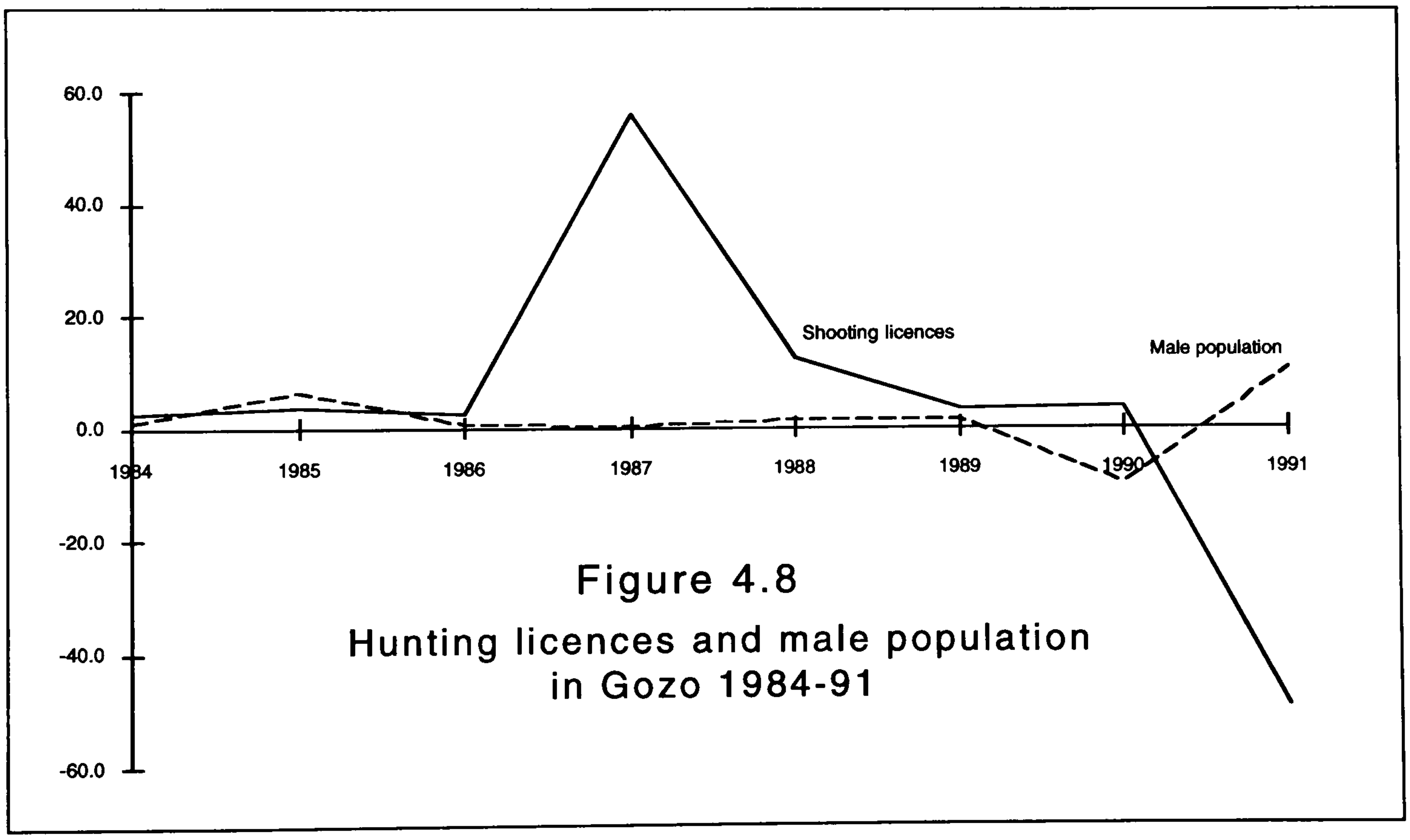


Figure 4.6 Hunting licences and male population in the Northern region 1984-91





In Gozo (Figure 4.8), the number of shooting licences increased in 1987 as the male population registered zero growth. In contrast, as the male population increases after 1990, the number of shooting licences registers a sharp decline.



A cursory glance at Figure 4.9, summarising the overall totals of all regions, one notices that the increase in the number of hunting licences between 1984 and 1987 is not supported by a similar increase in male population. This clearly indicates that the number of hunting licence holders did not increase as a result of any changes in the male population, but the increase could only be due to changing habits of the males who became hunters and started paying a hunting licence fee. The implication of this is that a number of hunters who may have become hunters only recently, not because they had ancestors who hunted but more due to peer pressure. As discussed in previous chapters, hunters who do not hail from families who have a family history of hunters are less likely to have any form of hunting ethic instilled in them and may well be one of the causes of indiscriminate shooting evident in the Maltese Islands.

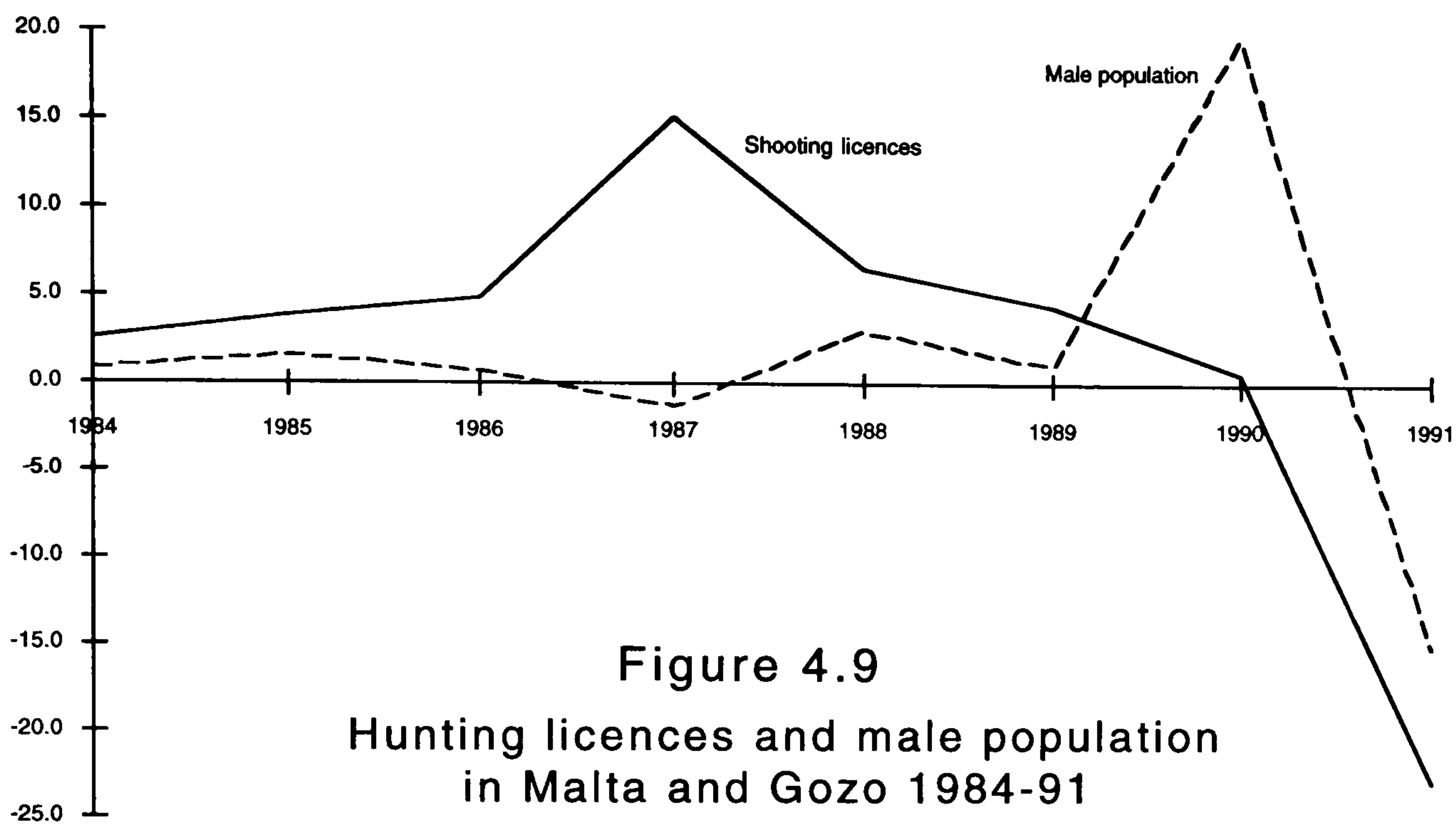


Figure 4.9
Hunting licences and male population in Malta and Gozo 1984-91

Discussion of the hunting population by age groups

The age structures of hunters who paid both A and B licences (Figure 4.10), enabling them to hunt in between 1 September and 31 January and between 10 April and 20 May, show that the population of hunters is an ageing one. The largest percentage of hunting licence holders in 1995 was in the 31-40 age group, where there were 30 per cent of the shooting licence holders. Over 27 per cent of the hunters were in the 41-50 age group while almost 14 per cent were over 51 and over 11 per cent were over 61. The percentage number of hunters in the 21-30 age group was just over 17 per cent. These figures show that the population of hunters is not a self-sustainable one.

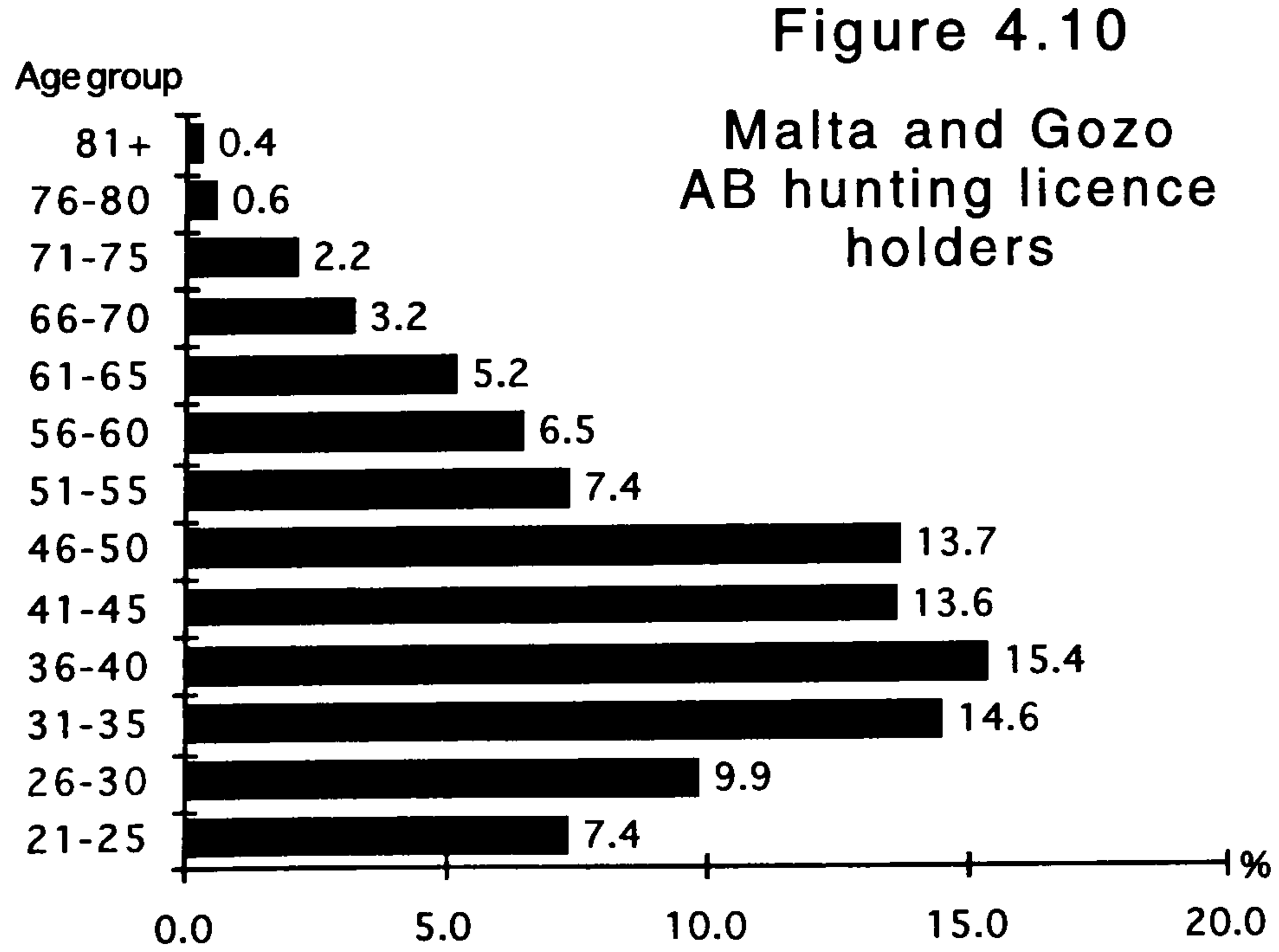


Figure 4.10
Malta and Gozo AB hunting licence holders

If one were to compare the age structure of hunters who paid both the A and B licences with the age structure of males in 1995, there are some interesting observations to be made. The most noticeable one is that while the percentage number of males in the 21-25 age group stood at almost 11 per cent, the number of hunting licence holders in the same age group was over three per cent less. Hence, if an effort is made to educate people not to take up hunting and side track existing and prospective young hunters into other shooting disciplines, the number of hunters in future generations in bound to decrease considerably as the population of hunters will neither grow nor be sustained by younger emerging hunters.

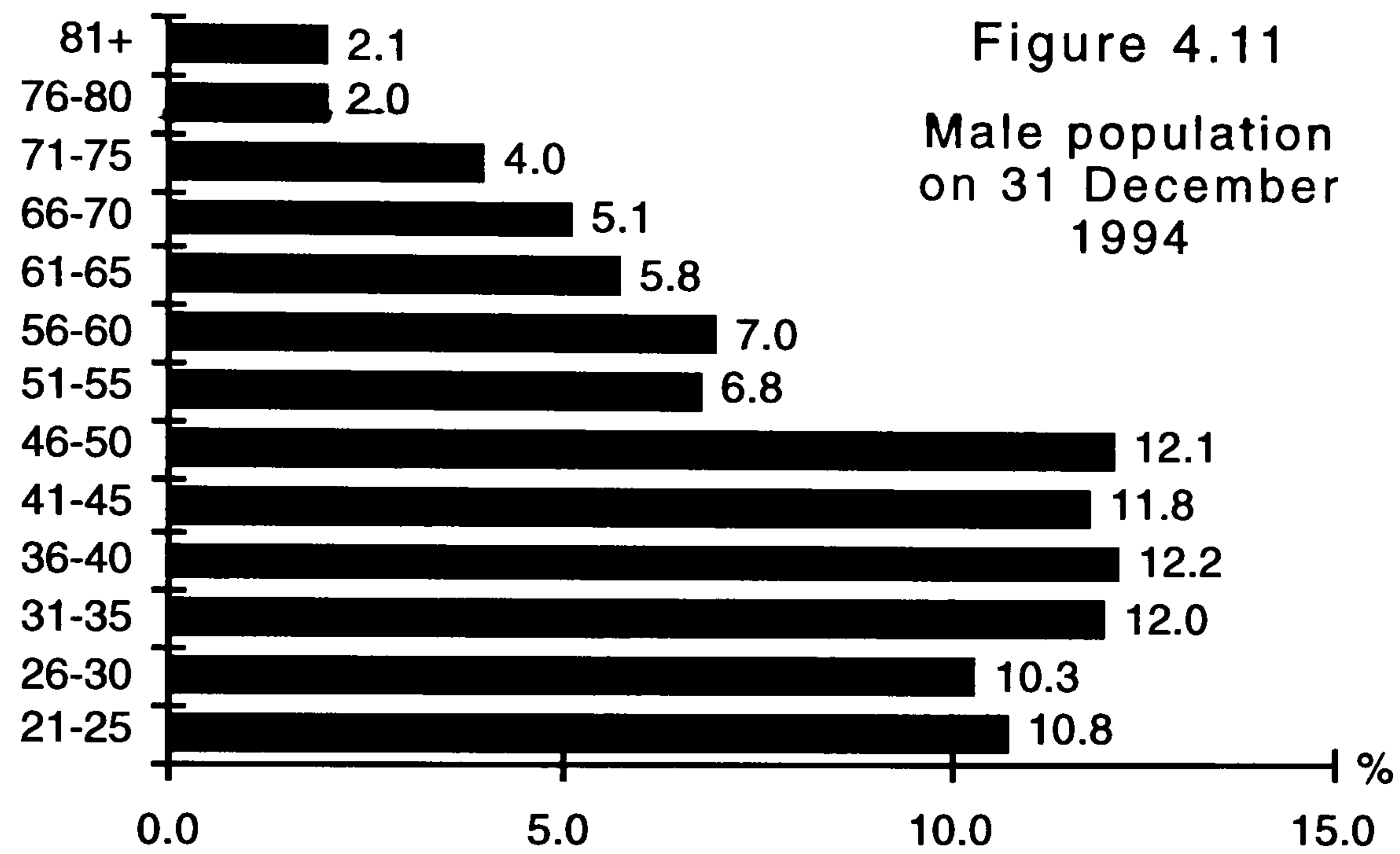


Figure 4.11
Male population on 31 December 1994

In other age groups, the percentage number of hunters is often slightly bigger than the percentage number of males in the same age group. While close to 30 per cent of the hunters were in the 31-40 age group, only 24 per cent of the males were in the same age group. Again, there were 3.5 per cent more hunters in the 41-50 age group than there were males. This indicates that those interested in hunting are in the middle and late middle ages. The percentages become close to each other over the age of 51. But an overall look at the male population reveals that the male population is a growing, but not an ageing one, while in the case of hunters, their population slowly ageing. The fact that the bulk of hunters if found in 31-50 age group (57.3 per cent) while another 25 per cent are over 51, carries an important consideration. Demographic statistics show that most males in Malta get married when they are in their mid to late 20s. This implies that apart from ties related to their jobs, they would have new familial responsibilities. Such factors might well imply that enforcement of hunting regulations will result in more observance of the laws as hunters would have social pressures, apart from legal ones.

DISCUSSION OF THE TRAPPING POPULATION BY AGE GROUPS

The bar graphs of the age structures of those paying the E and F licences enabling them to trap finches between 1 September and 31 January and quail and turtle dove in spring, show that the trappers are an even more ageing group that shooters. Although there are two types of trapping licences, practically all of those who paid the licence to trap turtle dove and quail paid also the finch trapping licence — while 928 paid the licence to trap turtle dove and quail, 911 paid both the finch trapping and the licence to trap quail and turtle dove. However, it is still worth looking at the finch and turtle dove trapping licence holders separately to get a clear picture of the trends in the number of trapping licences. Unlike the shooting licence, a trapping licence may be obtained under the age of 21, but the percentage number of finch trappers in this age group was 0.6 per cent in both Malta and Gozo. The number of turtle dove trappers under 21 was also similar in both islands: 0.2 per cent in Malta and 0.3 per cent in Gozo. As Figure 4.12 shows, the largest proportion of finch trappers in Malta was in the 41-50 age group, in which there were practically 28 per cent of the licence holders, closely followed by the 31-40 age group in which there were practically 24 per cent of the licence holders. Just over 10 per cent of the finch trapping licence holders in Malta are in the 21-30 age group while over 19 per cent were in the 51-60 age group and a further 18 per cent were over 61. The situation in Gozo is quite similar (Figure 4.13), with the largest percentage of licence holders, 30 per cent, in the 41-50 age group, followed by the 31-40 age group, in which there were practically 29 per cent of the finch trapping licence holders. Close to 18 per cent of the trappers were in the 51-60 age group while only 12.5 per cent were in the 21-30 age group.

Figure 4.12

Malta E licence holders 1995
Total = 1717

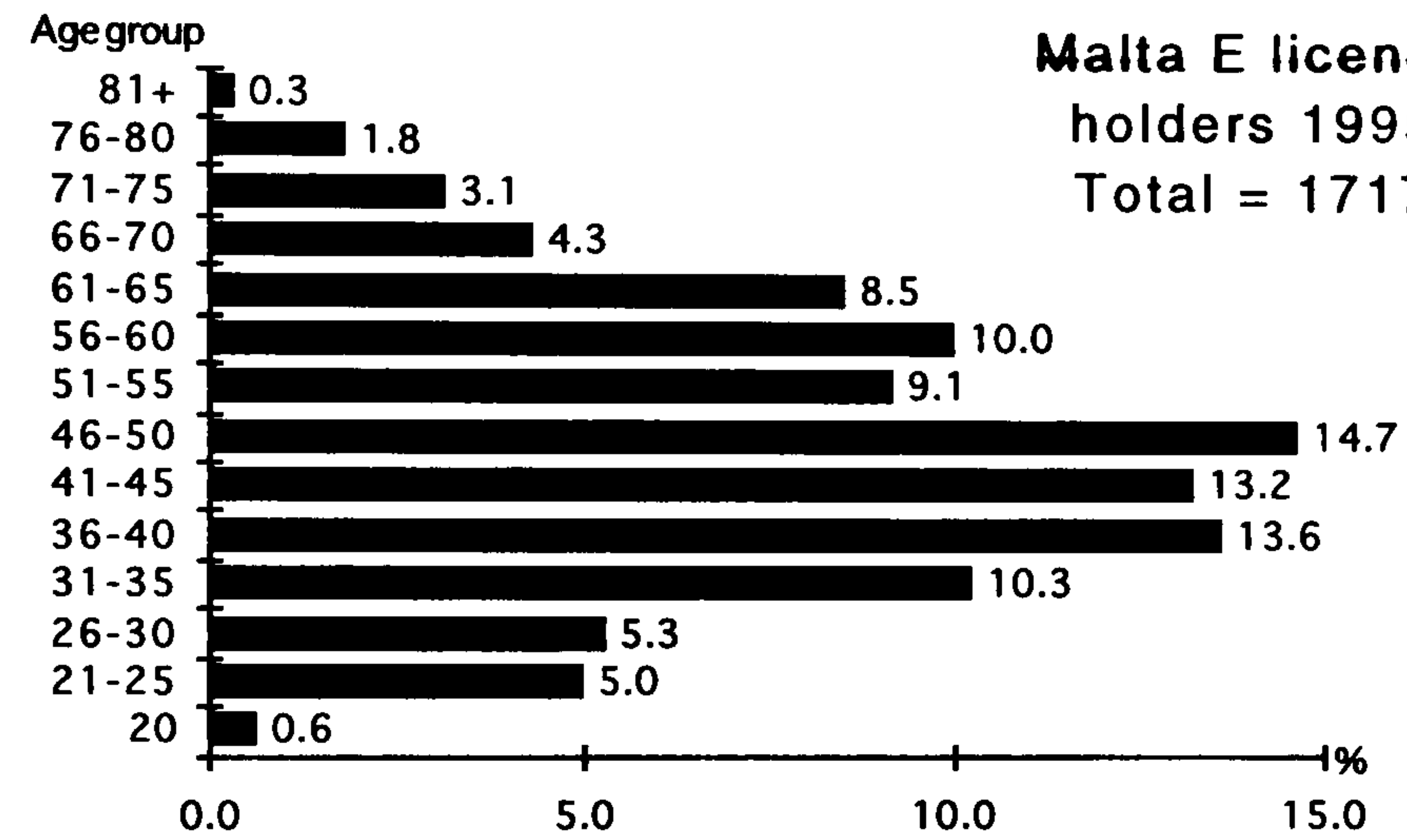
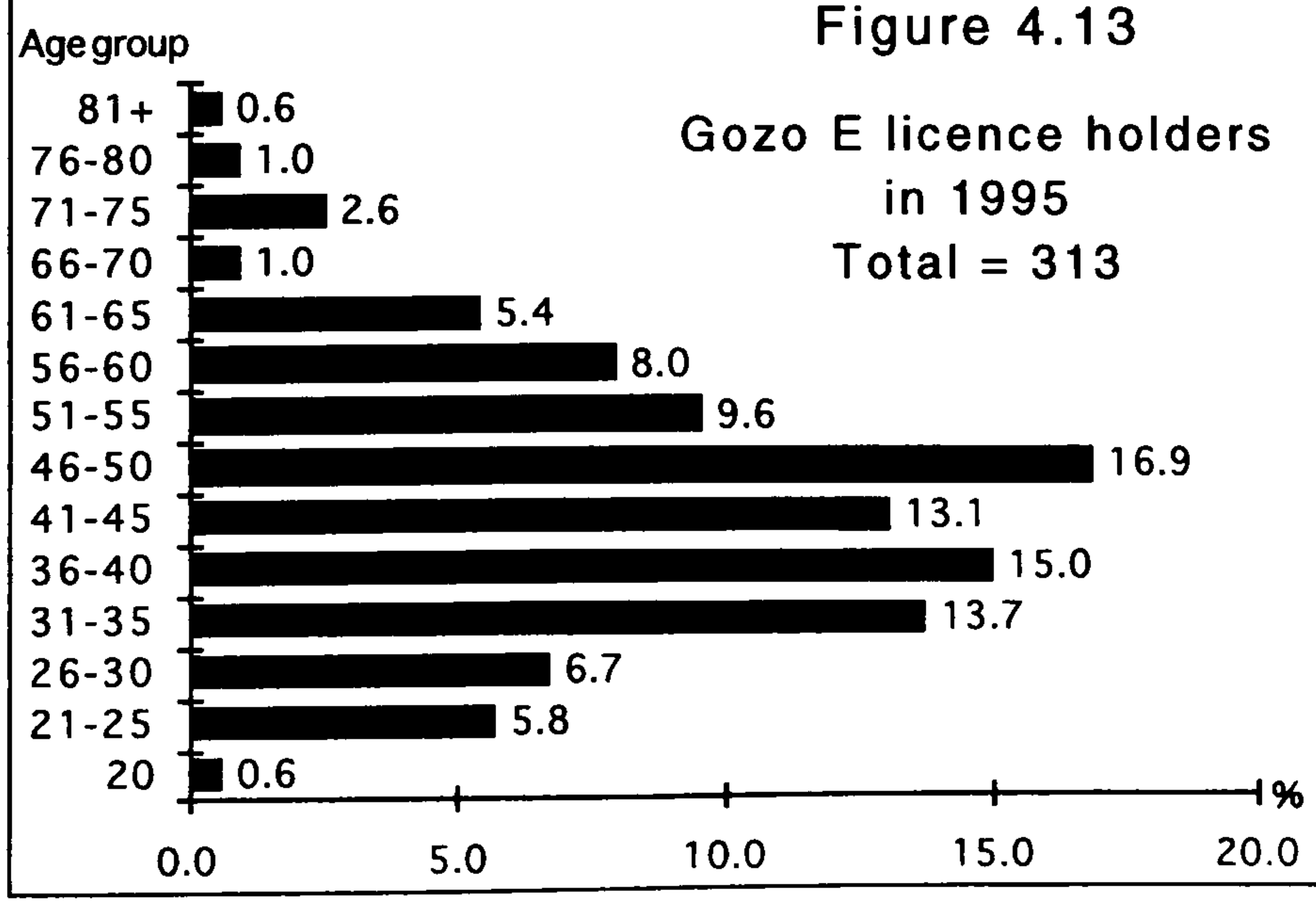


Figure 4.13

Gozo E licence holders in 1995
Total = 313



The age structures of those holding the licence to trap quail and turtle dove in spring also shows an ageing population. As Figure 4.14 shows, just over 30 per cent of such trappers in Malta are in the 41-50 age group while just over 35 per cent are aged between 21 and 40. Almost 34 per cent were over 51. In Gozo (Fig 4.15), turtle dove and quail trappers are more evenly spread with about 32 per cent in both the 31-40 and 41-50 age groups. Just over 23 per cent are over 51 while under 12 per cent are in the 21-30 age group. This implies that over the next generations, trapping in Gozo is likely to survive a relatively longer life span than in Malta.

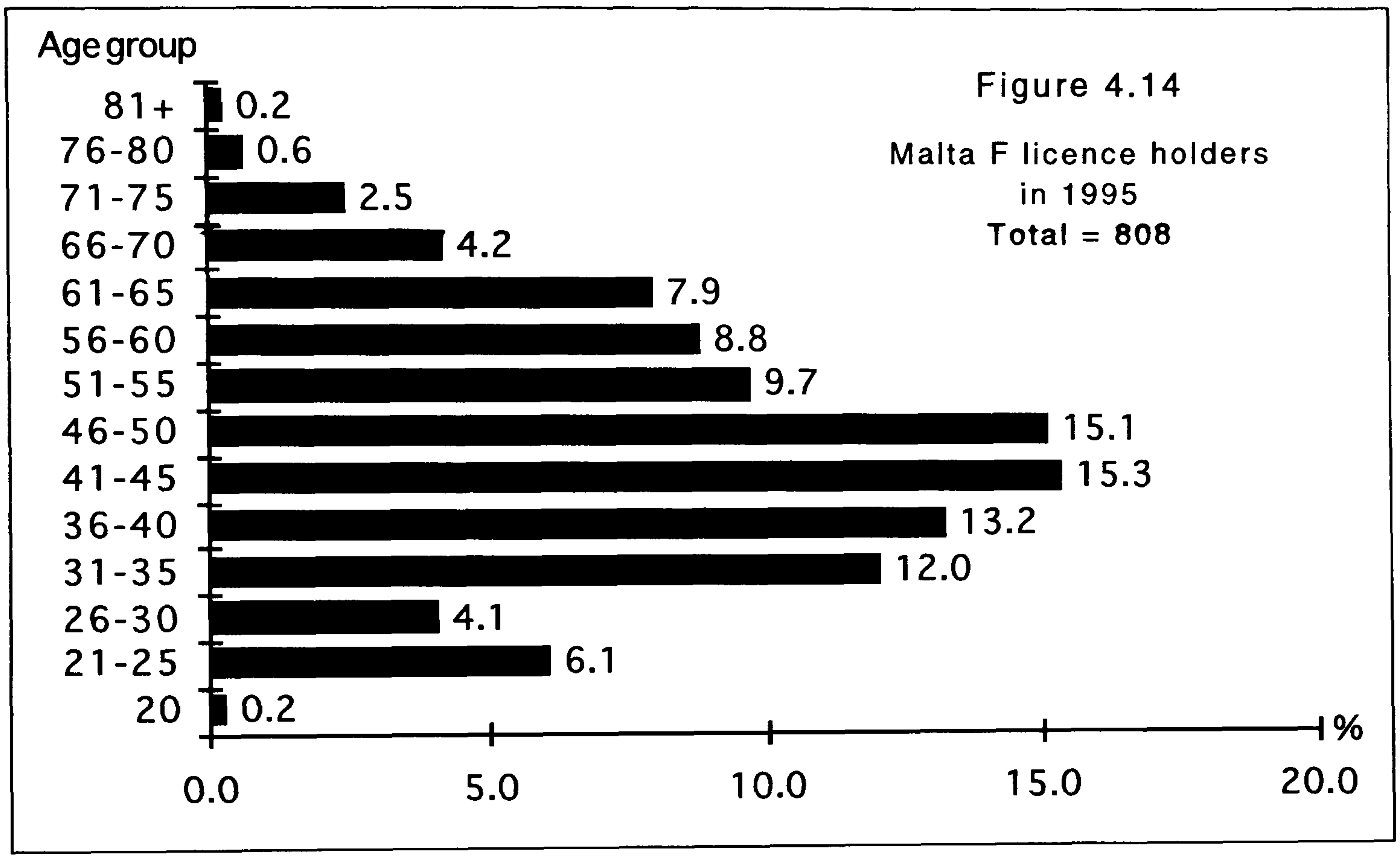


Figure 4.14

Malta F licence holders in 1995

Total = 808

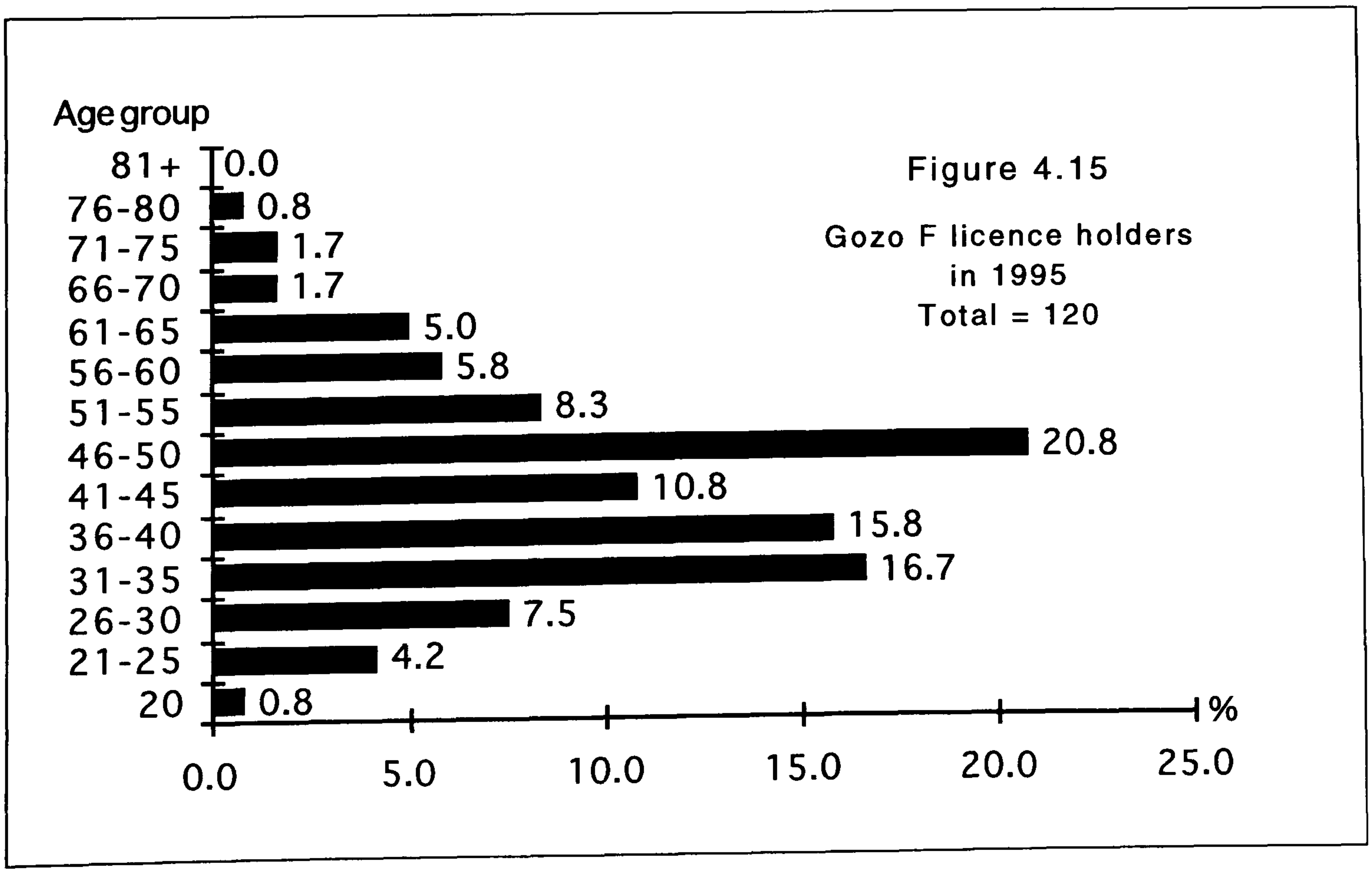


Figure 4.15

Gozo F licence holders in 1995

Total = 120

An analysis of the age structures of the AB hunting licence holders and EF (trapping) licence holders in the regions individually and a comparison to the national male population produces a number of findings. Although the percentage number of hunters is similar to the overall percentage of males, the number of hunters in the 21-25 age group is always lower than the percentage number of males.

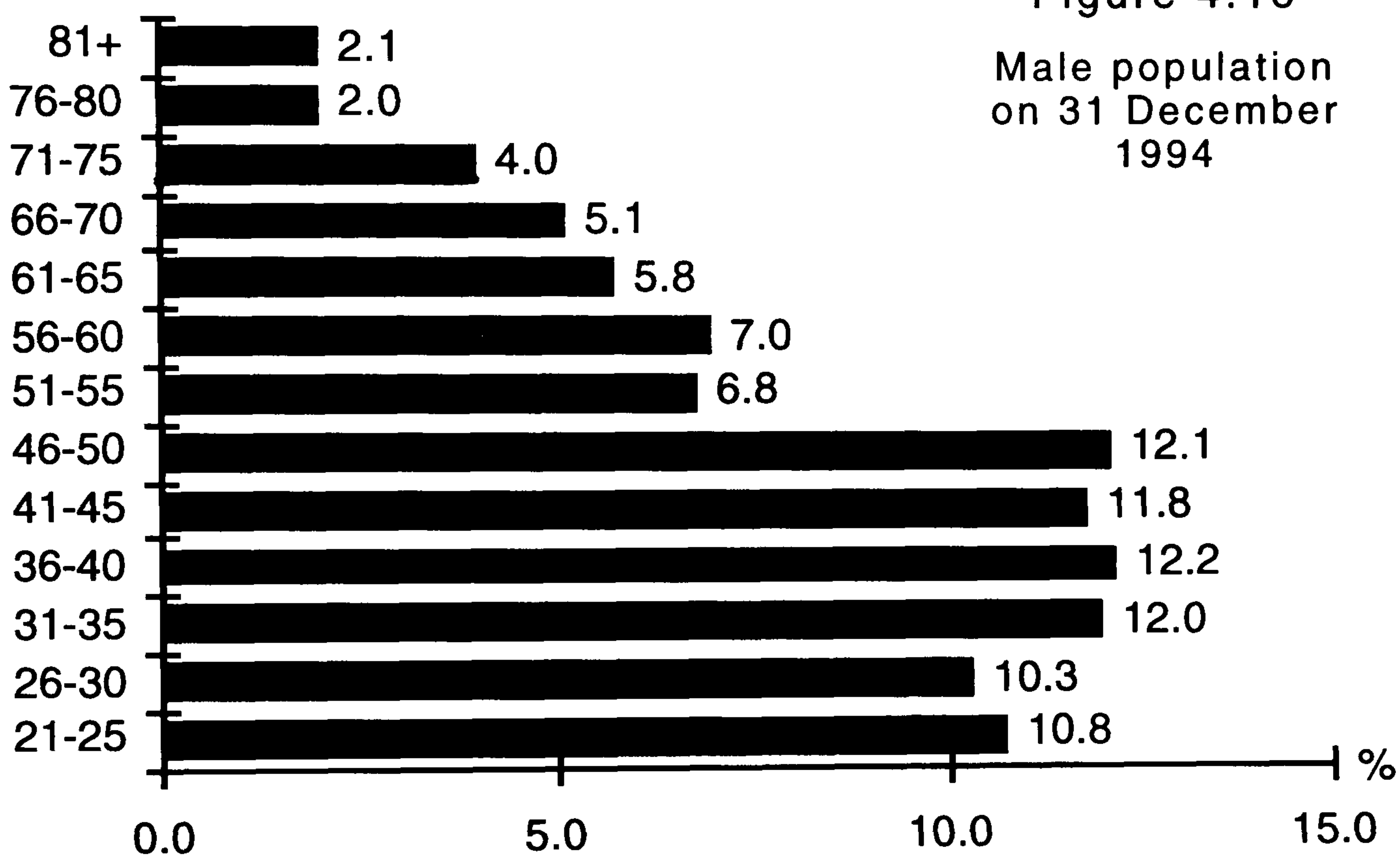


Figure 4.16

Male population on 31 December 1994

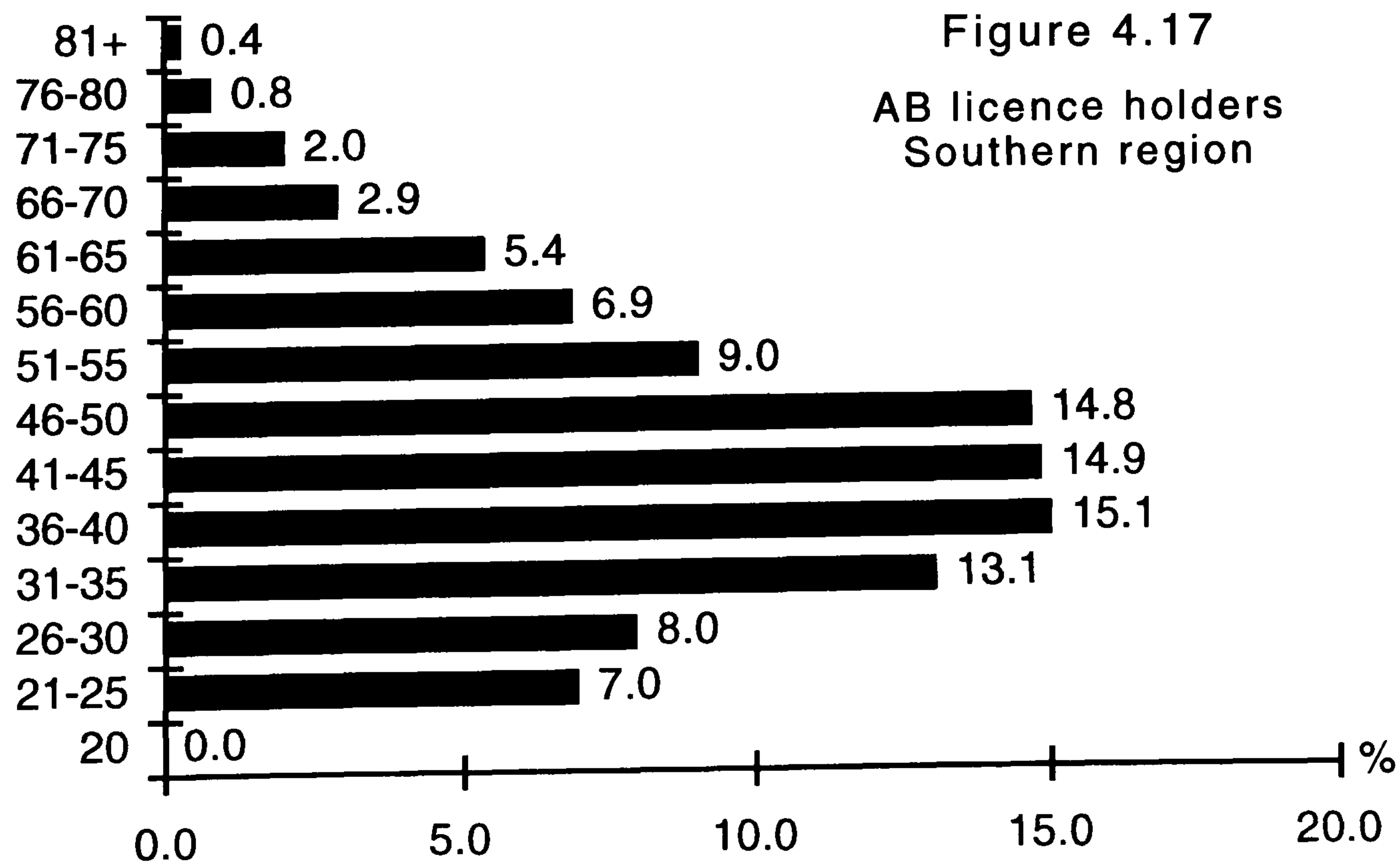
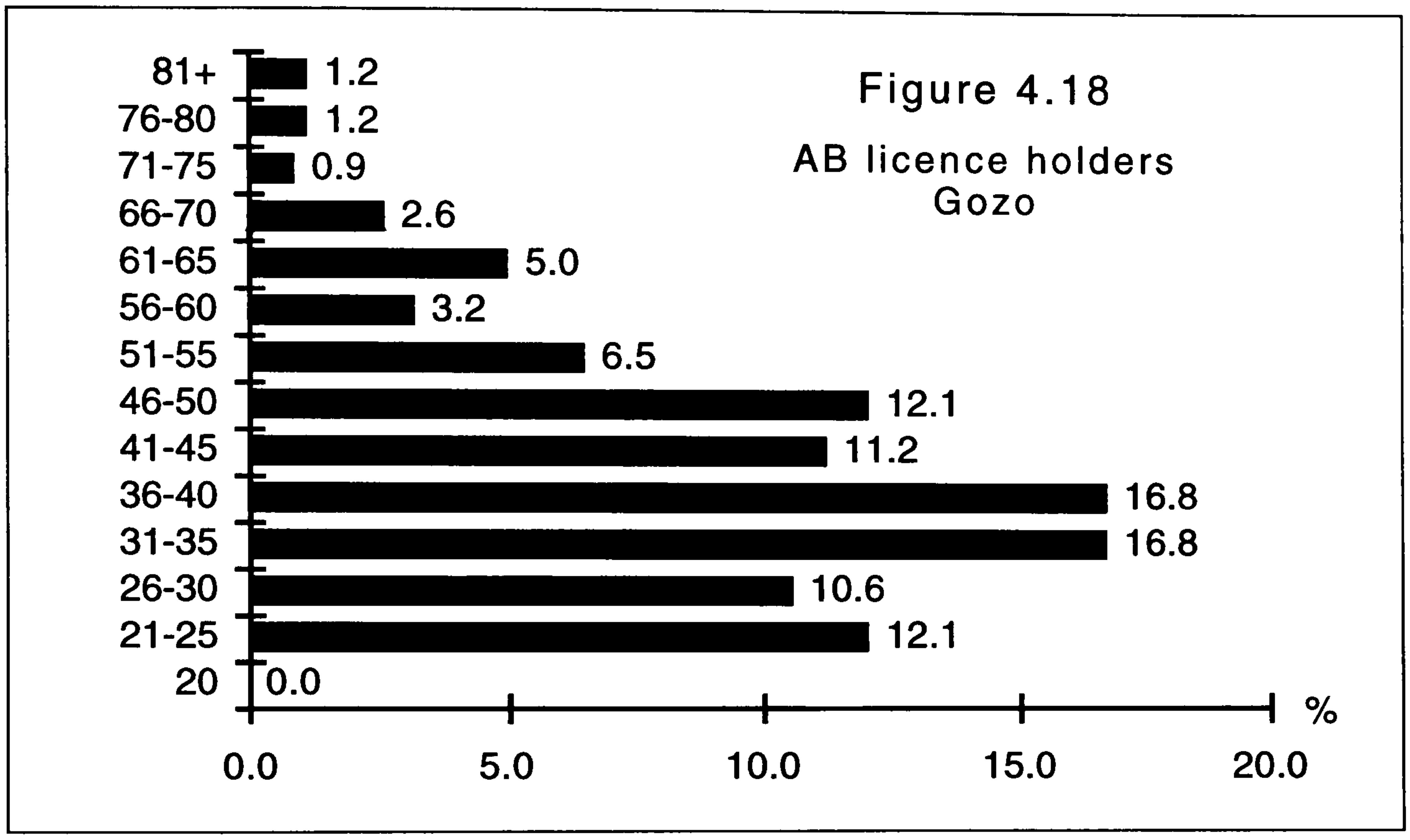


Figure 4.17

AB licence holders Southern region

Figure 4.17, showing the age structure of the AB hunting licence holders in the Southern region is fairly typical of the age structures of hunters in the other regions, except for the Northern region and Gozo. In the Northern region, the percentage number of hunters above the age of 55 and below 26 is lower while in Gozo (Fig 4.18), the number of licensed hunters below the age of 26 is slightly higher than that over 26, while the difference in the percentage number of hunters in other age groups is more pronounced. Gozo is the only region where the number of licensed hunters in the 21-25 age group is higher than the number of hunters in the 26-30 age group.



A comparison of the two age structures in Figures 4.16 and 4.17 shows that while the percentage number of males in the 21-25 age group is slightly bigger than that in the 26-30 age group, the average number of hunters in the 21-25 age group in all regions in Malta was was 3.9 per cent lower than that in the 26-30 age group. The difference was most pronounced in the Harbour region, where it was 6.7 per cent lower and in the Northern region, where it was 5.4 per cent lower. In the Western and Central regions it was 1.9 and one per cent lower respectively. It was only in Gozo that the number of hunters in the 21-25 age group was 1.5 per cent higher than the 26-30 age group.

While 48.1 per cent of the males were aged between 31 and 50, the number of hunters in the same age category in Malta amounted to 61.4 per cent and 56.9 per cent in Gozo. The Harbour, Northern and Central region all had over 60 per cent while the Western and Southern region had just under 60 per cent in this age group. The Harbour region had the largest percentage, 67.8 per cent, closely followed by the Northern region 62.5 per cent. The percentage number of hunters and that of males in the 51-60 age group similar: close to 14 per cent of the males were in this age category while there were over 12 per cent of the hunting licence holders in both Malta and Gozo in this age group. Malta, having close to 15 per cent in this age group, had a higher percentage of hunters than Gozo, where there were just under ten per cent. The percentage number of the hunting licence holders aged over 61 was just over half of the number of males in the same age group. If one were to do a similar exercise on the number of people paying the trapping licence, a different pattern would emerge as the age structure of trappers is more unbalanced than that of hunters. The only region with an age structure showing a similar pattern to the age structure of males is the Southern region (Fig 4.19), in which there was the highest number of licensed trappers in 1995. In spite of the similarity in the age structure, the decline in the percentage number of trappers starts showing after the age of 45.

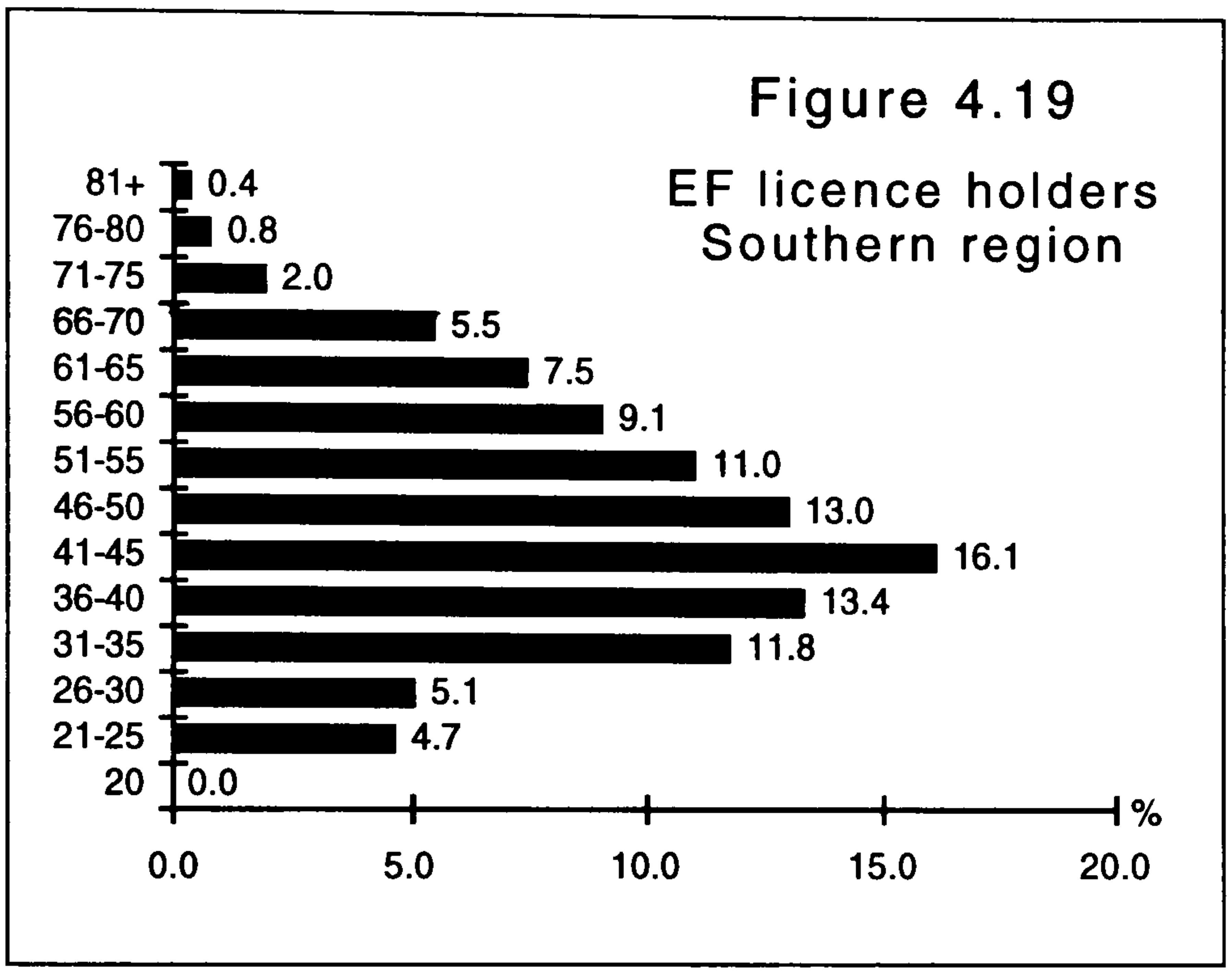


Figure 4.19
EF licence holders Southern region

While 21.1 per cent of Maltese males were aged between 21-30, only 10.8 of those holding the E and F trapping licences were in this age group. The percentage number of trapping licence holders in other age groups is also different than that of males in the respective age groups and for certain age groups, the difference between Malta and Gozo (Fig 4.20) are more accentuated. While the number of males in the 31-50 age group at the end of 1994 stood at 48 per cent, the number of trapping licence holders in Malta stood at almost to 58

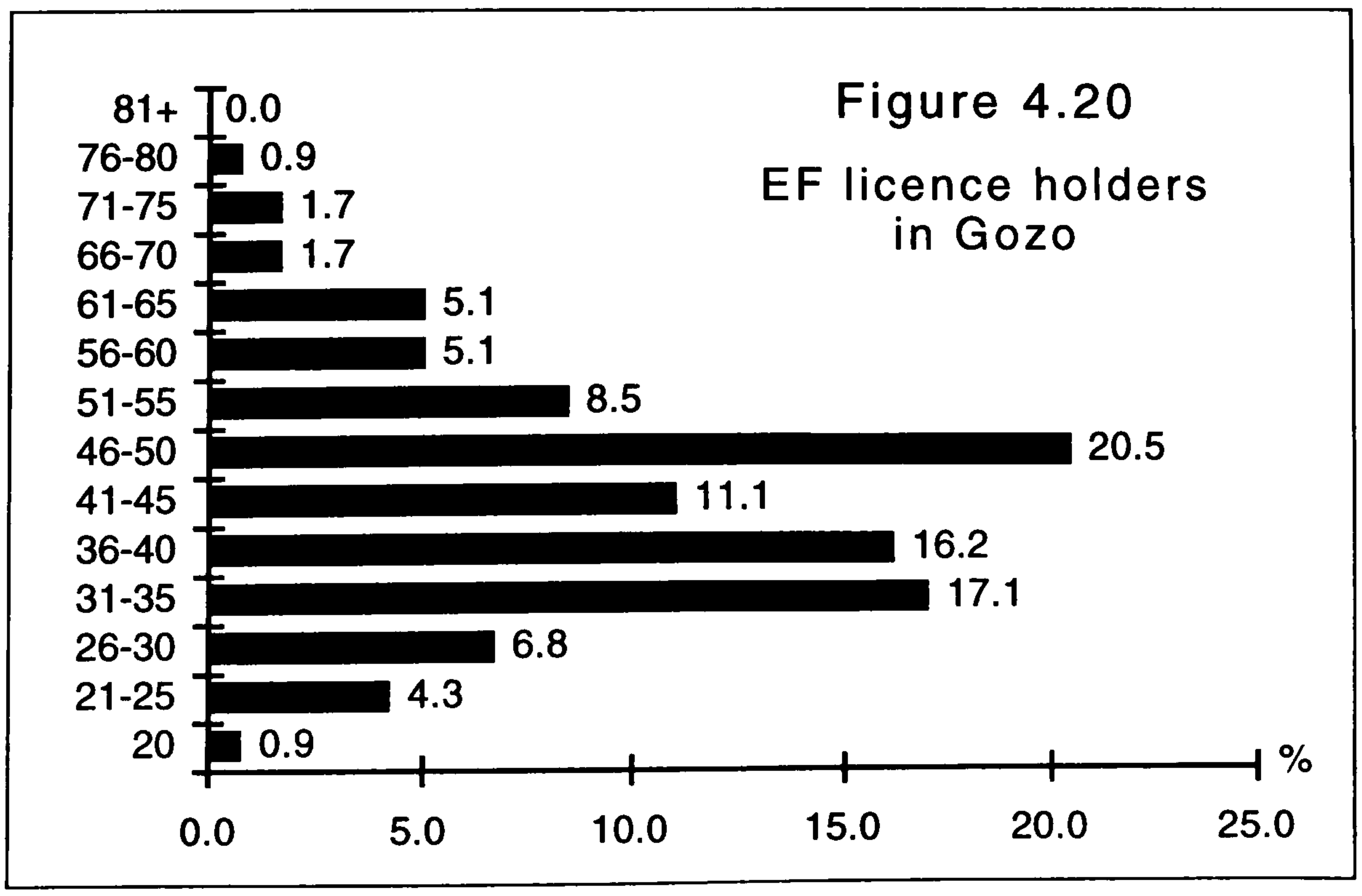


Figure 4.20
EF licence holders in Gozo

per cent while in Gozo, 76 per cent were in this age group. The number of trapping licence holders in the 51-60 age group in Gozo is similar to the number of males in the same age group: while there were 13.8 per cent of the males in the 51-60 age group, there were 13.6 per cent of the Gozitan trappers in the same group while in Malta, there were over 19 per cent. In the 61+ age group, there is a noticeable discrepancy between Malta and Gozo. While there were 19 per cent of the males aged over 61, over 16 per cent of Maltese trappers and just over nine per cent of Gozitan ones were in this age group. These figures show that most of Maltese trappers are in their middle and late middle ages and that the number of trappers over the age of 61 is larger than the number of trappers aged 30 and under.

The relatively small number of trappers under the age of 30, especially when compared to the number of males in the same age group, implies that the number of trappers is not bound to escalate and that if the Government were to implement a system where no new trapping licences were to be issued while only renewals were allowed, the number of trappers would be reduced considerably, more so if the law is effectively enforced. Furthermore, if the suggestion made by the Authority of Review on the issue of trapping licences is implemented, enforcement could become easier. The Authority of Review, a board composed under the provisions of the Environment Protection Act before which objections to hunting regulations could be made, recommended that trapping licences should be granted to trappers on particular trapping sites and that all trapping sites should be registered with a view to eliminate those on public land (Authority of Review 1995).

Case studies

In Malta, the highest number of licensed shooters is found in Rabat, where in 1991, there were 1,074 licensed hunters. For the past ten years, Rabat always had the highest number of licensed hunters. Figures for 1990 show that 22.42 per cent of the males in Rabat had a hunting licence. Rabat can be considered as a rural area and its location, on a hill surrounded by arable land and orchards; and its proximity to areas such as Dingli cliffs, Bahrija, Chadwick Lakes, Mtahleb and Kuncizzjoni, offers plenty of space for hunting. Although hunter mobility today is very efficient, the availability of hunting areas close by is still an advantage. Cutting travelling time means spending more time hunting, especially on days when hunters go to hunt for a few hours before or after work. Children raised in the countryside or close to hunting areas become socialised to hunting even if their parents or elder brothers do not hunt.

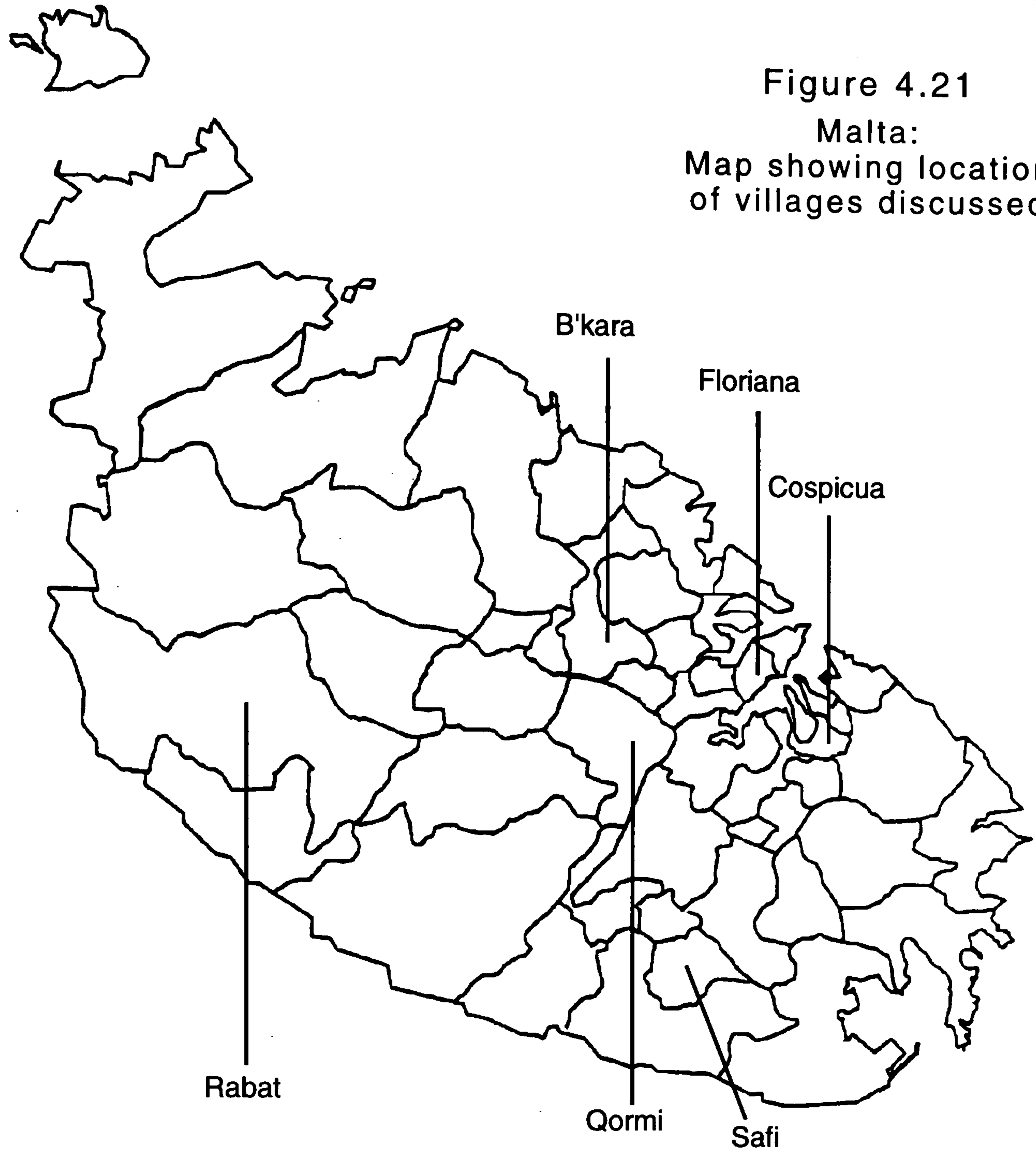


Figure 4.21
Malta:
Map showing location of villages discussed

In spite of having the highest number of licensed hunters, a downward trend has been noted in Rabat since 1989. In 1992, there were 284 hunting licences less than there were in 1989. One cannot state with certainty what the decrease is due to. The age structure of Rabat shooters before 1994 was not available, but it is unlikely that the decrease is due to population changes, since the male population is actually increasing. It could be that the younger generation is more conscious about the need to protect the environment, including bird life and is less interested in hunting. The age structure of Rabat hunters who paid their 1995 hunting licence (Figure 4.22) shows that while just under 14 per cent are in the 21-30 age group, over half

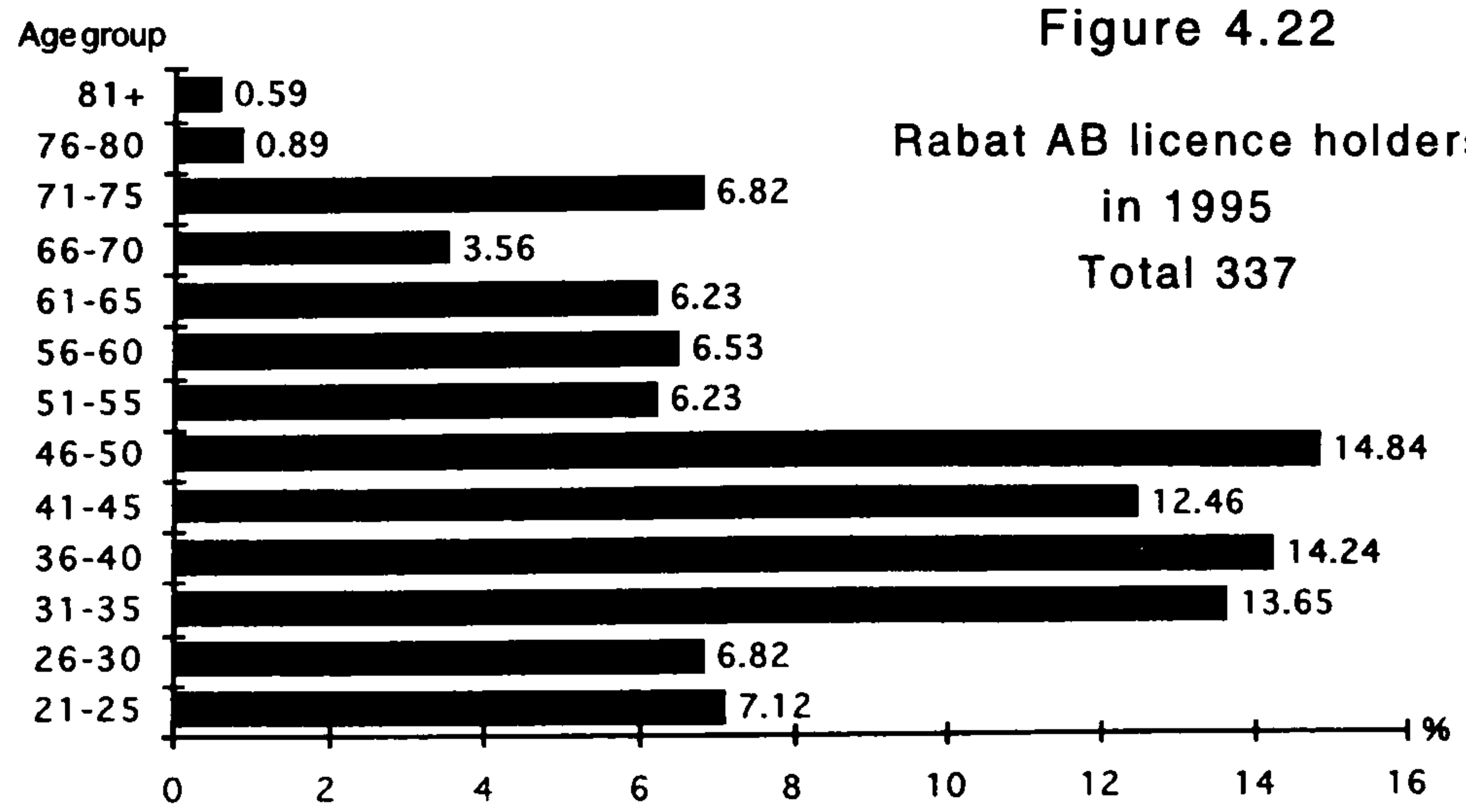
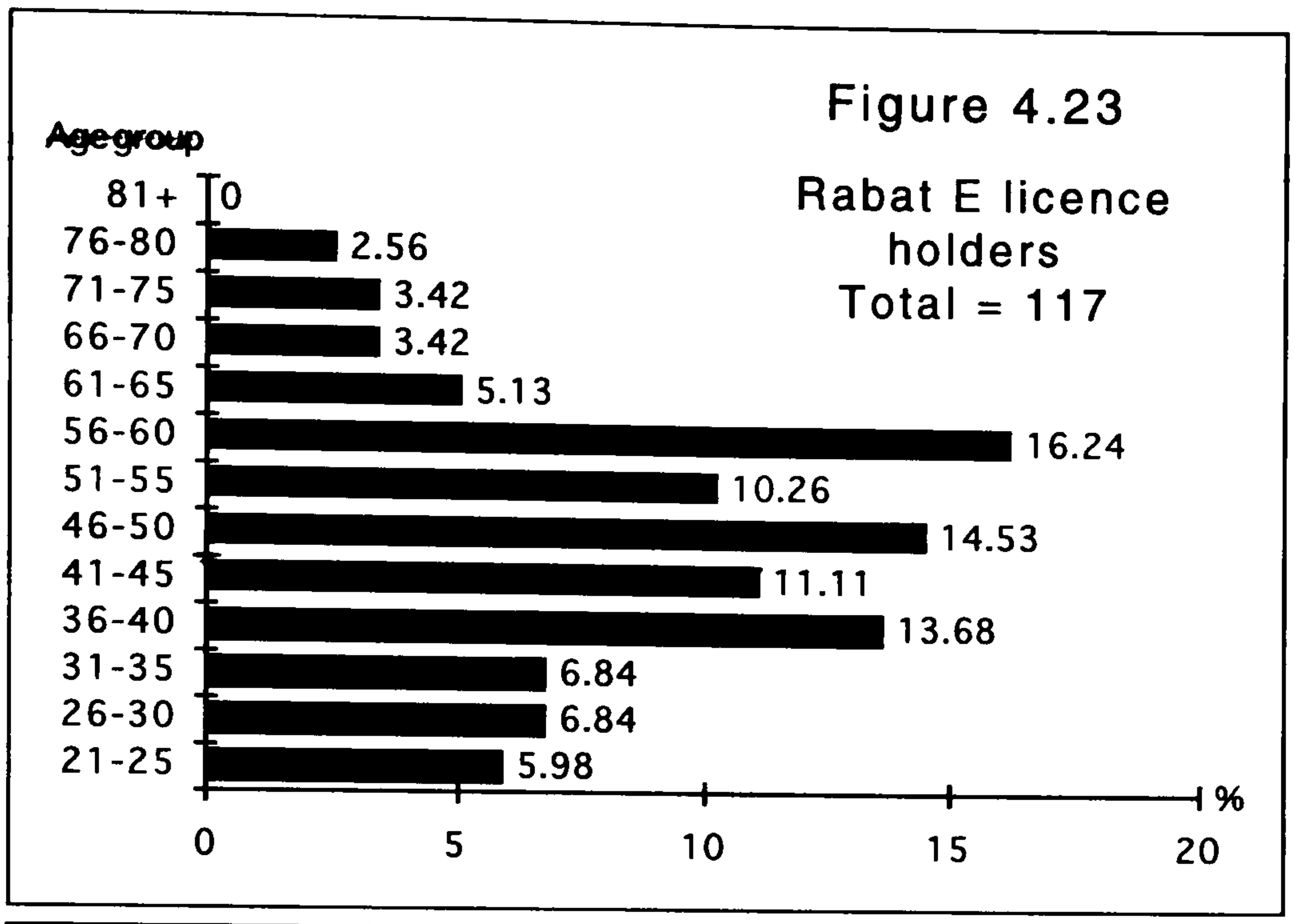
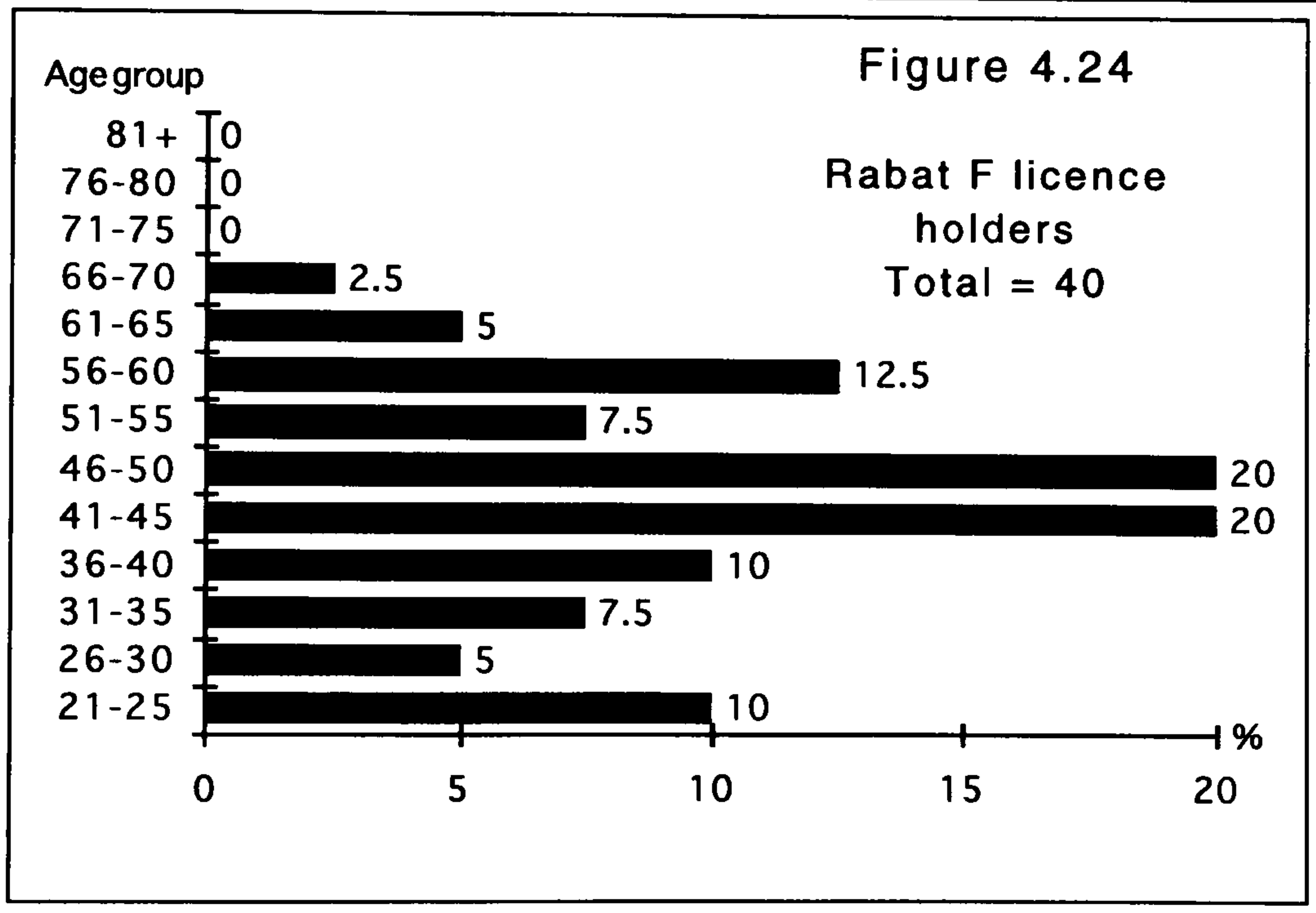


Figure 4.22
Rabat AB licence holders in 1995
Total 337

of licensed hunters are found in the 31-50 age bracket, just under 14 per cent are in the 21-30 age group, close to 19 per cent in the 51-65 age group, while the other 12 per cent are in the 66+ age group. This implies that unless there is an influx of young hunters, the number of hunters in Rabat will continue to decrease.

This pattern of decrease is even more marked in the number of people paying the licences to trap finches, where less than 13 per cent are under 30 years of age, 46 per cent are between 31 and 50, 41 per cent are over 51 years old (Figure 4.23). This pattern is similar to those paying a licence to trap quail and turtle dove in spring: 15 per cent are under 30, just over 57 per cent are in the 31-50 age group while the remaining 28 per cent are over 56 years of age (Figure 4.24).





B'Kara ranks second to Rabat in the number of hunting licences. This may be partly explained as B'Kara has the largest population in the whole Island. In 1990, the population of B'Kara stood at 21,218, of which, 10,546 were males. The percentage of B'Kara's population holding a hunting licence stood at 2.13 per cent. Although B'Kara is situated in the heart of Malta, there were various places ideal for hunting around it, some of which have been built up over the past 40 years. But hunting areas may be reached within a few minutes drive of this town. Hunters from B'Kara tend to prefer to hunt in the central and northern parts of the Islands. The current trend in the number of hunting licences in B'Kara shows a slight increase over the period 1988-91.

The age structure of B'Kara is not typical of the other towns and villages as the number of shooters in the 21-25 age group is relatively higher than the 26-30 age group (Figure 4.25). The percentage number of shooters in the 21-30 age bracket stood at 16.7 per cent. Close to 30 per cent of those who paid the AB shooting licence were in the 31-40 age group, just over 29 per cent in the 45-55 age category and 25 per cent were over 56 years old. The pattern of finch trapping licence holders does not show any increases in the younger age groups (Figure 4.26), where 1.78 per cent are under 30, 20.5 per cent between 31 and 40, close to 36 per cent between 41 and 55, the other 41 per cent being over 56 years old.

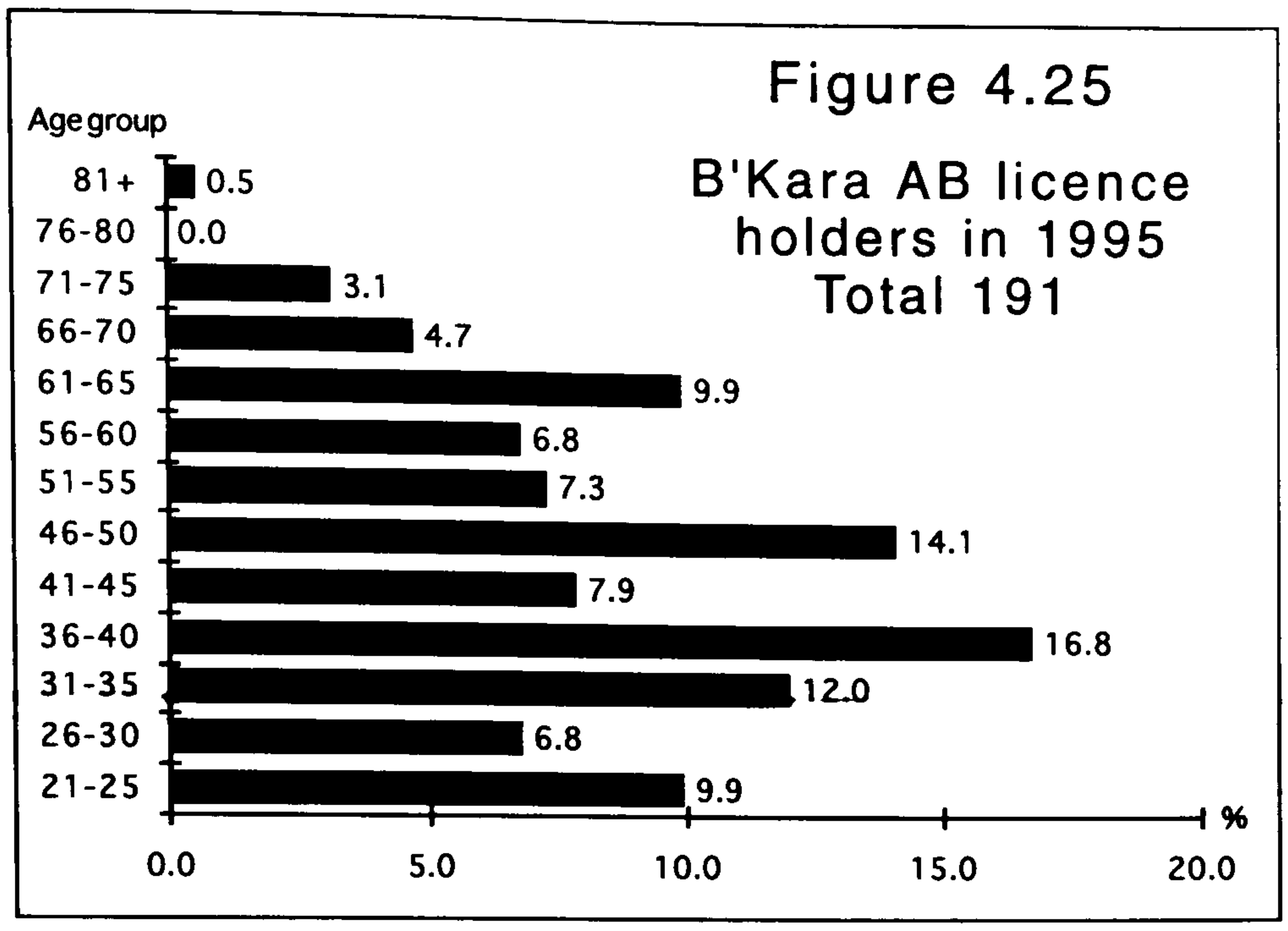


Figure 4.25
B'Kara AB licence holders in 1995
Total 191

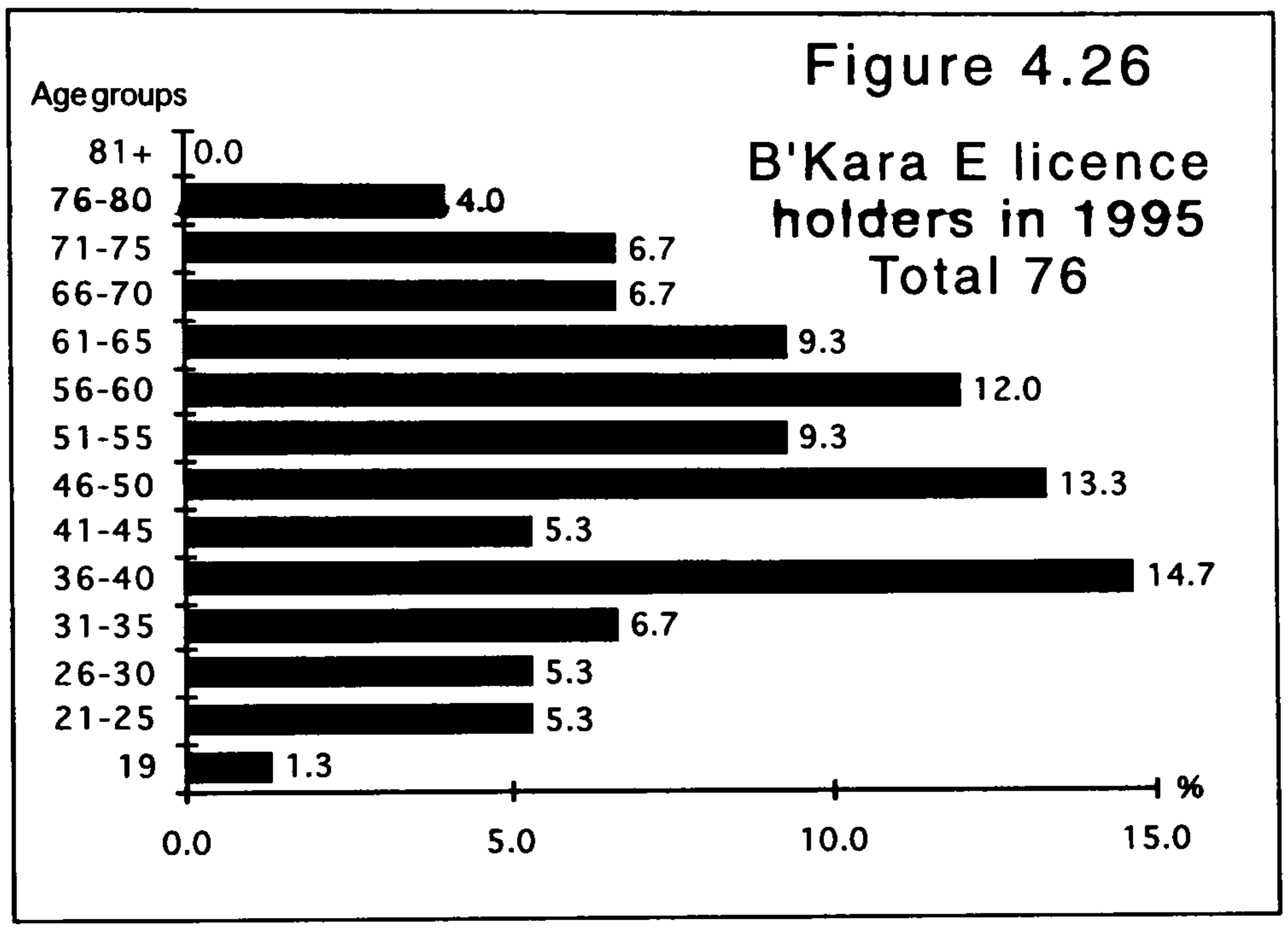


Figure 4.26
B'Kara E licence holders in 1995
Total 76

Qormi has the second largest population. In 1990, Qormi had a population of 19,330 of which 9,611 were males, of which 462 or 2.39 per cent had a hunting licence. The age structure of those who paid their 1994 shooting licences in Qormi, shown in Figure 4.27, conforms with the general trend, where there are less hunters in the lower age brackets than the middle-aged ones, implying that unless there is an influx at the lower age groups, the population of Qormi hunters would decrease over the next generation.

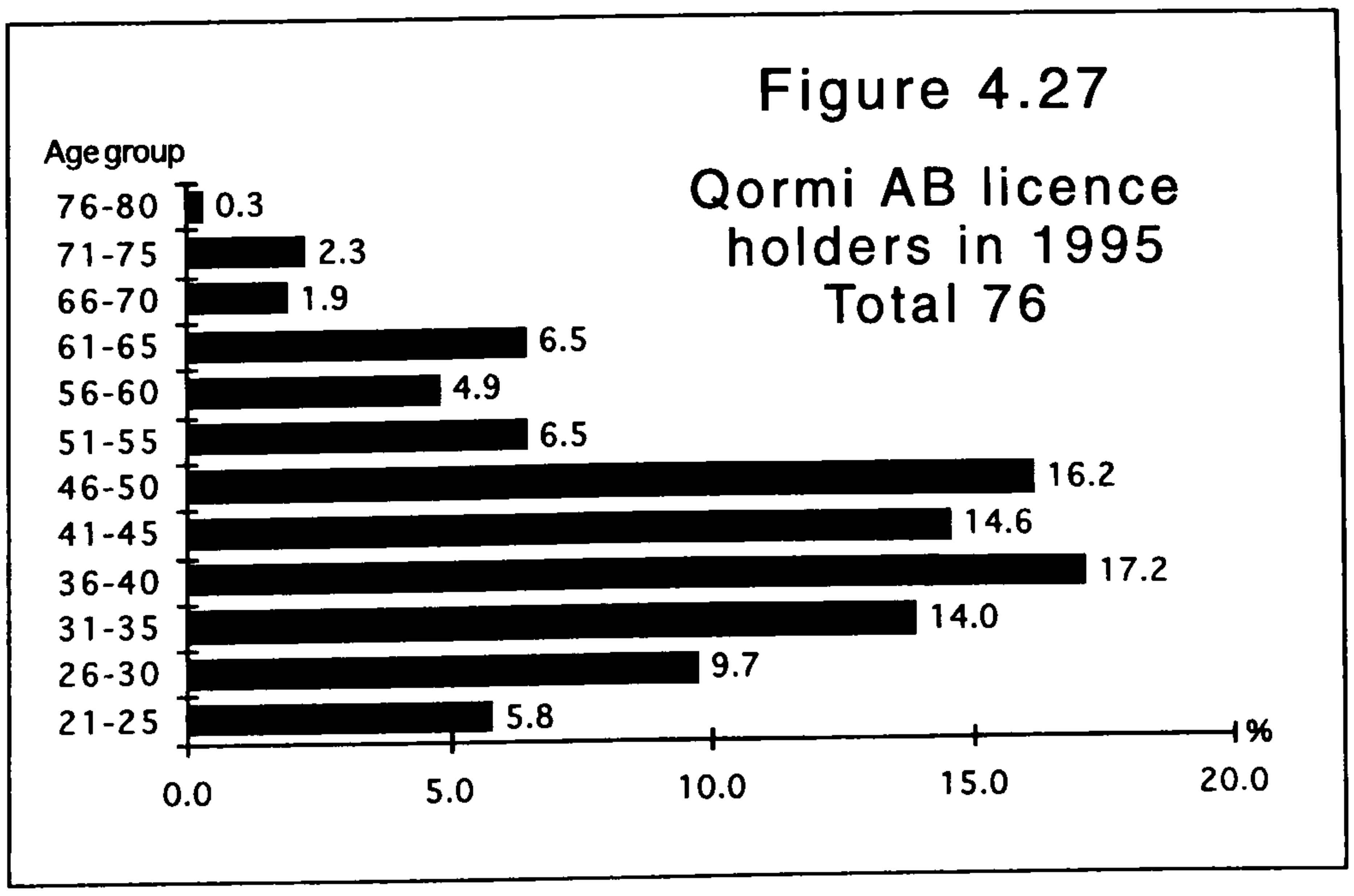


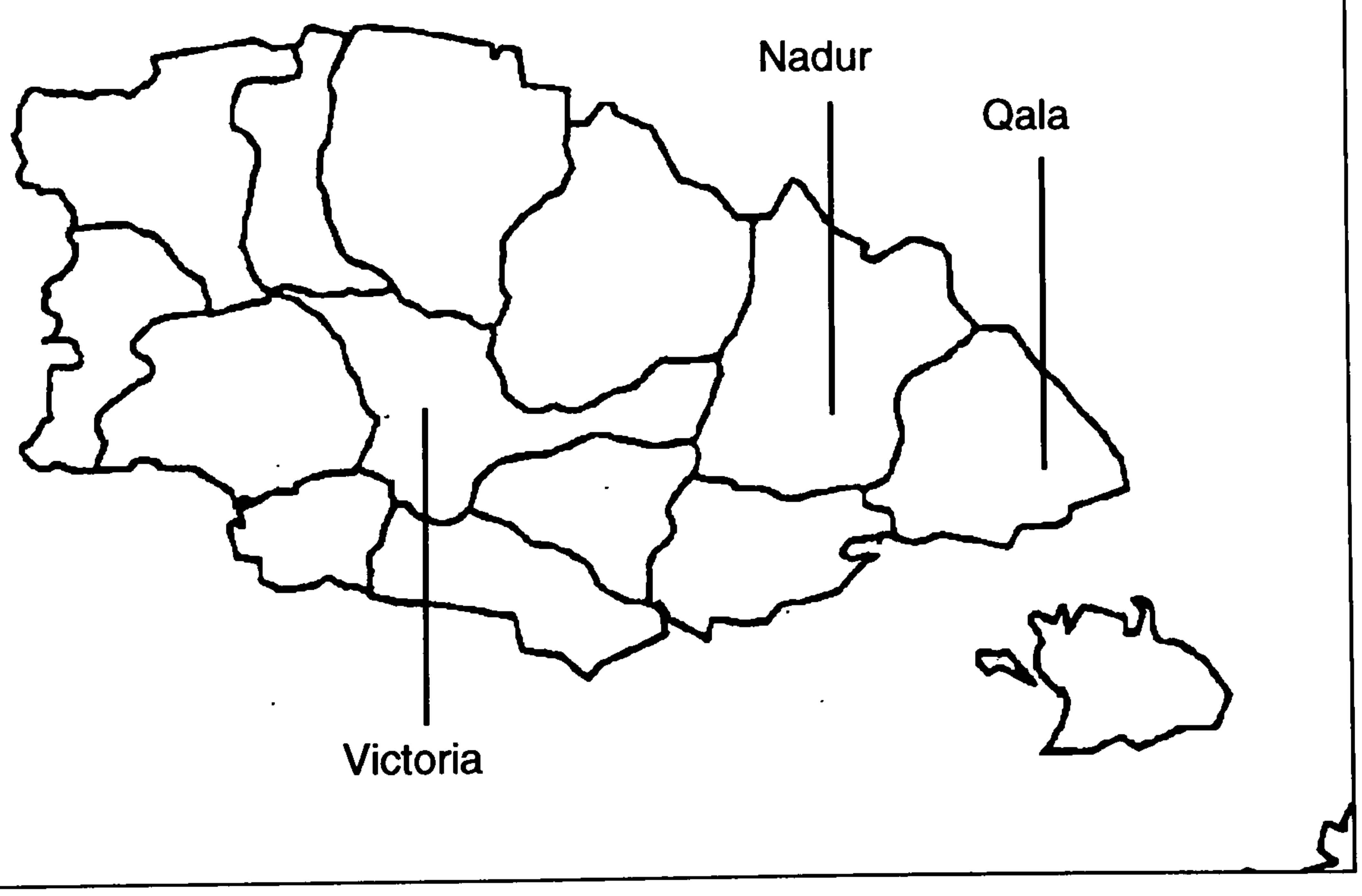
Figure 4.27
Qormi AB licence holders in 1995
Total 76

While the number of hunting licence holders in rural areas is still relatively high, the number of hunters in towns is remarkably small. In 1991 Floriana had the lowest number of licensed hunters, 11 in 1991. This is typical of the port conurbation areas, Valletta and the three cities, where the highest number of hunting licences in 1991 was 91 in Cospicua. Although hunter mobility enables hunters to be in an area suitable for hunting in less than half an hour, the lack of areas available for hunting in these areas may be one of the determining factors why people are not interested in hunting.

Geographically, Gozo offers a totally different setting. It is greener, with ribbon development between localities leaving large tracts of arable land within walking distance from every town and village. The percentage of males with a hunting licence is much higher than in Malta. The average percentage of males who had a hunting licence in Malta during 1991 was 9.4 per cent. In Gozo, 33.9 per cent of the males had a hunting licence. The lowest percentage of males with a hunting licence in Gozo is in the capital city Victoria, where 18.07 per cent of the males hunt. This is still practically double the average percentage in Malta.

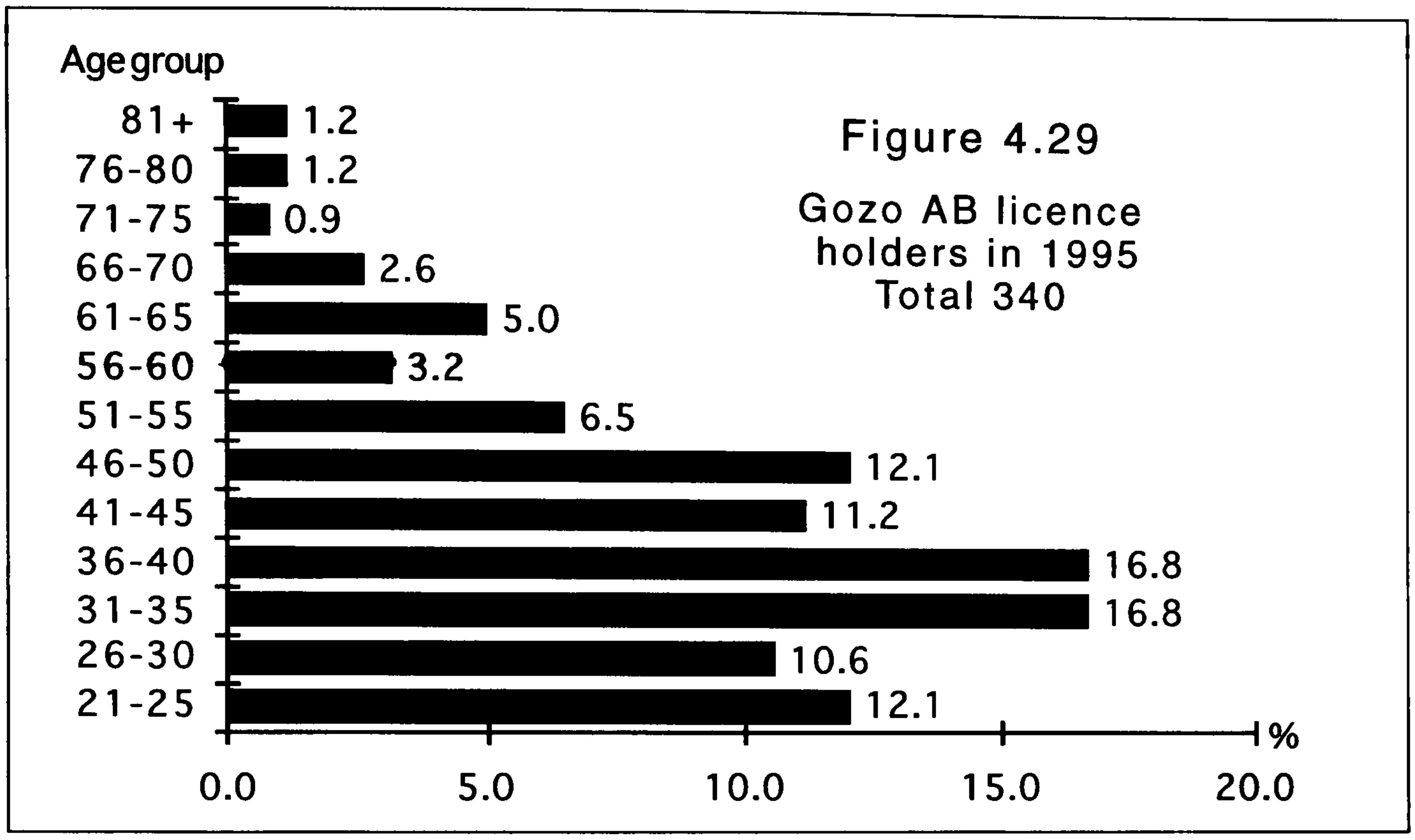
Figure 4.28

Gozo: Map showing localities discussed



The highest percentage of males with a hunting licence in Malta is rural Safi (35.71 per cent), in Gozo there are villages such as Nadur and Qala with over 47 per cent of the males registered as hunters. The highest number of licensed hunters in Gozo is at Nadur, where in 1991 there were 767 registered hunters. Victoria ranked second with 600 hunting licences.

As discussed earlier, the age structure of the hunters who paid the AB shooting licences in Gozo is similar to that of Malta, with the exception that the number of hunters in the 21-25 age group is slightly higher than those in the 26-30 age category (Figure 4.29). Otherwise, the biggest number of hunters is found in the 31-45 age group, in which there are 44.8 per cent of the hunters. Close to 23 per cent are in the 21-30 age group, over 18 per cent in the 46-55 age category while the remaining 14 per cent are over 56.



Because the trend in the number of hunting licences shows a decrease in the number of licence holders, even although the age structure for Gozo shows that percentage wise there are more younger hunters than there are in Malta, unless there is a sudden, sustained influx in the number of hunters from the younger generation, the number of hunters would decrease considerably over the next generation.

Conclusion

The discussion on demography and the growth in the number of hunters and trappers showed that the increase in the number of hunting and trapping licences is not related to demographic growth. Figure 4.9 discussed in this chapter showed that between the years 1984 and 1988, the number of hunting licences increased while the male population decreased. Up to the early 1960s, hunting was mainly practised by well to do people but the increasing standard of living started bringing hunting within everybody's reach, both in financial terms as well as in the spare time which started becoming more readily available. It can be shown that the increase in the number of hunters and trappers is linked to the growth of the Gross Domestic Product, and this is described graphically and discussed in Chapter 6.

The largest increase in the number of hunting licence holders occurred between the years 1985-1990. While the male population in Gozo increased by 7.6 per cent, the number of shooting licences practically doubled — they increased by 92 per cent. There are several villages in Gozo where 50 per cent of the males hold a hunting licence. As discussed in the previous chapter, such a heavy presence of hunters enhances the hunters' experience and creates a bond between hunters in the village, creating more peer pressure. During the same five year period between 1985 and 1990, the male population in the southern region in Malta increased by 4.5 per cent while the number of hunting licences increased by 26 per cent. The average increase in the number of hunters for all the island of Malta was of over 27 per cent while the male population increased by 4.4 per cent. This growth rate implies that more people from middle age groups and returned migrants were taking up hunting.

Through various age structures it was shown that in spite of the recent growth, the population of both hunters and trappers is not a self sustaining population and that the largest percentage of both hunters and trappers are in the middle and late middle ages. While over 21 per cent of the male population is aged between 21 and 30, only just over 17 per cent of the hunters are in the same age bracket. 30 per cent of the hunters are in the 31-40 age group, just over 27 per cent in the 41-50 age group while over 25 per cent are over 51 (over 11 per cent of which are over 61 years old). The percentage number of hunters aged between 31 and 50 is over nine per cent higher than the percentage number of males in these ages, while the percentage number of hunters aged between 21-30 is almost four per cent lower than the percentage number of males in the same age bracket. It has been argued that this factor could be a determining one as far as law enforcement is concerned as middle aged people have family commitments, apart from jobs. This is likely to influence their actions and law enforcement would encourage these people to observe the law as they would have pressure not to jeopardise their living or their family because of their pastime.

The significance of the lesser number of hunting enthusiasts in the lower age groups was discussed and the relationship between the changes in male population and hunting licences in various regions have also been discussed in some detail. Here again it has been shown that the increase in the number of hunting licences is not related to population growth but is more likely to be linked to a better standard of living.

A detailed discussion on the number of trappers is less likely to produce any valid projections because as Table 4.3 shows, the number of trappers who pay a licence does not reflect the actual number of trappers. Between 1990 and 1995, the number of trappers decreased by almost 18 per cent but the number of trapping sites increased by six per cent. Although this argument can be said for hunters, as a number of hunters shoot without a licence, one cannot quantify the number of such hunters. But if one were to go by police prosecutions, there have been few hunters charged with hunting without a licence while the number would be much bigger if the number of unlicensed hunters was bigger (Insp. Peter Cordina pers. comm.). If one were to extrapolate from age structures available, it emerges that the age structure for both finch trappers and those trapping turtle doves and quail are remarkably similar. This could be due to the fact that when different licences were introduced in 1993 (Table 4.4), the trapping of finches in spring was not allowed and the difference in paying a single licence or both finch and turtle dove and quail trapping licence was only Lm1. Many trappers could have feared that if the law was amended again in future, only those who had a licence could renew it and opted to pay both licences to retain the right to trap in spring.

The age structures of trappers in Malta and Gozo are also similar, except that Gozo has more trappers in the younger generation than Malta. While in Malta ten per cent of the trappers and under 30, in Gozo 12 per cent are under 30. Over 50 per cent of the trappers in both islands are between 31 and 50. There are more trappers in older age groups in Malta than in Gozo. There are some eight per cent more finch trappers and some ten per cent more turtle dove and quail trappers over 51 in Malta than in Gozo. Trappers on Gozo are only marginally a relatively younger age group and it would need a relatively longer period of time for trapping to be phased out naturally. One of the solutions to stem the growth in the number of trappers could be to renew existing licences and not to issue any new ones, unless in exceptional circumstances. The implementation of the recommendation by the Authority of Review to register trapping sites and issue licences only on registered sites can also help in stemming the growth if the construction of new trapping sites is forbidden. Trapping sites found on public land and on land obtained from the government for agricultural purposes but which was converted into a trapping site instead, should also be removed.

The next chapter follows from this one as it deals with hunters and the local institutions. The electoral system in Malta is one of proportional representation, in which Malta is divided into a number of districts, each returning five members of parliament. Hunter demography plays a role in this as politicians woo hunters for votes while hunters and their associations, in turn, pressure politicians in the hope that their pastime would not be restricted.

Chapter 5 HUNTERS AND LOCAL INSTITUTIONS

Introduction

The importance of this chapter cannot be underrated as it is only when one looks at the way the political system in Malta works that one begins to understand why the 'pastimes' of hunting and trapping have been allowed to escalate and become a problem. Since the exponential growth in the number of hunters started occurring after the 1970, it is pertinent to look at the political scene since that time. The Nationalist government, which had been in power since 1962 and which obtained Malta's Independence from the British Crown, lost the 1971 elections by just one seat. The Malta Labour Party leader Dom Mintoff became prime minister, and won the elections again in 1976. In 1981, the Nationalist government obtained the majority of votes, but failed to obtain the majority of seats, but the Labour party hung on in government until the elections of 1987, when the Nationalist Party was elected to government. The Nationalist party won the elections again in 1992 and lost in October 1996, when Labour was returned to government.

Mintoff's premiership brought many changes, among which were numerous improvements for the working class. The standard of living increased gradually and employees started benefiting from reduced working hours through the introduction of the 40 hour week. The political arena during these thirty years was also marked with numerous clashes which helped entrench the polarisation existing in Malta. With parties winning and losing elections with about three per cent of the votes, it is not surprising that parties are very careful not to act in any manner which might hurt large sections of the electorate. The increased standard of living also meant that more people could afford to become hunters and the number of hunters started growing at a very fast rate. At the same time, the conservation movement, which had been formed in the early 1960s, started making an impact on Maltese society, but more importantly, its voice started to be heard vociferously abroad with the result that the government was being urged to change the hunting regulations which dated back to 1932. When, in the late 1970s it started becoming evident that hunting regulations were in the offing, hunters, who up to then were a mass of individuals, formed their own association to ward off any restrictions and the hunting lobby came into being. The hunters' association plays a key role in opposing legislative matters where hunting is concerned and constantly flaunts the number of hunters and reminds politicians that hunters have a vote. With this background in mind, one can understand better the implications of hunting on the operation of political parties and the manner general elections are contested and run.

The analysis of the election results considered in this chapter shed more light on this complex relationship. The stance of the two major political parties is discussed. The role of the emerging Alternattiva Demokratika, a pressure group which contested elections as a party for the first time in 1992, is also discussed. Apart from their electoral manifestos over the years, one may read various examples of how political party candidates and established politicians differ in their opinions on hunting and this is explored further by a survey, the first and only undertaken so far, of the opinions of candidates and politicians who contested the 1992 elections.

As stated earlier, it is not only hunters who have an active interest in hunting. Both the members of the conservation movement as well as the non-hunting sector of the public often have an interest in the issue. The best way to look at the pulse of society in this respect is by looking at how the mass media, particularly news papers, look at hunting. For this chapter, research was conducted in all the main daily and weekly papers since 1962 at intervals of every five year period with a view to find out the number of environment related items in the press and to establish how many of these contain messages which are pro or against shooting. The results are tabulated and interpreted. To further gauge public opinion, reference is made to all the opinion polls about hunting.

The role of the Hunters Association and its lobbying tactics and influence in the political sphere are discussed and specific examples are given. These are compared to the tactics employed by the National Rifle Association (NRA), an American organisation considered to be one of the most powerful gun lobbies in the world. The reason why the comparison is being made is because in spite of their differing ways, both organisations are the strongest gun lobbies in their respective countries and both can be said to have similar aims, the protection of what they see as their members' rights to pursue their pastime.

One of the most influential institutions after the political parties in Malta is the Church. The relationship between the Church and hunting is not restricted to Malta, but in Malta the Church is often passive on a number of issues which are not of a religious nature but in the case of hunting, there are numerous instances where the involvement of the Church, or the lack of it, are more striking. Some examples of these events are also discussed in this chapter.

The political situation

Polarization is rife and deep rooted in Malta. It suffices to note that over 90 per cent of the eligible voting population votes at election time (see Table 5.1 on page 207). A brief look at Malta's political history shows that following the 1971 elections, small parties were practically eliminated while bigger parties became stronger. The electoral system in Malta uses the proportional representation with the single transferable vote. There are 13 districts each returning five Members of Parliament. To achieve election, a candidate must equal or exceed the quota established for the districts. The districts are formed by the Electoral Commission, which is bound to review the district boundaries at intervals of between two and five years. Alterations to the boundaries should be carried out taking account of geographical vicinity and differences in the density of the population. The Commission is also responsible for running the elections and the vote counting process.

The Labour Party won the elections in 1971 and 1976, each time with a slender majority. Violence marked the announcement of the election results and a large number of Nationalist Party clubs were attacked. Thirteen Nationalist Party clubs were heavily vandalised following the 1971 and 1976 elections (Schiavone 1992). Nationalist supporters frequently retaliated. Social anthropologist Boissevain, a Dutchman who lived for long spells in Malta doing research from the early 1960s to date, wrote a number of papers related to party politics in Malta. His observations on the recent political history may be more objective than those written concurrently by party officials or by party supporters.

Boissevain (1993) states that when the Labour Party won the 1971 elections, it had not yet forgotten the involvement of the Church in the 1960s electoral campaign, and the Labour Government took steps to curb the power of his old opponent. He noted that these reforms were imposed, rather than negotiated and describes Mintoff as a "charismatic leader", but his style of government was "abrasive and divisive. He was a tough minded reformer in a hurry" (Boissevain 1993 p.152). Boissevain states that during the Labour administration, public discussion of government policy was seen as criticism and was dealt with severely; strikes were harshly subdued and employees were suspended for taking part in industrial action ordered by their union. Physical violence gradually became an overt political instrument. Labour supporters burnt down the offices of the daily paper *The Times* in 1979, the residence of the Nationalist Party leader and the headquarters of the Church, were attacked and ransacked.

In the 1981 elections, the MLP gained a majority of seats with 49.1 per cent of the votes as against the PN's 50.9 per cent of first preference votes. The Nationalist Party argued that Labour did not have a mandate to govern, and that gerrymandering of electoral boundaries had produced the result. They boycotted parliament for over a year and waged a campaign of civil disobedience. Howe (1987) a member of the British Electoral Reform Society, stated that "the Electoral Commission's boundary revisions had produced some peculiar-looking shapes on the map" and pointed out that "given that certain streets are known to be strongly Labour or Nationalist, their transfer from one constituency to another is bound to arouse suspicions, whether justified or not" (Howe p.241).

Both Lakeman (1982) and Bogdanor (1984) argue that the anomalous 1981 result is likely to have stemmed not from deliberate gerrymandering, but from more Nationalist than Labour votes being "wasted". In all previous elections, the number of 'wasted' votes has been roughly equal as between the parties, but in 1981 this was not so: in nine of the 13 constituencies the last unelected candidate was a Nationalist, their votes totalling 20,207, while in only four it was a Labour candidate, that party's "wasted" votes totalling only 8,734 (Lakeman p.85, Bogdanor p.97). In a report about the 1981 elections, the Nationalist Party claimed gerrymandering was responsible for the "wasted votes".

In spite of the bitterness created by the election result, the Constitution stated that the Party obtaining the majority of seats had a right to govern, and the Labour Party exercised its Constitutional right even though it did not have a popular mandate. Boissevain noted that clientilism grew as the Labour Party strove to win back the votes it had lost. Getting employment within the civil service, being promoted and other "favours" were more easily granted through political intervention. This contributed to the increase in polarization, people were lumped into groups: "reds" (Labourites) and "blue" (Nationalist) (Pirotta 1991, p.62). Boissevain noted that the sixteen years of Labour Government had brought relative prosperity to the Islands. The position of the working classes was greatly improved but Labour's harsh methods fuelled mordant political antagonism. In 1987, a Constitutional amendment ensured that the party obtaining the majority of votes would also get a majority of seats.

The electoral system feeds the existing culture of patronage. Politicians campaign for re-election between elections and candidates from the same constituency compete with each other for votes from the same people. MPs who have demonstrated success in obtaining favours can hope to capture more votes.

Ministers are besieged by streams of competing favour-seekers from their own party, whose own political careers depend on ministerial patronage. "Paradise may be unattainable without the assistance of saints, but Malta is a paradise for political saints", remarked Boissevain (Boissevain p. 156). This mentality may gradually change following the introduction of Local Councils. Although one has to state that political parties are directly involved in such councils. The Nationalist Party and Alternattiva fielded a number of candidates officially, while the Malta Labour Party said it was against the councils being polarised due to parties participating at the elections. Yet a number of "independent" candidates known for their Labour leanings ran for elections and some were elected.

Knowing the background of the past twenty years of Maltese politics, one is bound to understand better why most politicians are extremely vote conscious. This mentality is further fostered by the narrow margin with which a political party wins, or loses, an election. A cursory glance at election results over the past years shows that since the 1971 elections, the percentage difference with which a party wins an election has hardly ever been over two per cent, except during the 1992 elections when the Nationalist Party obtained 5.29 per cent more votes than the Malta Labour Party.

Table 5.1
Votes polled by political parties 1971-1996

	1971 votes	percent	1976 votes	percent	1981 votes	percent	1987 votes	percent	1992 votes	percent	1996 votes	percent
MLP	85,448	51.41	105,854	51.53	114,132	50.92	114,936	48.98	114,911	46.52	132,497	50.73
PN	80,753	48.59	99,551	48.47	109,990	49.08	119,721	51.02	127,932	51.79	124,864	47.81
AD	—		—		—		—		4,186	1.69	3,820	1.46
Total	166,201	100	205,405	100	224,122	100	234,657	100	247,029	100	261,181	100

Source: General Election Results, Department of Information

Note: Alternattiva Demokratika (AD) contested the elections for the first time in 1992. There were a number of independent candidates and political parties at all the elections mentioned above, but the number of votes they obtained was insignificant and were hence left out.

Shooters capitalise on such a narrow margin. A letter to the press by the president of the Association of Shooters, Trappers and Conservationists, sums it all up: "considering that no party wins by more than a marginal and minimal majority in Maltese elections, and also bearing in mind that the hunters of Malta exceed in number this very narrow margin and that they have the sport embedded in their very hearts, it is surely prudent for politicians to be careful to look after the interest of the hunter" (Scicluna 1989). In the past, the hunters' lobby compelled even politicians who were renowned for their sympathies towards nature conservation, to tread carefully where bird shooting was concerned. The late Dr Anton Buttigieg, at one time Minister of Justice of the Socialist Party in the 1970s, who later became President of the Republic, and who was also known as the poet of nature due to the large number of poems he wrote about the subject, said "I will not sacrifice my political future for a few birds" (Testaferrata Abela 1974).

The only political movement which has openly declared that it is against hunting is Alternattiva Demokratika. Support for this party is still minuscule, having obtained 1.69 per cent first count votes in 1992 and 1.46 per cent in 1996. Alternattiva's ideology is closely allied to that of green parties on the continent. Most of the people within Alternattiva were previously active in various pressure groups in Malta. The first item on Alternattiva's 1992 electoral manifesto was 'the natural environment'. The manifesto stated that Malta should sign the Berne and Bonn Conventions, that a referendum on hunting should be held and until then, the EU directives on hunting should be enforced. Alternattiva also wanted that the money from shooting licences should be devoted to projects and environmental education and that public lands in the hands of shooters should be again made public (Alternattiva Demokratika 1992, p.2). But even this new party is having second thoughts as the 1995 document "From principles to action" speaks of "the consolidation of the new hunting regulations and the gradual prohibition of spring hunting" (Alternattiva 1995). Following 1996 election result, Alternattiva decided to adopt a more "pragmatic approach" on a number of issues including hunting (Manduca 1996).

The Malta Labour Party stance

It was the Malta Labour Party, which had been in Government for nine years, that enacted the bird protection act and subsequent regulations (Act XVII of 1980, Legal Notice 68 of 1980). However these regulations were hardly ever enforced, more so at the time immediately following their enactment. Statistics published by the Police show that between 1980-83, only one person was charged with infringements of the bird protection regulations (Pullicino 1983 p.16-17).

Dom Mintoff was Prime Minister when the hunting laws, which replaced the ones of 1937, were enacted. Mintoff seemed well aware of Malta's shortcomings in this respect as in a foreword of a book about Malta's birds, he wrote: "the record of the present and past generations in the preservation of all forms of wildlife has been discouragingly poor. Year after year, hundreds of thousands of migratory birds have been ruthlessly shot or trapped" (Bannerman and Vella Gaffiero 1976 p.iv.). Yet, he does not believe that bird shooting is a problem. He thinks that shooting is self defeating, in the sense that the more birds shooters shoot, the less there is to shoot in subsequent years (Dom Mintoff pers. comm.). Speaking in Parliament on a bill which aimed to disqualify a person from holding a shooting licence for twelve months if found guilty of shooting at homing pigeons, Mintoff, then leader of the opposition in 1963, spoke on the concept of game preservation, bird sanctuaries and the need for close-seasons. He felt that birds other than pigeons should be protected (Debates of the Legislative Assembly 4 May 1963 p.6577-6597). Nine years later, while replying a Parliamentary Question on the possibility of eliminating private riservatos, Mintoff stressed that hunters have certain obligations — not simply paying the licence. He spoke against the killing of "creatures" while they are about to "propagate" and about the concept of rearing game. Mintoff appealed to hunters to unite and form their own regulations. He expressed an opinion in favour of giving government owned land to those who showed disposition to be educated. Although he promised that the MLP would not eliminate hunting, since it governed by consent, he spoke on the need for an ecological balance and the need to educate the public. "One cannot keep justifying things on what our grandfather did. It is because our grandfathers were hunters that we ended up without any birds," he said (Parliamentary Debates Sitting 69, 2 May 1972 p.1216-1222).

Shooters had field days, but little sympathy while Mintoff led the Labour Party. A striking activity in March 1982 was the screening of a film on hunting in Czechoslovakia at the former MLP headquarters. A statement released by the party said this was not the "first and last activity as it was planned that more films on hunting abroad will be screened". It was also planned to send Maltese shooters on hunting trips abroad "at special prices during the hunting seasons" (*L-Orizzont* 1982). A few years after Dr Karmenu Mifsud Bonnici took the helm as Prime Minister and leader of the Labour Party in December 1984, a pro-hunting bias started to be felt. Following a series of meetings with representatives of the shooters' association, in April 1986 the Prime Minister "confirmed his approval to the association that only members of the association who have no other place to hunt will be allowed to hunt at Mizieb". The Police had to co-operate so that this agreement was realised. He agreed that lands at l-Ahrax and Mizieb were to be handed over to the shooters' association. He also agreed that "during the time when hunting is in progress, no one, except those authorised, can enter Mizieb". These conditions applied also to the project at Mellieha (Zammit, Scicluna and Vella 1986). The map shown in Fig 5.1 shows the location and approximate extent of these areas.

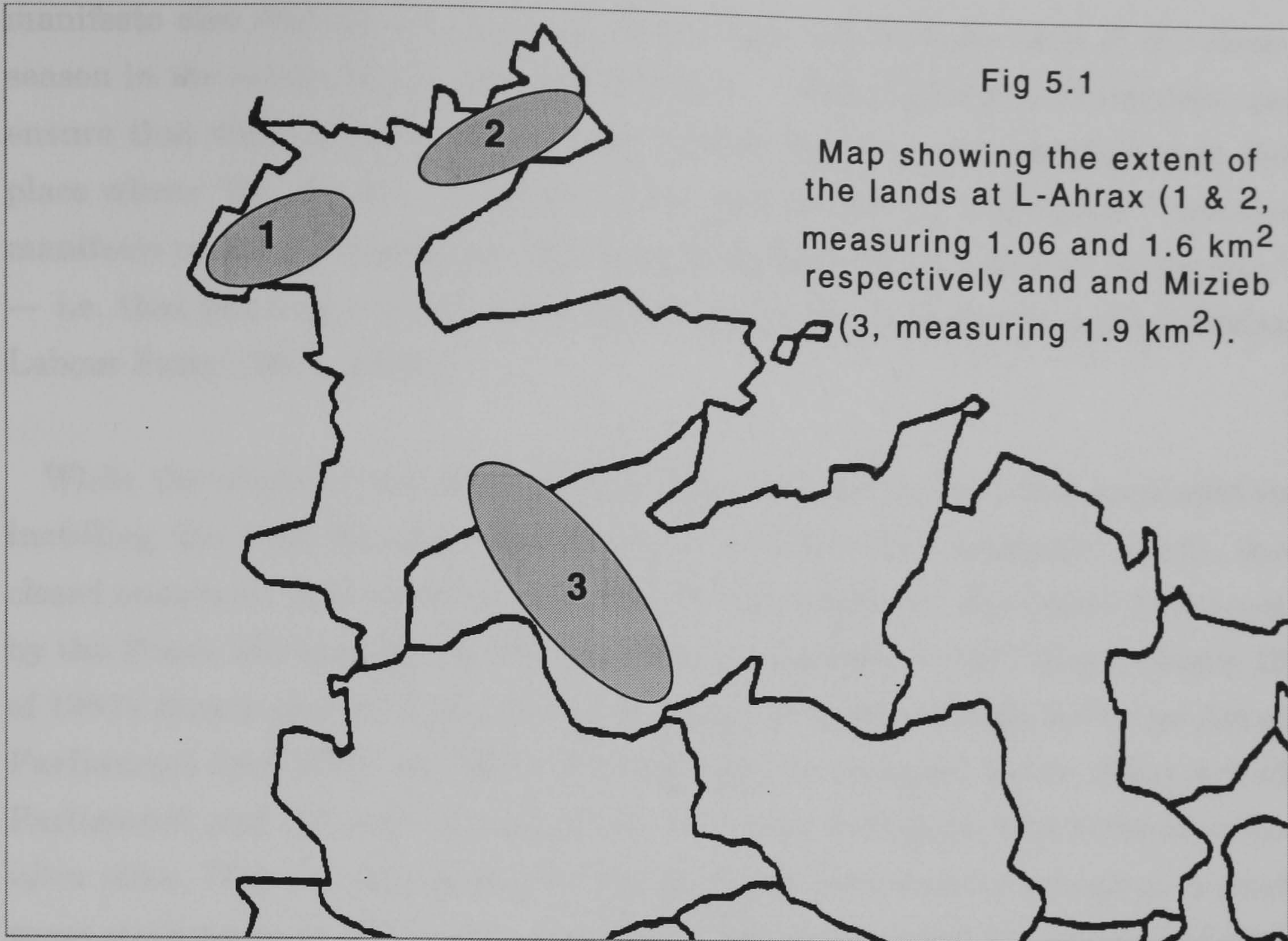


Fig 5.1

Map showing the extent of the lands at L-Ahrax (1 & 2, measuring 1.06 and 1.6 km^2 respectively and and Mizieb (3, measuring 1.9 km^2).

Although Dr Mifsud Bonnici endorsed the letter sent to him by the Shooters' Association, the Department of Information never issued an official statement. The Lands Department, which is responsible for the administration of government owned land, has never entered into an agreement whereby the shooters' association was recognised as a tenant to these two sites, which were afforested out of public funds in the late 1950s. Over £1 million liri (£1.8 million) were voted for afforestation between 1957-60 and over a third of a million was actually spent on afforestation of these areas (Estimates for the Financial year 1957-58; 1958-59; 1959-60). Another agreement between the Malta Labour Party leader Dr Mifsud Bonnici and the president of the hunters' association Mr Victor Vella was signed on 17 June 1991. The 13 point agreement stated that no steps should be taken to stop hunting and trapping in spring and that the rebate from hunting licences should be given to the hunters' association regularly. Agreement was also reached that the contracts related to the lands at l-Ahrax and il-Mizieb should be drawn up and signed and that other lands suitable for hunting should be identified and passed on to the hunters' association (Mifsud, J 1993).

The MLP 1987 Manifesto

The electoral manifesto of the Malta Labour Party for 1987 contained just over a page with three basic concepts on the environment. One of these concepts was "Hunting and the natural heritage". This stated that the "Socialist Government has already given proof that it appreciates the protection of natural heritage and recognises the right that the pastimes of hunting and trapping should exist". The manifesto also stated that the government had "instilled the need of the close-season in the minds of shooters and trappers — thus shooters and trappers can ensure that they will still have ample quarry. Mizieb is also mentioned as the place where "the shooter takes care of the place where he traps birds," and the manifesto promises to keep moving along these lines "to unify these two aspects," — i.e. that hunters protect the environment in the process of hunting (Malta Labour Party 1987 p.35-36).

While the electoral manifesto spoke of the way government had succeeded in instilling the need for the close-season in shooters' and trappers' minds, the closed season for bird-shooting was illegally shortened to 1 June until 14 August by the Prime Minister just before the general elections of 1987 (Legal Notice 18 of 1987). Due to the fact that the closed season had been established by an Act of Parliament (Act XVII of 1980), it could only be changed by an other Act of Parliament and the amendment by the Minister of Justice was claimed to be *ultra vires*. This was explained in detail by eight environment groups at a joint press conference, in which they appealed to the Government to repeal the Legal Notice (*In-...Taghna 1987*; *The Times* 1987a). But the authorities ignored all appeals. In January 1988, representatives of the environment pressure group *Zghazagh ghall-Ambjent* (now Friends of the Earth [Malta]), challenged the validity of the legal notice in Court. In July 1988, the Court decreed that such a change could not have been made since the Minister was not empowered to make it. It further declared that the regulation was null as far as the shooting of birds was concerned. However, it was not irregular with regards to bird trapping since the close season for bird trapping was not stipulated in the Code of Police Laws but was part of the regulations. Nevertheless, following an appeal filed by the Shooters' and Trappers' Association, the case is still pending in the Court of Appeal, but irrespective of the outcome, the 1980 regulations and all subsequent amendments have been revoked and replaced by the 1993 regulations (Legal Notice 143 of 1993).

In another 'vote catching' exercise before the elections of 1987, Mr Denis Sammut, then executive director of the Bank of Valletta, and a candidate for the Socialist Party, signed an agreement whereby the Bank of Valletta sponsored the Shooters' Association with a sum of Lm5,000 (*The Times* 1987b). On the 16 March 1987, that is after the dissolution of Parliament prior to the elections of May 1987, Mr Wistin Abela, then Minister of Finance and Customs for the Socialist Government, authorised the payment of Lm6,250 as financial assistance to the Shooters' Association. These moneys represented 50 cents from every paid shooting and trapping licence (Mifsud Tommasi 1988). In spite of the fact that there was a change of Government following those elections, the Shooters' Association kept receiving these moneys officially. In the 1993 Budget, Lm5,700 were voted under the votes of the Police (Estimates 1993, p.101).

THE MLP RUN UP TO THE 1992 ELECTIONS

The Electoral Manifesto of the Malta Labour Party for the 1992 elections contained 16 pages of policy on the environment, yet neither hunting and trapping, nor the protection of nature were mentioned. During the 1992 electoral campaign, Labour leader Dr Karmenu Mifsud Bonnici, spoke in favour of shooting on more than one occasion. He said that areas should be allocated for bird shooting, so that shooting can be conducted safely away from the general public (*The Times* 1987c), and that a future Socialist Government would allocate parts of the Islands for shooters and trappers, as it had done in the past (*The Times* 1990a). On other occasions he argued in favour of bird shooting and trapping by saying "one cannot ignore tradition and the fact that hunting and trapping was a pastime, even if it was at the expense of animals. Many youths who were hunters and trappers were free of other temptations. Few drug victims were known to be hunters and trappers" (*The Times* 1991a). The statement that hunting kept people away from drugs was reiterated on another occasion (*The Times* 1991b). Such statements drew the fire of some environment groups as well as members of the general public, so much so that the party felt it should clarify the air. In a letter to the press by the propaganda secretary of the Malta Labour party said that the Labour leader's statement regarding hunting and drug addiction was "solely for the scope of emphasising the fact that sports (including hunting) helps in the fight against drugs" and that "one cannot ignore the bad social consequences that would affect thousands of bird hunters should their sport be abolished" (Mifsud 1991a and b). On more than one occasion, Dr Mifsud Bonnici visited shooters at l-Ahrax in Mellieha during the spring shooting season, where he was greeted with a fusillade of shots in salute. One such activity held on 12 May 1991 was an official activity of the Malta Labour Party.

THE NATIONALIST PARTY STANCE

In spite of the declared policy of wanting to join the EU, the Nationalist Party electoral manifesto for the 1992 elections had no specific mention of hunting and little concrete commitments on nature protection. The only generic statement it contains is that the "Environment protection law will be implemented" (Nationalist Party 1992 p.81). In subsequent statements before the 1992 elections, the Prime Minister Dr Edward Fenech Adami said that "abolishing hunting was inconceivable" and that "Malta had particular circumstances in this sphere and there could therefore be exceptions to EC regulations" (*The Times* 1992a). In a similar statement, replying to the MLP's saying that Malta's entry into the EU would spell the end of hunting and trapping in Malta, the Prime Minister cited Kalchreuter's report which said that bird hunting and trapping "could be tolerated" (*The Times* 1992b, p.40). Dr Herbert Kalchreuter spent less than ten days in Malta on two visits in 1991. The first visit was between 30 April and 5 May, the second between 2 and 6 November. His report was criticised as a superficial attempt to justify hunting in Malta (Fenech 1993; Vella 1993; Azzopardi, J. 1993).

Before the elections, the Parliamentary Secretary for the Environment Dr Stanley Zammit, visited shooters at Mizieb and assured them that the government did not intend to withdraw lands which were being used by the shooters' association, neither would the government reduce or stop the annual financial contribution it made to the association (*The Times* 1991d). Following criticism, which included an editorial in *The Sunday Times*, Dr Stanley Zammit wrote that his visit to Mizieb was not an election gimmick but that he "had received a draft document suggesting the terms for an 'agreement' with the *Ghaqda kaccaturi* (hunters' association) concerning their access to the land at Mizieb and l-Ahrax". Since the Lands Department also fell under his portfolio, it was his express duty to visit and see with his own eyes, the land under discussion (Zammit 1991).

At a discussion on the theme "The environment — a politicians' game?" organised at University in October 1992, both the Prime Minister and the Leader of the Opposition argued against the holding of a referendum on hunting. Labour leader Dr Alfred Sant said that if a referendum took place and sixty per cent of the people voted against hunting, they would be imposing their will on the rest, and this was undemocratic (*The Times* 1992c). During this discussion, the Prime Minister argued against referenda as these are "costly", also stating that "if hunting is against life, then I am against life" (Borg 1992). In a report presented to the EC-Malta Joint Parliamentary Committee by Nationalist MP Dr Louis Deguara, himself a hunter, used arguments from Dr Kalchreuter's report to justify hunting (Deguara 1993).

Candidates vs Politicians

Candidates tend to have a more straightforward stance on hunting than Members of Parliament, but few of them dare speak out publicly. The following are some recent examples with some form of commitment and others typical of the usual ambivalent tight rope walking stances one is accustomed to hear from politicians.

Mr Joe Saliba, a Nationalist Party candidate wrote that political parties should forget their differences and analyse "the situation of these creatures, who do not have a vote, but have a right to life...I do not doubt that most of the Maltese MPs are against hunting and trapping. But they are afraid of loosing votes" (Saliba 1992). Dr Michael Axiaq, another Nationalist candidate wrote against the arrogance of some shooters and urged proper enforcement of the regulations. Axiaq's plea came after he saw shooters killing a falcon and "whose immediate reaction became violent and punctuated by the cocking of their guns" when he passed a remark about their illegal activities (Axiaq 1992). Following a profile interview with a Mr Lawrence Vella, at one time one of Malta's leading clay pigeon shooters and president of the shooters' association, where it was stated that Mr Vella killed hundreds of sparrows in shooting competitions, Nationalist MP Mario Galea wrote expressing a strong opinion against such practice as well as against the party paper for giving space to those who boast of killing birds (Galea 1992).

The only Labour MP to air his views against certain aspects of hunting was Deputy Leader Dr George Vella, who said he did not agree with hunting from seacraft and that hunting regulations should be enforced (Vella 1992). On the other hand, Mr Charles Buhagiar, MLP spokesman on the environment was very non-committal when replying to questions on the need to regulate hunting. In his opinion, hunting "is more of a socio-cultural attitude based on a very long tradition of hunting and hence this has to be changed gradually by means of education." Mr Buhagiar's comments were also ambivalent: "we have to protect birds, bearing local conditions in mind" (*The Malta Independent* 1993 p.15). In a meeting with officials of the Malta Ornithological Society (MOS), Mr Buhagiar agreed that hunting "should not be tackled in a partisan manner and that there was the need for more studies on the effects of hunting in Malta" (*The Times* 1993a p.23, Buhagiar 1993). Labour MP Mr Noel Farrugia, who contested the elections for the first time in 1992 and was elected, met a delegation of the Rabat Committee of the Hunters' and Trappers' Association where he told them that he does not feel that hunting and trapping should be stopped. He also said that hunters and trappers should show more responsibility with regards to existing laws and condemned the illegal shooting of protected birds (*Il-Passa* March 1993 p.7). In a televised debate organised by the Broadcasting Authority in May 1993, Dr Sant said that the MLP backs the Government in its intention to sign the Berne Convention (Televised Debate on PBS 14 May 1993; *l-orizzont* 1993). But asked to elaborate the following day, he said that he knew that Government "would be making reservations and one still needed to discuss these with the parties concerned", adding that the MLPs support depended on what the Government's exceptions would be (teleconversation on Saturday 15 May 1993).

HUNTING AND THE 1992 ELECTION RESULTS

At a press conference given before the elections of 1992, the Association for Hunting and Conservation listed what the political parties had said and done about hunting in Malta. The conclusions were that the Labour Party had favoured shooting more than the Nationalist Party (*The Times* 1992d). The 1992 elections showed that hunters do not really have the strong voting lobby they claim they have. Firstly, the Nationalist Party, which used Malta's accession to the European Union as a platform in the electoral campaign, which also means restrictions on hunting practices, not only got re-elected but increased its majority by over 8,000 votes — from 4,785 to 13,021 votes.

At the poll of 1992, a number of candidates who were hunters or who showed sympathy towards hunting, were not elected (see Table 5.2). Two of them were eventually elected only after another MP vacated his seat on being elected from another district. Dr Philip Muscat, a hunter within the Labour ranks, who was at one time Minister of Education, was not elected and made it to Parliament following a by-election for the seat vacated in the sixth district. Dr Louis Deguara, a Nationalist candidate and a hunter from Naxxar, was elected when a seat was vacated in the 11th district. Nationalist MP Mr (now Dr) Tony Abela is not a shooter but openly shows his sympathy towards shooters and his canvassers include shooter. He actually lost his seat in Parliament. Dr Adrian Vassallo, a doctor who is also a hunter, contested the elections within the Labour fold for the first time in 1992, but failed to be elected.

Table 5.2
Votes polled by pro-hunting candidates (1992)

Candidate/Party	District	Quota	Votes polled on 1st count	Votes polled on last count	Number of hunting licences in the district
Abela Tony (PN)	7	3,190	382	422	1,400
Abela Tony (PN)	12	3,148	1,551	2,054	2,200
Deguara Louis (PN)	11	2,885	1,139	2,860	1,100
Muscat Philip (MLP)	6	3,130	756	774	900
Muscat Philip (MLP)	7	3,190	494	553	1,100
Vassallo Adrian (MLP)	9	3,198	1,629	1,816	600

Source: General election results, Department of Information

During the 1992 elections, there were 2,002 invalid votes. Although a number of these votes may have been invalidated by mistake, a number showed mistrust of politicians. Some of these votes had slogans "*Kacca u nsib No. 1*", (Hunting and trapping No. 1) and "*Kontra l-kacca*, No vote" (Against hunting, no vote) (Cassola 1993).

POLITICIANS AND THE 1993 HUNTING LAWS

The new hunting regulations published in October 1993 gave rise to widespread comment and were followed by a number of protests by the hunters' association. There was a wave of incidents and vandalism. Traffic signs, public buildings, pre-historic temples and a number of houses at Mdina as well as a British military cemetery at Mtarfa were vandalised. A bomb was planted and severely damaged the main pipes leading to the reverse osmosis plant at Ghar Lapsi. Trees were chain-sawed and pro-hunting slogans and messages against the Environment Secretary Dr Stanley Zammit were painted at a number of places. Two hunters were charged and found guilty of daubing traffic signs (Testa 1994a, Testa 1994b, *In-Nazzjon Taghna* 1994b). The situation was seen as 'serious' and discussed in Parliament, but the Labour Party came out with a policy in support of hunting and against the new regulations (Media release on the hunting and trapping regulations, Malta Labour Party, 1 February 1994). Before the MLP's policy was announced, the MLP Environment spokesman Mr Charles Buhagiar criticised the hunting laws saying they were done hurriedly and only to bring Malta closer to the European Union (Debates of the House of Representatives, Sitting 207, 10 December 1993 p.306).

The MLP's policy was published on 1 February 1994. Amongst other things, the unsigned three page document stated that the Labour party agrees that song bird trapping in spring should be allowed and that the spring hunting season should be longer. The party agrees that hunting from sea-craft should be practised between October and February while the new regulations allow it only in November and December (Media release on the hunting and trapping regulations, Malta Labour Party, 1 February 1994). On the same day the MLP's policy was announced, the hunters' association issued a statement and hailed the policy as "an important step towards the position suggested by the hunters' association and offers a sound base for an acceptable compromise" (Press release by the Association for Hunting and Conservation, signed C. Brincat, 1 February 1994). Alternattiva Demokratika, on the other hand, expressed its concern at the "opportunist stance" adopted by the MLP and criticised the party which while saying it agrees that Malta signs the Berne Convention, was proposing measures which go against the spirit of the convention (Alternattiva Demokratika 1994).

The MLP's policy was defended further by Deputy Leader Dr George Vella who was the only Labour MP to speak openly against certain hunting practices before the new laws and the Labour Party's position were announced. In a paper presented at the EU-Malta Joint Parliamentary Committee stated that the "cultural and recreational aspect has been completely ignored in the new regulations" (Vella 1994). Other Labour MPs spoke against the new hunting regulations at a number of meetings or on radio programmes. One of the strongest statements was made by the former MLP leader Dr Karmenu Mifsud Bonnici who told hunters at a meeting in Mellieha that "hunting is God's gift to the poor (*The Times* 1994b p.40). The Prime Minister strongly defended the new regulations and attacked the MLP for changing tack, to come out against them after indicating they were in favour (Zammit 1994).

The run up to the 1996 elections and the election results

In spite of being a short electoral campaign lasting a mere five weeks, the hunting issue kept surfacing, particularly during the latter half of the campaign. All parties had something to say about the issue, including independent candidates who do not obtain more than a handful of votes (*The Malta Independent* 1996c). The Malta Labour Party was the one with the most pro-hunting manifesto, with hunting taking up over five per cent of the space of the section dealing with the environment. The MLP's 43 page electoral programme said that "the traditional custom of shooting and trapping will continue to be recognised and will be allowed to take place within the limits which respect the environmental needs and interests of the rest of the population. The limitations which will be drawn up on hunting and trapping will be those according to the Bern Convention with reservations which will reflect the special circumstances of Malta" (MLP 1996b p.7). The electoral programme of the Labour Party was based on a document released in January 1996 (MLP 1996a), which contained more details about the party's agenda on the matter. The party pledged "to discuss with all associations concerned" to revise the laws and to enforce them better. It proposed a "scientific study to identify all the parameters of hunting and trapping in Malta" and to modify the reservations on the Bern Convention taking into consideration Malta's geographical position. Labour also pledged to embark on an educational campaign about hunting and how it can be practised "with respect to other citizens without harming the environment." In spite of such statements, the Labour Party had already reached an agreement with the biggest hunters association about the matter, and the agreement went beyond the electoral manifesto (*The Malta Independent* 1996d).

A number of Labour candidates, even some who stood for elections for the first time, wrote pro-hunting articles in the press. Amongst these were Mark Sammut (Sammut 1996), Dr Angelo Farrugia (Farrugia 1996), Teddy Busuttil (Busuttil 1996) and Labour's spokesman for the environment Charles Buhagiar. The latter told hunters at a meeting before the elections that the day after the election they should feel free to practise their hobby as a Labour Government would not take action against them. Mr Buhagiar is reported to have said "I know that hunting on a Sunday afternoon is illegal, but don't worry we will instruct the police authorities not to issue any charges against you" (Bonello 1996). However, as in the 1992 elections, most pro-hunting candidates failed to be elected (Table 5.3).

Table 5.3
Votes polled by pro-hunting candidates (1996)

Candidate/Party	District	Quota	Votes polled on 1st count	Votes polled on final count	Number of hunting licences in the district	Elected (e)
Agius Chris (MLP)	3	3,329	199	262	1,200	
Sammut Mark (MLP)	6	3,294	626	1,365	1,300	
Sammut Mark (MLP)	7	3,519	311	320	1,100	
Buhagiar Charles (MLP)	7	3,519	2,535	3,670	1,100	e
Pace Bertu (MLP)	7	3,519	1,360	1,405	1,100	
Vassallo Adrian (MLP)	9	3,249	3,177	3,250	600	e
Vassallo Adrian (MLP)	10	3,361	208	228	400	
Farrugia Angelo (MLP)	11	3,420	1,426	2,986	1,700	e
Deguara Louis (PN)	11	3,420	2,361	3,527	1,700	e
Busuttil Teddie (MLP)	13	3,323	1,140	2,432	3,800	
Galea Pace Victor (PN)	13	3,323	1,225	3,690	3,800	e

Source: General Election results 1996, Department of Information

In its 243 page manifesto, the Nationalist Party did not even refer to the hunting issue. The electoral programme stated that the process of creating nature reserves will continue, that the protection of biodiversity will be ensured and that new incentives will be taken to protect the countryside, among which is the encouragement of walks in the countryside (Nationalist Party 1996). Such measures would have had an impact on the hunting issue as the creation of nature reserves would limit the space available to hunters and the protection of biodiversity could have included also birds. The encouragement of walks in the countryside would also have had a ripple effect as it would have increased the number of clashes with hunters and trappers, who are present in the same countryside the party was going to encourage walks in. In spite of such statements in the manifesto, the Prime Minister Nationalist Party leader repeatedly assured that the hunting laws would not be changed (*Il-Mument* 1996) and reminded hunters that they always had the Authority of Review to resort to in case changes were made. Whenever Nationalist Party candidates spoke publicly about the matter, they simply reiterated the party stand and echoed the Prime Minister's statement. The most anti-hunting manifesto was that of Alternattiva Demokratika, which proposed the abolition of hunting in spring and that illegal hunting and trapping would be fought (Alternattiva 1996). The hunters' association intensified its campaign during the last weeks of the election campaign. Banners with the slogan "your vote is a weapon just like the shotgun, use it well" and "PN a future with no hunting a trapping in spring", were hung in a number of prominent places, especially in areas with a high concentration of hunters. District committees circulated leaflets saying what the Labour Party was promising and comparing it with what the other parties were offering. The hunters' association was telling hunters, both directly and indirectly, to vote for the Labour Party.

The Nationalist Party lost the 1996 elections by over 7,600 votes. Hunters were claimed to have contributed greatly to this defeat, but an analysis of the swings against the party reveals that there is no correlation between the loss of votes and the number of hunters in any of the districts (*The Malta Independent* 1996e). The biggest swings, as can be seen in Table 5.4, occurred in Gozo, the 13th District, and in the first district, comprising of the harbour area. The swing against the Nationalist Party was over five per cent in both districts, but while the number of hunters in Gozo amounts to almost 4,000, in the first district hunters number just 400.

Table 5.4
Relationship between the swing and the hunting licences per district in the 1996 general elections

District	Number of hunting licences	Actual swing %	Swing %
13	3,800	-5.2	-5.2
1	400	-5.1	-4.8
7	1,120	-4.7	-9.4
9	600	-4.6	-4.5
12	2,200	-4.5	-2.8
11	1,700	-4.4	-5.4
6	1,200	-4.3	-1.3
4	900	-4.2	-4.9
5	1,200	-3.9	-4.7
8	800	-3.3	-4.5
3	1,200	-3	-3.1
2	500	-3	-1.7
10	400	-2.5	-2.5

Source: General election results 1996, hunting licence statistics

In a number of other districts, the party suffered a swing ranging between 4.2 and 4.7 per cent. The number of hunters in these districts varied between 600 and 2,200. In the first and the tenth districts, where there was an identical number of shooters, the party suffered different swings of 5.1 and 2.5 per cent. The hunting issue could have contributed to the party's loss, but only minimally. This can be confirmed by looking also at the votes obtained by pro-hunting candidates in Table 5.3, where a number of them failed to be elected and there is no relation between the number of hunters in the districts to those who made it to parliament. Labour had three pro hunting candidates on the seventh district. Between them they polled 4,206 first count votes when there are 1,100 hunting licences in the district. Pro-hunting Labour candidate Dr Adrian Vassallo made it to parliament in 1996 after having failed to be elected in 1992. He polled 3,177 first count votes in the tenth district, where there are 600 hunters. In another district he contested, he polled 208 first count votes when there were 400 hunters and there were no other pro-hunting candidates. Two pro-hunting candidates in Gozo, one from each party, did not even manage to poll the equivalent of the total number of hunters in their district. Together they polled a total of 2,365 first count votes when there were 3,800 hunters in the district and the one who was eventually elected was for the Nationalist Party, whose hunting policy was more restrictive than the Labour one.

THE HUNTERS' LOBBY

Lobbying is one of the most important tools any organisation possesses and the way the lobbying is organised sheds light on the ideology of the organisation. The lobbying tactics employed by Maltese hunters and their associations can be best analysed when compared to those of other hunting organisations. Since the National Rifle Association (NRA) in the United States is considered to be one of the most effective and powerful gun lobbies, a comparison of the strategies of both organisations may shed some light on parallels or differences between the strategies employed. The NRA came into being as a direct result of the American Civil War, and although its origins were far removed from sporting interest as they are perceived now, it has evolved into a bastion of defence against gun control in the United States. In the early 1930s, the NRA began to forge a method of political influence and due to its legal and technical expertise became consultant to many legislators in the drafting of gun laws (Leddy 1987). The Maltese hunters Association came into being as The National Association of Shooters and Trappers in 1973 when pressure against hunting was gaining ground and new hunting laws were being drafted (Azzopardi 1985). The association was always consulted by the government when hunting laws were being drafted. The hunters association as well as the recently established Arms, Armour and Militaria Society (AAMS), which brings together weapon collectors as well as gun enthusiasts, have been involved in a government consultative committee to advise on the necessary changes and way of implementation of the amendments to the Arms Ordinance, which controls the use and possession of weapons (Naudi 1995).

The pressures for gun control in the United States grew as a result of President John F. Kennedy's assassination. Pressure was such that leaders of the National Rifle Association attempted to redirect the association away from opposition to gun control and into areas of conservation and environmental interest (Leddy 1987). Pressure for gun control in Malta dates back to 1908, when the Superintendent of police wrote in his official report that "the considerable yearly increase in the number of licences to carry firearms for sporting purposes is quite out of proportion to the area of these Islands, and, for obvious reasons, deserves the serious consideration of the Government" (Malta Police 1908 p.I 4). The number of licences had increased from 1,702 in 1903 to 2,442 in 1907, an increase of 740 licences in the span of five years. But it seems that no official action was undertaken as the number of shotgun licences, as well as the number of firearms, kept increasing. While the number of shooting licences in 1907 stood at 9.2 per 1,000 of population, in the number rose to 47.9 shooting licences per 1,000 of population in 1990. This represents a five-fold increase while the population in the same period only doubled. Although there was a marked drop in the number of licences paid in 1994, when the number of shooting licences amounted to 9,923 (or 27.6 per 1,000 of population), as discussed in the previous chapter, one has yet to see whether this drop reflects the actual number of hunters who hunt as it may well be that many did not renew their licence but who, nevertheless, still hunt.

The way the NRA operates is interesting as in spite of its success, is diametrically opposed to the methods employed by the Maltese pro-hunting lobby. Although there may seem to be parallels, these are very superficial. Firstly, "the NRA acts on a one to one approach, where the legislator is contacted by his own constituents who are NRA members" (Leddy 1987 p.114). In Malta, although the hunters' association exerts political pressure, it is exerted on the party as a whole and the association speaks on behalf of its undisclosed membership. Thus it is the party policy which is targeted, rather than individual candidates, which in turn may influence their party policy. The effectiveness of lobbying by the Maltese hunters' associations seems ineffective, at least as far voting patterns are concerned because as Tables 5.2 and 5.3 show, candidates who are hunters or who openly express pro-hunting sentiments still fail to be elected. The NRA keeps its members informed about proposed gun laws and directs them to what course of action should be taken: "members are asked not to send form letters or petitions. The NRA feels that individual communications are far more likely to be considered than an obviously 'canned' message. Members are also urged to be courteous to the legislator even when he is a strong opponent. Abusive letters are regarded as likely to antagonise rather than persuade (Leddy 1987 p.118). In this context, the approach by the Maltese hunters' association is different. Hunters are informed mainly through press releases issued by the association in the mass media, which, although having a wide audience are not guaranteed to reach all members. Many individual hunters as well as members of district committees frequently express their opinion which often is in conflict with that of the parent association. While the hunters' association is 'non-political', a member of one of the district committees of the hunting association, wrote in the press that the shooters should vote for the Malta Labour Party at the next elections in view of that party's stand (Cilia 1996, Decelis 1996). Following the enactment of hunting regulations in 1994, a number of letters in the press contained abusive language against the Prime Minister and the Nationalist Government and strong attacks ostracising Alternattiva Demokratika for their stand on the regulations and backing the Labour Party (Mamo 1996, Psaila 1996, Psaila 1996a, Psaila 1996b).

The NRA is practically invisible: "A major reason for the invisibility of the NRA as a social movement is its abstention form the demonstration as a tactic. The NRA knows that in any crowd of hunters, some will appear in clothing more suited to the hunting field, which looks odd to most city dwellers" (Leddy 1987 p.126). Leddy states that the NRA is cautious not to be associated with violence, which is so easy in demonstrations, leading to reaffirm that guns and gunners equal violence. The NRA has gone to great lengths to avoid this and to promote a responsible, law-abiding image. It knows that the cost of any adverse incident would be far greater that the possible gain. The tactics employed by the local hunters' association are diametrically opposed. Rallies and demonstrations involving thousands of hunters have been used by the association ever since its inception in the early 1970s. Demonstrations reach a peak attendance following the announcement and eventual enactment of new regulations. Men clad in camouflage hunting clothes, many of whom carried wooden guns and cartridge belts, harnessed decoy birds, stuffed birds and posters, many with abusive and threatening language, could be seen in press photographs and film clips on television news. During carcades leading to and from the demonstration, trees were uprooted and in more than one instance, tyres were burned on the roads, blocking them for several hours and several policemen were injured when stones were hurled at the police who tried to intervene to open the main road to the airport which was blocked by hunters (Zammit 1994b, Cocks 1994, *The Times* 1995a, *The Times* 1995b). Far from providing a law abiding image, the stress was on the strength and power of the protesters. These protests are to be seen in the context of what was happening in Malta at the time. A wave of vandalism was underway, and although the perpetrators remained unknown, pro-hunting slogans formed part of many of the vandalistic attacks and two hunters were charged in court and fined after they were caught red handed defacing traffic signs (*In-Nazzjon Taghna* 1994b, Testa 1994a, Testa 1994b).

THE MASS MEDIA AND HUNTING

Although before 1993 there have not been any scientific opinion polls to test whether public opinion is in favour of, or against hunting, the mass media showed that public opinion is opposed to hunting. By looking at the environment-related items in the press, and limiting oneself to items dealing with natural history, conservation, items highlighting the degradation or safeguarding of the countryside or the natural environment, items regarding the killing or saving of particular species in Malta and planning related items which have a bearing on the natural environment, one can draw certain conclusions. For this study, all the daily, weekly and monthly papers published between 1962 and 1992 were seen and environment related items were photocopied and later analysed. In analysing the press cuttings, the articles were read to determine where the author placed his emphasis. The major orientation used to determine whether the article was deemed for or against hunting. Since error may be caused by value judgements of different observers, all the press cuttings were self-gathered and analysed. Graphs were constructed for each five year period starting in 1962 (Fig 5.2-5.8). Three vectors are plotted, these represent the anti-hunting items, the MOS generated anti-hunting reports and the pro-hunting items per month.

The graphs show the number of items, irrespective of the space they took in the media. It was the thrust of the message, whether this was for or against hunting which was important, not its length. Table 5.5 gives a breakdown of environment related items in the local press for the period under study. Not to clutter the data, a sample every five years starting in 1962 was chosen. This year was chosen as it was the year during which the Malta Ornithological Society and the Natural History Society were set up. Apart from the printed media, hunting often features on discussion or phone in programmes on radio and television. But with ten local radio stations and two television stations it is humanly impossible to monitor what goes on the air and even so, it is difficult to judge with certainty on what the conclusions are, especially in live discussion programmes where a number of people phone airing their views. It is easier, although laborious, to look at printed matter and to decide what is for or against a particular issue. I have limited myself to local papers only although reference to foreign papers or journals reporting on the local situation is made in the chapter dealing with economic aspects.

Table 5.3
Press reports on hunting and environment related matters
1962-1992

Year	Total press reports	Environment related	Pro hunting	Against hunting	MOS generated	% generated by the MOS
1962	95	36	25	34	13	38.2
1967	171	102	9	60	2	3.3
1972	114	26	44	44	2	4.5
1977	421	92	79	250	115	46.0
1982	326	84	55	187	101	54.0
1987	807	627	52	128	41	32.0
1992	1,957	1,620	71	266	35	13.2

Note: Press reports means any item appearing inthe press. Thuis includes stories, reports of activities, letters to the editor, features as well as adverts. Most "pro hunting" items in the 1960s were advertisments for shotguns and cartridges. The most common anti-hunting material were letters to the editor.
% MOS generated is the percentage of Malta Ornithological Society generated material of all the "against hunting" material appearing in the press
The newspapers analysed were The Times, The Sunday Times, l-orizzont, It-Torca, In-Nazzjon taghna, Il-Mument and The Malta Independent.

In the years surveyed it transpired that items about hunting tend to appear in the press mostly between March and May in spring and between September and October in autumn. This is not surprising as these are the main hunting seasons, and while organisations plan their campaigns to coincide with the migration period, individuals tend to express their opinion against or in favour of hunting when they are either reminded of hunting or when they experience it during the hunting season, while hunters reply to such criticism. The reports tend to thin out in summer, unless a campaign is sustained by some organisation or some rare birds are shot and feature in the press. In 1992, there were a total of 1,620 environment related items in the local press. Of these, 266 or 16.4 per cent were against hunting while only 71 (or 4.4 per cent) were pro-hunting. Of those against hunting, only 13 per cent were generated by the Malta Ornithological Society, the rest were written by individuals. The year 1987 had a similar pattern. There were 128 items against hunting in the press —15.9 per cent of the number of items related to the environment. In the same year, there were 52 pro-hunting items, or 6.4 per cent of the environment related items. The number of anti-hunting reports in the press reached a peak in the late seventies (Fig 5.2).

Fig 5.2
Monthly distribution of hunting related reports in 1962

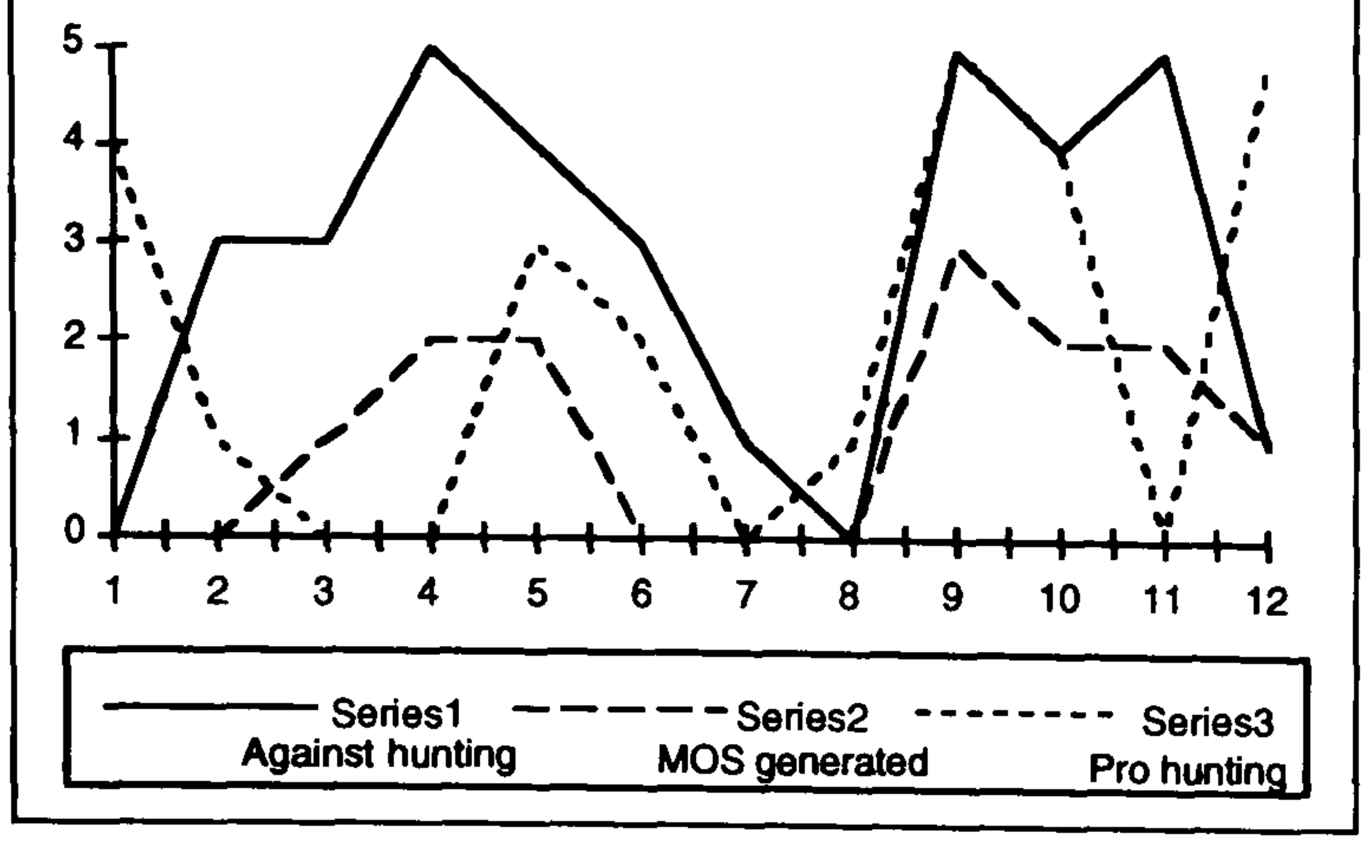
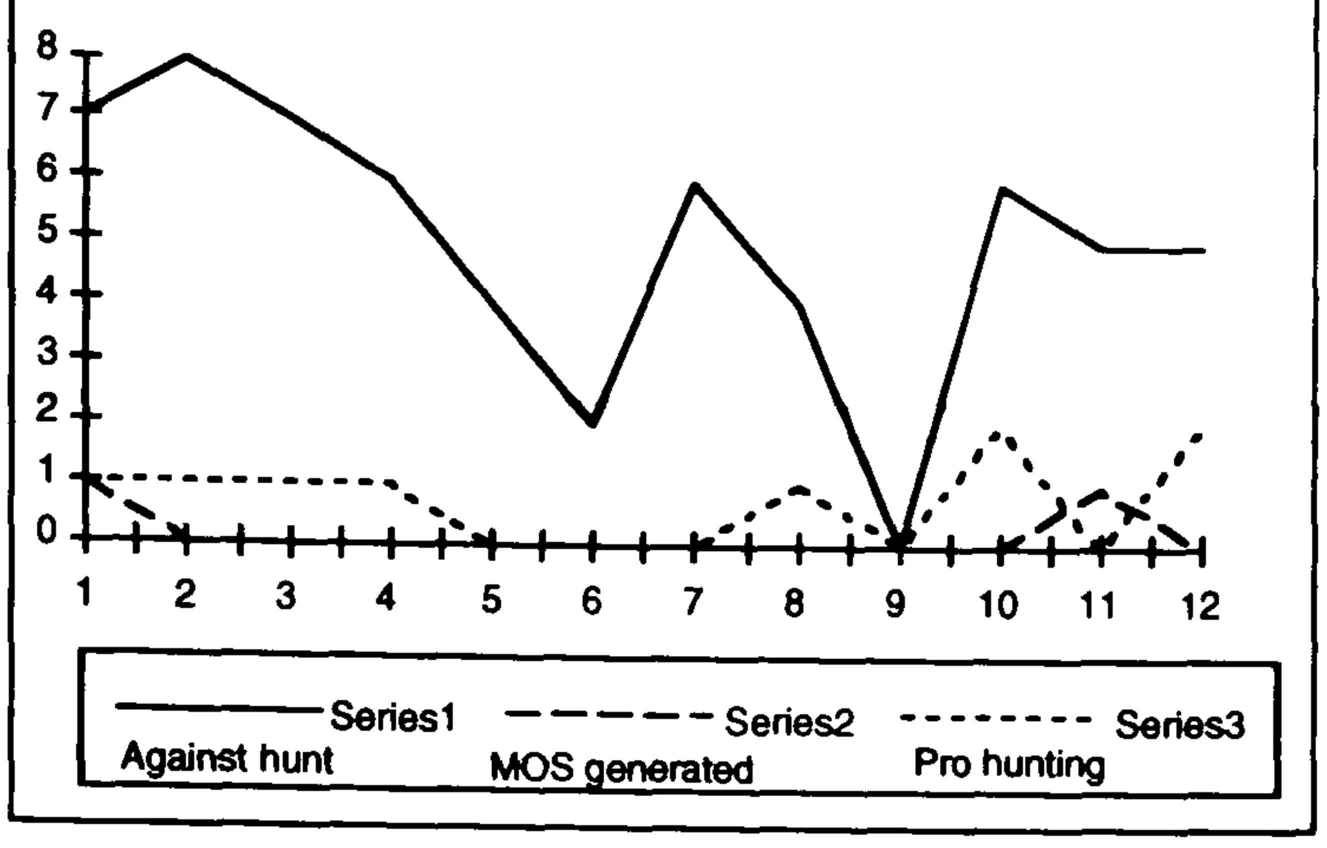


Fig 5.3
Monthly distribution of hunting related reports in 1967



Hunters set up their organisation in September 1973. Mr Aldo Azzopardi, who was one of the founder members of the hunters' association, wrote that "at that time shooters and trappers were under heavy fire from conservationist societies and harsh game laws were being formulated. Right from the start the Association took up the cudgels in defence of the hunting sports in our islands and on the whole, managed to stem the attacks" (Azzopardi 1985). While shooters managed to dilute the laws in the pipeline, anti-hunting sentiments grew. In 1972, the year before hunters set up their association, there were 44 items against hunting in the press. A mere five years later, in 1977, the number of anti-hunting items stood at 250, which was more than five times the 1972 total.

Fig 5.4
Monthly distribution of hunting related reports in 1972

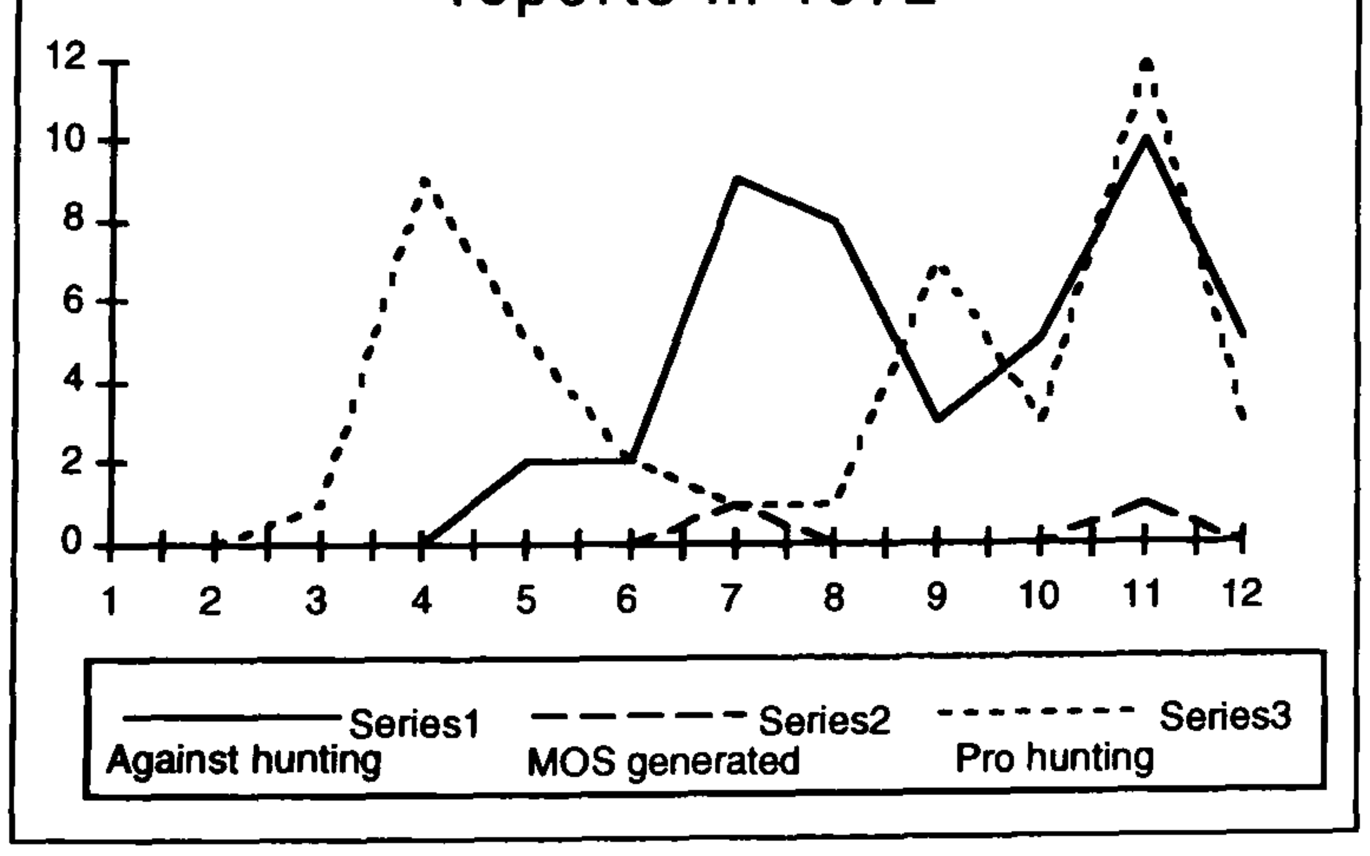
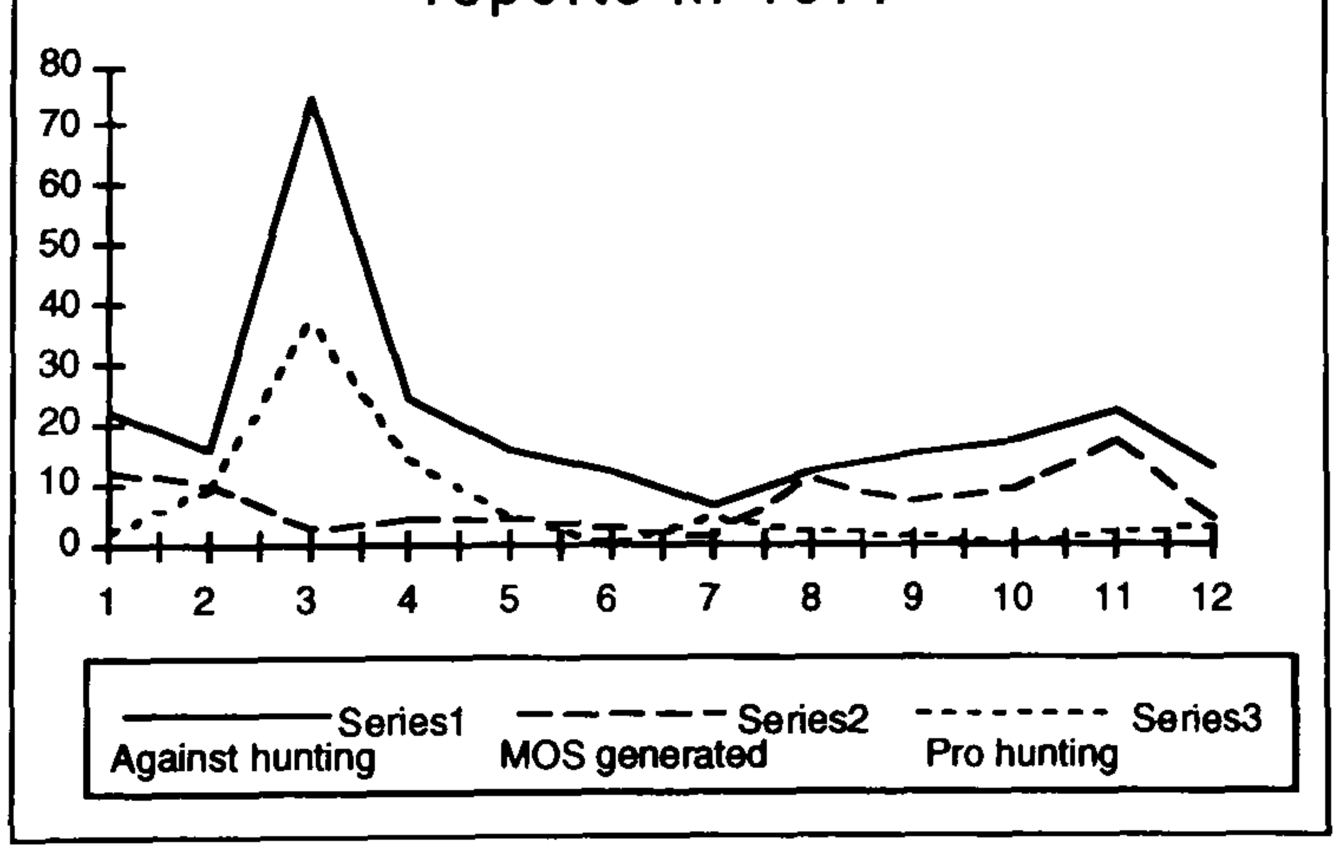


Fig 5.5
Monthly distribution of hunting related reports in 1977



In 1980, the bird protection laws were enacted. A marked decrease in items related to hunting followed. Between 1977 and 1987, there was a decrease of 11.5 per cent in anti-hunting reports while the items related to the environment increased by close to seven times — from 92 in 1977 to 627 in 1987. Anti-hunting reports still outnumber pro-hunting ones and in 1992 the number of anti-hunting reports reached their highest ever during the period 1962-92. A total number of 266 anti-hunting reports — an average of over 22 a month, were published. Of these, only 35 (or 13 per cent), were generated by the Malta Ornithological Society (MOS).

Fig 5.6
Monthly distribution of hunting related reports in 1982

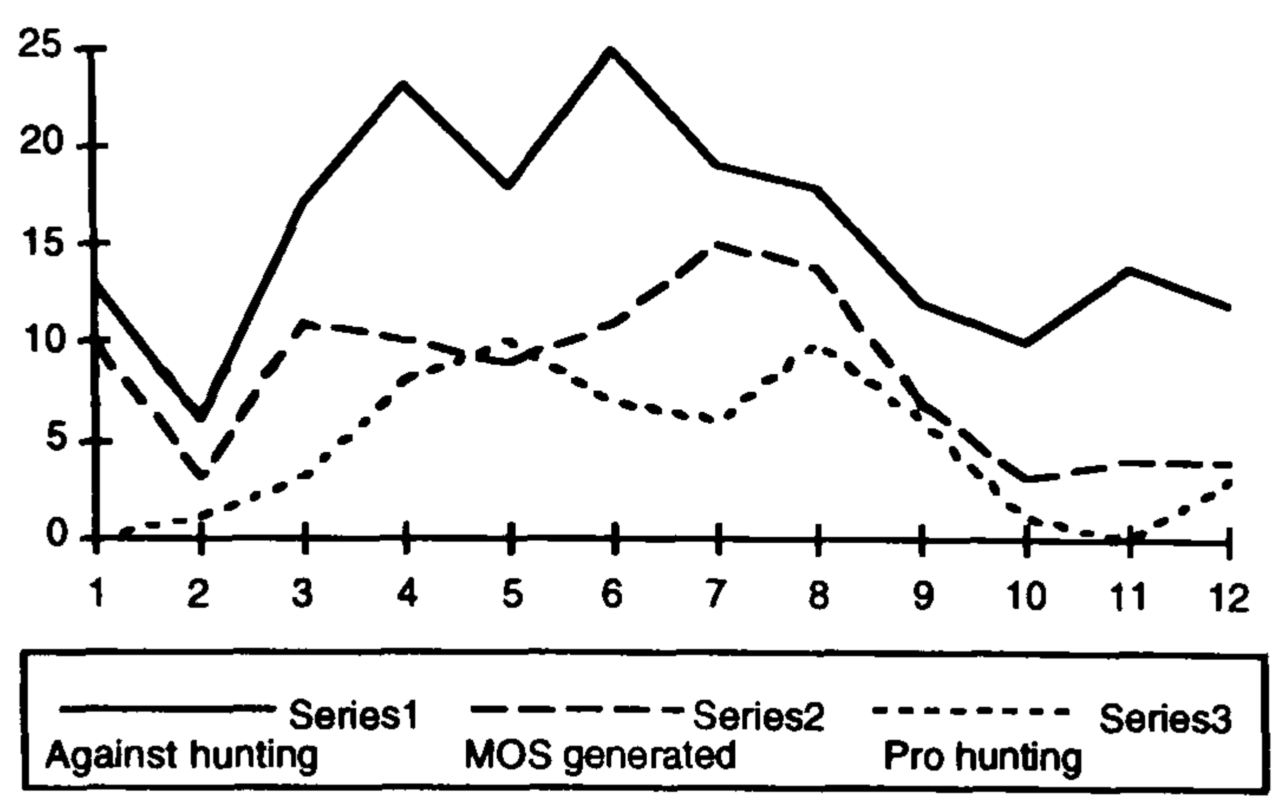


Fig 5.7
Monthly distribution of hunting related reports in 1987

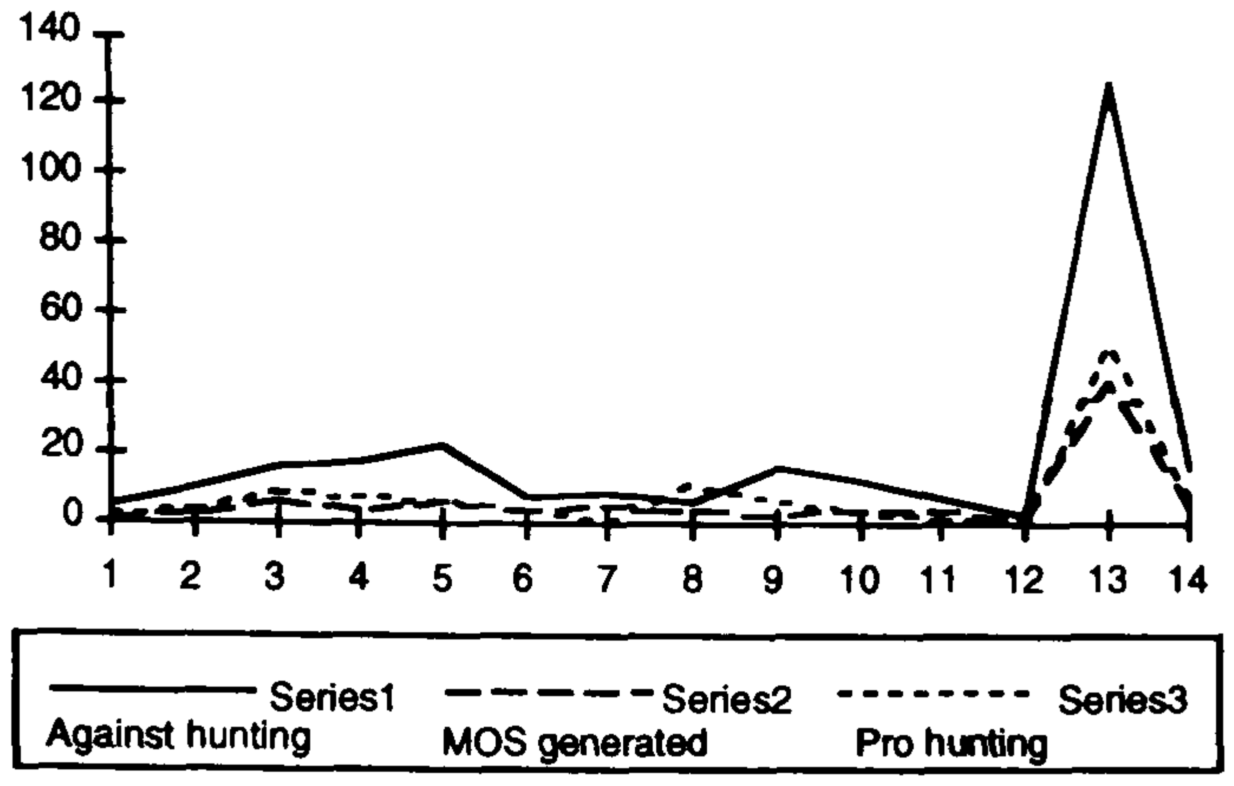
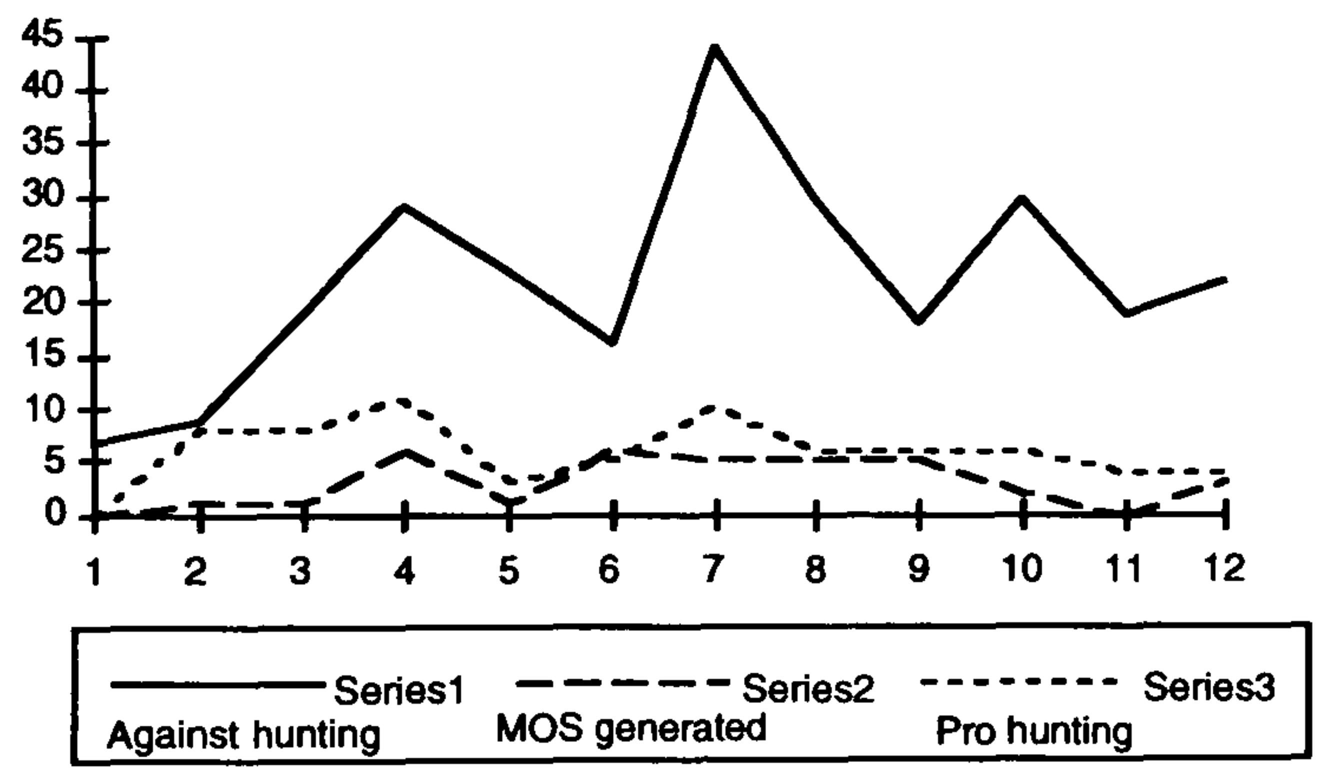
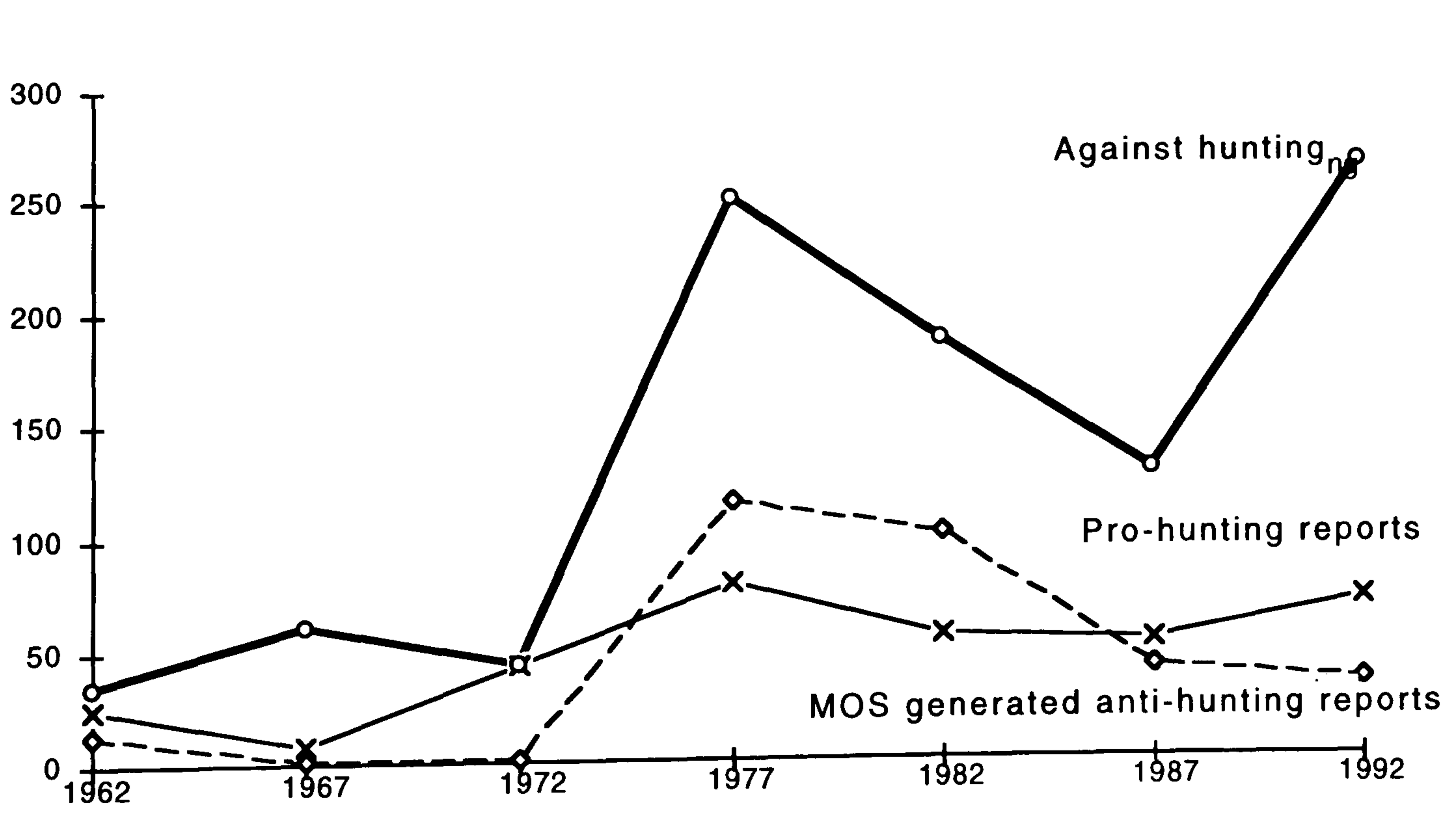


Fig 5.8
Monthly distribution of hunting related reports in 1992



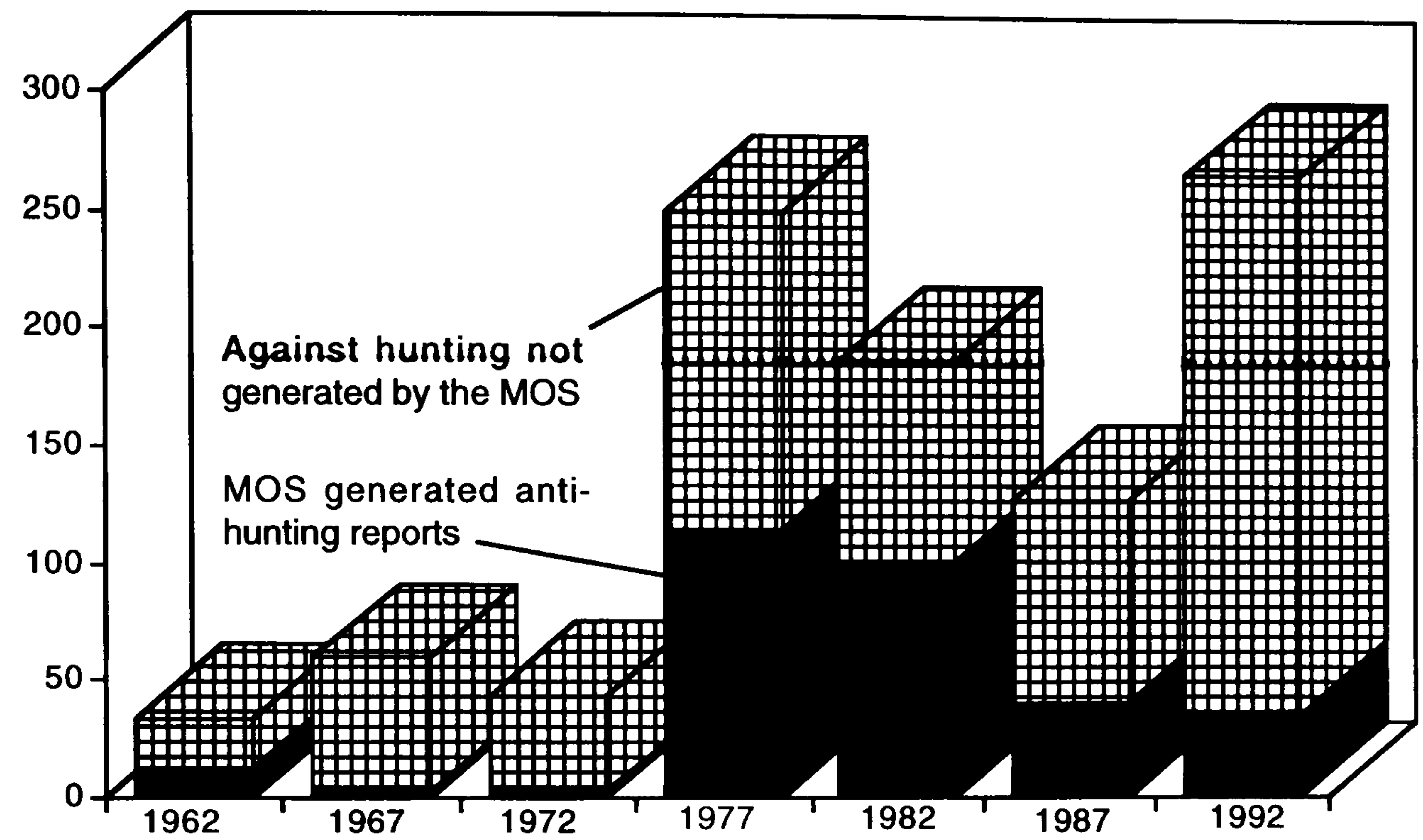
As can be seen in both Table 5.5 and Fig 5.9, the number of anti-hunting items originated by the MOS is decreasing considerably and has fallen from 54 per cent in 1982 to 13 per cent in 1992. It is not just the percentage output which has decreased but the number of MOS generated items has also fallen from 41 in 1987 to 35 in 1992.

Fig 5.9a
Analysis of hunting related press reports 1962-1992



The decrease in the number of MOS generated items is inexplicable as the society has the services of full time employees, while the increase in contributions by the general public is a sign of increased awareness against hunting. In 1992, the peak number of anti-hunting reports appeared in July, after the publication of the book *Fatal Flight*.

Fig 5.9b
Analysis of anti-hunting press reports by source 1962-1992



Hunters frequently complain that their voice is suppressed by the media. Which, if true, may also be an indication of the unpopularity of hunting as the media are willing to carry stories and reports which readers prefer to read about.

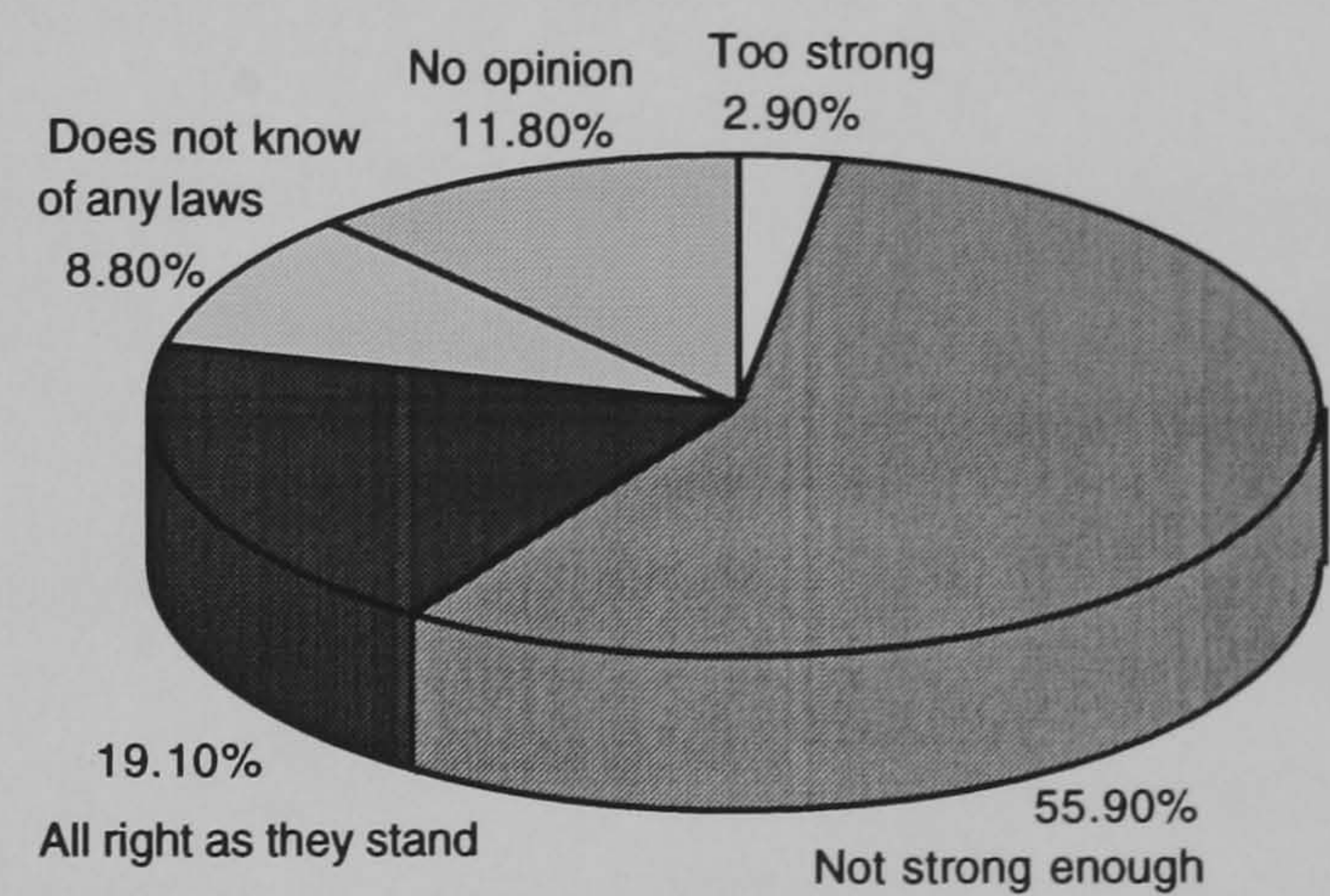
IDEA Pilot Survey

The first published study on the Maltese Public Opinion and the Environment published was a pilot survey made in 1987 by the research unit of the Institute of Design for Environmental Action (IDEA 1987). IDEA was the Department of Environment created by the Socialist Government a few months before the general elections of 1987. The aim of the survey was to "set the ground for a more expansive survey in the future". But following this survey, no other surveys of its kind were ever taken in hand. A Gallup (Malta) Poll on hunting was sponsored by *BBC Wildlife* in March 1993 (Gallup 1993).

For the IDEA survey, 68 respondents were chosen. Of these, half were males and the other half were females. The age groups were divided into three: 15-34, 35-59 and 60+. Twenty nine respondents fell into the first category, 21 in the second and 18 in the 60+ age group. Three more females than males were interviewed in the 15-34 age group, while three more males than females were interviewed in the 35-59 category. The number of males equalled the number of females in the 60+ category. The introduction of the report states that the interviewees were chosen via a random selection along Republic Street, Valletta, on Saturday 21 December 1986 and a few more were interviewed on 5 January 1987. The fact that the survey was carried out so close to the festive season, when people are more intent on Christmas shopping than on environmental matters, may give rise to somewhat distorted findings. Secondly, asking questions about hunting regulations at a time when hunting activity is at its lowest, may also yield distorted results.

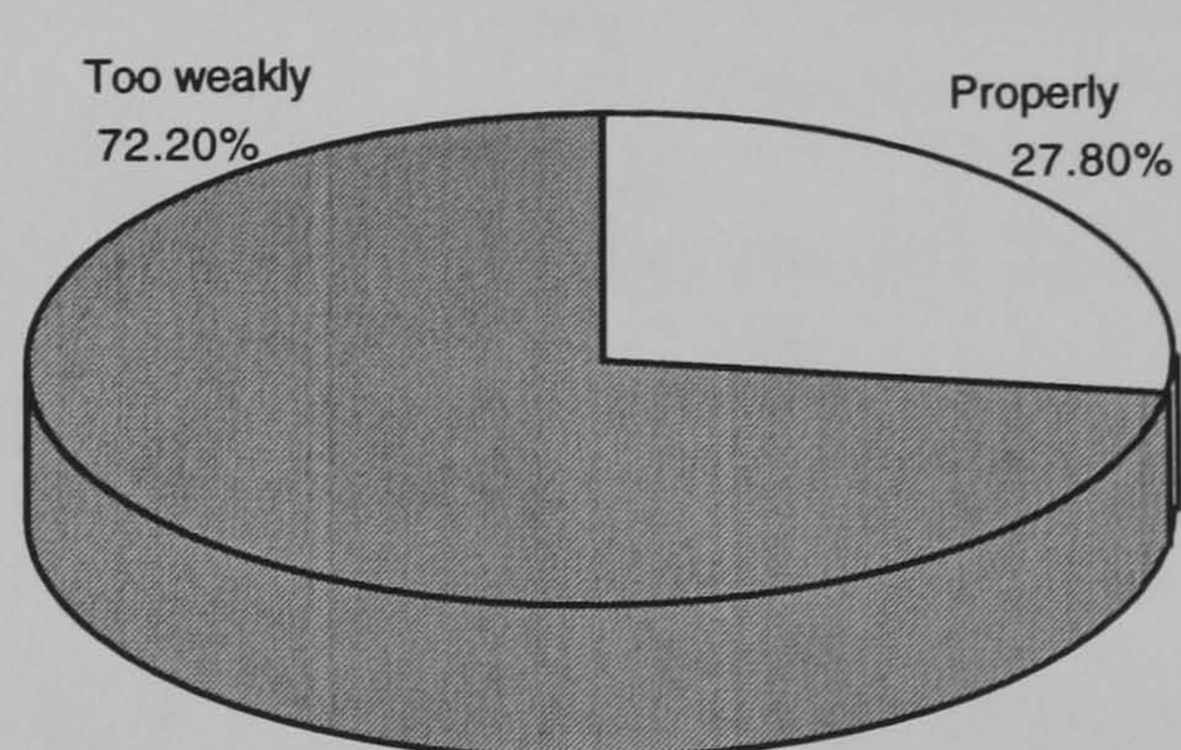
In spite of this, the survey reports that 55.9 per cent of the respondents felt that hunting laws were not strong enough, 19.1 per cent felt that they were all right as they stood, 8.8 per cent did not know of the existence of any laws and 11.8 per cent did not have an opinion or did not care. Only 2.9 per cent felt that hunting laws were too stringent. The figures are represented in Fig 5.10. Just over 72 per cent felt that the laws were enforced "too weakly" while 27.8 per cent felt that they were enforced properly. None of the respondents thought that hunting laws were enforced "too forcibly" (Fig 5.11).

Fig 5.10
Public opinion on hunting laws



Source: IDEA 1987

Fig 5.11
Public opinion on enforcement of hunting laws



Source: IDEA 1987

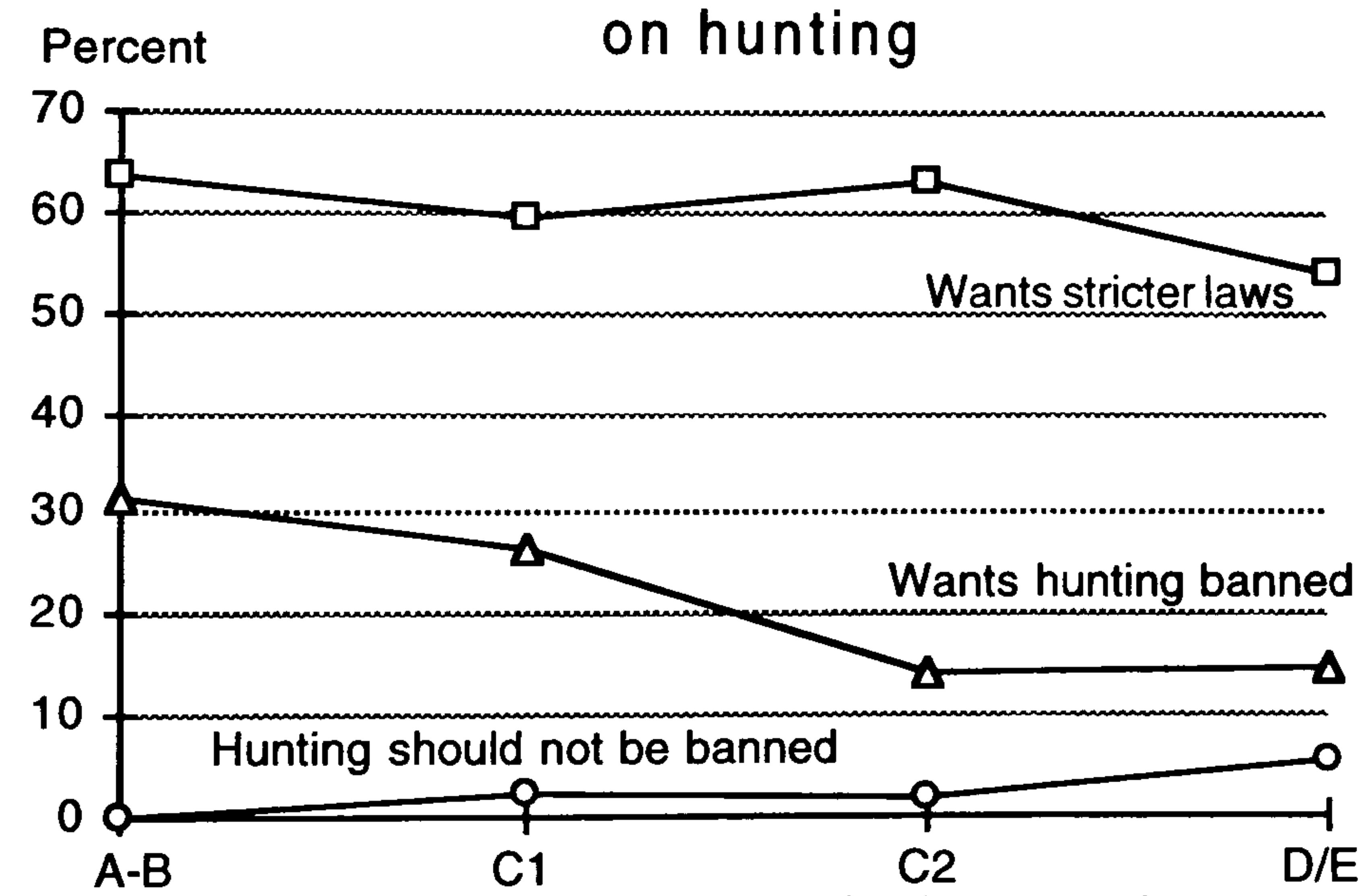
It is interesting to point out that male respondents felt more strongly about the 'weakness' of hunting laws — 67.7 per cent of males felt hunting laws were not strong enough while only 44.1 per cent of females felt so. Twice as many women as men were placed in the "no opinion/does not care" category. Nine females (26.5 per cent) thought hunting laws were all right as they stood while only four males (11.8 per cent) subscribed to that idea. This pattern was also similar in the question on enforcement of hunting laws: 82.1 per cent of the males and 64 per cent of females thought that the laws were being enforced "too weakly" while 17.9 per cent of males and 36 per cent of females felt that the laws were being enforced "properly". The stronger male response may be due to the fact that hunting is an all male activity, thus males are more likely to be conversant with regulations and norms of hunting.

THE 1993 GALLUP POLL

The *BBC Wildlife Magazine* sponsored Gallup (Malta) survey which covered a representative sample of 400 amongst the general public, was conducted in 39 localities in Malta and Gozo during the month of March 1993. The different areas randomly selected represented the Maltese population by age, sex and working status as well as by the populations in the towns and villages.

The results summarised in Fig 5.12 show that 65 percent of people interviewed said they did not agree with bird hunting and trapping and 19 per cent wanted hunting banned while 13.8 per cent did not know. Fifty nine per cent of the population said hunting laws should be made stricter, 5.3 per cent said hunting should be banned on Sundays and public holidays and three per cent said hunting should not be banned.

Fig 5.12
Opinions of socio economic groups on hunting

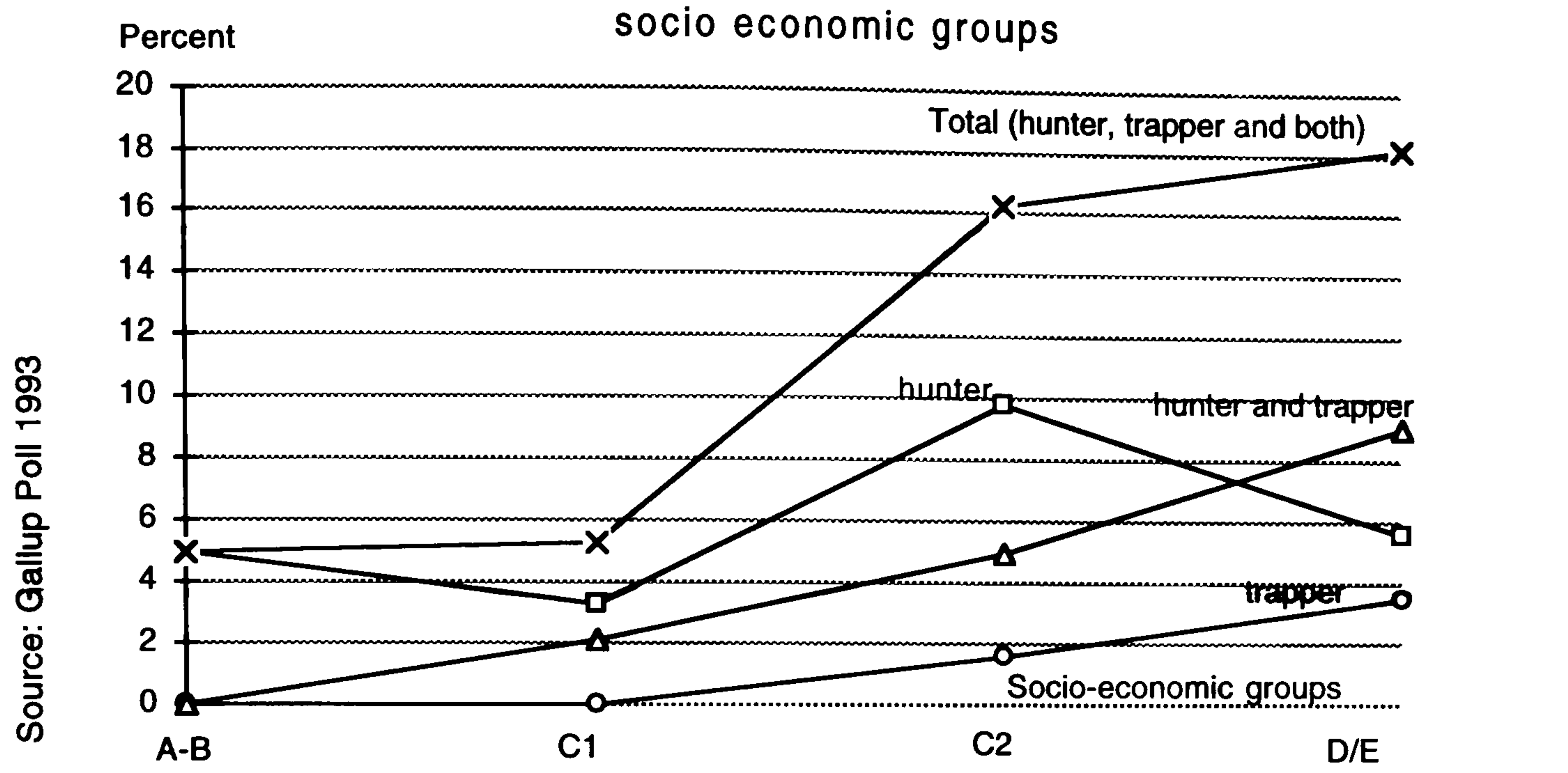


Source: Gallup Poll 1993

The results of the Gallup Poll show that 13.4 per cent of the population are involved in hunting practices: hunters (6.3 per cent), trappers (1.8 per cent) or both (5.3 per cent) while official statistics show that less than five per cent have a hunting or trapping licence. This shows that either many people hunt or trap birds without a licence or that people who accompany hunters or trappers but do not have a hunting or trapping licence, perceive themselves as hunters or trappers. The poll indicates that the highest number of hunters is found amongst the lower socio economic groups: 9.8 per cent of the skilled manual workers (Socio Economic Group C2) and 5.6 per cent of the semi-skilled and unskilled workers and those dependent on social security schemes (socio economic group

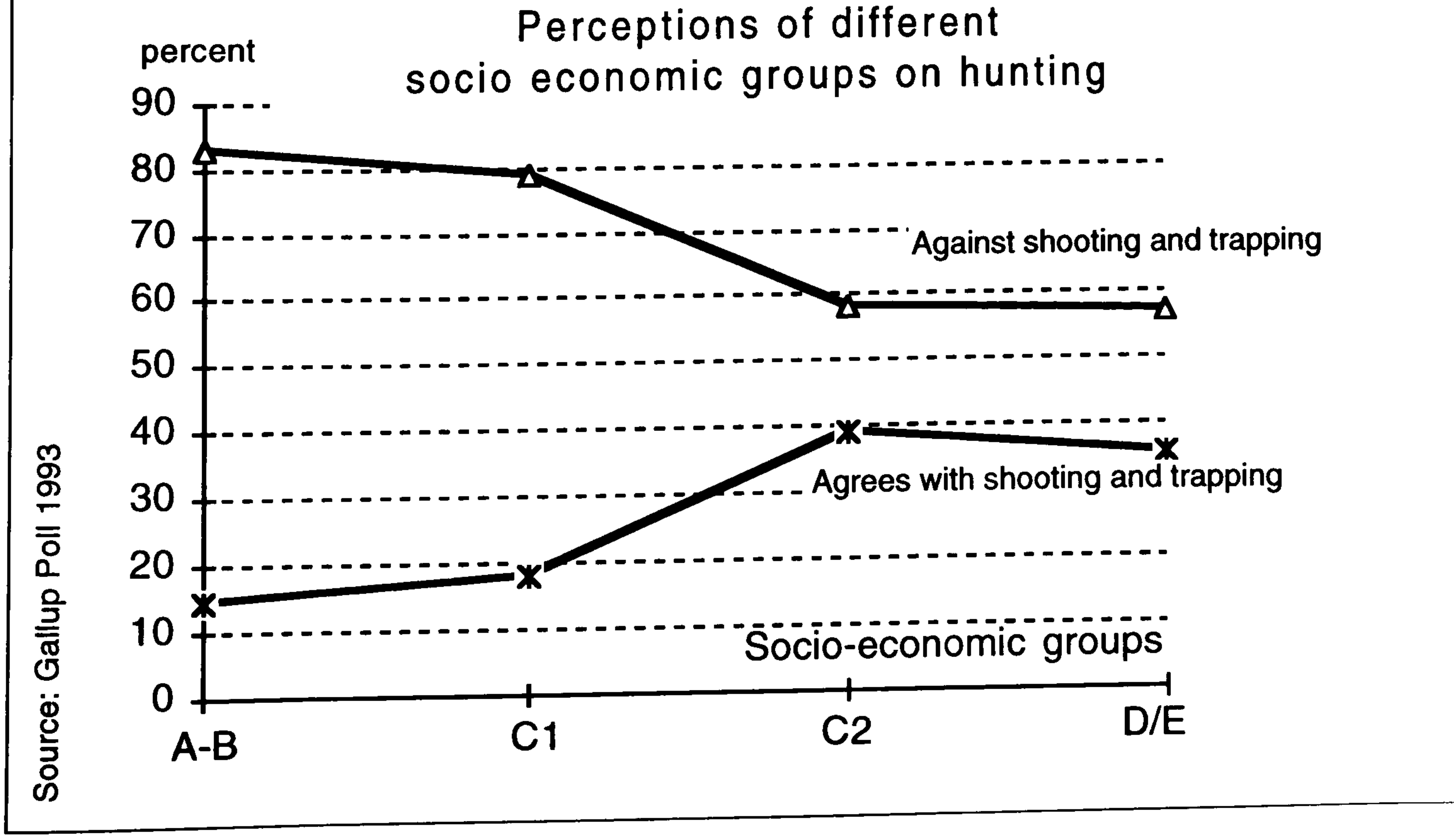
D/E) said they were hunters. The highest number of trappers (3.5 per cent) and both hunters and trappers (9.1 per cent) is also found amongst those in the D/E socio economic group (Fig. 5.13).

Fig 5.13
Distribution of hunters in
socio economic groups



The poll also indicates that there are no trappers in the A-B socio economic group, where the head of the household is a successful businessman, professional, senior civil servant, manager or has considerable private means. Just under five per cent of those interviewed in his category said they were hunters. Hunting is a less time consuming activity than trapping and this might explain why the survey indicated that there are no trappers in the A-B socio economic group. People in such a group might find time to hunt, but not to trap birds. Just over 30 per cent of those interviewed said they agreed with both hunting and bird trapping while almost twice as many felt that hunting laws should be made stricter (Fig 5.14).

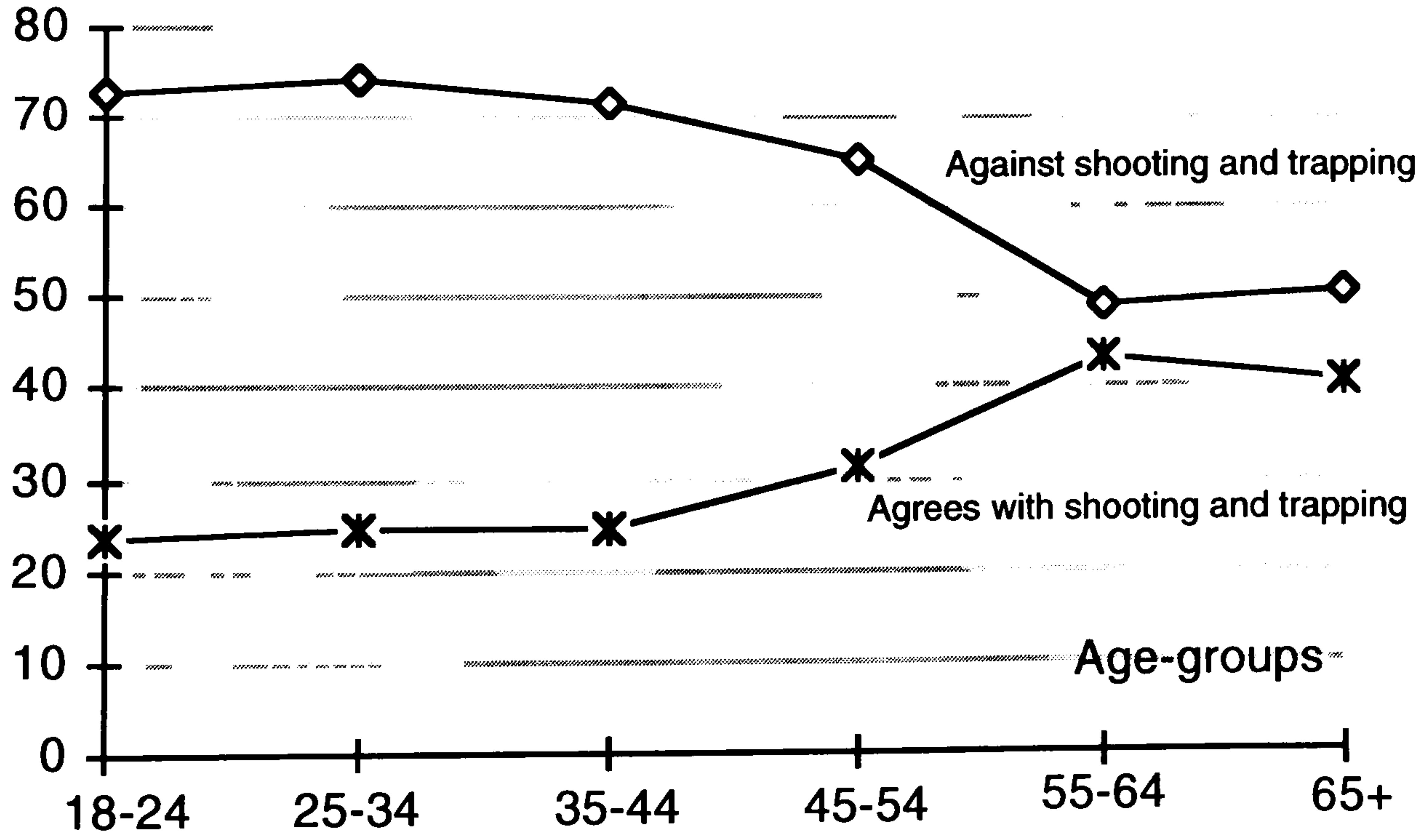
Fig 5.14
Perceptions of different
socio economic groups on hunting



Here again, those in the lower socio economic groups tended to agree more with hunting and trapping (39.3 per cent in socio economic group C2 and 35.7 per cent in D/E agreed with hunting, trapping or both). 19 per cent of the respondents said that hunting should be banned. There was uniformity with the different age groups on the opinion that hunting should be banned: about 20 per cent of respondents in all age groups said hunting should be banned, except in the 45-54 and 65+ age groups, where 16.4 per cent of the respondents said hunting should be banned. The highest percentage of those against hunting and trapping was registered in the A-B socio economic group (82.9 per cent), followed by those in socio economic group C1 (78.7 per cent), C2 (58.2 per cent) and D/E (57.3 per cent). The survey revealed that younger people are more opposed to hunting practices As Fig 5.15 shows, the 25-34 age group was the one where there was the highest opposition for hunting — 74.1 per cent, followed by the 18-24 year bracket — 72.5 per cent and the 35-44 age group — 71.9 per cent. The least opposition was in the 55-64 age group where 49.1 per cent said they were against hunting. This was the age group which supported hunting most — 43.4 supported hunting, trapping or both. Generally speaking, more females than males said they opposed hunting: 69.8 per cent against 60.5 per cent of the males while more males (36.5 per cent) than females (24.9 per cent) supported hunting, trapping or both.

Fig 5.15

Perceptions of different age groups on hunting



Source: Gallup Poll 1993

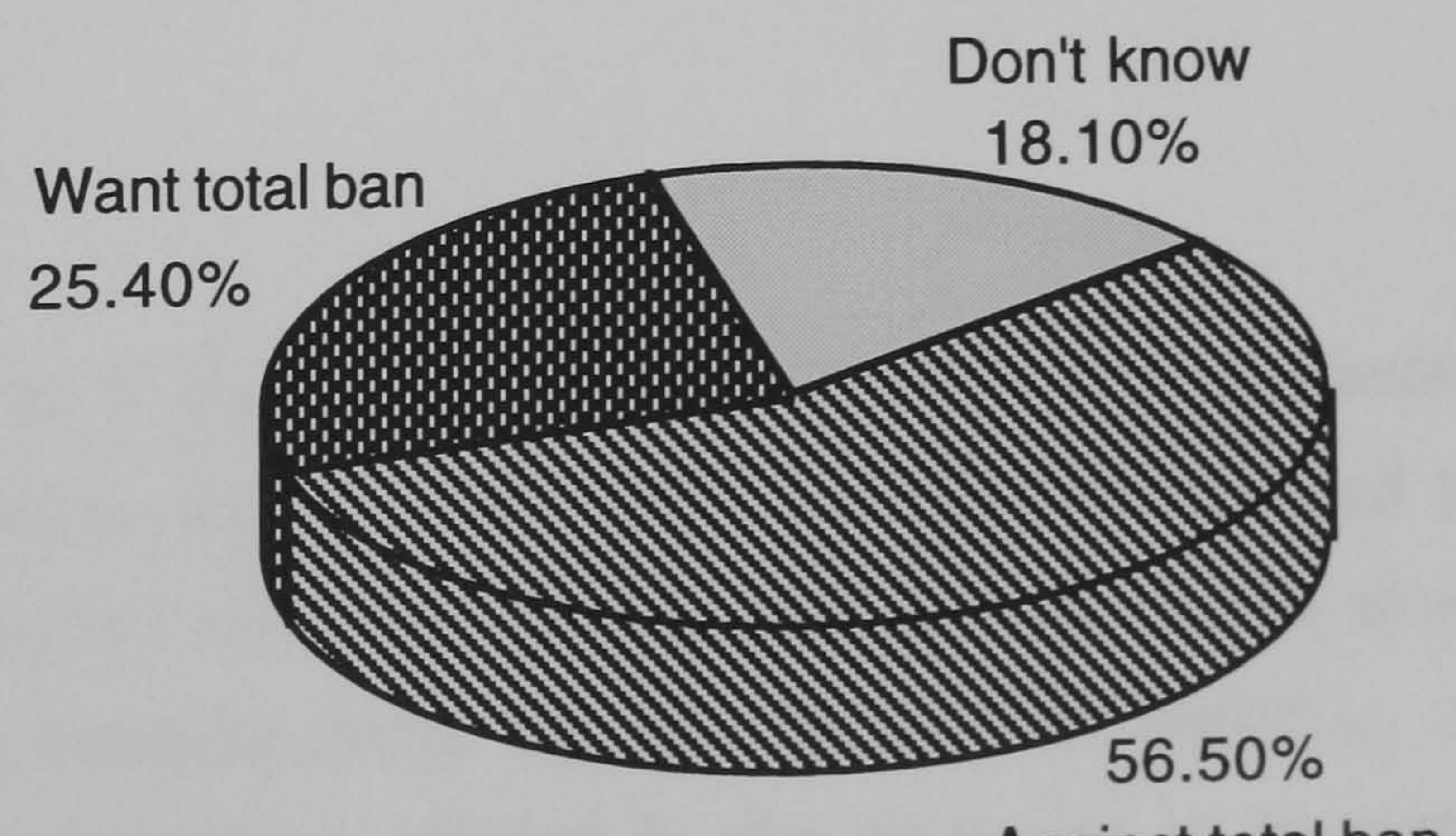
Almost 18 per cent of the population have someone in the family who hunts or traps and the highest percentage is again found in the C2 and D/E socio economic groups, where there were 23 per cent and 22.4 per cent respectively. This is significantly less in the AB socio economic gropu (8.5%) and in the C1 group (8.5%). Close to 68 per cent said they had no one in the family who hunts or traps birds. The relatively high percentage (18 per cent) of respondents saying they had a relative who hunts is significant when compared to the only three per cent who said hunting should not be banned. This implies that those interviewed felt more strongly about restricting hunting than siding with their relatives who hunted. The highest percentage of those who said hunting should be banned and hunting laws should be made stricter came from those in the A-B socio economic group while the highest percentage of those who said hunting should not be banned came from the D/E socio economic group where 5.6 per cent of those interviewed said so. The overall percentage of those saying that hunting should not be banned was three per cent.

The results of the poll showed that 52 per cent of those interviewed would still support their party if it takes a decision against hunting while 34 per cent said they were not interested at all. Only 1.3 per cent said they would support another party if it takes drastic measures against hunting. The highest percentage of those who said they would support another party came from those in the 55-64 age bracket — 3.8 per cent, followed by those in the 25-34 age bracket (2.4 per cent). The highest percentage of those who said they would still support their party if it takes a decision against hunting or trapping were in the A-B socio economic group (73.2 per cent) while the highest percentage of those who said they would support another party if it took a decision against hunting and trapping also came from this group — 2.4 per cent.

The 1994 ECO Survey

In a survey by the Malta Ecological Society (ECO), in which 800 people from 60 localities were interviewed in 1994, the percentage of those who said they wanted a ban on hunting rose by 6.4 per cent over the Gallup findings of the previous year. In the ECO survey, 25.4 per cent said hunting should be banned while 56.5 per cent did not agree with the total prohibition of hunting. Just over 18 per cent did not know what to think (Fig 5.16). In the same survey, it emerged that 56.9 per cent agreed with the hunting regulations, 23.05 did not while 20.02 per cent had no opinion (ECO 1994).

Fig 5.16
Public opinion on hunting



Source: ECO 1994

The survey was carried out during summer of 1994. In the Gallup poll conducted in March 1993, 19 per cent had expressed the opinion that hunting should be banned. Fifteen months later, the number of people who wanted hunting banned rose by 6.4 per cent.

THE 1996 BAY RADIO POLL

An opinion poll held by Bay Radio in November 1996 (Bay Radio 1996, *The Malta Independent* 1996g), for which 600 respondents were randomly interviewed via telephone showed that 90 per cent of the respondents were not interested in hunting while ten per cent were interested and that 48 per cent did not want to see further liberalisation to the hunting laws while just over 22 per cent agreed with further liberalisation. Close to 30 per cent did not have an opinion. The biggest number of respondents opposing further liberalisation were in the 36-49 age group (36.5 per cent) and the 19-35 age group (32.3 per cent). These figures correspond with the findings of the 1993 Gallup Poll. The biggest number of respondents in favour of further liberalisation were in the 50+ age group (32.8 per cent), followed by those in the 19-35 age group (29.1 per cent) and the 36-49 age bracket (27.6 per cent). The largest number without an opinion were over 51 (41.6 per cent), followed by those in the 36-49 age group (28.1 per cent). The largest number of respondents who said they interested in hunting were over 50 (40 per cent), while 28.3 per cent were in the 19-35 age bracket, 20 per cent were in the 36-49 age bracket while only 11.7 per cent were in the 14-18 age group. Those who said they were not interested in hunting were more evenly distributed in the age groups, about 30 per cent in the 19-35, 36-49 and 51+ age groups. The biggest support for making hunting laws less tight was in the D/E socio economic group (18.2 per cent), where there was also the highest opposition, (31.2 per cent), followed by the C1, where 10.7 per cent said they were against further liberalisation. In the Bay Radio survey, most hunting enthusiasts were in the D/E socio-economic group (eight per cent). Just over one per cent were in the C1 socio-economic group and 0.3 per cent in the AB and C2 socio-economic group.

MPS' AND CANDIDATES' SURVEY

To gauge the opinion of Members of Parliament and candidates who contested the 1992 elections, a questionnaire was drafted with questions intended to generate specific (yes/no/don't know) responses (See Table 5.A1). There were eleven straightforward questions ranging from "Do you think that hunting, as practised in Malta, is a sport" to questions related to the pressure by hunters and environmentalists before the elections. All questions were in Maltese, ten of them were to obtain feedback from the MPs or candidates. The last question was to see whether they were interested in receiving a copy of the results of the survey.

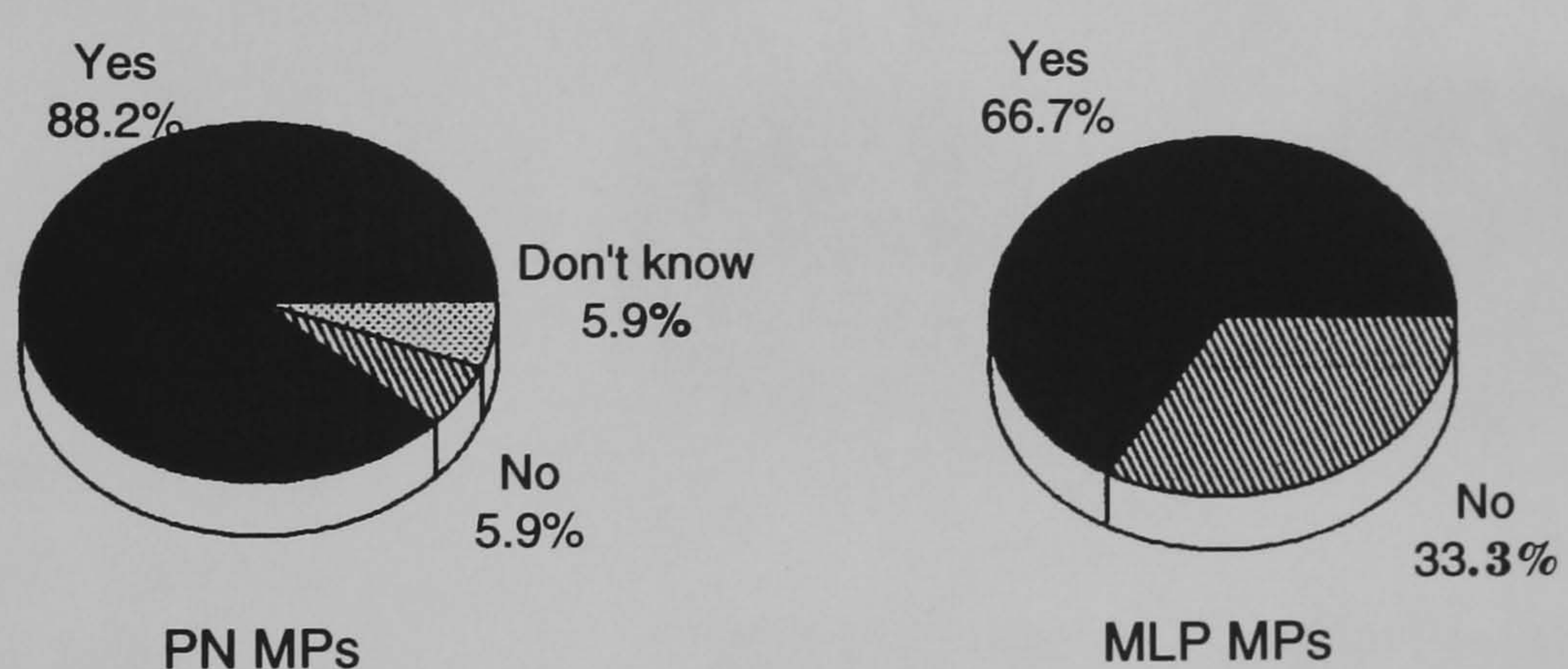
This survey was the first ever of its kind and assuming that politicians have a very tight schedule and that they receive a large amount of mail daily, it was designed to fit on a single A4 sheet of paper. Practically all the questions had a Yes, No, Don't know type of answer, where all respondents had to do was tick the one they thought was right. A pilot version of the questionnaire was discussed with five MPs and candidates to assess whether the questions were comprehensible and was altered slightly following their comments. The questionnaires were posted to their homes in the first week of December 1993. Together with the questionnaire, a self-addressed envelope was enclosed. In a brief letter explaining the scope of the questionnaire, respondents were assured about anonymity. Anonymity was emphasised so that anyone could give his opinion, which may differ from the party line. A reminder and another questionnaire sheet were sent six weeks later. The questionnaires were coded in a way that I could distinguish between Labour and Nationalist MPs and between Labour, Nationalist and Alternattiva candidates. The coding was a simple one. The first question in the questionnaire of Nationalist MPs (freely translated) read: "Do you think *that* hunting, as practised in Malta, is a sport?", while the question put to Labour MPs read: "Do you think hunting, as practised in Malta, is a sport?". The only difference between the questionnaires sent to candidates was that the word candidates was written with a lower case "c" for Alternattiva candidates, while the other difference between the MLP candidates' questionnaire and the PN candidates' was that, in the case of Labour candidates, question 11 had two question marks at the end, instead of one.

Out of a total of 159 questionnaires sent, 49 responses were received within two weeks of the first letter. This constituted a response of 30.8 per cent. Another 14 (8.8 per cent) were received following the reminder. The total number of responses amounted to 63, or 39.6 per cent of the questionnaires sent. The highest response was from Nationalist Party candidates, 51.7 per cent of whom answered the questionnaire. Nationalist MPs were next in line with 47.1 per cent. Response from Alternattiva candidates was 47 per cent and response of Labour Party candidates was of 32.7 per cent. The lowest response was from Labour MPs, of whom only 29 per cent filled in and returned the questionnaire. These results are summarised in Table 5.6.

Table 5.6	
MP/Candidates' response to the questionnaire	
Party	response rate %
Nationalist Party MPs	47.1
Malta Labour Party MPs	29.0
Nationalist Party candidates	51.7
Malta Labour Party candidates	32.7
Alternattiva candidates	47.0

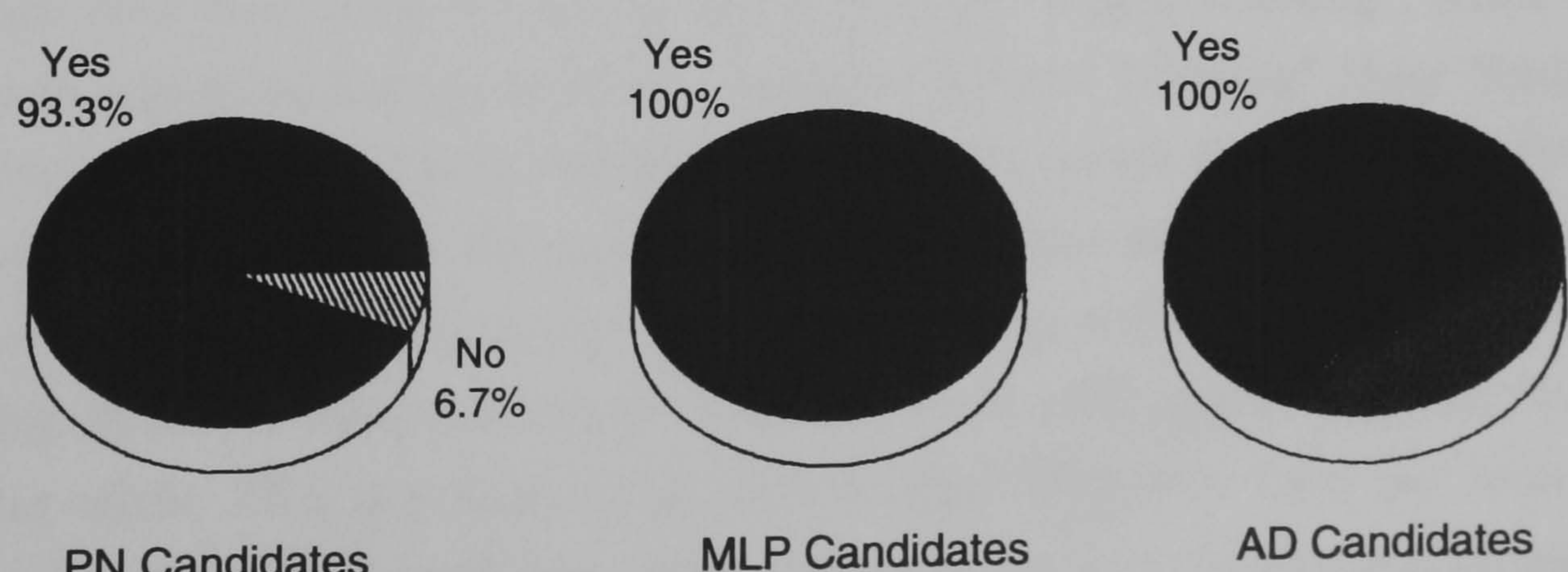
The results of the questionnaire are tabulated in the Appendix (Table 5A.2). Generally speaking, candidates were more against hunting than MPs. Nationalist Party (PN) candidates and MPs had quite similar responses while Labour candidates were more against hunting than Labour MPs. The survey confirmed that Alternattiva candidates were the most opposed to hunting. All of the Members of Parliament and candidates felt that hunting should be controlled and most were of the opinion that hunting laws should be made more stringent (Fig 5.17).

Fig 5.17
MPs response to: Should hunting laws be more stringent?



All the MLP and AD candidates were of the opinion that hunting laws should be strengthened. 93.3 per cent of the PN candidates, 88.2 per cent of the Nationalist MPs and 66.7 per cent of Labour MPs shared that opinion (Fig 5.18).

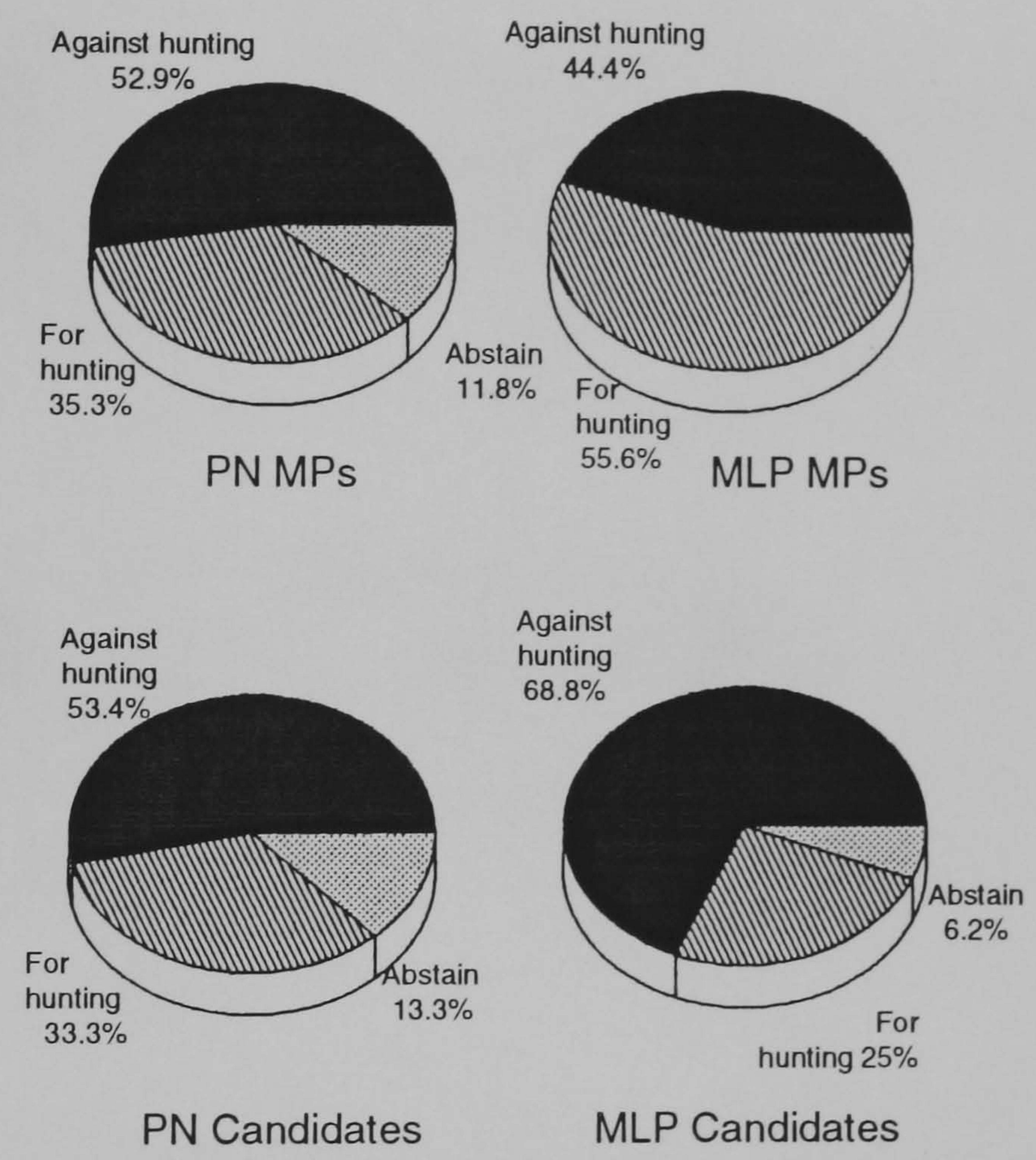
Fig 5.18
Candidates' response to: Should hunting laws be more stringent?



Practically all respondents were of the opinion that political parties should have a common policy on hunting, citing "to eliminate political blackmail" as the reason. Only three MPs said they were against parties having a common policy on hunting. One gave no reason, while the other two, one from each side of the house, said that they were against the "one party state" concept.

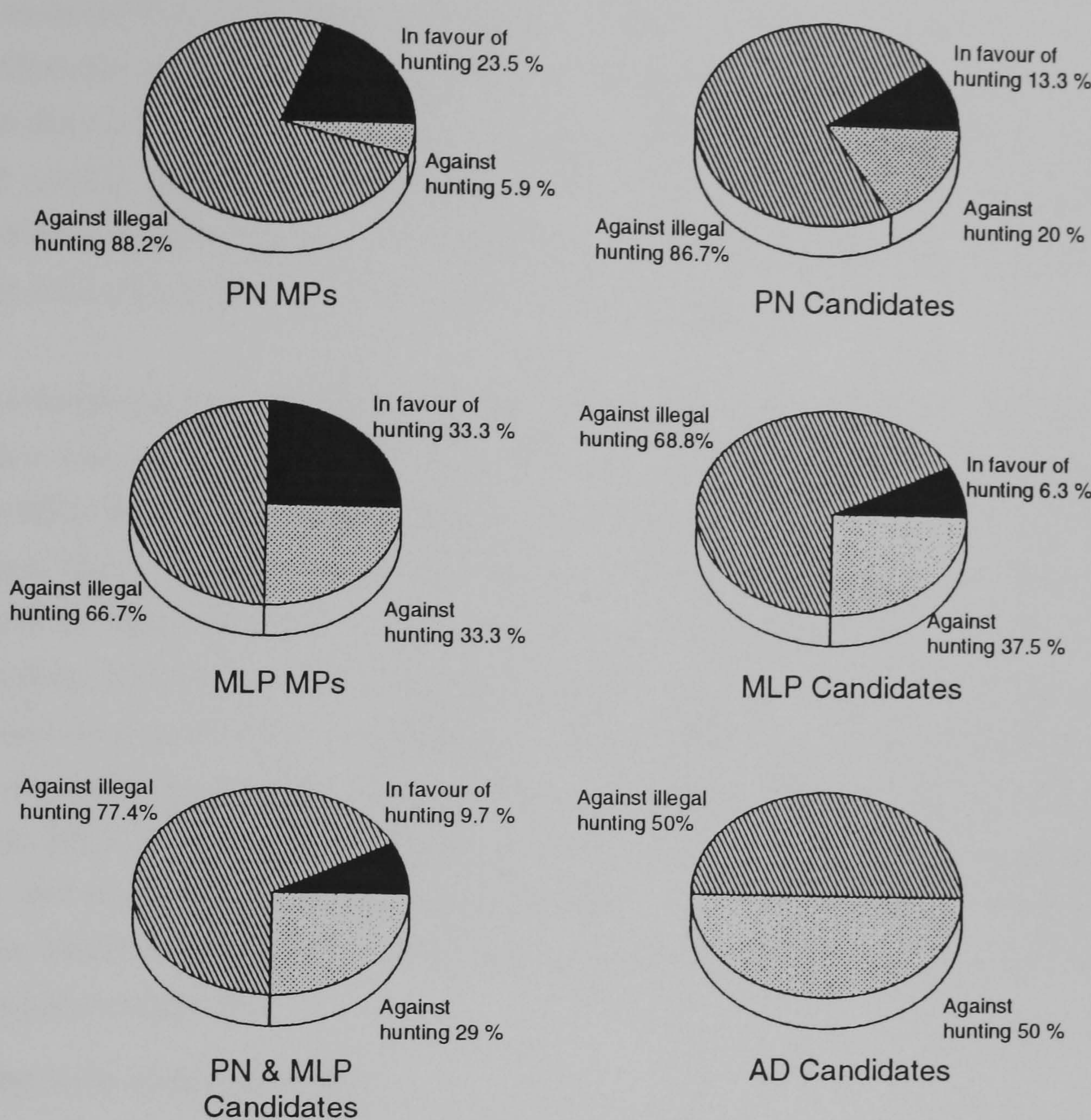
As Fig 5.19 shows, the majority of respondents, except Labour MPs, said that in a referendum, they would vote against hunting. All the AD candidates said they would vote against hunting. Fifty three per cent of Nationalist MPs and candidates, 68.8 per cent of Labour candidates and 44 per cent of the Labour MPs said they would vote against hunting. Just over 30 per cent of Nationalist MPs and candidates, 55.6 per cent of the Labour MPs and 25 per cent of Labour candidates, said they would vote in favour of hunting.

Fig 5.19
MPs and Candidates' response to:
In a referendum, would you vote:



The question "Are you prepared to speak: in favour of or against hunting or only against illegal hunting", produced some interesting results. While the majority said they were willing to speak against "illegal hunting", more Labour MPs and candidates were willing to speak "against hunting" than Nationalist MPs and Nationalist Party candidates. Fig 5.20 shows that Labour MPs were most willing to speak in favour of hunting (33.3 per cent). This contrasts with Labour candidates, of whom only 6.3 per cent were willing to speak in favour of hunting. None of Alternattiva candidates were willing to speak in favour of hunting while 23.5 per cent of the Nationalist MPs and 13.3 per cent of the Nationalist candidates said they were willing to speak in favour of hunting.

Fig 5.20
MPs' and Candidates' respose to: Are you prepared to speak:



Both MPs and Candidates reported that they had more pressure from hunters than from environmentalists before the 1992 elections. Nationalist MPs had most pressure — over 41 per cent said they had pressure from hunters. This contrasts with the 11 per cent of Labour MPs who said they were pressured by hunters. Nationalist Party candidates also reported more pressure than Labour candidates. None of the Alternattiva candidates reported any pressure from hunters. It could be that Nationalist MPs and candidates were pressured more in view of the fact that the party was harping on EU membership with the implication of tighter hunting laws while Labour had a declared policy against Malta joining as a full member of the EU, hence there would be no need for such laws. Nationalist Party candidates had most pressure from environmentalists. In general, hunters pressed MPs more than they did candidates. It could be that their attention was focused more to those who were already in Parliament, and who thus had a better chance of being re-elected.

Generally speaking, respondents thought that public opinion is against hunting. The only exception were MLP MPs, 33 per cent of whom said they thought that public opinion was in favour of hunting while 22 per cent thought public opinion is against. This contrasts heavily with MLP candidates, none of whom thought public opinion is in favour of hunting and close to 70 per cent thought that public opinion is against it. More Nationalist MPs than candidates thought public opinion opposed hunting. The highest percentage of candidates who believed public opinion is against hunting were Alternattiva candidates, 85.7 per cent of the AD respondents shared this opinion.

It is interesting to note that the MLP MPs were more amenable to hunting than the rest and that MLP candidates had a markedly different stand than Labour MPs. This could be because they have not yet made it to parliament and are more "free" in their line of thought. It could also be that they have less pressure as they are not in the position of decision takers, as MPs are. Alternattiva candidates were the only ones not to report pressure from hunters. This could be due to their 'anti-hunting' stance which may have made shooters believe it would be futile to pressure them in favour of the hunting issue. The fact that MLP MPs and candidates reported less pressure from hunters than anyone else (apart from AD), may signify that hunters were of the opinion that since the MLP had shown a positive disposition to hunting, there was not much point in pressuring them.

The Church And Hunting

Christianity is influenced by the theories of Aristotle, who claimed that man is supreme. He argued that just as the universe revolves around the world, whatever there is in the world revolves around man, hence, all creations exist for the sake of man. St Thomas Aquinas, the greatest philosopher in western Christianity, was greatly influenced by the Aristotelian theories. It was then claimed that since animals had no reason, they had no rights. The idea that God created all living creatures to serve man's needs is deeply ingrained in Judao-Christian religious philosophies and continues to provide one of the rationalisations with which many shooters justify the killing of birds.

Yet, historically, the Church took several stands against hunting, at least as far as the clergy were concerned. In the year 506, the Council of Agde decided that members of the clergy should be barred from keeping hounds or falcons. This prohibition was renewed by various other councils. At the Council of Ofen in 1278, St Ladislaw excluded the members of his order from hunting and falconry. As late as the sixteenth century, the council town of Munster, in Westphalia, demanded that the clergy should not hunt claiming Canon law prohibited the clergy from hunting (Hobusch 1980).

It was at this time that the legend of St Hubert gained popularity. The legend, written in 1621 states that as Hubert went to hunt in a forest, he saw some stags among which there was a specially beautiful one, "who shone among the rest. This stag turned round and spoke thus: 'Why do you chase me, Hubert?' " (Hobusch p.75). The legend states that Hubert was told to abandon unrestricted hunting and profess his Christian faith and he was so impressed that he gave up his worldly vanities and entered a monastery at Maastricht. St Hubert died in 727 and was canonised only a hundred year later. From a story of Hubert's life written 17 years after his death, there is no reference to his hunting passion. It was the guild of butchers in the town of St Hubert, in the Ardennes, who chose St Hubert as their patron saint in the twelfth century and every year on 3 November, they organised a procession to the cathedral. At that time, it was never mentioned that St Hubert was patron saint of hunters. The first graphic representations of the miraculous stag appeared over 400 years after his death and the legend of the miraculous stag gained popularity in the 15th century, at a time when several orders of St Hubert were founded, and the saint increasingly became the ideal, sophisticated hunter. St Hubert's day on 3 November, which marked the end of the hunting season for larger game, was first celebrated in 1744. Celebrations were of high moral value and took a stand against unrestricted hunting and for the protection of game. The pilgrimages served to improve the image of hunting and demonstrated the hunter's love of animals. The legend of the miraculous stag is also found in the early legends about the Roman general Placidus, who was a passionate hunter, and after meeting the miraculous stag, he was converted to a Christian and who was later canonised as St Eustace.

The Guild of St Hubert still exists in Europe and selected hunters are chosen as members. A new hunters' association *Kaccaturi San Ubertu* (St Hubert's hunters) was set up in Malta in 1996 and aims to raise the standard of hunting. Like the international organisation, the local one is prepared to accept only a limited number of members who declare they are prepared to abide by its code of ethics which in part is more restrictive than existing legislation (*The Malta Independent* 1997).

In Malta, the association of the Church with hunting dates back to the time of the Knights of the Order of St John, who belonged to a religious order. Hunting was prohibited to knights on all territories controlled by the Order before they came to Malta (NLM Libr 49 pp 21,90). This must have changed some time after as by the time they came to Malta in 1530 as in Malta, they attached considerable importance to hunting. From time to time the matter was discussed in the Council and regulations controlling hunting were issued. Various Grand Masters declared protected areas where only they or their guests, or those obtaining a licence from the Grand Falconer, could hunt. There were a number of priests who were keen hunters and this led to an uprising termed 'the rising of the priests' in 1775 after the Grand Master Ximenes, in a time of scarcity of food wanted to secure an abundance of cheap of meat and forbade all rabbit hunting in an effort to give animals a chance to breed. The question of hunting was frequently a point of conflict between the Grand Master and the Archbishop, especially when priests were apprehended hunting in prohibited areas (Cassar 1994). Individual members of the clergy continued to hunt and trap birds and in the mid-19th century, Wright (1864) noted that turtle dove trapping was a "favourite amusement with the country gentry...and the village priest whose occupations and duties afford him an abundance of idle time, pursues it with great assiduity" (Wright 1864 p.138).

THE CURRENT SITUATION

The Church in Malta plays a very passive role in environmental issues, and that of bird shooting is no exception. Apart from sporadic efforts by individual members of the clergy, one can say that through its silence, the Church in Malta approves that which goes on in the name of hunting. A clear example of the passive role played by the Church is that the Church authorities do not even condemn publicly the shooting which takes place at Malta's largest cemetery, the Maria Addolorata National Cemetery. During both spring and autumn migrations, shooters shoot even while funeral services are in progress. In a number of instances, members of the clergy have taken an active role in favour of bird shooting. Apart from a very early morning mass, called the 'shooters' mass', which is still said at a number of villages, individual priests have held sermons for shooters where shotguns were blessed. At a meeting for shooters and trappers, a priest even blessed a number of stuffed birds (Bird's Eye View 1983, p.4). During some village feasts, sparrows with coloured strings tied to their legs have been released (Gauci, V.M. 1979). Shotguns are sometimes offered as prizes in Church related fund raising activities in rural areas. Individual members of the clergy have at times pronounced themselves against the senseless destruction of nature (Sant 1986, Attard 1986, Darmanin 1995), but such instances are too few and far between to be of any real significance. Most of the clergy is not really interested or has a complacent attitude to shooting, and a some members of the clergy are also shooters.

Shooters try to take advantage of situations where they can get publicity by associating themselves with church activities. One headline story of the shooters' paper *Il-Passa* read: "We have the Pope's blessing, Even the Pope is in favour of hunting" (*Il-Passa* 1992 p1,3). The story reports a meeting which the Italian federation of shooters had with the Pope. The president of the International Council of Hunting and Conservation was also present. Since the Maltese Hunting Association is a corresponding member of this international organization, the editor of the shooters' paper and some Maltese shooters said the Pope approved of Maltese hunters too (Scicluna 1992).

But the involvement of shooters with the Church is often more than skin deep. A meeting of the hunters association in Gozo which took place on Sunday 20 June 1994, was advertised from the pulpit along with other notices. When this was highlighted in the press, the Curia said that reading of notices did not mean the Church was taking a position on a particular issue (*The Times* 1993b p.24).

At the village of St Julians, shooters fire blank shots from the roof of the Church as a salute on the day of the feast. This practice was introduced in the early 1980's. From St Julians, the habit moved to Mellieha, where shooters fire blank shots from the roof of the Chaplain's house during the feast of Our Lady of Victory. In both cases, the participation of shooters is an official part of the Church outdoor festivities. Following letters of protest to the respective chaplains, the Archbishop as well as pressure in the press (Fenech 1990), this activity was stopped from Mellieha 1991 but is still retained at St Julians and the shooters' association said it had an assurance from the St Julians Feast Committee that the activity will continue to be held and that "the feast would be made bigger by organising a mass for all shooters on 23 August" (*Il-Passa* 1995).

It should be pointed out that there is no mention at all of the shooters' salute in a 344 page book published on the occasion of the centenary of St Julians Parish (Fiorini 1992). The College of Parish Priests justify the activity at St Julians by saying that traditionally hunters used to go to hear mass before they went to hunt and since St Julians is their patron saint, they allow such an activity (Sullivan 1994). The choice of St Julians as a patron saint of hunters is a curious one as St Julian changed his life after mistakenly killing both his parents on his return from a hunting trip. The Church seems to be ignoring the fact that both legends associating hunters with Saints, have positive messages against hunting as both St Julian and St Hubert changed their way of life and stopped practising hunting.

The use of guns in honour of saints comes as no surprise and may have been acceptable when the Dominican fathers started it in 1957. Because of the legend associating hunters with Our Lady of the Grotto, the Dominicans invited shooters to participate in a pilgrimage on the occasion of the coronation of the statue. The Dominicans wished that shooters be united in their reveration of Our Lady of the Grotto as their protectress and urged shooters to wear their shooting attire or at least their hunting belt with cartridges and their guns. Shooters in rows of four followed the Dominican Fathers and a large number of devotees walked behind the shooters. When the pilgrimage reached the Dominican Church, the shooters lined the churchyard and fired several volleys as a salute to Our Lady (Fsadni 1980).

Shooters kept participating in the yearly pilgrimage until 1986, when, as Fr L. E. Attard, a Dominican Father, wrote: "some shooters caused great trouble to the Dominican fathers when, against all orders, some shooters shot at pigeons, sparrows, electric bulbs and loudspeakers". From then on, shooters were no longer invited to participate in the feast (Attard 1986). At St. Julians, Church authorities continue to give shooters an opportunity to appear as some sort of devout heroes, boosting their image in the process. The guns used to kill God's creations, are allowed to appear as paying tribute to saints. This contrasts sharply with the message of Pope John Paul II, who spoke of "genuine conversion in ways of thought and behaviour, where Church and religious bodies, non-governmental organisations, indeed, all members of society have a precise role to play in such education" and about "ecological awareness, due respect for nature and respect for life" (Pope John Paul II 1990 pp.3, 7, 9).

Conclusion

It has been shown how the major institutions interact with bird hunting and trapping practices. The Church is, at best, passive on the issue and is often seen as 'encouraging' hunting. The stand taken by the Church in this respect is inexplicable as historically this institution was never in favour of hunting and even the legends of the lives of saints associated with hunting have anti-hunting messages. The Church does not need to be 'elected' like politicians, who depend on individual votes to be returned to Parliament and who often give in to pressure by hunters, even when this may go against their personal beliefs. As the survey on the opinion of Members of Parliament and candidates who contested the 1992 election shows, the vast majority of the respondents felt that hunting laws should be made stricter and that they were prepared to speak against illegal hunting.

With the exception of Labour MPs, they all said they would vote against hunting in a referendum. Yet, polarisation makes it difficult for any party to take measures affecting any large interest group. The narrow margin with which political parties win or lose elections is a critical issue in this respect. However, the political clout wielded by hunters is in actual fact, far less than what it is perceived to be. Analysis of the votes polled by pro-hunting candidates during the elections in 1992 and 1996 show that there is no correlation between the votes polled by such candidates and the number of hunters in the district. The results of the 1996 elections discussed also show that, contrary to popular perception, the hunting issue was not a determining factor in the election result as there is no correlation between the number of hunters and the swing against the Nationalist party in any district.

Yet politicians seem to fear the might of the hunting lobby more than the protests by the non-hunting sector of the public. The Nationalist Party, which took the most drastic step on hunting since 1980, when the Labour Government had introduced laws replacing the outdated ones of 1932, had to retrace part of its footsteps after the Malta Labour Party announced its hunting policy which promised hunters far more concessions than the Government did. It may well be that the Nationalist Party was hoping to lure back some of the votes lost from hunters. The Nationalist Party knows that it stands little chance of losing environmentalists' votes due to the hunting issue as the policy of the opposition is more lax than what the Nationalist government conceded to hunters. The MLP had the most pro-hunting policy, the Nationalist Party's policy was more restrictive in view of the party's willingness to join the European Union while Alternattiva, which started off with an anti-hunting policy, is now adopting a more "pragmatic stance".

Unlike other hunting lobbies on the continent, Maltese hunters associations believe in flaunting their strength through demonstrations which often give rise to violent or unpleasant incidents. Such demonstrations have a dual effect. They seem to impress with the power they hold but also create a feeling of revulsion and give vent to anti-hunting sentiments.

The results of a survey of hunting related items in the printed media show that there is a growing anti-hunting lobby in Malta. A content analysis of newspapers between 1962, when the conservation movement was launched locally, and 1992 shows some stark findings: the total environment related items amounted to 95, 35 per cent of which were anti-hunting and 26 per cent were pro-hunting. In 1992, the number of environment related items increased to

1,957, of which 13 per cent were anti-hunting items while pro-hunting ones amounted to just to 3.6 per cent. These findings tally with various opinion polls conducted. Surveys conducted between 1987 and 1993 show that the number of people who felt that hunting laws were not strict enough increased from one survey to the next. Those seeking a total ban on hunting increased by close to 6.5 per cent in the span of just over a year. The results of a Gallup Poll indicate that support for hunting comes mostly from lower income groups and the greatest opposition to hunting comes from the younger generation. Among the more interesting findings of this poll is that while 18 per cent of the respondents said they had relatives who hunt, only three per cent said hunting should not be banned. Another interesting finding is the one which showed that only 1.3 per cent were prepared to vote for another party if the party they supported took steps against hunting. The results confirm the results of the content analysis of newspapers. The largest opposition to hunting is in the 25-34 age group. This corresponds with the influence of the conservation movement, which was launched locally in the early 1960s.

With over 10,000 licence holders, hunting generates an amount of business and the economic effects of hunting and trapping are discussed in the following chapter.

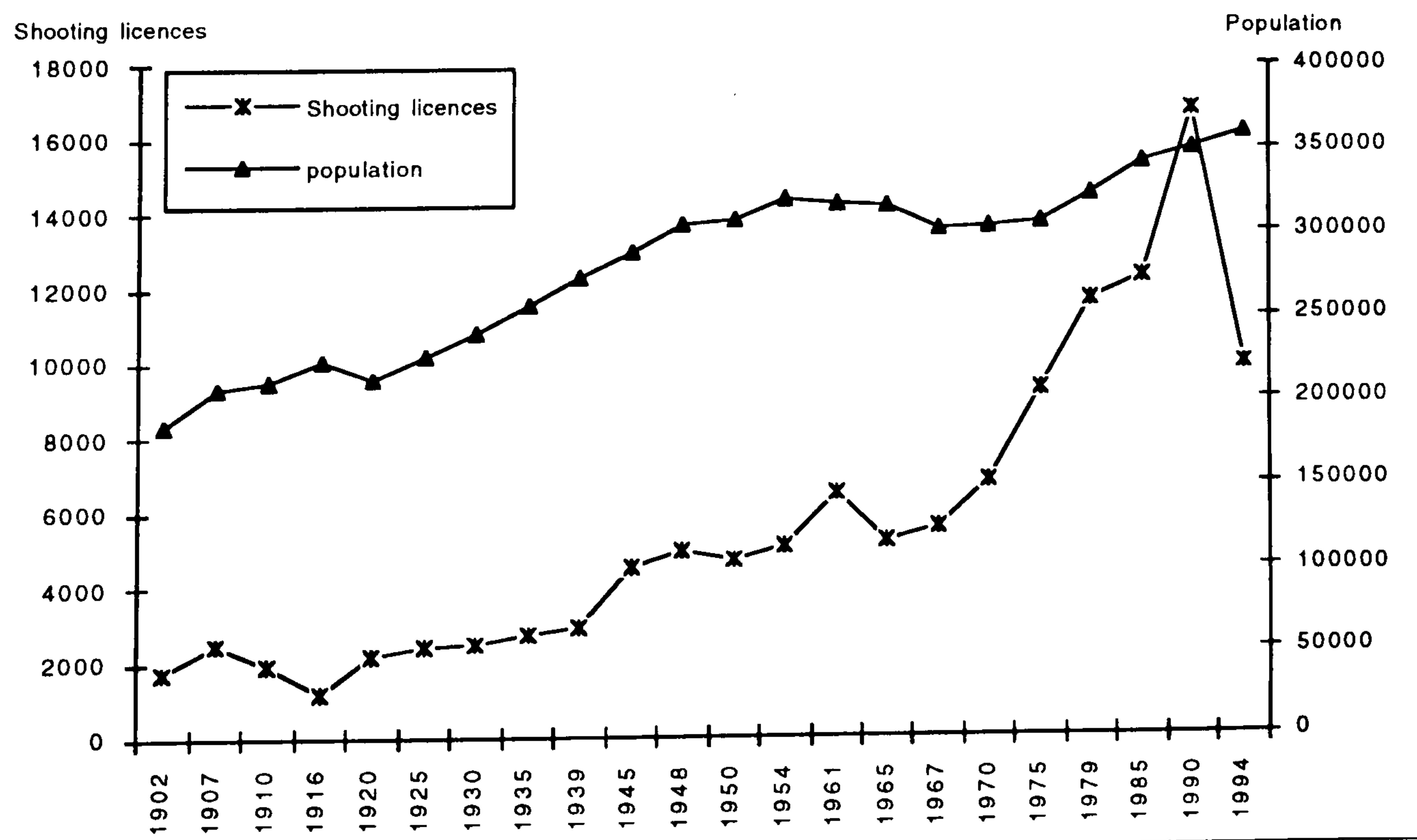
Chapter 6 Economic considerations

Introduction

Hunters world wide often state that apart from being a fulfilling pastime, hunting is beneficial to the economy of the country. Shooting and trapping may be considered as a consumer activity, and like other such activities, they generate an amount of business. Generally speaking, data on the economic activity generated by hunting and trapping is lacking. The only official data available is an account showing the value of imports from which one can deduce the per capita expenditure of shooters on shooting related imports. But there are wider economic aspects which can be analysed, none of which has been investigated in the Maltese Islands. In this chapter one finds a theoretical discussion of whether hunters produce meat or whether they 'harvest' it. If one agrees that hunters produce meat and then compares the cost of the meat produced by hunters with the cost of meat produced by farmers, one is bound to realise that it is not economic to hunt to produce meat. The hunting related business is analysed through a discussion on the value of imports of hunting related goods and this is placed in the context of the local economy.

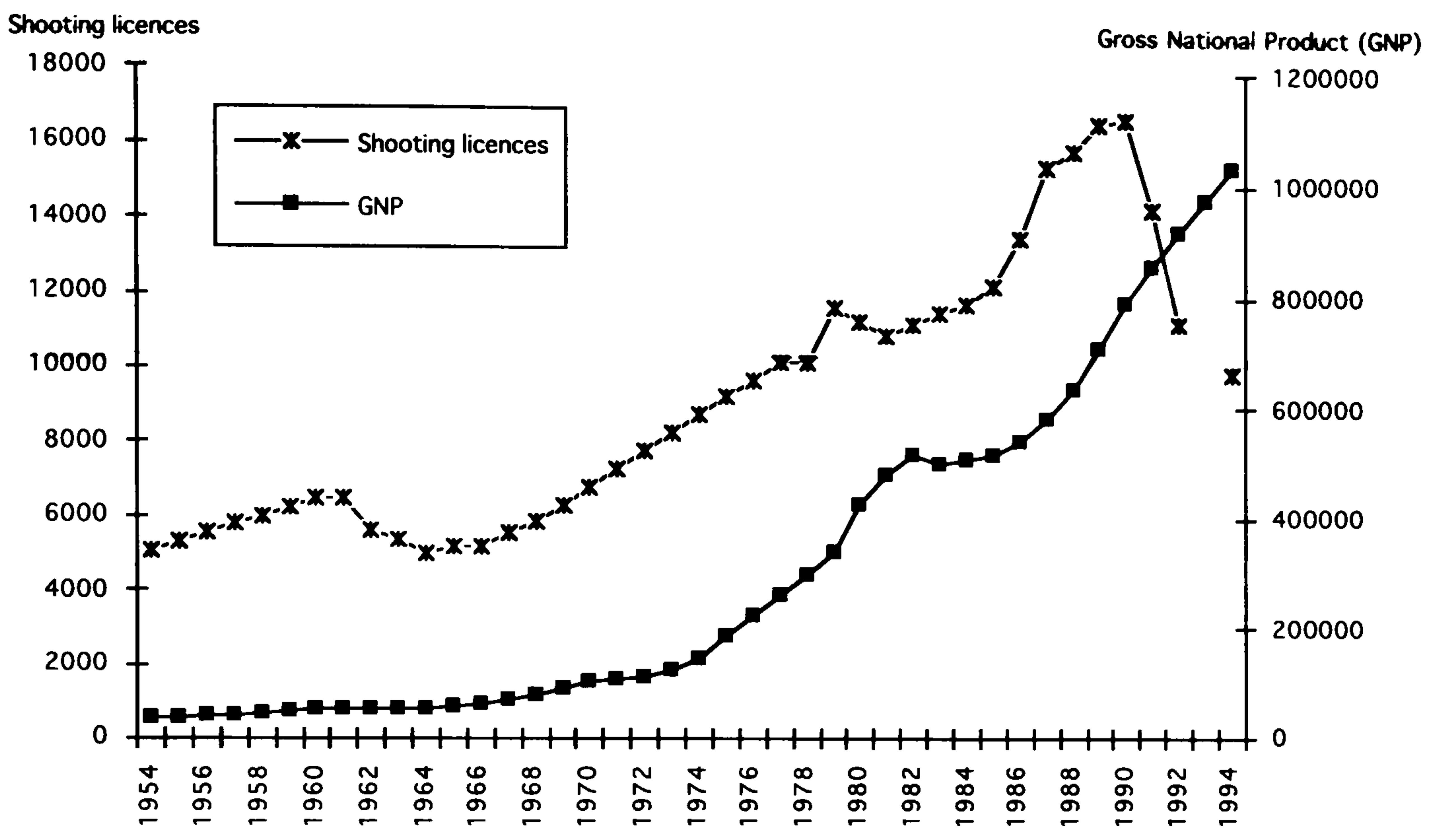
As Fig 6.1 shows, and as has been discussed in the Chapter 4, the growth in the number of hunting licences is related to economic growth. Figure 6.1 shows the growth rate of the population and that of the number of hunting licences from 1902 to 1994. It can be seen that while up to the late 1960's, the growth rate in both the population and the number of hunting licences is similar, the number of hunting licences starts to soar in the 1970s. Figure 6.2 shows the

Fig 6.1
Comparison of shooting licences and population 1902-1994



growth rate of hunting licences and Gross Domestic Product (GDP) from 1954 to 1994 and as the graphs illustrate, the growth rate is almost identical, which proves that the increase in the number of hunting licences is directly related to the increase in wealth.

Fig 6.2
Comparison of the shooting licences and GNP 1954-1994



Hunting has a number of negative aspects, some of which may have economic repercussions. One such example is the impact on the tourist industry. Various examples are cited which show that while the government's policy is to attract tourists in spring and autumn, this conflicts with the pastimes of shooting and trapping and often leads to disputes between hunters and tourists. Various tourist guide books are quoted to show the way travel writers look at hunting practices. The importance of the tourist industry to the economy is discussed through the use of data on tourist arrivals and expenditure as well as a discussion on the performance of selected tourist markets. Such a discussion is relevant to the study as although in general most tourists do not like to see birds in cages or hunters killing birds, tourists coming from countries where the environmental standards are high, such as Germany, and special interst travellers, such as outdoor recreation seeking type of tourists, are bound to have a stronger dislike to hunting practices. The bad impression left on these tourists may result in negative publicity when they return to their home country and this is likely to counter any positve publicity that the National Tourist Organisation makes to attract visitors from that country.

Finally, an account of revenue from hunting related goods is collated and compared to the cost of this revenue. From the balance sheet produced, it emerges that from the economic stand point, hunting is a liability, not an asset.

Commercial companies and hunting shops

There are seven limited liability companies registered under the Commercial Partnerships Act directly related to the shooting industry. Most of these are small family businesses which only employ a few people, mostly part timers. There are also a number of shops, some of which are owned by the companies mentioned before, while others are small family concerns. Apart from the shops licensed to sell firearms and ammunition, some shops, notably garden centres and hardware stores, often sell cartridges or other paraphernalia used by hunters and trappers. On the other hand, hunting shops often sell fishing equipment and some sell sports goods as well as garden and pet related goods. These shops sell locally made and imported cartridges and imported goods. Some of the shops are agents for particular brands of shotguns and ammunition and some even commission local cartridge manufacturers to load cartridges printed with the shop's name.

As Tables 6.1 and 6.2 illustrate, the number of shops licensed to sell hunting goods has decreased over the years in spite of the fact that the number of hunters increased.

Table 6.1
Ratio of hunter to hunting shops
for the years 1948-94

Year	Number of shops Malta	Number of shops Gozo	Number of hunters per shop Malta	Number of hunters per shop Gozo	Number of hunters per shop Overall
1948	52	17	78	53	72
1951	81	39	65	14	48
1961	106	15	50	81	53
1968	81	12	63	58	63
1978	43	31	194	60	138
1989	51	9	254	410	277
1994	49	8	?	?	174

Source: Reports on the workings of Government Departments

In 1948, there were 52 hunting shops in Malta and 17 in Gozo. The number of licensed hunters then stood at 4,052 in Malta and 908 in Gozo. This works out to 53 hunters per shop in Gozo and 78 hunters per shop in Malta. In 1951, there were 48 shooters for every shop. The number of shooters per shop rose steadily and in 1978 stood at 138 hunters per shop. In 1989 the number of shooters per shop reached its highest peak when there were 277 hunters per shop. The number fell to 174 shooters per shop in 1994. This decrease was primarily due to the large drop in the number of hunting licences paid. There were 6,742 licences less in 1994 than there were in 1989. The reason why there were more shops in the 1950s could be due to less hunter mobility. The hunters living in the village not only hunted in the vicinity of where they lived but also bought their hunting goods from their own village. One can see that even today, in Gozo, the villages with the highest number of hunters have the highest number of shops. Victoria, Nadur and Xaghra have the highest number of hunters and the highest number of shops (Fig 6.3). Villages with high numbers of shooters in Malta also follow similar patterns, although the highest number of shops is found in B'Kara, which is centrally located, while the highest number of shooters was in Rabat, where there were 699 licensed hunters catered for by three shops. At B'Kara there were five shops in 1994 while there were 392 licensed shooters.

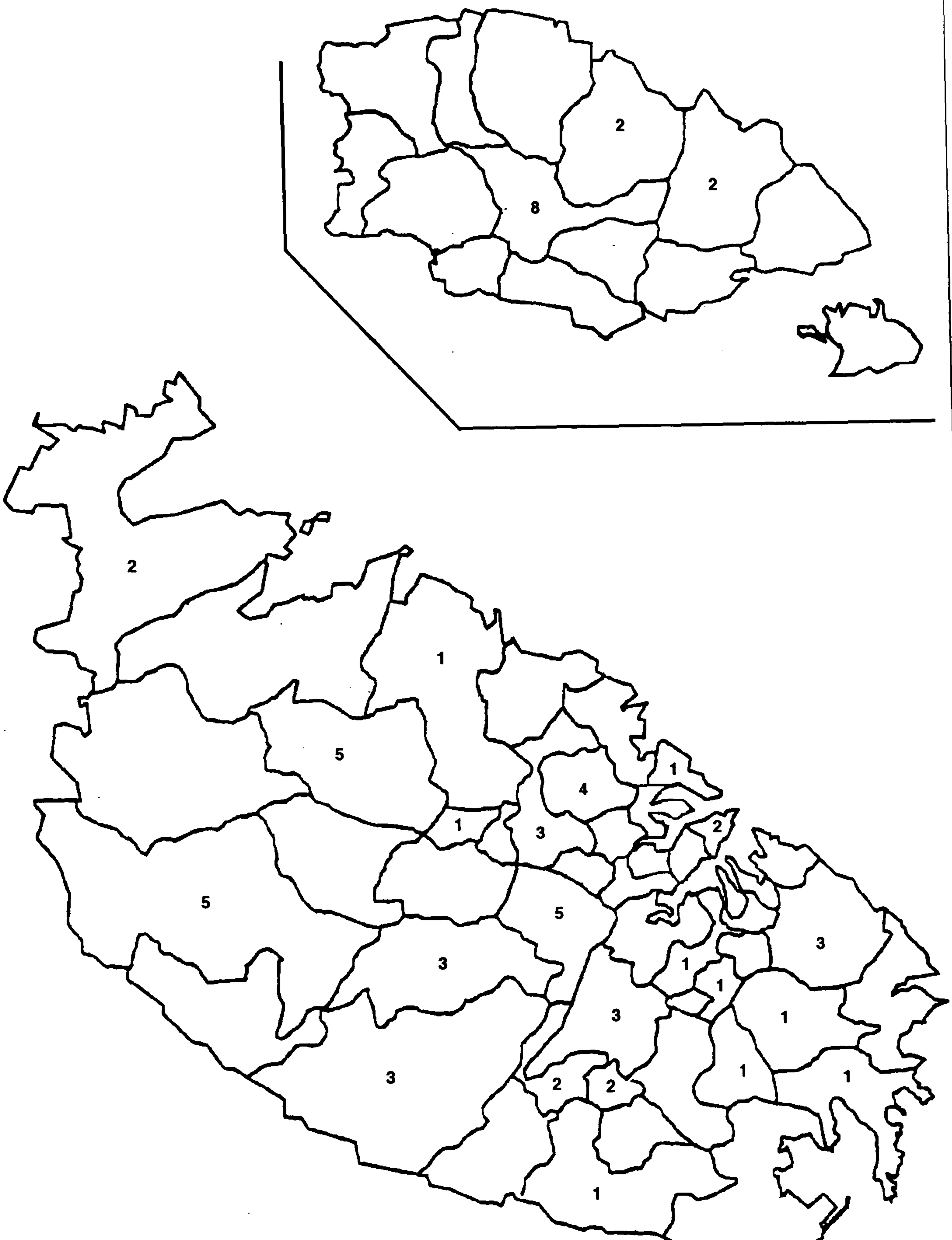
Between 1989 and 1992, there was a small decrease in the number of hunting shops but the number of hunting licences fluctuated from 16,665 in 1989, the highest number of licences to date, to 9,923 in 1994. The reasons for such a decrease are various. The different fees and hunting licences introduced in 1993 could have been one of the determining factors. Just over 12 per cent of the shops, (five in Malta and two in Gozo) are registered in the names of women, which means that the husband has a daytime job and does not earn a living from the shop (Parliamentary Question 2000, Sitting 25, 10.6.92; Parliamentary Question 19374, July 1994). Table 6.2 gives the number of hunting shops for the years 1989, 1992 and 1994.

Table 6.2
Shops licensed to sell firearms and ammunition 1989-94

Year	1989	1992	1994
Malta	51	51	49
Gozo	9	12	8
Total	60	63	57

Source: Parliamentary Questions 12630, 13.2.89; PQ2000, 10.6.92, PQ19374, 1994

Fig 6.3
Distribution of shops licensed to sell firearms and amunition in Malta and Gozo in 1992



A number of shops licensed to sell firearms and ammunition no longer sell such items, but sell general merchandise ranging from sports to household goods, but they retain the facility to sell firearms as it does not cost them anything and they can sell shooting goods if they want to. Pet shops sell birds caught by local trappers, but they also sell other birds and pets both locally bred and imported ones, pet-food, bird-seed, pots, plants as well as items related to gardening. Birds are also sold on Sundays at the open markets in Valletta and in Gozo. There is brisk business in finches and a trapper may easily earn Lm300 a year on selling the birds he traps (Victor Vella pers. comm.). In seasons when some species are scarce and at the beginning of each season, birds fetch higher prices. The most expensive finches are hawfinches, a male of which may fetch up to Lm90 (£250). Some make extra cash by making cages, traps or nets which they sell to shops or directly to trappers.

An amount of revenue is generated through taxidermy. There are no licensed taxidermists, but it is known that there are at least five taxidermists who handle a large volume of birds each year and a substantial number of part timers. The number of birds handled by some taxidermists can be quite high: a police raid at one taxidermist at Kirkop yielded close to 2,000 birds, most of which were found in nine deep freezers (*The Times* 1994c). Data for a part time taxidermist in Gozo between the years 1958 and 1977 (Table 7A.1 in the appendix) shows that on average, he used to handle an average of 542 birds a year. More recent data from two part time taxidermists (Table 7A.2 in the appendix) who stuffed birds for a known number of Maltese shooters (30 and 35 shooters respectively) between the years 1976 and 1986 shows that on average, these taxidermists used to handle 414 birds a year. Taxidermists charge between Lm2 for a bird such as a hoopoe and Lm5 for harrier. Larger birds cost considerably more to stuff. A rough estimate on 16,000 shooters each stuffing ten birds per year at Lm3 each, results in the figure of almost half a million Maltese liri (£900,000).

Stuffed birds are not found only in shooters' homes. They are sometimes sold either from taxidermists' shops or sold by the hunters directly. Occasionally, hunters shops may offer stuffed birds for sale. Stuffed specimens are mostly traded within the hunting fraternity. They may also be occasionally given to relatives or friends. A survey conducted in two boys' secondary schools whose catchment area was biased towards the central parts of the Island where the number of hunters is lower, revealed that 31 per cent of the children said that they have stuffed birds at home — quite a high proportion when one considers that less than five per cent of the population holds a hunting licence. The price for stuffing and mounting birds is bound to get higher the more the police clamp down on taxidermists. The number of taxidermists who will agree to stuff and mount birds for hunters will decrease as the risk of prosecution becomes bigger, while those who are still willing to risk are likely to charge higher prices both because there will be a shortage of taxidermists as well as because the risks of facing a court case with hefty penalties are higher. Less numbers of commoner species will be stuffed while rarer species will cost even more as taxidermists know that a hunter who shoots a protected bird would be willing to pay what the taxidermist asks for.

Business generated by Ammunition Sales

The sale of cartridges is another source of business. There are four companies which load cartridges in Malta. The biggest brands are 'Pelican', 'Franwin', 'Wings' and 'Gun and Rod'. Many shops sell cartridges stamped with their shop's name, but these are usually loaded by the above-mentioned companies. The number of cartridges loaded locally is increasing. Machines currently in use are capable of loading 3,500 cartridges per hour. The amount of import duty on empty cartridges and gunpowder more than doubled between 1985 and 1990 (Parliamentary Question 23351, 1990). In 1989, the number of locally loaded cartridges was more than double the amount loaded in 1985. Locally loaded cartridges cost less than foreign loaded ones, which they match in quality. Using the figures mentioned by Vella (1990), who stated that 230 tons of lead imported each year it is estimated that some 7.2 million cartridges are manufactured locally each year (Fenech 1992). The rental of shooting butts, trapping sites and shooting rights are other sources of income to land owners or farmers. The fees for renting an area for shooting may range from the equivalent of the cost of couple of boxes of cartridges or a pair of turtle doves to an annual fee of over Lm100. Although many shooters hunt over private land, the greatest majority hunt in public areas.

Hunting licence fees

Hunters pay a hunting licence each calendar year. There are various types of licences related to the keeping and carrying of firearms. Up to 1993, the hunting licence used to cost Lm10, a licence to keep a gun cost Lm5 while the licence to trap birds cost Lm5. The shooters' association received 50 cents off every shooting licence paid. A new tariff structure was introduced in 1994 and licences are issued according to the different hunting seasons: a licence to hunt birds in autumn costs Lm9 and a hunting licence for turtle dove and quail in spring costs Lm10, but if a hunter paid both he only paid Lm10. Most hunters who paid the

1994 licence took this option. Both the licence to trap quail and turtle dove in spring and the licence to trap finches in autumn and winter cost Lm3 each, but a licence for both seasons costs Lm4. Most trappers who paid the 1994 licences took this option (Parliamentary Question 18303, sitting 264, 16 May 1994). A new tariff for the hunting from seacraft in November and December, was introduced and costs Lm25. Only 57 hunters paid for such a licence in 1995. Table 6.3 gives a summary of the revenue collected from hunting licences for the years 1982—1994.

Table 6.3
Revenue from hunting licences
for the years 1982-94

Year	Lm
1982	75,657
1983	78,920
1984	80,604
1985	83,649
1986	85,307
1987	85,328
1988	89,371
1989	92,287
1990	131,983
1991	133,333
1992	130,444
1993	?
1994	127,997
Total	1,194,878
average	99,573

Source: Reports on the workings of Government Departments
Parliamentary Question 9,560, 19.4.93; PQ 25,310, 13.3.95

Revenue from customs duty

Shooters argue that revenue from customs duty is also a major source of income for the government. Up to the end on 1994, there was an import duty of 65 per cent on shotguns and ammunition imported from member states of the European Union while a duty of 80 per cent was levied on the same items imported from non-EU member states. Although government revenue from customs duty was high, one must also take into account the considerable amount of money that is going out of the country to pay for hunting related goods.

Table 6.4
Import duty paid on hunting related goods
during the years 1985-93

Year / Item	1985	1986	1987	1988	1989	1990	1991	1992	1993	Total	average
Shotguns	91,170	92,041	89,962	80,636	97,973	95,217	90,648	87,275	66,643	791,565	87,951.7
Cartridges	30,414	40,929	20,551	32,842	43,687	38,507	42,083	19,916	29,374	298,303	33,144.8
gunpowder	6,114	14,524	5,871	8,743	15,087	8,862	0	0	0	59,201	6,577.9
leadshot	2,091	5,812	7,827	6,639	0	0	0	0	126	22,495	2,499.4
Totals	129,789	153,306	124,211	128,860	156,747	142,586	132,731	107,191	96,143	1,171,564	130,173.8

Source: Parliamentary question 23351, 15.10.90 and Ministry of Finance

Table 6.4 shows the amount of revenue generated through the duty paid on shooting related items for the years 1985-1993. This scenario has changed dramatically in 1995 when Value Added Tax (VAT) was introduced. The rate of VAT has been set at 15 per cent and has replaced the import duty on goods imported from the EU while duty on goods imported from non-EU countries has been lowered. In the case of hunting related goods, the import duty of 80 per cent has been replaced by a levy of 6.3 per cent and 15 per cent VAT. Thus, the revenue collected by the government from import duty on hunting related goods will therefore decrease by some 45 per cent while the balance of payments with other countries will, at best remain the same. One has to see what would be the effect of lower prices in the case of hunting goods. It may well be that lower prices of shotguns and foreign made ammunition will entice hunters to buy more, bringing a further negative increase in the balance of payments.

If one were to analyse the tables showing the imports of hunting goods (Table 6.5), the bulk of the expenditure is on shotguns (59.3 per cent) while ammunition (i.e. empty and loaded cartridges, wads and gunpowder), accounts for 37.3 per cent the remaining 3.4 per cent is lead shot.

A thirteen year average computed over the years 1980-1992 (Table 6.6) shows that practically 93 per cent of the shotguns are imported from EU countries. Italy accounts for over 80 per cent while Spain and Belgium account for 5.5 and 3.7 per cent respectively. USA and Japan account for three per cent and 2.5 per cent respectively. Just over 98 per cent of the ammunition is imported from EU states. Italy accounts for 71 per cent, France for just over 16 per cent and the UK for just over three per cent. Nine non-EU countries from where ammunition is imported account for less than two per cent of the value of imports (Table 6.7).

These statistics illustrate how customs revenue figures are bound to plunge in and after 1995 with the introduction of VAT. Thus the amount of revenue generated for the public coffers by shooting related activities is significantly less than what shooters make it out to be, more so now, after the introduction of VAT.

The average number of licensed hunters per year for the period 1985-93 was 14,527. The average amount of duty paid over the same period amounts to Lm8.96 per licensed hunter. When analysing the monetary value of imported hunting goods, the average per capita expenditure of hunters for the 15 years from 1980 to 1992 amounts to under Lm13 annually. This can hardly be labelled of any relevance to the economic activity of the islands.

Table 6.5
Import of hunting related goods
for the years 1980-1992

Item / Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Total	13 year average
Shotguns	92,732	67,645	46,510	9,136	9,826	135,113	139,693	66,619	125,806	150,359	144,556	135,937	127,119	1,251,051	96,235
Wads	10,982	1,316	0	8,137	5,101	5,278	2,827	3,644	5,457	11,317	0	0	0	54,059	4,158
Ammunition	3,534	1,162	28	4	89	572	0	6,590	8,900	1,603	89,830	78,109	39,883	230,304	17,716
Loaded cartridges	72,399	40,665	30,829	44,296	8,178	28,378	30,896	21,472	13,772	25,189	0	0	0	316,074	24,313
Empty cartridges	27,639	10,570	4,991	23,569	29,112	18,376	29,354	8,101	38,161	41,641	0	0	0	231,514	17,809
Lead shot	2,210	0	0	10	0	3,217	8,941	10,446	10,214	0	27,590	0	12,312	74,940	5,765
Parts	3,301	2,680	1,340	9,455	4,484	0	6,310	5,674	7,590	5,267	6,775	6,567	9,297	68,740	5,288
Totals	212,797	124,038	83,698	94,607	56,790	190,934	218,021	122,546	209,900	235,376	268,751	220,613	188,611	2,226,682	171,283
no. of shooting licences	10,000	10,953	12,412	11,515	11,818	12,286	13,586	15,465	15,947	16,665	16,760	14,379	11,298	173,084	13,314
per capita expenditure	21.3	11.3	6.7	8.2	4.8	15.5	16.0	7.9	13.2	14.1	16.0	15.3	16.7	167	12.9

Source: Trade Statistics

Table 6.6

Import of shotguns by country
for the years 1980-1992

Year / Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Totals	13 year average	Average %		
Belgium	1,155	1,215	0	1,030	885	14,753	2,408	661	3,428	11,065	2,151	8,151	2,005	48,907	3,762	3.7%	Belgium	
France	0	0	0	30	1,635	20	1,286	1,487	1,274	2,376	90	150	2,639	10,987	845	0.8%	France	
Germany	0	279	713	100	35	40	0	110	153	0	115	0	0	1,545	119	0.1%	Germany	
Italy	81,951	61,479	42,264	3,932	2,922	63,182	119,197	123,093	115,722	127,788	125,664	116,415	79,622	1,063,231	81,787	80.5%	Italy	
Spain	1,015	25	90	713	85	37,676	12,335	769	809	430	9,770	3,161	5,383	72,261	5,559	5.5%	Spain	
UK	972	0	0	107	430	135	177	647	852	3,356	350	1,400	6,160	14,586	1,122	1.1%	UK	
Austria	0	0	0	0	0	0	0	0	0	0	0	40	10	50	4	0.0%	Austria	
Portugal	0	0	0	0	0	7,955	0	4,810	0	0	0	0	0	12,765	982	1.0%	Portugal	
Sweden	0	0	0	0	0	996	0	0	0	0	0	0	0	996	77	0.1%	Sweden	92.75% EU
Canada	175	0	90	460	15	0	870	165	68	180	0	248	0	2,271	175	0.2%	Canada	
USA	4,855	3,522	1,850	711	1,924	1,647	1,755	2,007	1,260	2,170	553	1,522	15,233	39,009	3,001	3.0%	USA	
Brazil	15		60		270	30	0	0	0	60	140	70	863	1,508	116	0.1%	Brazil	
Peru	0	0	0	0	0	0	0	0	0	0	0	50	0	50	4	0.0%	Peru	
Hong Kong	0	0	0	0	0	0	0	0	0	0	0	90	0	90	7	0.0%	Hong Kong	
Phillipines	0	0	0	0	80	0	0	0	0	0	0	0	0	80	6	0.0%	Phillipines	
Japan	2,484	985	1,022	905	590	1,416	1,400	1,301	1,710	1,712	5,016	2,172	12,579	33,292	2,561	2.5%	Japan	
China	0	0	0	0	0	0	0	0	0	0	0	0	517	517	40	0.0%	China	
Australia	110	140	421	843	825	145	215	800	295	1,053	210	100	80	5,237	403	0.4%	Australia	
C'vachia	0	0	0	60	0	0	0	125		124	447	1,255	0	2,011	155	0.2%	C'vachia	
USSR	0	0	0	245	125	7,118	50	698	235	45	50	1,113	2,028	11,707	901	0.9%	USSR	
Morocco	0	0	0	0	5	0	0	0	0	0	0	0	0	5	0	0.0%	Morocco	7.25% Non EU
Total	92,732	67,645	46,510	9,136	9,826	135,113	139,693	136,673	125,806	150,359	144,556	135,937	127,119	1,321,105	101,623	100.0%		100.0%

Source: Trade Statistics

Table 6.7
Import of ammunition by country
for the years 1980-1992

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Totals	13 yr av	Average%	Year	
Belgium	0	0	0	0	2,276	0	0	23	0	0	0	0	0	2,299	177	0.3%	Belgium	
France	374	4,711	2,690	5,828	7,108	3,311	17,089	20,997	27,470	15,350	16,874	16,544	0	138,346	10,642	16.2%	France	
Germany	2,608	78	11,457	54	0	80	0	0	1,157	957	776	80	0	17,247	1,327	2.0%	Germany	
Italy	109,242	47,919	21,538	69,968	23,222	37,512	45,809	29,854	36,082	58,560	42,622	52,959	30,530	605,817	46,601	71.0%	Italy	
Spain	0	0	4,667	0	0	0	0	0	0	0	0	0	0	4,667	359	0.5%	Spain	
UK	2,226	506	1,588	113	9,777	595	168	0	1,575	655	1,244	8,475	0	26,922	2,071	3.2%	UK	
Austria	0	0	12,351	0	0	0	0	0	0	467	0	0	90	12,908	993	1.5%	Austria	
Portugal	0	0	0	0	0	0	0	0	0	0	28,296	0	0	28,296	2,177	3.3%	Portugal	
Sweden	0	6	0	0	0	1,178	0	0	0	0	0	0	0	1,184	91	0.1%	Sweden	
Greece	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0.0%	Greece	98.1% EU
Y'slavia	0	0	0	0	0	0	0	0	0	0	0	36	0	36	3	0.0%	Y'slavia	
Cyprus	0	0	0	0	0	0	0	0	0	3,265	0	0	0	3,265	251	0.4%	Cyprus	
Canada	0	0	24	0	0	4	0	0	0	0	0	0	0	28	2	0.0%	Canada	
USA	27	17	0	1	77	117	0	0	0	0	2	0	0	241	19	0.0%	USA	
Hong Kong	0	0	215	0	0	0	0	0	0	0	0	0	0	215	17	0.0%	Hong Kong	
Japan	1	0	1,105	0	0	0	0	0	0	0	0	0	0	1,106	85	0.1%	Japan	
Australia	76	0	78	38	20	54	11	13	6	0	25	15	0	336	26	0.0%	Australia	
C'vachia	0	0	0	0	0	5,655	0	0	0	0	0	0	0	5,655	435	0.7%	C'vachia	
Hungary	0	476	0	0	0	4,098	0	0	0	496	0	0	0	5,070	390	0.6%	Hungary	1.9% Non EU
Total	114,554	53,713	55,713	76,006	42,480	52,604	63,077	50,887	66,290	79,750	89,839	78,109	30,620	853,642	65,665	100.0%	Total	100.0%

Source: Trade Statistics

IS HUNTING PRODUCTIVE?

Some might argue that hunting is productive as hunters are, in essence, 'producing' meat. Rappaport (1974) argues that "the slaughter and consumption of a deer by a lion armed only with claws and by hunters armed with bows and arrows or shotguns and speaking to each other while they hunt are, ecologically speaking, transactions of the same general type. In both there is a material exchange between predator and prey populations" (Rappaport 1974 p.242). Rappaport's argument sounds watertight, but is not. It is true that in an ecological niche, there is a kind of material exchange. But ecologically speaking it does differ whether an individual animal is killed by a natural predator or by a human being. The human being is not a natural predator and by killing wild animals or birds, man is tampering with the balance of nature. By hunting, man ~~actually reduces the population of particular species, thus reducing the prey~~ available to predators or forcing them to shift to other species. By killing predators as well, man would also be tampering with the balance of nature as most predators consume a variety of other organisms which man does not.

Another aspect Rappaport overlooked was the overall impact of hunting on the ecosystem. In shooting, hunters disperse hundreds of pellets each time they shoot, of which, only a very small percentage hit and kill, or maim the animal. The rest of the pellets are dispersed in the environment and cause a number of side effects. Lead poisoning of waterfowl, which ingest spent lead shot while feeding, is a classic example of one of the impacts of hunting. Rappaport also ignored 'crippling losses', birds which are injured by shot but not retrieved. Hunters do not kill and find every bird they shoot. Birds and animals are often wounded and not retrieved. Although the aim of the hunter is not to prolong the suffering of his quarry, this inevitably happens. Hunters often counter such arguments by saying that better hunters train to achieve 'clean kills', and such hunters either kill a bird instantly or else miss it, while bad shots kill less and miss more frequently. A recent study has shown that good shots actually maim many more birds than bad ones and that for every duck bagged, at least another is wounded (Anderson 1994).

Ingold (1982), who wrote about the meaning of production as an index of distinctiveness of mankind, argues that hunting is 'productive'. He states that although when viewed from an ecological perspective, the interactions of hunters and predators with their prey are of the same general kind, socially speaking they are quite different, and to grasp the difference is also to pinpoint the essence of production. According to Marx and Engels (1977), men begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence. Ingold argues that although hunters do not 'produce' their food, but 'collect' it, the hunters' economy is an extractive one similar to that of all other animals that must extract their food from an unmodified environment in order to survive and reproduce. Ingold argues that hunting and predation are not the same. "There is more to hunting than predation, namely the intention of the subject who experiences the activity as something he does, in person. Unlike ladybirds, men carry the responsibility for their hunting; it is a responsibility that is founded in their mutual involvement with others in a social collectivity, hence hunting qualifies as a form of social action, as production" (Ingold 1982 p.103).

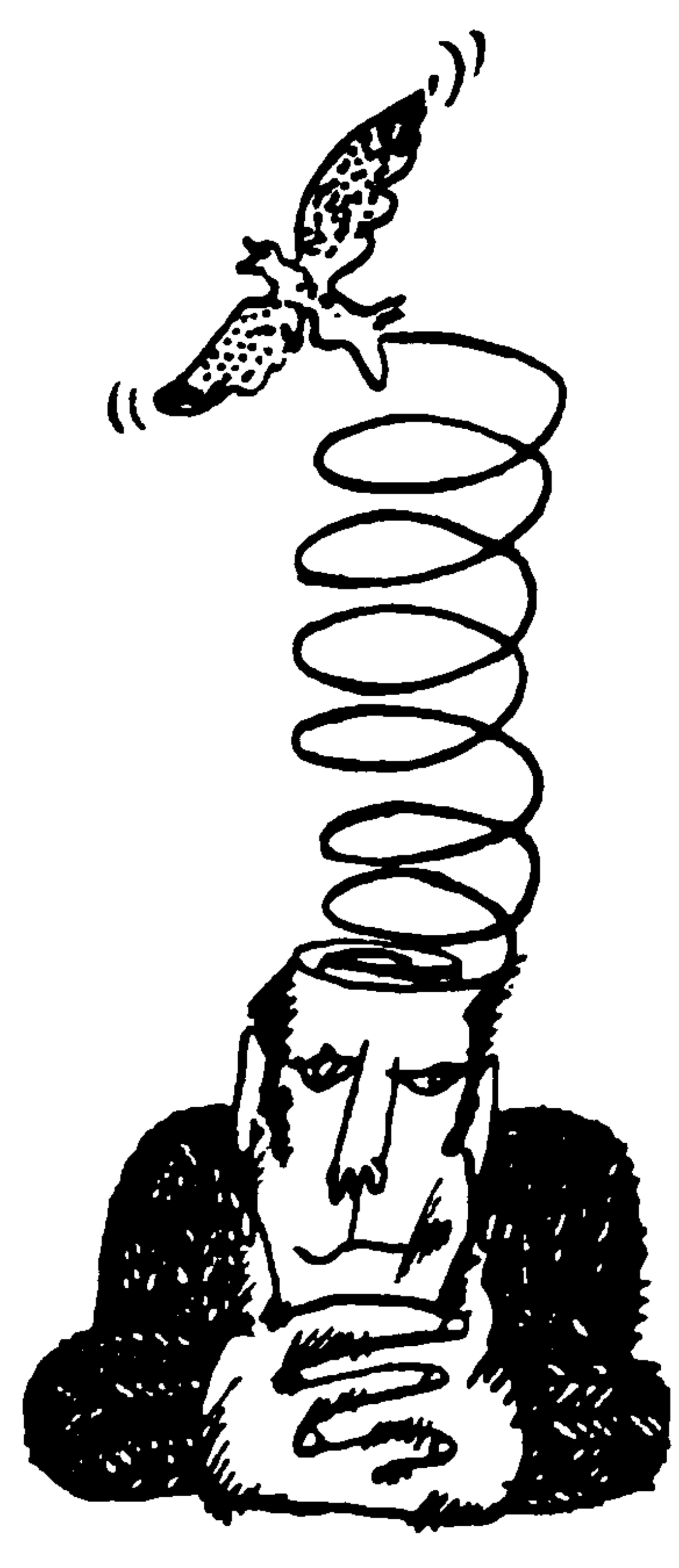
If one were to agree with Ingold, that hunting is productive, then calculating the costs of production are bound to show whether the production of meat through hunting is viable. A simple calculation using the nominal average weekly earnings per employee in 1995 where an employee earned Lm75.50 a week, or Lm1.88 per hour (Economic Survey 1995) and assuming that a hunter shoots for 15 days in a season, during which he spends nine hours in the field results that 135 hours of hunting effort are spent in hunting. In monetary terms, 135 hours at the rate of Lm1.88 an hour amounts to Lm253.80. If during this time, the shooter bags ten turtle doves, which are roughly equivalent to two kilograms of meat, then the cost of a kilogram of meat amounts to Lm127 (£228), when beef from a butcher shop costs about Lm1.50 (£2.70) per kilo. In making this calculation, one is ignoring the costs of fuel used to arrive at the place one hunts, the cost of ammunition, hunting licence fees, the costs of shooting rights and other incidental expenses. One is also assuming that a shooter hunts for only 15 days in a season, when most hunters shoot every day from 10 April to 22 May.

THE LIABILITIES OF HUNTING — LOSS OF LABOUR

If, in spite of the costs, one were to consider hunting activity as an asset for the internal economy of the country, one has to weigh it against negative effects which also have a bearing on the economy. One of the negative factors is the loss of labour due to hunting. Many shooters and trappers take their vacation leave just to pursue their pastime. One may argue that there is nothing wrong with taking time off to pursue one's leisure activities, but the taking of vacation leave *en masse* can have an effect on certain industries. Shooters take long spells of leave between mid-April and late May and between October and November. Loss of labour *en masse* has a multiplier effect on the industry especially in production oriented enterprises where the loss of a person might mean the stoppage of work of a whole line and/or increased production costs resulting from overtime work becoming necessary. Increased production costs also mean loss of competitiveness.

The effects of hunting related absenteeism from work is most evident in the building industry. The late Albert Gauci, who was one of the founder members of the hunters' association wrote: "a younger friend of mine in the building industry, at his very first adventures in his new professional life, was complaining how difficult it was with the coming of April to keep any hold over his contractors, plasterers, stone dressers and the like. All his projects had suddenly come to a grinding halt. He had been so badly hit that he could not help blurt out that he had never expected such a craze in full twentieth century. It is indeed astonishing how even unto our day and age, so many thousands of otherwise sensible people from all walks of life, skilled and unskilled workers, professionals and priests included, low and high, young and old, fair and dark, simply toss off behind their shoulders their very livelihood, renounce their normal way of life, just to dedicate themselves entirely to the craze of game" (Gauci 1973). In his foreword to a book on the *Birds of the Maltese Archipelago*, published by the Museums Department, Dom Mintoff, who was Prime Minister at the time, wrote: "during the two migration periods, absenteeism in the building industry, in Government employment and in new industries reaches frustrating peaks" (Bannerman and Vella Gaffiero 1976 p. iv). On the other hand, many hunters are unable to take leave. A cartoon in the May 1989 issue of the shooters' paper *Il-Passa* (Fig 6.4) shows what such shooters would have on their mind.

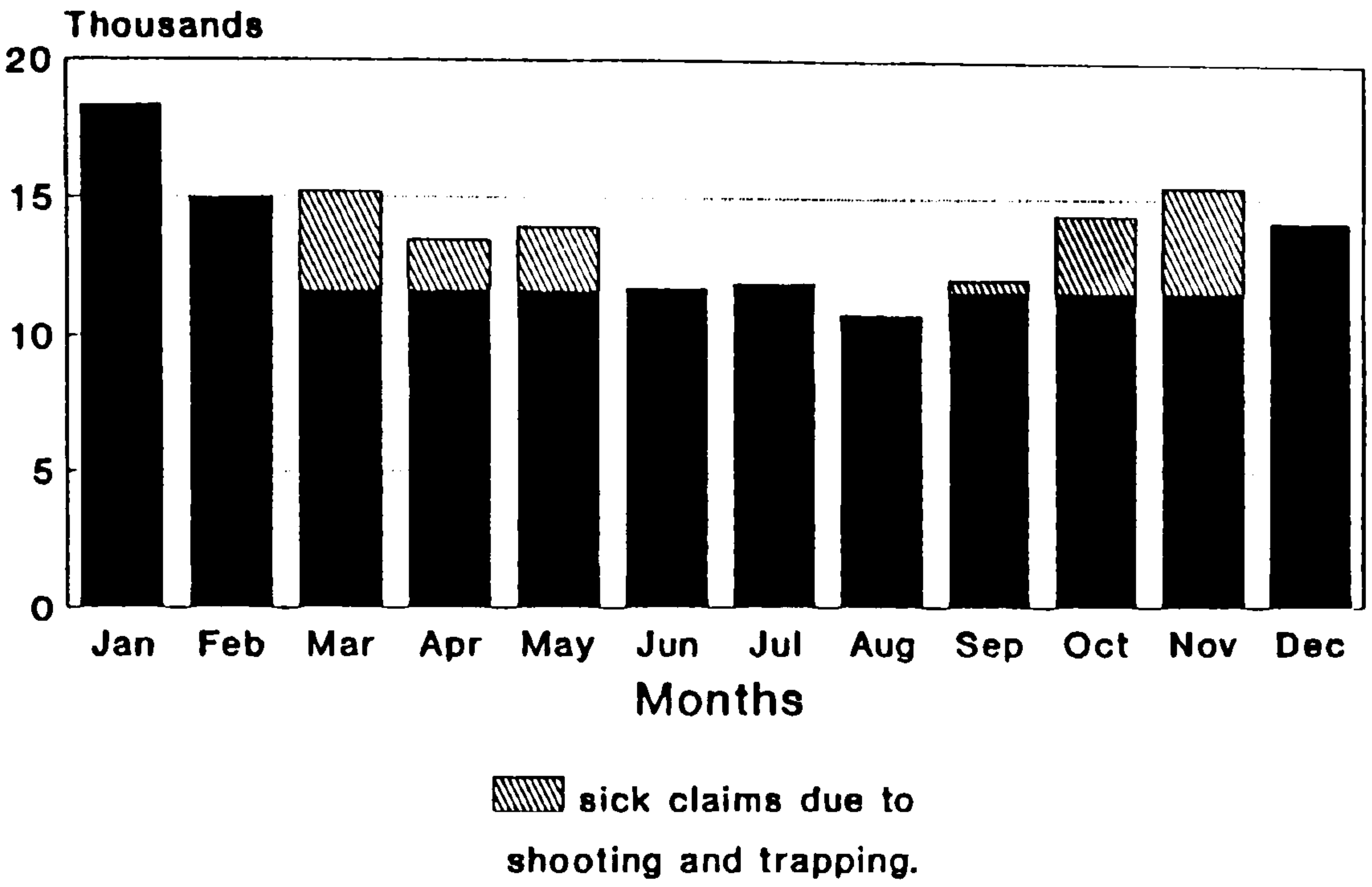
Fig 6.4
A hunter's mind during the hunting season



Source *Il-Passa* 1989

Apart from vacation leave, many shooters and trappers take sick leave in order to pursue their hobby. This is a very significant, but hidden, loss. Statistics from the Social Security Department show that on average, about 300 sick-claims per day are registered in the civil service. The number of sick-claims swells on particular days during the migration periods. The following are some examples of sick-claims made by Government employees in 1990. On 16th April, a day on which there was significant migration of birds, 449 people reported sick. On 23rd April, feast of St George, which is said to be the date of the first migration of turtle doves, 353 people reported sick. On 28 May, a very large migration of birds took place and 585 people reported sick. The following day, shooters were hoping that migration would perhaps be as good and 457 reported sick. Sick-claims in the private sector, were also significantly higher than usual (Department of Social Security).

Fig 6.5
Number of sick claims per month
the total per month is an avaerage of the
years 1980-1990



A 'sick claim' is made each time a person reports sick. For Fig 6.5, the total and the average of the summer months were calculated from the months of June, July, August and September, during which most employees both in the public and private sectors work half days. The number of people taking sick leave on half days is significantly lower than other months of the year, and reflects more accurately the number of real sick-claims than other months. The months of December, January and February were not taken into consideration as people are more prone to infectious diseases such as colds and thus the number of claims made are above average. During the month of December, some, especially those who would have expended all their leave, might also take sick leave.

An increase of sick claims can be seen during the peak shooting and trapping seasons in March, April and May and in October and November. In September, during which month shooting takes place, shooters do not take sick leave as most shooting takes place in the afternoons when they are still working half days. The average number of sick claims made per year is 166,498. It is estimated that of these, 14,716 are made due to shooting and trapping. Assuming that shooters and trappers report sick only on single days and using the figure of Lm10 as an average pay for a day's work, the equivalent of Lm147,960 per year is lost on sick claims which are made due to shooting and trapping. This is more than the Government earns from customs revenue on shooting goods. The phenomenon of taking sick leave for other purposes other than illness is not restricted to the civil service. But since most private industries use the services of medical companies and send doctors to examine those reporting sick, less abuses take place. The fact that more sick leave is taken during the peak times of the migration period than at other months of the year, illustrates that most of the sick leave taken is for hunting and trapping purposes. A conservative estimate is that 8.8 per cent of all sick claims made are due to shooting and trapping (Fenech 1992).

POLLUTION AND LAND USE

A very serious, although hidden effect is the pollution resulting from spent lead shot. This is dealt with in more depth in the following chapter, which deals with environmental impacts. Nevertheless it has to be mentioned as it is a liability which is difficult to quantify, and which costs money to redress. Spent plastic cartridges are a form of litter which is evident wherever one walks in the countryside. This too is a negative repercussion as is the inconvenience caused by the sound of shooting close to inhabited areas.

The conflicts arising due to multiple land uses are also a negative aspect which are hard to quantify in fiscal terms. Hunters use public lands, as non-hunters do, with the exception that hunters pretend to have exclusive rights during the hunting season. During talks with the government for the handing over of public lands to the hunters' association, hunters always demanded exclusive use during the hunting seasons. The environmental impacts of hunting and trapping on land have also been discussed in some detail in the following chapter, but these impacts too are difficult to quantify financially.

IMPACTS ON TOURISM

Malta is visited by over a million tourists each year. The number of tourists has been increasing steadily and rose from 490,000 in 1983 to over a million in 1993. Tourism is the strongest pillar of the economy and continues to be so as the number of full time people directly employed in the tourist industry increases. The number of employees in this sector rose by almost a thousand between 1990 and 1993. In October 1993, there were 8,136 persons employed on a full-time basis in hotels and other holiday accommodation and catering establishments. This amounted to 6.17 per cent of the total work force (Table 6.8). In September 1995, the number of full time personnel employed in hotels and catering establishments exceeded the 10,000 mark and accounted for 7.3 per cent of the gainfully employed (Economic Survey 1995). To these one must add the large number of part timers, some of whom are employed only on a seasonal basis while others do part time work practically all year round.

Table 6.8
Number of people employed
in the tourist industry

Year	1990	1991	1992	1993	1994	1995
tourist trade employees	7375	7558	7683	8136	9508	10094
% of total workforce	5.8	5.8	5.8	6.2	7.0	7.3

Source: Economic Survey, Ministry of Finance

Income from tourism forms the backbone of the local Gross Domestic Product. The net income from tourism in 1993 exceeded Lm233 million. This was up from just over Lm175.3 million in 1991, which accounted for 25.9 per cent of the Gross Domestic Product.

Table 6.9
Net income from tourism
and its percentage contribution to the GDP

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Gross receipts Lm millions	76.6	67.8	63.1	69.8	83.9	120	138	144	158	175	181	232	242	250
Tourism as a % of GDP	16.6	14.8	13.7	14.7	15.5	20.7	21.8	20.4	20	20.5	19.7	23.1	23.4	29.2

Source: Economic Survey, Ministry of Finance

The figures shown in Table 6.9 show that with almost a third of the GDP is generated by the tourist industry and with over six per cent of the work force employed on a full-time basis in hotels and other holiday accommodation and catering establishments Malta can be said to depend on tourism. The dependence of the economy on tourism becomes more evident when one starts including other businesses providing services not exclusively used by tourists but for which tourism is the most important activity. These include car hire companies (there were 122 car hire firms in 1994), mini buses and other modes of transport, as well as the national airline, Air Malta, which employs over 1,000 people and flies in over a half of the tourists who visit Malta.

Tourism policies and marketing are carried out by the National Tourism Organisation of Malta (NTOM). The aims of NTOM are: diversification of source markets and further exploitation of special interest and niche markets; improving the seasonal arrival spread of tourists; improving the socio-economic profile of visitors and developing tourism in a sustainable manner. The NTOM noted that the trend over the past few years throughout Europe was for people to have two or more holidays a year; one or two short breaks in winter or during the shoulder season and another in summer. Thus the NTOM, which is aware that "this type of tourist is generally more environment conscious", is trying to target special interest travel and is continually seeking to obtain quality media exposure abroad by inviting selected journalists to focus on specialist activities. These include walking, rock climbing, mountain biking, jeep safaris, abseiling, trekking and others (NTOM 1993, NTOM 1995). The NTOM's policies are incompatible with hunting and trapping since they are likely to attract not only more environment conscious tourists but also those who like to walk and discover the local landscape, which during the shoulder months, is also heavily patronised by shooters and trappers. NTOM's efforts are frequently diluted either by articles about the hunting situation in specialist publications, or by letters by visitors who recount their bitter experiences during their holiday.

Table 6.10
Total tourist arrivals per month

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
January	20,419	23,988	28,580	29,209	28,502	37,053	37,573	42,726	40,874
February	25,432	31,502	35,504	38,361	34,051	48,812	48,135	55,504	53,314
March	36,581	47,618	57,388	54,044	55,557	62,836	66,409	90,203	83,923
April	52,915	52,441	58,836	76,786	60,582	86,991	90,286	100,541	112,079
May	75,014	76,484	83,933	82,270	87,329	104,200	99,134	115,576	105,120
June	82,042	84,411	87,202	91,543	90,914	102,513	99,572	111,667	110,028
July	99,757	105,207	104,353	105,997	110,116	119,205	131,238	151,926	134,477
August	110,441	106,405	110,210	116,082	125,752	134,150	143,063	145,001	140,557
September	90,752	94,600	94,703	101,309	105,825	110,812	122,389	126,402	121,307
October	76,109	78,585	80,674	83,613	91,988	90,209	107,000	115,496	102,732
November	39,421	45,627	50,261	52,057	57,589	56,462	67,944	66,392	59,971
December	37,060	36,978	36,667	40,475	47,281	49,138	50,470	54,775	51,589
Totals	745,943	783,846	828,311	871,746	895,486	1,002,381	1,063,213	1,176,209	1,115,971

Source: Research and Planning Division, NTOM

Due to the importance of the tourist industry, efforts are being made to diversify as much as possible to reduce over dependence of single markets in tourism. However, as Table 6.10 shows, the largest number of tourists visit Malta during the summer months — close to 50 per cent of the number of tourists who spend their holidays in Malta visit during the months of June, July, August and September. The year 1994 showed that Malta cannot take more tourists between June and September (Psaila Savona 1995).

Table 6.10b
Tourist arrivals per month expressed as a percentage of the total arrivals per year

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995
January	2.6	3.1	3.5	3.4	3.2	3.7	3.5	3.6	3.7
February	3.4	4.0	4.3	4.4	3.8	4.9	4.5	4.7	4.8
March	4.9	6.1	6.9	6.2	6.2	6.3	6.2	7.7	7.5
April	7.1	6.7	7.1	8.8	6.8	8.7	8.5	8.5	10.0
May	10.1	9.8	10.1	9.4	9.8	10.4	9.3	9.8	9.4
June	11.0	10.8	10.5	10.5	10.2	10.2	9.4	9.5	9.9
July	13.4	13.4	12.6	12.2	12.3	11.9	12.3	12.9	12.1
August	14.8	13.6	13.3	13.3	14.0	13.4	13.5	12.3	12.6
September	12.2	12.1	11.4	11.6	11.8	11.1	11.5	10.7	10.9
October	10.2	10.0	9.7	9.6	10.3	9.0	10.1	9.8	9.2
November	5.3	5.8	6.1	6.0	6.4	5.6	6.4	5.6	5.4
December	5.0	4.7	4.4	4.6	5.3	4.9	4.7	4.7	4.6
Totals	100	100	100	100	100	100	100	100	100

Source: Research and Planning Division, NTOM

As Table 6.10b shows, the current policy of increasing the number of tourists in the shoulder months seems to be working as more tourists are visiting Malta particularly during the months of March, April and May and October and November. It is worth noting that the largest increase took place after 1993 when new legislation banning all forms of hunting and trapping was introduced. In previous years, the increase was never so large. From 1992 to 1991, the overall increase in March arrivals was 11 per cent while the 1993 increase over 1992 was 5.4 per cent. Table 6.11 shows the increasing trend where more tourists visit the Islands during the shoulder months. Tourists who come during shoulder months do not come for the sun, sea and sand, like the summer tourists usually do. From data available it is evident that tourists from Germany, prefer to visit the Islands during the off peak periods. In 1992, the number of German tourists who visited Malta in April surpassed the number of Germans visiting in any other month. German tourists are among the more environment conscious visitors and are very upset by hunting practices.

Ta ble 6.11
Number of visitors per season between 1963-1993

Year	Spring	Summer	Autumn	Winter	Total
1963	7,595	14,429	3,977	6,308	32,309
per cent	23.5	44.7	12.3	19.5	100.0
1973	47,717	99,710	35,470	28,299	211,196
per cent	22.6	47.2	16.8	13.4	100.0
1983	117,050	252,883	65,457	55,422	490,812
per cent	23.8	51.5	13.3	11.3	100.0
1993	255,829	496,097	174,965	136,178	1,063,069
per cent	24.1	46.7	16.5	12.8	100.0

Note: for the purpose of this table, Spring is composed of the months of March, April and May; Summer is made up of June, July, August and September; Autumn is composed of October and November while Winter is made up of December, January and February.

Source: Research and Planning Division, NTOM

Table 6.12

Performance of selected tourist markets

results given as a percentage of the total number of tourist arrivals

Year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
France	4.35	3.81	4.28	4.72	4.44	3.74	3.05	3.35	3.95	3.78	4.54	4.73	5.84	6.53
Germany	5.09	5.38	8.92	11.01	10.40	9.42	9.91	11.07	14.94	15.25	15.32	16.56	17.03	16.82
Italy	6.03	7.22	8.80	8.46	6.35	5.84	6.47	6.43	7.35	7.15	7.59	8.05	8.40	8.73
Libya	2.65	3.13	3.79	8.37	4.03	5.96	4.74	3.77	4.14	5.23	3.84	4.46	3.46	3.33
Scandinavia	4.13	4.14	3.63	4.34	4.58	3.49	3.36	3.24	3.82	3.24	2.65	2.40	2.54	2.96
UK	64.92	63.63	56.31	49.52	57.37	58.89	60.80	59.51	51.62	51.23	52.44	48.99	45.09	41.32
Others	12.83	12.69	14.27	13.58	12.83	11.66	11.67	12.63	14.18	14.13	13.62	14.81	17.64	20.31

Source: Research and Planning Division, NTOM

Looking at the performance of Malta's tourist markets (Table 6.12), it is evident that the UK market is still the biggest one, although it has fallen by almost 16 per cent since 1982. The German market, on the other hand, is steadily increasing and has more than trebled since 1982. If one were to look at the number of German tourists who visited Malta between 1983 and 1993 one would notice that 30.8 per cent of the Germans visited the Islands in spring, 37.8 per cent arrived in summer, 18.9 per cent in autumn and 12.6 per cent in winter. Almost 50 per cent of the Germans visit Malta in spring and autumn. Looking at the 1983-93 average, one concludes that most Germans arrive in Malta during the months of October, September, March, April and May — which coincide with the peak months of shooting and trapping. German tourists who visited Malta between July 1994 to June 1995 accounted for 25.5 per cent of the total number of tourists staying in five star hotels and 24.2 per cent of those staying in four star hotels (NTOM 1996). British tourists accounted for 21.1 per cent of the total number of tourists in five star hotels and 41.3 per cent of those staying in four star accomodation.

Maltese nature has plenty to offer to the discerning tourist. There are over 1,200 species of plants, including 16 species of orchids and other rare plants of special interest which nature loving visitors come to see or study. Such tourists come mainly from Germany. In 1983, the German market formed 5.4 per cent of the total tourist market, in 1990, they amounted to 14.94 per cent while in 1993 Germans made up 16.56 per cent of the total number of tourists who visit Malta. With more visitors in spring and autumn, it is likely that there will be more conflicts and complaints with hunting and trapping practices. Tourists visiting in October and November are more likely to come in contact with trappers since trapping in autumn is at its peak during these times and intensive trapping is carried out at some of the most scenic places such as Dingli Cliffs, Delimara as well as in areas of archaeological interests such as near the Neolithic temples at Hagar Qim and Mnajdra. Trapping is more visible than shooting as trappers use a large number of decoy birds in small cages around their trapping site. The birds in cages are placed on raised pillars of stone or hung from specially made sticks. Thus they are very conspicuous. Disputes between hunters, trappers and tourists frequently arise especially when tourists are seen trying to photograph trapping sites or caged birds, or even when tourists try to take a closer look or pass by trapping sites: not an impossible thing to do when one considers that trapping sites are also found by the road sides and caged birds are placed on boundary walls dividing fields from the public roads. The main reason for such conflicts is that shooters and trappers know that tourists do not like shooting and trapping and they are wary of the adverse publicity that can arise if they are allowed to take photographs of hunting and trapping practices. Conflicts are rather common, but only the more newsworthy ones reach the public. A British tourist was attacked by trappers and had to be hospitalised when he was filming bird trapping activity close to the White Rocks Holiday Complex in 1993 (*The Times* 1993c). *The Sunday Express* photographer was shot at while taking photographs of hunters shooting swallows at Dingli (*The Times* 1995c).

ADVERSE PUBLICITY

The hunting situation in Malta has received substantial publicity in specialised environment and nature related magazines such as *BBC Wildlife magazine* and *Panda*, the magazine of the Worldwide Fund for Nature. The issue crops up from time to time in foreign newspapers and has been the subject of a number of television documentaries such as the British Channel 4 and the German NDR Hamburg television. Such media exposure usually always evokes reactions from readers/viewers. Some writers ask readers to express their dismay at the annual slaughter by writing to the Prime Minister and the Minister of Tourism and the European Union, with which Malta is seeking closer ties (Taylor 1991, Taylor 1992). Other authors went as far as suggesting a tourist boycott (Hansen 1983; Hansen 1992). Hundreds of letters of protest are received by the Maltese authorities following the publication of such write ups or films. Between 1992 and 1994, over 1,000 letters were received at the Prime Minister's office. Over 32 per cent of these came from Holland, 20 per cent from the UK, 13 per cent from Germany, over ten per cent from Sweden and 7.5 per cent from Switzerland (OPM secretariat, pers. comm.). Apart from the UK market, the other countries from where the letters of protest originated are countries where the NTOM is striving to increase the number of tourists. Adverse publicity is not restricted to specialist publications. In 1992, a survey of 1,016 items in the press about Malta, which appeared in Germany, was carried out by the National Tourism Organisation (NTOM). The survey showed that just over two per cent, mentioned birds (Cassar Reynaud 1993).

In 1993 there were four items in the UK press, two of which were in the *The Times* and two in the *Daily Telegraph*. All these articles in the British papers spoke about "Campaigners opposing Malta's slaughter of songbirds". British television personality and bird watcher Bill Oddie was one of the people behind such a campaign (Elliott 1993, Clover 1993, Peet 1993). In a feature about the migration of birds entitled "Incredible journey out of Africa, the author describes Maltese hunters as "the most enthusiastic shooters of migratory birds" (Aldiss 1995). A *Financial Times* journalist brought to Malta by the NTOM in May noted that "migratory birds were still practised upon by trappers in spite of new restrictions" (Hopkins 1995). Letters in the local press from tourists who witnessed hunting and trapping scenes appear frequently and they usually comment positively about the hospitality of locals but complain about the killing of birds and litter. Some unequivocally state they will not return to holiday unless bird protection measures are stepped up and situation improves.

Malta has a potential for 'green' tourism, but successive Governments have so far failed to tap this resource. An expert from Greenflag International commissioned by Government to study the possibility of green tourism noted "evidence of extensive shooting and trapping upon the landscape. The number of shooting and trapping points, particularly in coastal areas, places an inordinate impact upon the natural environment. The imposition of what are in essence hundreds of stone structures, spoils the landscape impact upon headlands and around coves and bays. Such excesses should be carefully controlled. Spring and autumn visitors and those arriving at the height of the shooting season, would have to be extremely insensitive not to come in contact with shooters and trappers or not to recognise the gunfire" (Sisman 1981 p.16). It should be noted that Sisman visited Malta in late June and early July when no hunting activity takes place. One can only imagine what his statements would have been had he visited during the peak hunting seasons in April and May or between September and November, when shooting and trapping are in full swing.

Hunting in Tourist guide books

One may argue that the impact of hunting on the tourist industry can be contained as long as the adverse publicity is restricted to specialised publications read by a small sector of people in a diverse market such as Malta's. However it is not only specialist publications which now comment on the local situation. Most tourist guide books available contain at least passing references to bird shooting and trapping. The only other negative remarks are usually about the bad state of the roads and litter. However, the strongest and most impassioned remarks are directed at bird hunting and trapping. Some of the references are just simple observations which may leave little impact on the casual reader. This contrasts sharply with the accounts written before the 1960s, which either do not comment about hunting activities or mention them as a matter of fact. The air of disapproval which can be sensed in accounts of the 1960s becomes more forceful as time goes by. In his narrative description of Malta, Hogg (1969) notes that "for the Maltese, hunting connotes the persistent, relentless, round-the-year shooting of anything that flies" (Hogg p.83).

A mere ten years later, references started becoming more direct. In a 1981 guide book, one reads "perhaps due to the combination of lack of trees and a Maltese love of shooting, there is always a scarcity of birds, although somehow or other the sparrow survives. Everywhere in the countryside you will see RTO painted on walls and stones. This stands for *riservato*, meaning the shooting rights are reserved, and nearby you will also notice low stone hides for the hunters" (Cox 1981 p.26). While in a guide book dealing with Gozo, the author notes that "Bird-shooting and trapping are practised by a big proportion of Gozitans. Unfortunately the regulations are hardly followed, with the consequent accidents" (Vassallo 1981 p.37).

The words "hunting", "bird migration" or "nature reserves" can be found in the index of most tourist guide books available today. In the sections dealing with these keywords, as well in the sections dealing with other areas such as Delimara in the south or Buskett Gardens and Dingli environs, one comes across short descriptions of what visitors may expect to encounter. In his thirteenth edition of a holiday guide book to Malta, Best writes: "There is now little wildlife. There are, of course, sparrows but the unfortunate and irresistible impulse to shoot anything that flies has, to say the least, limited the chances of observing both indigenous and migratory birds" (Best 1993 p.18).

The Automobile Association (AA) guide book to Malta has a section entitled "peace and quiet", in which it is noted that "that the coast is varied and interesting. Although a few coastal flowers survive in this harsh environment, the wildlife interest is largely confined to birds, but here they suffer greatly at the guns of Maltese hunters. One of the saddest aspects of Maltese life is the trade in caged birds and the wholly unnecessary slaughter of tens of thousands of birds by hunters. ...the birds are shot mainly for so called sport, and the corpses and spent cartridges are a heart-breaking sight to anyone with any sympathy for wildlife" (Chester 1992 p.86). In another guide book, it is stated that: "the exiting time for ornithologists and all lovers of nature is marred by what has to be regarded as Malta's greatest shame, the irresistible impulse to shoot anything that flies. When walking on Malta visitors will encounter or at least hear shots of hunters, especially at weekends and holidays. They will also see fields and lanes littered with cartridges and dead birds. For obvious reasons the incensed walker is advised to proceed with great caution (close to hunting areas)" (Dicks 1991 p.55-6). The section 'Nuisances' in a countryside guide reads: "be aware that shooters and trappers are about, particularly at weekends and holidays. Cliff-tops and much of the open countryside, are reserved for bird shooting... Most hunters are friendly and don't seem to mind walkers disturbing them; inevitably there are a few exceptions, and all shooting hides are best approached with caution and passed by quietly and quickly (Lockhart and Ashton 1993 p.35).

But perhaps the strongest piece written so far in a tourist guide book is the one by Gaul (1993), who wrote that hunting "is a very unsavoury part of Maltese sporting life. *Kaccaturi*, or hunters are responsible for the deaths (by shooting, netting, caging or trapping) of nearly four million birds a year. ...there is no excuse for the atrocities, and the practices of the lawless minority continue to bring international condemnation on Malta. If you walk by Dingli cliffs in spring when the birds migrate north from Africa, the dawn chorus sounds, without hyperbole, like Beirut of old. Many practices have gone beyond the boundaries of sportsmanship... To the average holiday-maker or businessman passing through it seems obvious that the time has come to outlaw *kacca*, or at the very least curb and police it..." and "Until Malta's breadwinner, the tourist industry, is very seriously affected nothing will be done; 'green' tourists and certain conferences already boycott the islands but they are a tiny number compared with a large market. The migration seasons, March-May and September-November, are the periods when the unsavoury customs of the *kaccatur* are at their most pronounced... It's impossible during these months not to be concerned or intimidated, or both, in parts of the countryside. Try to avoid, especially in the mornings or early evenings, Dingli. Buskett, Wardija, Delimara, the deserted areas near Hagar Qim and any of the exposed cliffs in Malta and Gozo" (Gaul 1993 p.41,81-82). On the section dealing with the South of the Island, Gaul is even more specific when he comments about "...the nightmarish slaughter of birds, the *kacca* or the hunt in and out of a much abused season. This has resulted in blighted and no-go areas for Maltese and tourists alike. A walk along Delimara point can be intimidating, as men stroll about with arsenals of firepower" (Gaul 1993 p.227). Gibb (1995), a British journalist on holiday in Malta, who was shot at by hunters after he photographed them shooting at swallows, summed up the negative impact illegal hunting and such incidents can have on the tourist industry: "whatever the true situation, the violence against those who object to the killing of migratory birds will not be much comfort to the Saatchi and Saatchi advertising team which has been to the Mediterranean to photograph Maltese beauty spots for a new publicity campaign. Pictures of bird life in the island's countryside are hard to spot in their glossy new brochure. At the moment, there aren't any birds" (Gibb 1995 p.8).

Such statements cannot be taken lightly. Official action to curb malpractices may be taken on paper but until it starts making a difference in practice, Malta may be risking more adverse publicity which in the long run may at worse jeopardise the tourist industry and at best, hinder the prospects of having more quality tourists in the months they are most needed — the shoulder months — when the official policy is to try and attract more tourists at these lean times of the year.

Rish of injury and damages

Apart from other impacts, hunting poses a risk of injury both to hunters as well as non-hunters. The density of hunters in Malta makes matters worse. Each year, a number of shooters are injured by shooting. But most of the injuries remain unreported as shooters refrain from going to hospital because the Police would have to be called to investigate. Fortunately, most of the injuries sustained are of a light nature, but there have been cases where shooters or people accompanying them have lost an eye while a number of people have accidentally lost their lives due to shooting. Apart from injuries to shooters, there is the risk of injuries to third parties. Modern cartridges have ranges of over 100 metres and may be very dangerous to passers-by as well as to other shooters. One must also mention the damage done to property when shots are fired close to inhabited areas. One frequently comes across letters in the press complaining of glass panes shattered or hit by shotgun pellets (Hood 1994, *In-Nazzjon Taghna* 1994c). The damage done to agricultural produce both by shooting as well as by trampling, by shooters and their dogs, cannot be easily quantified. The sense of insecurity by the noise caused by showers of lead, even when this poses no real threat, is another impact which cannot be translated in financial terms. The picture would be incomplete if no mention is made of the expenses and inconvenience caused when overhead telephone and electric cables are damaged when shooters shoot at birds sitting on overhead wires. Of 52 faults on overhead telephone cables reported between 1993 and June 1994, 21, or 40 per cent were caused by gunshots; the rest were caused by cranes. The faults caused by gunshots effected over 640 telephone subscribers. This data reflects only damage to cables as no information is kept on the number of individual lines broken by gunshots (PQ 19,373 sitting 288, 6.7.94.)

Weapons in crime

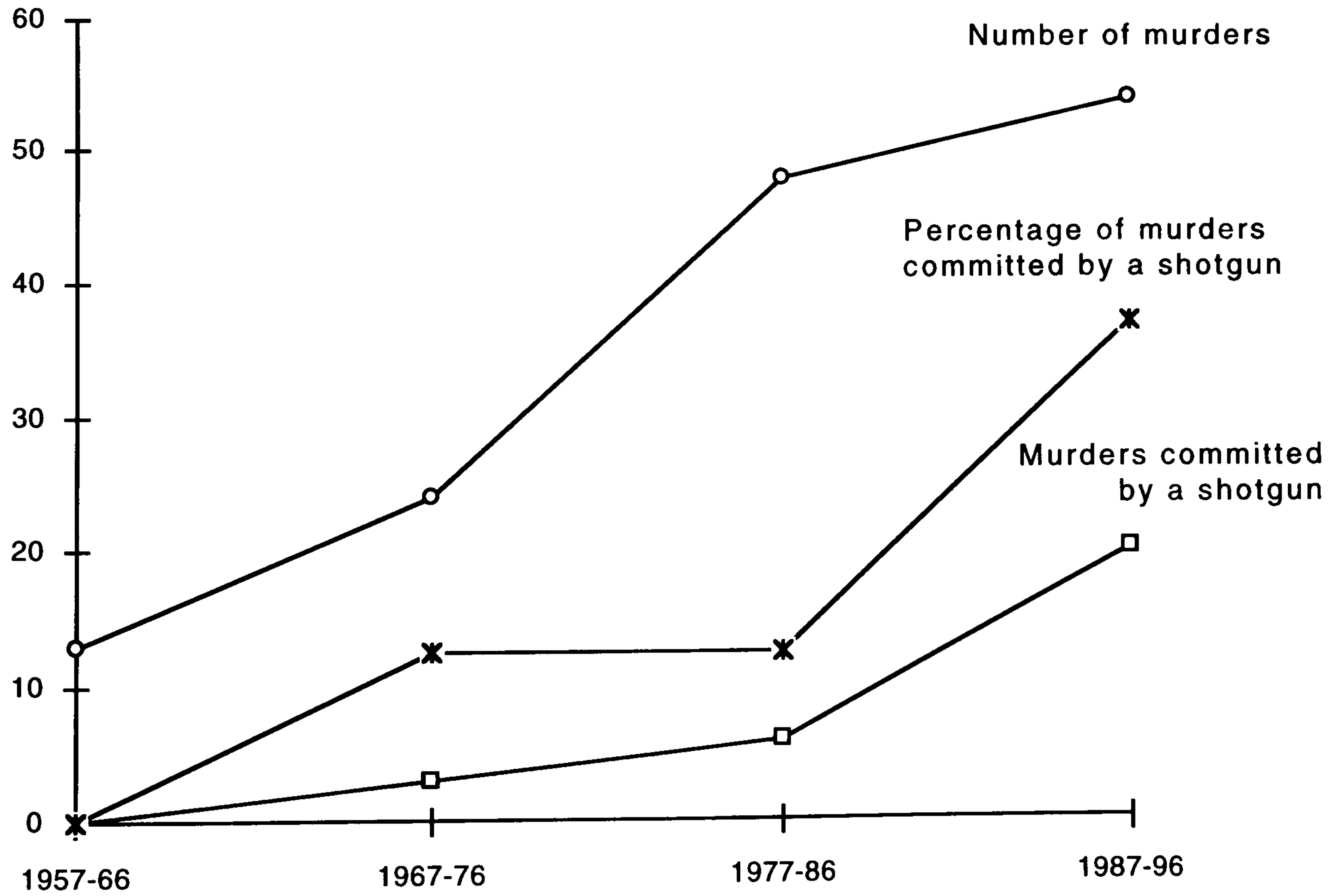
The use of weapons in crime is not something that is directly related to the hunting issue, but the availability of weapons is often a determining factor in the commission of crimes. Shotguns, being easily available, feature very prominently in crime statistics. Up to the 1970s, the use of shotguns in murders was practically unheard of, except for a double murder in 1938. But following the first murders with a shotgun in the early 1970s, the number of murders involving shotguns has escalated. Whereas in the five year period between 1971 and 1975, 11 per cent of the murders were committed by means of shotguns, in the five year period between 1991 and 1995 the number of shotgun murders had risen to 46 per cent. In 1996, murders committed by a shotgun accounted for 75 per cent. These figures are summarised in Table 6.13 and represented graphically in Fig 6.6.

Table 6.13
Murder statistics and the use of shotguns

Year	Number of murders	Use of shotgun	% use of shotgun
1957-66	13	0	0.0
1967-76	24	3	12.5
1977-86	48	6	12.5
1987-96	54	20	37.0

Source: Press reports

Fig 6.6
Number of murders and percentage committed by shotguns for the years 1957-1996



It is also significant to note that in a large proportion of the armed crime which takes place, shotguns are the most commonly used weapons. During criminal investigations between 1987 and 1991, close to 60 per cent of the weapons confiscated by the police were shotguns. Over 120 shotguns were lifted by the police during the said five year period (PQ 4,103 Sitting 49 28.9.92). The police report on deaths and injuries caused through accidents in 1992 lists 94 entries, eight (or 8.5 per cent) of which were caused by gunshots. Six people reported they were hit by shotgun pellets while a fifteen year old youth was killed when he was hit by pellets. Another person was injured when a cartridge blew up in his hand. The number of people reporting they were hit by shotgun pellets does not reflect the real number of people who are injured as many of those injured prefer to go to private clinics to avoid having to call the police, more so if they were hit by a colleague.

CONCLUSION

If one were to try to sum up the results of the discussion in this chapter into a balance sheet, the result would be Table 6.14. Even a cursory glance at this account shows that the cost of the revenue is more than one and a half times higher than the amount earned by government.

Table 6.14
Account showing yearly Government revenue
and cost of revenue from shooting related activity
based on an average of the years1985-1993

	Revenue Lm	Cost of revenue Lm
Hunting licences	96,989	
Trapping licences	6,286	
Money given to hunters' association		6,000
Customs duty (average over 9 years)	130,173	198,195
Sick claims		147,960
Loss of production		nq
Decline in competitiveness due to production loss		nq
Injuries		nq
Damage to property		nq
Faults on overhead cables		nq
Pollution from spent lead shot		nq
Nuisance		nq
Toll on migratory birds		nq
Tourist complaints		nq
	233,448	352,155

Note: nq means not quantifiable.

Source: Parliamentary Question 23351 15.10.90. Data for revenue for shooting licences is for the years 1982-92 while for trapping licences and Customs duty, the figure is an average for the years 1985-93. Shooting licence fees between 1985-93 were Lm6.50 while between 1991-93 the fees were Lm10. Trapping licence fees were Lm3 between 1985-93 and the average number of trappers during this period was 2095. The sick cliams are an average forthe years 1980-1990.

Apart from what the balance sheet shows, other points have to be considered as even revenue has its expenses: a section of the police force is deployed in the weapons office dealing specifically with the licensing of weapons. Policemen in district offices have to deal with the renewals of licences. Police officers and Environment inspectors are involved in examining new applicants for hunting licences and patrols to enforce hunting regulations and the lengthy court procedures which often ensue each time someone is apprehended and charged in Court. All such activities cost money and are not reflected in the cost of revenue as they can hardly be quantified. It must also be borne in mind that after 1995, the amount earned through customs duty will be less than Lm20,000 through the hegemonization of customs duties set at 15 per cent. If one adds the other factors which are not quantifiable, the cost of revenue is bound to be rather alarming.

The discussion in this chapter shows that in Malta, far from being an asset, hunting and trapping are a liability both in actual and perceived terms. It has been shown that the increase in the number of hunting licences is directly linked to economic growth and that there is nothing 'traditional' about the growth rate of hunters. Hunting does not have any positive impacts on the economy and without hunting, there would be no negative economic repercussions for the country. There are only seven companies, out of the thousands of registered companies, which are directly related to shooting. The number of shops selling shooters goods is under 60, 12 per cent of which are registered in the names of females, signifying that the men are engaged in full employment elsewhere and do not depend on the hunting shop for a living.

The hunters' argument that hunting is a source of revenue to the public coffers because of customs duty is untenable as VAT has replaced the previous high customs duty and, in any case, the reverse side of this argument is that money is siphoned off from the country to pay for the imported goods. It has also been argued that hunting is not productive and that if one were to assume that it is productive, the costs of producing the hunted meat are exorbitant compared to other forms of produced meat. Hunted meat costs 85 times more than beef bought from a butcher's shop. There are other aspects of hunting which are difficult to quantify in fiscal terms such as the effect of lead poisoning and crippling of birds as well as the potential lead pollution from spent lead shot. The liabilities of hunting are several, the most noticeable of which is the loss of labour, particularly in the construction industry, which grinds to a halt during the shooting season. It is estimated that close to nine per cent of the sick claims made are due to hunting and trapping, and a conservative estimate on such claims results that such claims cost the public coffers more than what is earned through customs duty.

Conflicts which arise because of the presence of hunters and trappers in the same countryside which picnickers and tourists want to use are another of the negative aspects of hunting and trapping. These practices are incompatible with the marketing strategies of the National Tourism Organisation, which is striving to attract specialist interest travel and to spread the seasonal spread of tourists. Negative comments on hunting are no longer the domain of specialist publications with limited readership. European television stations, international newspapers as well as tourist guide books are also focusing on the issue.

Risks of injuries and damages due to hunting are among the other liabilities of hunting, many of which are difficult to price. The practise of hunting may be beneficial to the few companies and shops which sell hunting goods, but overall, it has a negative effect in real financial terms. When one looks at the value of goods imported for hunting purposes and considers the average annual expenditure of hunters, it results that they spend an average of under Lm13 each annually. Such expenditure is bound to be much higher in real terms but even if it is ten times higher, one cannot say that this is of any significance for the local economy.

The liabilities of hunting outweigh any economic benefits hunting may produce. In the following chapter, the environmental impacts of hunting and trapping are discussed. Many of the impacts discussed can also be termed economic impacts, but they are difficult to calculate in monetary terms.

CHAPTER 7 — IMPACTS ON THE ENVIRONMENT

INTRODUCTION

As with other human activities, hunting and trapping have an impact on the physical and natural environment. But being predominantly outdoor activities, their main impact is on the natural environment. The most obvious impact is the toll on bird life on a fairly major scale. Hunting in Malta predominantly implies the killing of migratory birds. There are no wild 'game' animals except wild rabbits and as shown in Chapter 4 rabbit shooters constitute just under two per cent of the total number of hunters who pay a hunting licence, while those who paid the licence to catch rabbits using rabbit hounds and ferrets accounted just 0.5 per cent of the total number of hunting licence holders.

Since hunting in Malta implies the taking of migratory birds, bird migration is discussed in some detail. The origin of Malta bound migrants has been analysed within the constraints of the available data of bird ringing recoveries. When discussing migration, one cannot talk only in general terms as there are various categories of migrants and as discussed briefly in this chapter, birds of the same species but of different ages and those coming from different geographical areas may use different routes on migration. For instance, it is known that adult birds of various species often migrate earlier and use different routes than their offspring. But since it is impossible to focus on every species of bird that migrates over Malta as there are over 350 migrants recorded on the Islands, discussion about Malta bound migrants is focused around various families of birds which inhabit different ecological niches and which have different migration habits. In this manner, a fair picture of the migration pattern over Malta can be drawn. The choice of species involved is also influenced by the available data on recoveries of ringed birds.

The study of migration is aided by bird ringing, where birds are marked by a metal ring so that when the bird is recovered, it can be reported. While the bird is being processed in ringing, various measurments such as weight and wing length are noted and the bird is released soon after. When birds are recovered, the relevant data is collected and this enables certain conclusions to be drawn on flight patterns, speeds and so forth. In this chapter all the ringing recoveries of Malta ringed birds, as well as foreign ringed birds recovered within the same season in which they were ringed, are analysed. Such recoveries are called 'direct recoveries' as they imply a direct flight from the place of ringing to the place of recovery. The reason for looking only at these kinds of recoveries is that they give a clear indication of which countries birds are coming from, hence which populations are involved in migrations over Malta. There are numerous other recoveries of birds ringed in one year and recovered several seasons or years later, but these were not considered as a bird ringed, say, in spring somewhere in Africa and recovered two autumns later in Malta would have travelled extensively and may have come to Malta from a European country.

In looking at migration patterns, particular focus is made on five families of birds, namely birds of prey, seabirds, herons, finches and hirundines (i.e. swallows and martins). The reasons for choosing these families are varied, but they have been selected mainly because the species concerned are hunted and trapped extensively and there is a considerable amount of data from ringing recoveries. These two factors enable one to draw certain fairly accurate conclusions. Certain species such as gulls, terns, herons and hirundines often nest in colonies on the continent and relatively large numbers are ringed in the nest, improving the chances of direct recoveries. Birds of prey, particularly ospreys and honey buzzards, are also ringed in the nest in considerable numbers, mostly in Scandinavia, where an ongoing research programme is facilitated in part by the breeding habits of the adult birds which return to the same breeding sites year after year. The choice of the families of birds of prey and herons has also been influenced by the conservation status of these families of birds. There are numerous species which are endangered on local and international levels and both families are greatly affected by changes in habitat, thus hunting pressure is an additional pressure which from the conservation point of view, can be avoided. Although other species, such as turtle doves, quails and thrushes are shot in large numbers, there is hardly any data from ringing recoveries for one to be able to draw solid conclusions about their migration patterns. However, the impact on these species is discussed through bag records compiled from log books of different hunters.

The impacts of hunting in spring and autumn are discussed in detail and bag records have been analysed to establish which species are shot in which months. Particular focus is made on bags of turtle dove and quail, colourful birds, herons, various species of birds of prey and owls, thrushes and starling and various waders, which are all hunted extensively during different seasons. Taxidermists' records are analysed to see whether there are any correlations between the number of birds shot per season and the number of birds stuffed in the same season. Taxidermists' records are also used to illustrate which species of birds are taken in different months. Although the sample size of bag records used is too small to be termed 'scientific', this data is shown to be reliably indicative because when extrapolations were made, taking into account the number of licensed hunters for the same years for which bag records were available, and comparing the results with extrapolations from taxidermists' records who stuffed birds for a known number of hunters from known villages, the results were practically identical. Even the percentage composition of the different species of birds found at different taxidermists was very similar, in spite of being taken over a span of 20 years.

Reliable data is more difficult to obtain since hunting has become a contentious issue. Hunters argue that the amount of birds they kill is insignificant, yet they hardly ever produce shooting records. Hunters in general are reluctant to keep bag records and any efforts to collect such data in the near future is likely to give tainted results as hunters will be likely to under register their bags, fearing that analysis of such data will result in restrictions on hunting. Furthermore, protected species shot are not likely to be registered. In 1996, the government announced that before hunting and trapping licences could be renewed, hunters and trappers had to fill in a special form declaring the amount of birds they shot or trapped. This list contains only the species of birds which could be hunted, while as shown in this chapter, the number of birds which can be hunted comprises only about half of the birds bagged each year.

An analysis of hunting pressure on the breeding birds of Malta was also carried out reviewing the existing literature on the subject. The impact of hunting on forms of wildlife other than birds, is also discussed. Mammals and reptiles are often killed by hunters and trappers. Some of the animals taken by hunters, such as weasels, are declining in numbers. Another negative impact of hunting on the environment is the pollution from spent lead shot. A study quoted shows that soil samples collected from areas in which hunting takes place had twice the amount of lead found in other areas. Spent cartridges in the countryside are another form of litter: about ten million cartridges are used in Malta each year.

A survey in which robin trapping featured was analysed in an attempt to establish what percentage of the younger generation still traps robins. Finally, the impacts of bird trapping are considered. A distinction is made between robin trapping and bird trapping. Bird trapping implies mainly the catching of finches. While robins are mostly caught in small traps by children during the months of October and November, finch trapping is carried out by older people and takes place between October and March. Finch trapping is also carried out in a more systematic manner from trapping sites using large nets and live decoy birds.

The impacts of trapping sites on the landscape are discussed and maps showing the density of the number of trapping sites indicating the concentrations of such sites, are given. It is the first time that such maps have been compiled following a detailed analysis of an aerial photographic survey of the Maltese Islands.

BIRD MIGRATION

Migration in Europe can be defined as a seasonal movement from breeding areas to resting grounds, which often are also wintering quarters, and back. One usually refers to the migration to the breeding grounds as 'spring migration' and the journey to the 'wintering grounds' as 'autumn migration'. The terms 'spring migration', 'autumn migration' and 'wintering grounds' are, strictly speaking, incorrect as many migrants, such as larks and thrushes, leave in the middle of summer and reach continental Europe before the spring equinox in March while it is still winter. Some bird species such as swift, reach their 'wintering quarters' during the summer while the majority of species reach them in the autumn at the latest. New terms are being introduced and one speaks of 'outward migration' for movements away from the breeding grounds and 'return migration' for movements back to the breeding grounds. The term 'resting grounds' is often used instead of 'wintering areas'.

Birds migrate from south to north in late winter and early spring. Birds leave their resting and winter quarters to reach the breeding grounds further north, where the day is longer, the temperature milder and food availability is at its peak. This enables the young be fed, and feed, more easily. Disturbance and predation pressures from mammals may also be less at higher latitudes since few predatory mammals can survive there through the winter. This may permit greater nesting success for ground nesting species such as waders. The chances of survival of migrant individuals during the breeding season are greater in temperate and Arctic areas than they would have been in the often tropical non-breeding areas. During the return migration, birds then fly south again in late summer and in autumn to the warmer southern countries where winter is less harsh. Adult birds usually leave their breeding areas in Siberia before the young hatched during that year and may arrive at moulting grounds in western Europe four to five weeks before their juveniles reach the same areas. In some species which reach their sexual maturity after several years, such as storks, osprey, some herons and wader species, juvenile birds stay on their resting grounds beyond their first year of life and migrate only a part of the way towards their future breeding area, passing the summer at a suitable site as non-breeders. The birds will start participating in two full-distance migrations in the course of a year once sexual maturity is reached and they make their first flight to their breeding grounds, usually in an area close to where they were bred and from then on will show normal complete periodic biannual migrations.

Certain birds may spend an astonishingly long time on the move, especially during the outward migration. Most long distance migrants leave Central Europe in August and September and do not arrive at their resting grounds before November or December, sometimes even later. Among European passerines, long-distance migrants take 88 days to migrate to the resting areas; medium-distance migrants take 42 days and partial distance migrants 32 days (Alerstam 1991). The time for return migration, which is faster, is about one third to one half shorter (Berthold 1993 p.78). This is due to a number of factors. Birds have the capability of finding the shortest way from the last resting area to their familiar breeding place. There is also evidence to suggest that older birds migrate much faster to their familiar resting areas than young birds on their first departure.

CATEGORIES OF MIGRANTS

Migrant birds may be categorized into four broad categories: i) flexible migrants, ii) nocturnal migrants, iii) soaring and gliding birds and iv) diurnal migrants.

i) Flexible migrants are birds which are flexible and can migrate by day as well as by night. These include most ducks, geese, swans, waders and gulls.

ii) Many small species of land birds such as warblers, flycatchers and thrushes are primarily nocturnal migrants. Such birds depart usually some 30 minutes to two hours after sunset and arrive in their next destination at dawn, where they can feed to replenish their energy reserves in order to leave the following night or a few nights later. When flying at night, these migrants use constellations to guide them in their navigation and have the advantage of less dangers from predators, especially nearer the end of the flight when the birds' speed would be slower (Alerstam 1993 p.349). Even though birds in this category normally restrict their migration to the night-time, they fly both during night and day. Sometimes they fly for more than three days without stopping, especially when flying across stretches of sea.

iii) The soaring and gliding birds prefer to migrate in the middle of the day, when hot air produces well developed thermals over land. Broad winged birds such as storks and many birds of prey fall in this category.

iv) The last category is that of birds which are principally diurnal migrants but do not migrate by soaring and gliding. This group includes, amongst others, most finches, buntings, swallows and martins, bee-eaters, starlings and doves. The birds normally begin to migrate just before sunrise and the number of birds involved is more intensive during the earliest hours of the morning and becomes weaker towards midday. Day migrants move only for a few hours in the morning before stopping to feed, unless they are aerial feeders such as swallows, which may continue to migrate all day, feeding as they travel. Some species occasionally show a second migration peak in the evening.

Some migrants, particularly those that feed by probing in damp earth or picking prey from the surface in short grasslands may move in response to the onset of freezing conditions. Species such a lapwing, skylark and plover move in directions most likely to lead them to unfrozen feeding areas between west and south. In mild winters no such movements take place, in other years their timing is dictated by the occurrence of severe weather (Evans 1985 p.351).

THE HAZARDS OF MIGRATION

Evans (1985) notes that the most prominent and extensive movements of land birds occur in a north-south direction. Most passerines breeding at high latitudes in the western Palearctic move towards equatorial regions of Africa during the Northern Hemisphere autumn, whereas those breeding in eastern Siberia move chiefly towards south-east Asia and Australasia. Migrants cover long distances and often reach remarkable speeds. The ruff has been recorded of flying distances of about 330 km per day (Alerstam 1993). Ruffs, as well as wheatears are known to travel distances of over 30,000 km a year. Some spectacular ringing recoveries of geese, waders and thrushes reveal remarkable record performances of distances covered in short periods of time. These include distances of 600-1,000 km in 24 hours and 3,000-5,000 km in 60-65 hours (Berthold 1993). Normal migration however takes much longer.

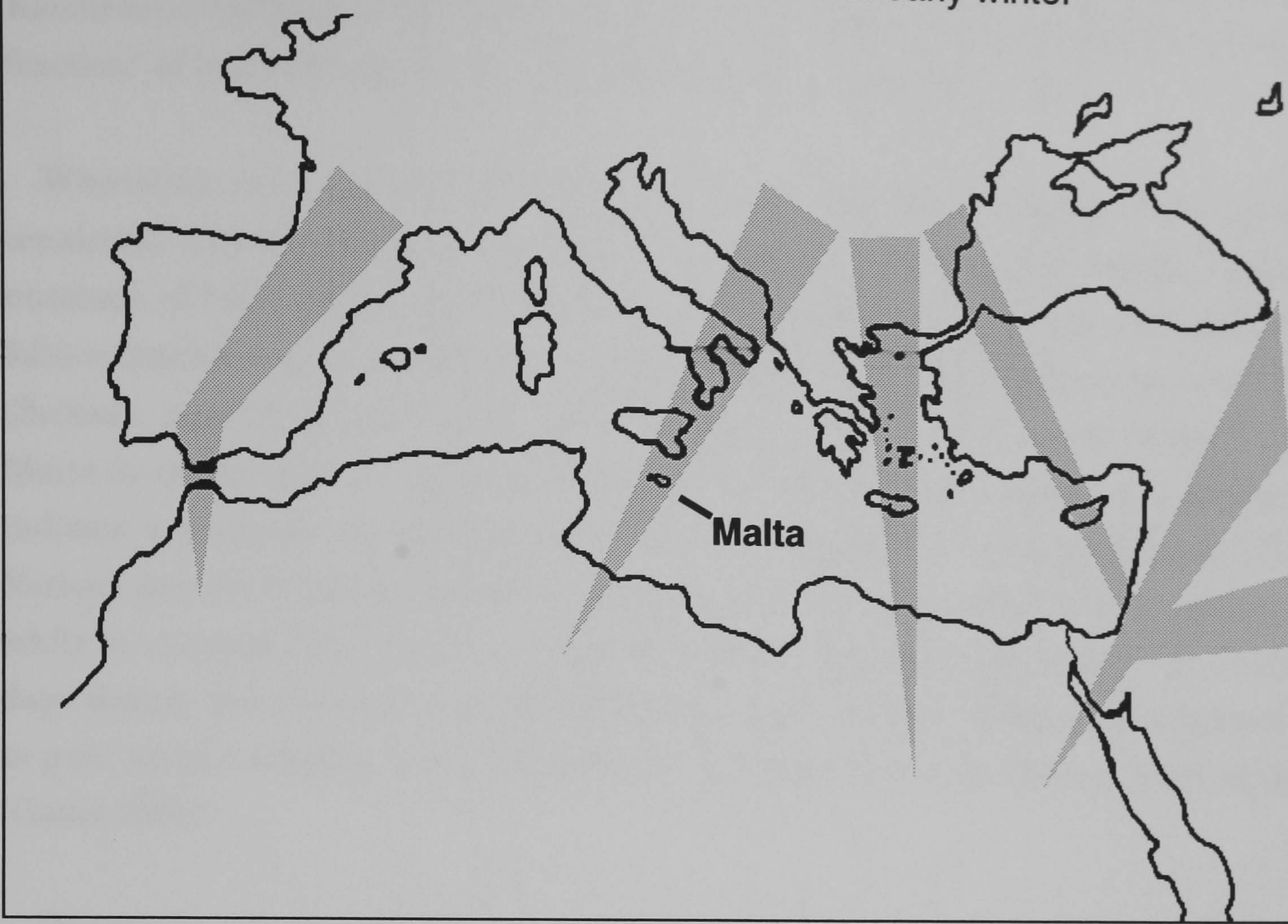
By leaving their breeding and wintering areas, birds would be avoiding the high mortality rates resident counterparts are likely to suffer during severe climatic conditions such as cold, drought or rainy seasons, which make feeding more difficult. But on avoiding these conditions, they would be exposing themselves to specific hazards during migration. It has been noted that migrant birds must also cope with intra and inter-specific competition. While resident birds can secure a breeding site in early spring or even in winter, migrants can do so only after arriving in their breeding territory immediately prior to the start of reproductive activities (Biber and Salathé 1991). Similarly, when they reach their wintering quarters in autumn, migrants have to compete with local residents and other migrants already in the same area (Greenberg 1986). Apart from such natural threats, migratory birds are exposed to ever-increasing threats of human origin. Habitats are modified or destroyed through agriculture, water management, recreation, urbanisation and industrialisation. The fact that many migrants concentrate at specific sites during migration and follow fixed flyways, makes them even more vulnerable to ecological alterations at key sites. Combined with the problem of direct human persecution, these may result in disastrous impacts (Biber and Salathé 1991). Berthold (1993) states that direct human persecution hardly plays a role in Central Europe but is of great significance in some regions around the Mediterranean and especially in Africa.

MEDITERRANEAN FLYWAYS

Birds migrate on 'broad' or 'narrow' fronts, in which birds fly in a 'standard direction' typical of their population while flying over uniform terrain and the sea (Gauthreaux 1980). Ecological barriers such as mountain ranges, oceans or large spans of sea, lakes and deserts may act as obstacles and lead to deviations among the migratory birds which encounter them. By contrast, river systems, marshes and coastal stretches may attract the birds. When the geomorphological factors influence the migratory direction of birds, 'leading lines', occur. Leading lines are the imaginary lines delineating the boundaries between favourable and unfavourable terrain. Such lines can influence even broad front migrations and may lead to mass migration. In areas where this occurs regularly, migration corridors or flyways, develop (Berthold 1993).

In the Mediterranean there are three main migratory flyways, represented in Figure 7.1. In the east there is the Bosphorus, where migrants from northern Europe and Russia converge to fly over the Bosphorus in Turkey. To the west there is the Straits of Gibraltar and another pathway is through the central Mediterranean from Cap Bon in Tunisia through Italy. Bordering the Mediterranean on the east there is another important flyway which is used by birds coming from eastern Europe. These flyways are used mostly by broad winged birds such as stork and birds of prey which soar in the thermals produced over the land taking advantage of lift they provide. After converging at these points, birds then diverge again into a type of funnel shaped migration on the African continent. These routes are more or less used also during the return migration in spring.

Figure 7.1
Map of Mediterranean showing the main flyways during the outward migration in late summer, autumn and early winter



Most migration of songbirds and other passerines takes place on a broad front, that is individuals originating from geographically dispersed breeding areas cross all the geomorphological features along their routes without deviating much from the direction of their goal in their initial tracks and do not converge at the major crossing points like soaring birds tend to do. It has been noted however that the individuals of different populations do not simply migrate randomly all over the area. Broad fronts develop as a result of different populations moving parallel to each other as if in neighbouring sectors.

Origin of Malta bound migrants

Millions of birds cross the Mediterranean during both migrations. Some stop over the Maltese Islands. There is no evidence to suggest that the islands receive more than a representative cross-section of the broad-front migrations across the Mediterranean (Moreau 1972). Moreau suggested that, excluding waterfowl, some 5,000 million migrants fly to Africa during the 'autumn' migration (Moreau 1972 p.48). However the author puts more than a word caution as to the number of birds involved. The chapter in which these figures are given starts as follows: "Let us now toss a few figures into the air. I use this lighthearted expression deliberately, because the last thing I would wish is to be taken too seriously in this connection and for the figures I shall put forward to be taken a "hard" and quoted as such. Whatever I may say in depreciation, experience teaches me, I am afraid, that they will be" (Moreau 1972 p.45). Moreau's figures were quoted by Kalchreuter (1992), who concluded that the birds shot in Malta constitute "a tiny fraction" of the total migratory population (Kalchreuter 1992 p.9).

Whatever the number of birds crossing the Mediterranean, there is a consistent number of birds on the Maltese Islands during both migrations. Large numbers of birds are usually seen in Malta when "a period of adverse weather follows suddenly on a period of fine, settled weather and more favourable winds" (Sultana and Gauci 1982 p.19). Bird ringing has shown that birds landing in Malta in spring tend to spend up to some four to six days and subsequent retraps indicate a material increase in body weight during this time (Rushforth 1973). Various species of waders spend an average of four days at the Ghadira reserve, while in autumn they spend a mean of ten days, some species staying up to 29 days during the autumn migration and six days in spring. Waders were noticed to gain weight ranging from 0.6 grams to 3.06 grams per day during their stay (Gauci 1990).

Due to the heavy persecution of birds the size of a lark and larger, not many medium sized birds are ringed locally and those which are ringed are often shot within days. The species selected in Table 7.1 are birds which live in different habitats and have been chosen as they illustrate the point that birds stand little chance of survival when they land in Malta. The little bittern, spotted crake and moorhen are birds which prefer habitats with dense acquatic vegetation and are mainly crepuscular foragers. The little ringed plover, curlew sandpiper, green sandpiper and jack snipe are waders which appear mostly either around the coast or in valleys. Turtle doves and nightjar prefer wooded areas or areas with an ammout of tree cover, with the nightjar only flying to catch insects at dawn and dusk. The kingfisher is a small bird which lives in the vicinity of the water and may be encountered both inland as well as at the coast, provided there is suitable feeding habitat.

Not many birds of such species are ringed in the Maltese Islands as there are not many undisturbed places suitable for ringing. Yet, the few ringed give an indication of the pressure there is on bird life in the Maltese Islands. Out of three little bitterns ringed, two were reported recovered within four days. Out of ten turtle doves ringed, four were recovered within a week, three of them within two days. Out of two nightjars ringed, one was reported recovered within three days. One factor to be borne in mind when interpreting such information is that hunters do not report every ringed bird they shoot and it is likely that more ringed birds are shot and remain unreported. But the fact that close to 30 per cent of the medium sized birds ringed were reported recovered within a few days of ringing shows the magnitide of the existing hunting pressure. The data in Table 7.1 can be contrasted data about birds at the Ghadira Reserve, where birds are relatively safer. Ringing data shows that a proportion of birds surviving summer, return to winter at the reserve. It has been noted that 30 per cent of the water rails and six per cent of the kingfishers ringed there returned to winter, while kingfishers may spend from August to the following March or April at the reserve (Gauci 1990).

Table 7.1
Local recoveries of selected species recovered within days of ringing

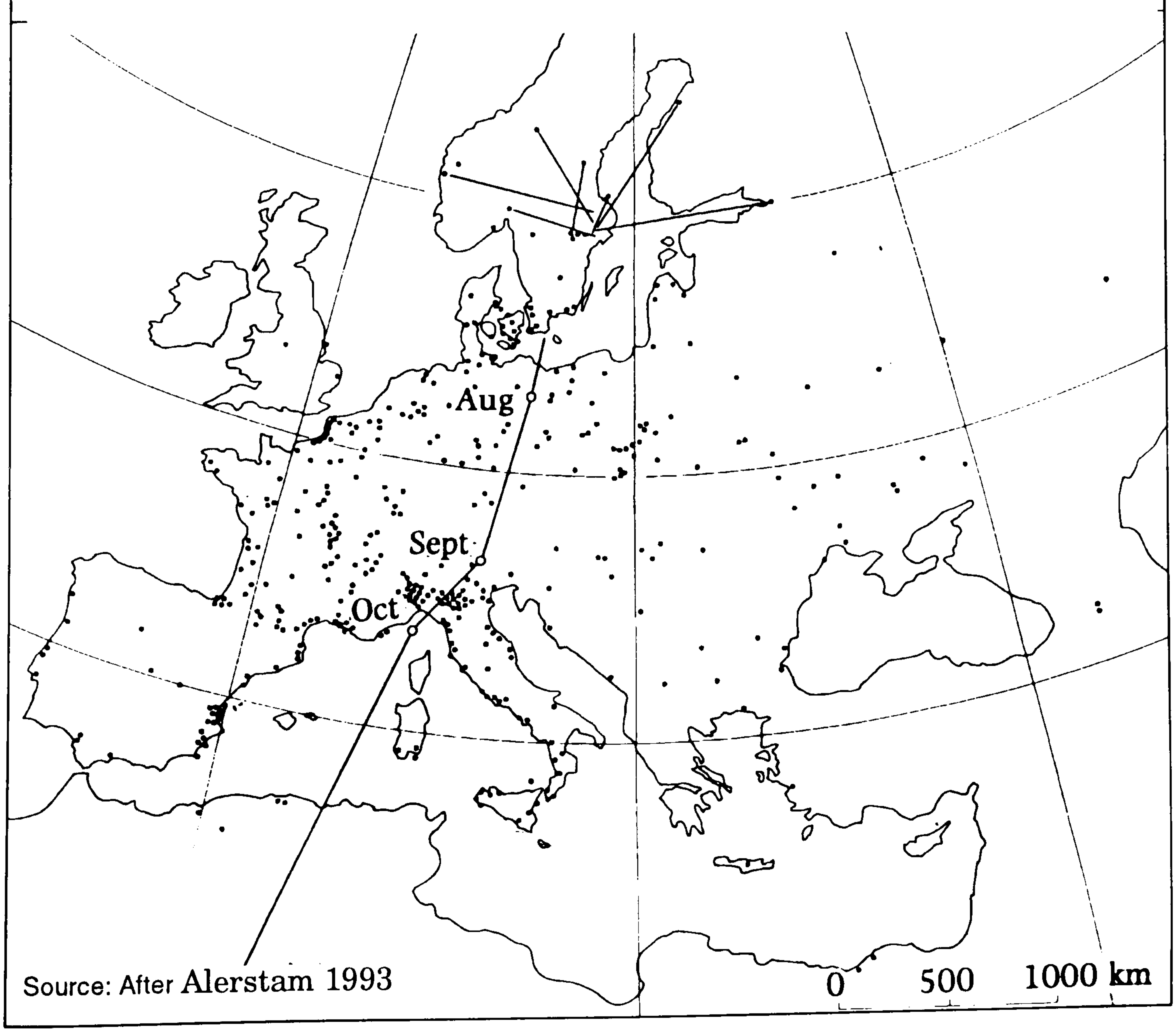
Species	reported recovered within one day	reported recovered within two days	reported recovered within three days	reported recovered within four days	reported recovered within five days	reported recovered within six or more days	Total recovered	Total ringed during respective years	Percentage recovered and reported
Little bittern	1			1			2	3	66.7
Spotted crake		1					1	2	50.0
Moorhen	1						1	3	33.3
Little ringed plover		2					2	12	16.7
Curlew sandpiper			1			1	2	14	14.3
Jack snipe						1	1	2	50.0
Green sandpiper			1			2	3	6	50.0
Turtle dove	2	1				1	4	10	40.0
Nightjar			1				1	2	50.0
Kingfisher					2	4	6	30	20.0
Total	4	4	3	1	2	9	23	84	27.4
% recovered	17.4	17.4	13.0	4.3	8.7	39.1			

Source: Ringing recoveries data, Malta Ornithological Society

Reports of locally ringed birds has decreased since bird rings with the address of the Malta Ornithological Society were introduced in the mid-1970s. Before that time, the local ringing schemes used rings supplied by the British Museum and hunters reported the rings either directly to the British Museum, which in turn informed the local ornithological society. But since the introduction of a Maltese address the reporting rate has decreased considerably. It is significant to note that the four local recoveries of turtle doves occurred between 1973 and 1975. No other turtle doves were reported recovered, although other birds were ringed. Out of 17 recoveries of waders, the most recent ones were two in 1993 and one in 1981; the rest were all recovered between 1968 and 1979. While six golden orioles were reported recovered between 1971 and 1975, the only one reported was in 1992. The most notable figures are those of finches and thrushes. All the 78 local recoveries of finches were reported between 1967 and 1978, and none were reported after. The same can be said for thrushes: there were 35 local recoveries in the 11 years between 1967 and 1978 while there were only four in the 17 subsequent years.

Data from birds ringed in summer and recovered during the following autumn suggests that Malta bound ‘autumn’ migrants originate mainly from countries to the north east. First year ospreys recovered in Malta originate mostly from Finland and Sweden. Out of 25 recoveries, 48 per cent were from Finland and Sweden respectively (12 from each country) and a single bird, or 4.2 per cent, from the former East Germany. Most of the ospreys taken in Malta are first year birds. In spite of the rather low rate of report of bird rings. It is evident that Maltese hunters are mainly killing Swedish and Finnish ospreys. Since the osprey is a protected species, a hunter who kills a ringed bird is likely to be reluctant to report the ring to the foreign or local ringing scheme. Most recoveries of ospreys in Malta are reported to the ringing stations abroad by the local ringing scheme after the relevant information is passed on to it by third parties. The recoveries reported by private individuals to foreign ringing schemes usually state that the birds had been “found dead” or “found injured, cured and released”.

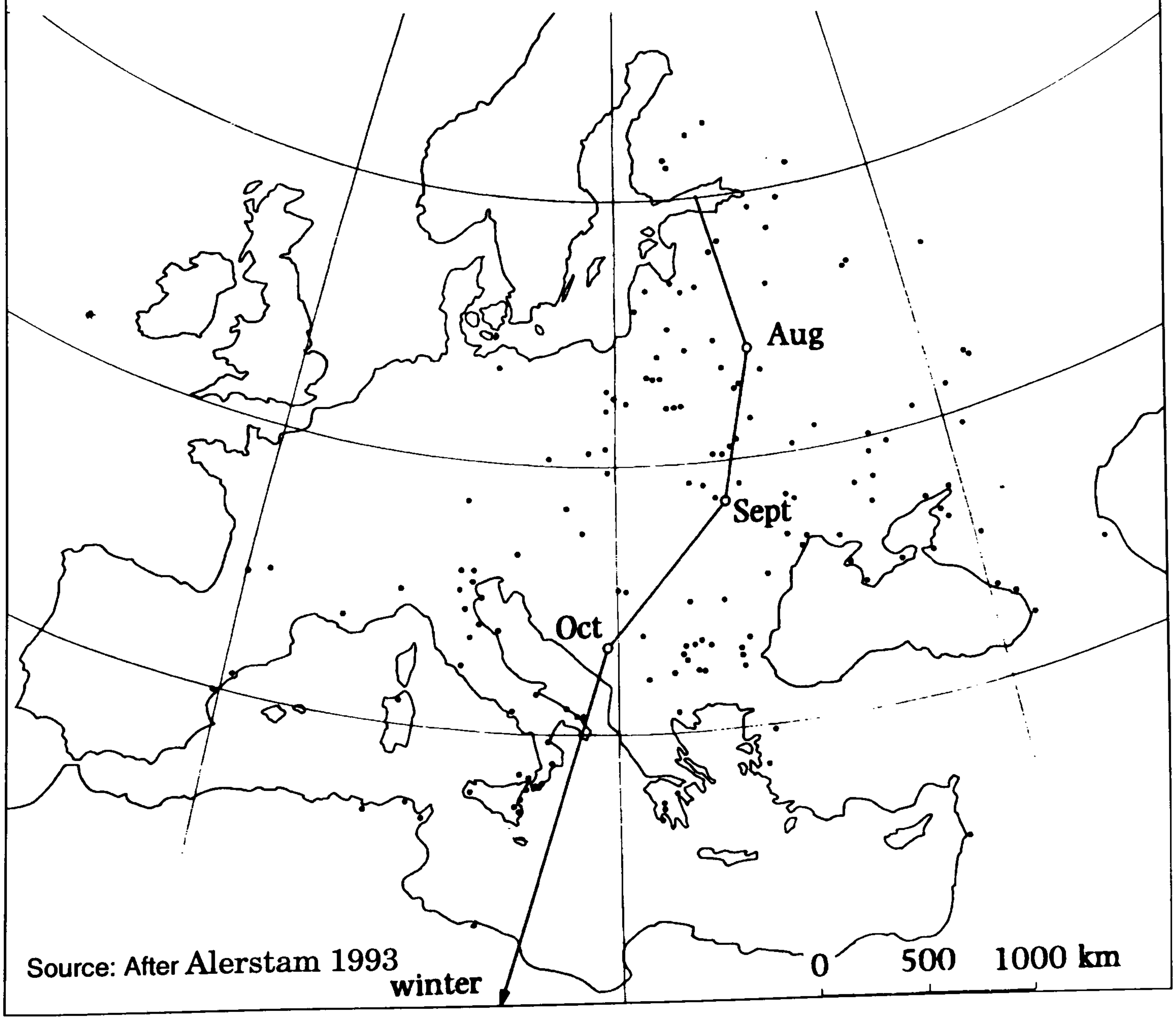
Figure 7.2
General direction of Swedish osprey migration based on ringing recoveries



Source: After Alerstam 1993

It is estimated that the Swedish population of ospreys consists of some 2,000 pairs, the Finnish population numbers 800 to 1,000 pairs while the (East) German population numbers about 70 pairs (Cramp and Simmons 1980). Although a considerable number of ospreys from these countries have been recovered in Malta, it is difficult to assess the impact the shooting of ospreys in Malta can have on the populations concerned as not all ospreys are ringed and neither are all the ospreys recovered reported. It is known that ospreys spread out on a strikingly broad front. Adults are usually two to three weeks ahead of the juveniles in the average migration timetable. As Figure 7.2 shows, autumn recoveries of Swedish ospreys range from Portugal, France to England in the west and the Ukraine, Georgia and the regions of the Volga river in the East, a front 4,500 km wide. Ospreys from Finland also spread out on a broad front (Figure 7.3), but Finnish ospreys usually depart in a south to southeast direction on the eastern side of the Baltic Sea and turn off more towards the Southwest in southern Europe (Alerstam 1993 p.110-113). This might explain why more Finnish ospreys have been recovered in Malta.

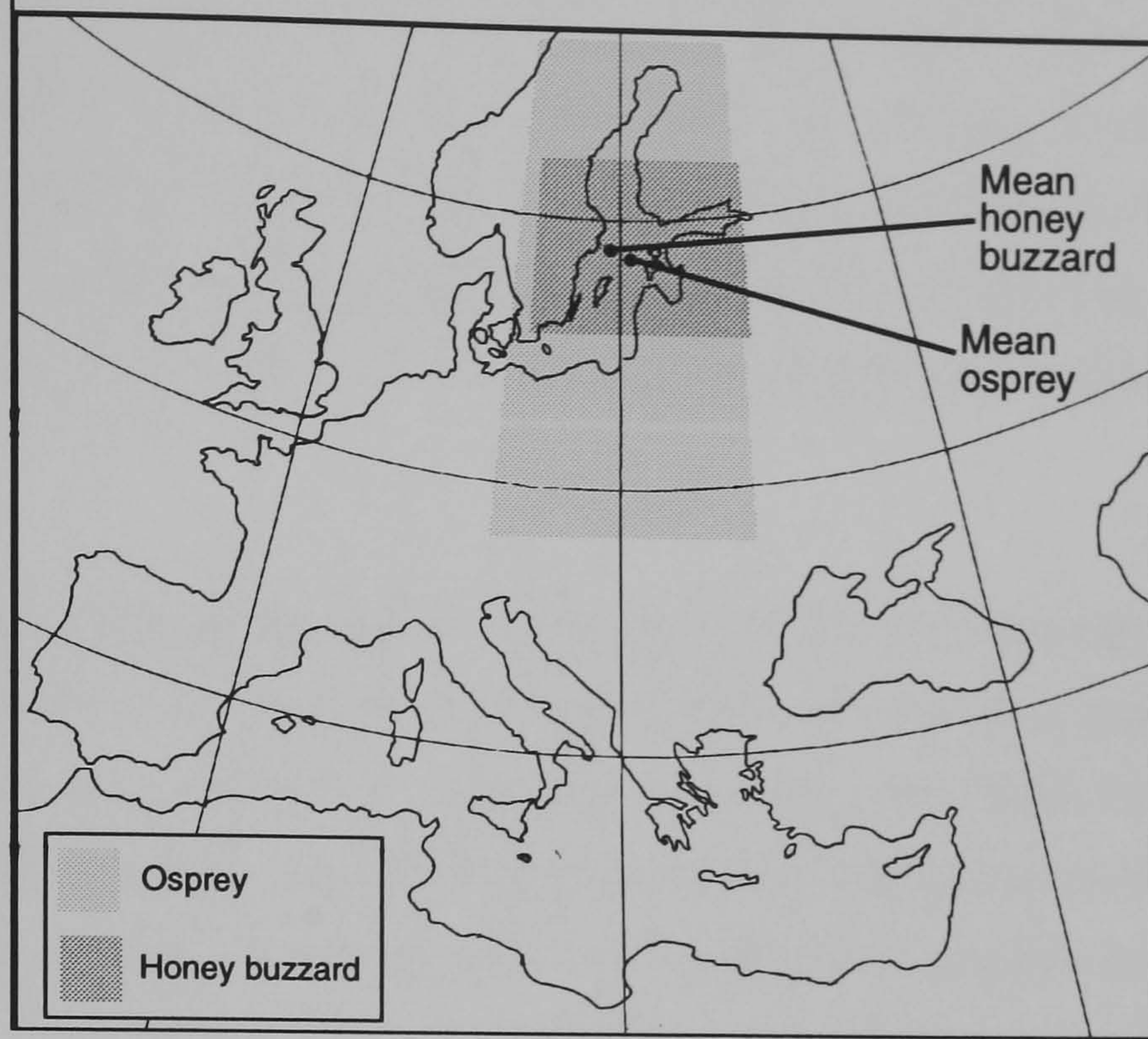
Figure 7.3
General direction of Finnish osprey migration based on ringing recoveries



Source: After Alerstam 1993

As Fig 7.4 shows, other birds of prey recovered in Malta, such as honey buzzard also came from Sweden, and East European countries such as Poland and Hungary. German, Swiss and Lithuanian ringed birds of prey have also been recovered during their first autumn flight. Ringing recoveries indicate that birds seen in Malta come from specific areas in Europe and that thus their exploitation may have a long term effect on the populations concerned.

Figure 7.4
Areas of origin of osprey and honey buzzard based on ringing recoveries



Systematic observations carried out at Buskett in September 1981, summarised in Table 7.2, indicate that 21.4 per cent of the birds of prey seen were shot. The daily percentage of birds shot varied from 8.3 per cent to 32.6 per cent of the birds observed (Fenech 1992).

Table 7.2
Birds of prey observed at Buskett on 18 September 1981

Species	Total seen	Total shot	Percentage shot
Honey buzzard	144	41	28.5
Marsh harrier	30	5	16.7
Kestrel	25	8	32.0
Other falcons	13	8	61.5
Other raptors	44	1	2.3
Totals	256	63	24.6

Source: Logbook of bird observations at Buskett

At Buskett, more birds are shot in bad weather conditions, as birds try to seek refuge in trees. In good weather conditions when birds keep flying at an altitude out of range of shotguns, more birds of prey are usually killed late in the afternoon, when birds start losing altitude due to lack of thermals. As Table 7.2 shows, the highest number of birds of prey killed are small falcons, which tend to fly at lower altitudes. A high percentage of honey buzzards are also killed, mainly late in the afternoon as the birds start flying at low altitudes while looking for a roosting place. The term "other raptors" includes large broad winged birds which were unidentified, mostly due to the high altitude they were flying at, hence only a relatively low percentage of them are shot. In spite of the relatively high percentage of raptors killed at Buskett, especially in autumn, it is worth noting that out of the 114 birds of prey ringed abroad and recovered in Malta in autumn, only six or 5.3 per cent were reported recovered from Buskett. This indicates that a large number of birds of prey are shot elsewhere in the Maltese Islands.

It is worth mentioning that the general direction of migrating honey buzzards in autumn in Israel has the same southwesterly trend indicated by ringing recoveries in Malta. Studies of honey buzzard migration in Israel show that in autumn, most individual birds headed between 220 degrees and 225 degrees in a southwesterly direction. The basic direction of migration corresponded roughly to the primary axis of migration was 220 degrees in autumn and 30 degrees in spring (Bruderer and Blitzblau 1994).

Gulls, Terns and Herons

Direct ringing recoveries show that most of the black headed and Mediterranean gulls recovered in Malta have been ringed at the Orlov Isles and the Smalenyi Isles, close to the Black Sea. There is an individual recovery of a German ringed Mediterranean gull. Gulls are mostly winter visitors which occur from October to late February. Black headed gulls originate mostly from Eastern and Northern Europe. All lesser black-backed gulls recovered locally originated from Scandinavia. The terns recovered so far indicate a southerly and south westerly migration. Of all six caspian terns recovered, four were ringed in Scandinavia. The only three recoveries of Sandwich terns involved birds ringed at the Black Sea. Recoveries of various species of herons (Table 7.3 and Fig 7.5) also show that most of the birds come from Eastern Europe while purple herons originate from a small restricted area in former Yugoslavia and Bulgaria. The shaded area in Fig 7.5 shows the areas where various species of Malta bound herons originate from. Points mark the mean locality of all ringing recoveries for different species of herons.

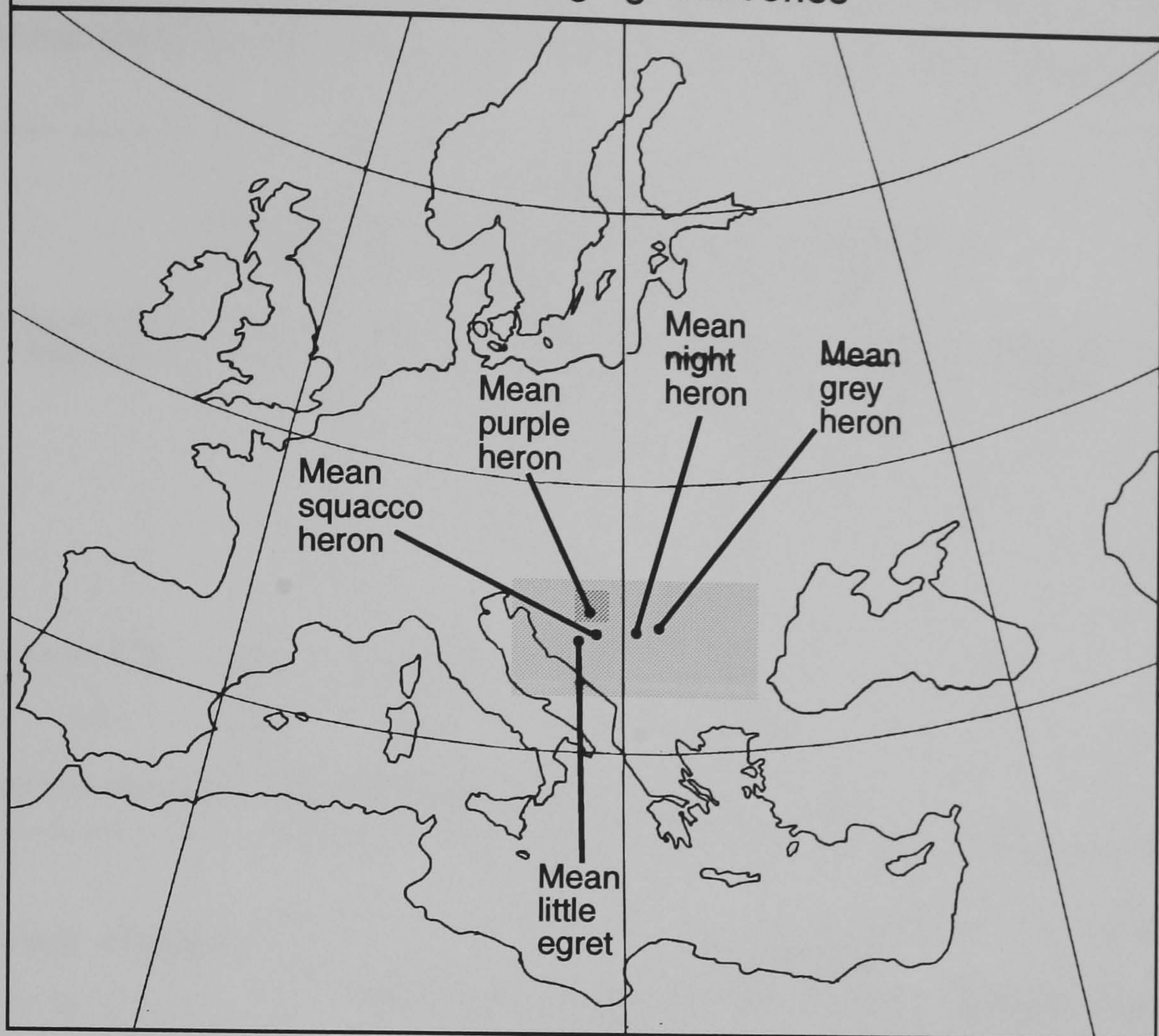
Table 7.3

Country of origin of summer ringed herons recovered in Malta during the following autumn

	Hungary	Yugoslavia	Bulgaria	USSR
Night heron	1	12	1	1
Squacco heron		2		
Little egret		1		
Grey heron		1	1	
Purple heron		2	1	

Source: ringing recoveries data, Malta Ornithological Society

Figure 7.5
Area and mean points of origin of Malta bound herons based on ringing recoveries



FINCHES

Alerstam (1993) noted that birds which live on seeds from trees and bushes do not show fidelity to fixed winter quarters. This is because trees and bushes may have a good measure of seeds and berries in one year and bear a poor harvest in the next. Birds dependent on seeds from trees such as spruce, alder and birch lead a nomadic winter life, sometimes allowing their varying migration routes to be determined by the direction in which the wind makes it most economical and quickest to fly. Since the winds vary, the same bird can seek its winter food in west Europe in one year and in east Europe in the next. Hence species such as siskins, move to places where their favourite food abounds. On the other hand, birds feeding on seeds from herbacious plants, such as linnet and serin are more faithful to their wintering grounds. Herbaceous plants are short-lived plants which must produce a lot of seeds to ensure the survival of their species. Inspite of their swift mortality in an unstable environment, herbacious plants offer seed-eating birds a fairly stable food base year after year. In areas where the supply of weed seeds is abundant in one year, there is a strong probability that it will be so also during the following year. Thus birds which feed on weed seeds in winter exhibit stable and regular migratory habits in site fidelity in their wintering quarters (Alerstam 1993 p.190-1). Many finches are trapped both in spring and in autumn. In the Maltese Islands, a large number are trapped also in winter when they flock to feed in areas where white wall rocket abounds. Since these finches usually show site fidelity, it is likely that the birds would return every year and that their numbers are likely to increase if they are not trapped.

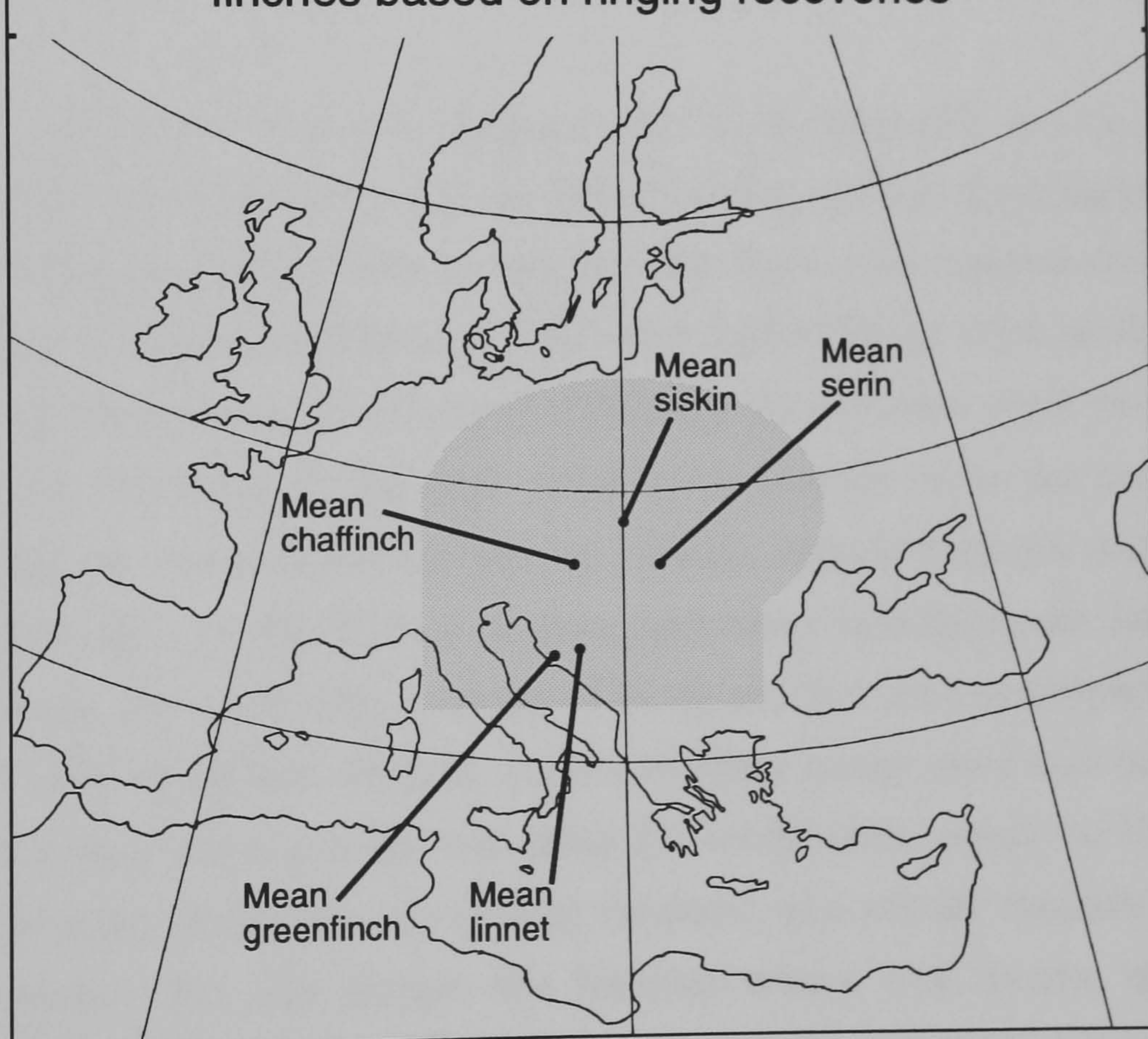
Table 7.4
Origin of finches ringed in autumn and recovered in Malta in the same autumn or during the following winter

Direction Country	North West Switzerland	North Italy	North Germany	North East C'vachia	North East Yugoslavia	North East Hungary	North East Poland	East USSR
Chaffinch		1				1	1	
Greenfinch		1		2	1			
Goldfinch					1			
Siskin		1	1		2			2
Serin				4	1			
Linnet	1	1		7	4	5		1

Direction	North West	North	North East	East	Total
Total	1	5	29	3	38
Percent	2.6	13.2	76.3	7.9	100.0

Source: Ringing recoveries data, Malta Ornithological Society

Figure 7.6
Area and mean points of origin of Malta bound finches based on ringing recoveries



Data from ringing recoveries summarised in Table 7.4 and Fig 7.6 indicates finches seen in autumn in Malta originate mostly from Eastern Europe. Information from 38 finches ringed in autumn and recovered in Malta during the same autumn or the following winter shows that 84.2 per cent of the birds recovered migrated from the north east and eastern European countries, 13.2 per cent came from the north while only one recovery, or 2.6 per cent came from the north west. There is also evidence that in autumn, other passerines which migrate over Malta such as swift, martins, wagtails, kingfisher, wryneck, robin and starling, also originate from a north easterly direction (Table 7A.25 in the appendix).

DESTINATION OF SPRING MIGRANTS FROM MALTA

Data on Malta ringed swallows and martins in spring indicates that birds fly mainly in a north easterly route to those countries where Malta gets is autumn migrants from (Table 7.5 and 7A.27 in the appendix). Out of 34 direct recoveries, 38.2 per cent were recovered to the north east, 20.6 per cent to the north west, 32.4 per cent to the north and 8.8 per cent to the east.

Table 7.5
Direction of migration of hirundines ringed in Malta
in spring and recovered during the same spring or the following summer

Direction	North West UK	North West France	North West Netherlands	North Germany	North Italy	East USSR	East Crete
House martin				1	1	1	
Sand martin	1	2	1		2		
Swallow	1	2		5	2	1	1

Direction	North East C'vachia	North East Yugoslavia	North East Sweden	North East Poland	North East Bulgaria	North East Finland
House martin	-	-	1	-	-	-
Sand martin	1	1	1	1	1	-
Swallow	3	1	-	1	1	1

Direction	North West	North	East	North East
Total	7	11	3	13
Percent	20.6	32.4	8.8	38.2

Source: Ringing recoveries data, Malta Ornithological Society

IMPACT OF HUNTING

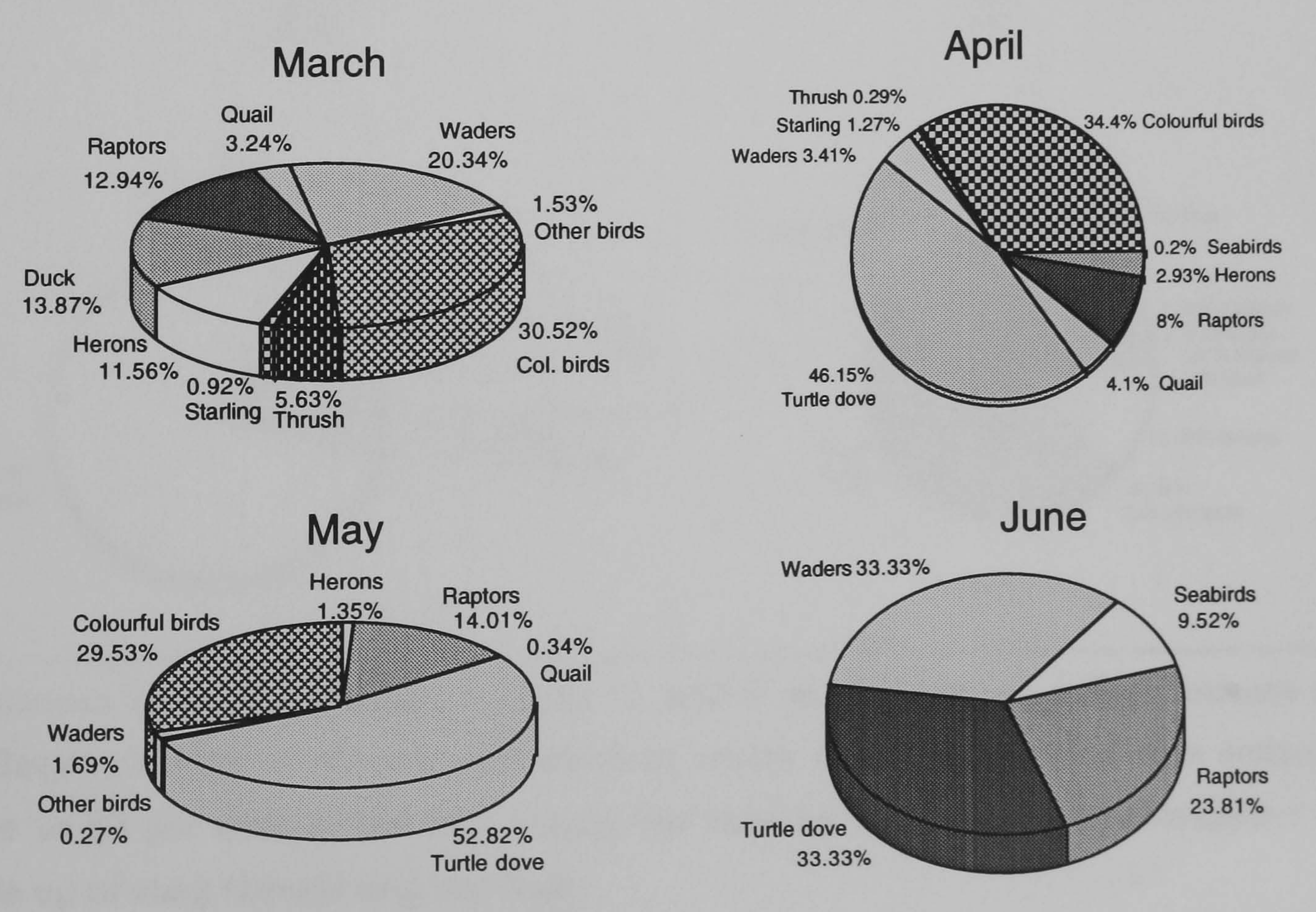
As has been shown, the birds shot in Malta come from specific areas in Europe. Using bag records of ten hunters over a collective fifty-three year period (Table 7A.5 in the appendix) and records from two taxidermists who used to stuff birds for a known number of hunters between 1976 and 1986 (Table 7A.6 in the appendix), it has been estimated that over three million birds are shot each year (Fenech 1992). Although the sample for this data is too small to be termed 'scientific', it is nevertheless more than indicative. When extrapolations were made on two independent sets of data (that of two part-time taxidermists and the bag records of hunters), the resultant number of birds stuffed was practically identical to the number of birds killed. In fact, it was slightly lower, and this can be explained by the fact that shooters do not take all birds they shoot to the taxidermists. Ideally, for a scientific survey of bag records, one would require a representative sample where the age group, the habitat where one hunts, the amount of time off taken for hunting and a reliable entry of all species seen and shot are noted. Such data is practically impossible to obtain since hunting has become a contentious issue. Hunters argue that the amount of birds they kill is insignificant, yet they never produce any data. Hunters in general are reluctant to keep bag records and any efforts to collect such data in the near future is likely to cause tainted results as hunters will be likely to under register their bags, fearing that analysis of such data will result in restrictions on hunting. Furthermore, protected species shot are not likely to be registered.

The data used in this thesis came from a hunter who kept his records, while the data for the other nine hunters came from one who kept the records for all his friends. The data for Taxidermists A, B and C was obtained from taxidermists who stopped stuffing birds (Tables 7A.1-3), while data for Taxidermists D, E, F, G and H was available following police raids at these taxidermists. From these bag records, it is estimated that on average, a shooter take home 88 birds a year. Bag records show that on average, a hunter shoots two herons, a duck, six birds of prey, a gull, 16 turtle doves, three cuckoos, two nightjars, two hoopoes, 34 thrushes, ten starlings and five golden orioles each year. In the bag records available, none of the shooters recorded the number of small birds they shot. The number of such birds runs into hundreds of thousands, but they are not listed in bag records. There are a number of other small birds such as larks, which are systematically shot and pipits, at which a shooter takes a pot shot every now and again. With over 10,000 licensed hunters, most of whom hunt regularly, the 'occasional pot shot' is likely to add up to considerable numbers. It should be stated that due to the small size of the Islands, hunters do not have to travel long distances in order to reach an area where they can shoot. A hunter may go to shoot for an hour or two before he goes to work in the morning and return home in time to be able to go to hunt again for another hour or so in the evening. During the peak of the migration periods from mid-April to mid-May and from the first week of October until mid-November, many take time off to hunt. Some hunters literally spend days in the field during migration. Shooters argue that there is not enough game for them to shoot and individual hunters claim that their forefathers complained about the lack of game even during the "glorious days" at the turn of this century, when turtle doves flew in large flocks and all sorts of other birds were plentiful. Although individually shooters may shoot less birds of certain species each year, the collective bag of certain species, has increased. This is not only due to the increase in the number of shooters, but also due to the fact that shooters are seeking ways of shooting birds which were previously not shot in large quantities, such as ducks and seabirds. As discussed in previous chapters, hunters a mere thirty years ago did not take time off to hunt but only hunted before going to work and on their return from work and only hunted during the peak of the migration periods. Technology has also improved hunting techniques, resulting in more kills. Repeater shotguns have long replaced twin barreled shotguns and muzzle loaders. The efficiency and range of cartridges has also improved greatly and more realistic electronic bird calls are now used instead of hand operated or mouth blown calls.

The impact of hunting on bird life is a significant one, especially when hunting takes place at the time when birds are returning to their breeding grounds in Europe from their wintering quarters in Africa. The birds would have survived at least one migration, with all the associated hazards. Most are also in breeding condition. When computing the data from the bag records, spring was taken as comprising the month of March, April, May and June as 'spring' migrants are observed mostly during these months. Since only very few 'spring' migrants are also noted in late February, this month was included with January and December as 'winter'. The months of August, September, October and November were taken as autumnas 'autumn' migrants appear during these months while the month of July is taken as summer.

The hunting season in spring is now limited to quail and turtle dove between April 1 and May 20. Before 1994, the hunting season was between 1 September and the 21 May. It is still to early to say what effect the new laws will have and whether hunters will abide by these regulations. But if one takes the past three years as an example, some started to hunt a few days before the season opened, while during the open season, protected species were shot as if they were not protected at all. Raids at taxidermists in late 1995 showed that 86.6 per cent of the birds they had were protected, which is similar to data from taxidermists

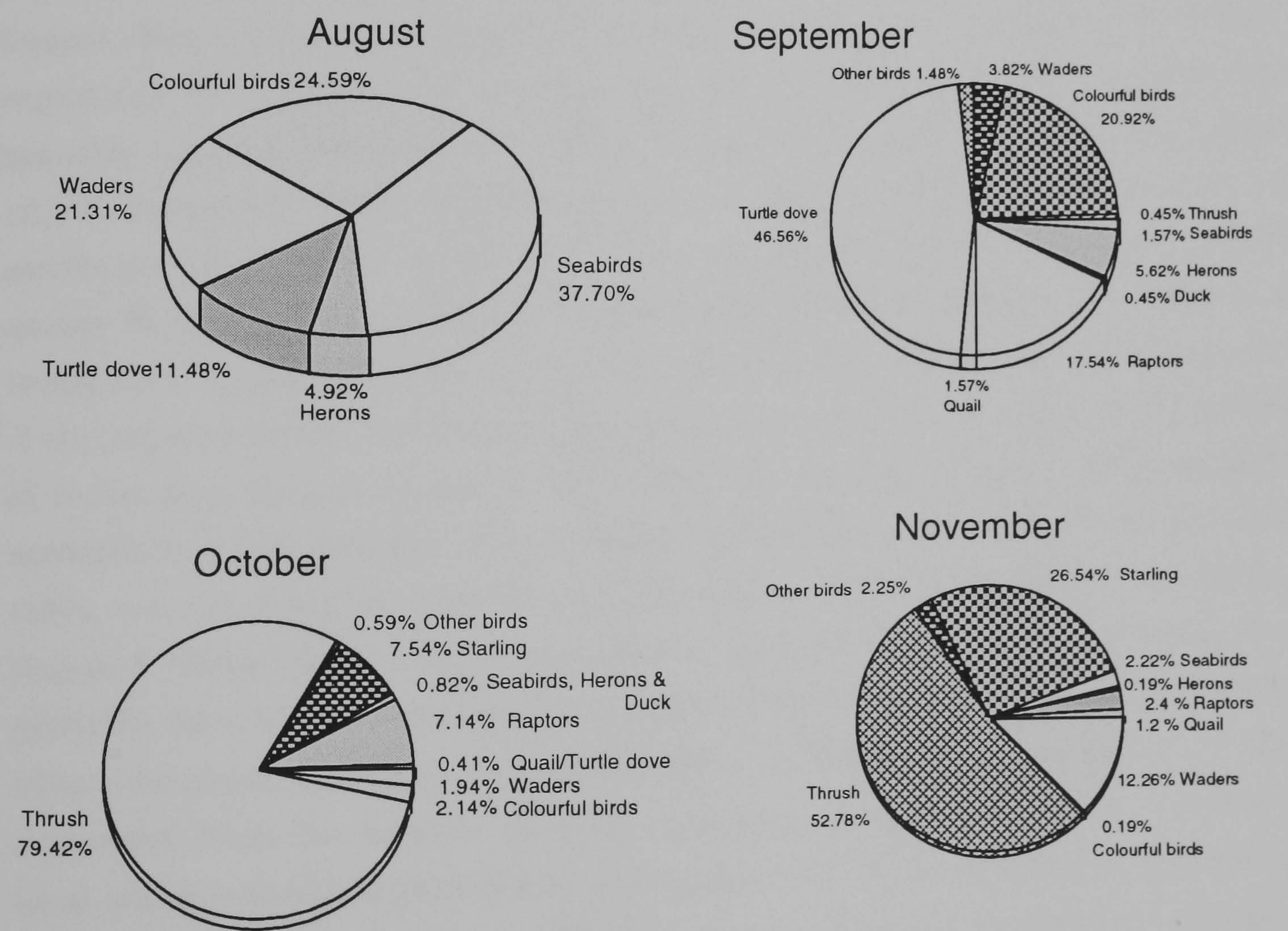
Figure 7.7
Composition of bags in selected spring and summer months



before the new hunting regulations were enacted. The composition of the hunters' bag during the months of March, April, May and June is represented in Figure 7.7.

As the pie charts show, colourful species, turtle dove and birds of prey are the most predominant species shot during these months. Although bag records were available for the period 1972 to 1987, only the 1982-1987 records were analysed for this exercise. The reason being that for the years 1972-1981, the records of only one hunter were available while the records of four hunters were available for the years 1982-83, the records of nine hunters were available for the years 1984-85, the records of eight and seven hunters were available for 1986 and 1987 respectively. An analysis of bag records for the period 1982 to 1987 reveals that the largest quantity of birds are shot in autumn, that is between the months of August and November (Figure 7.9). Almost 50 per cent of the total number of birds shot are killed in autumn while 40.83 per cent of the birds are shot in spring, 8.95 per cent in winter and 0.3 per cent in summer.

Figure 7.8
Composition of bags in selected autumn and winter months



Autumn ranks first in the seasons in which most birds are killed because of the large number of thrush and starling which are killed during this season. Close to 80 per cent of the bag during the months of October and November is made up of song thrush and starling.

Case studies of species shot

Turtle dove and quail

Turtle dove and quail are the two main game species, most of which are taken in significant numbers in spring and to a lesser degree in autumn. It has been estimated that the annual bag of turtle doves in Malta is between 160,000 (or ten birds per hunter in poor years) to 480,000 turtle doves (or 30 birds per hunter in good years) (Fenech 1992). Bag records indicate that shooters shoot an average of 15 turtle doves annually, 78.4 per cent of which are taken are taken in spring and 21.58 per cent are taken in autumn. This implies that a minimum of over 125,000 turtle doves are killed in spring in a poor season while over 376,000 birds are taken in a good spring season.

These bag records are supported by data published in a newsletter issued by the Maltese Association for Hunting and Conservation, a summary of which is represented in Table 7.6. Extrapolations from the data presented show that hunters shoot more than nine turtle doves each in spring. In the article, it is stressed that the figures cited are "realistic statistics and not exaggerated figures often cited by abolitionists". It was also stated that migration "was poor, especially for turtle doves and the only game which probably appeared in sparsley larger numbers was quail" (Farrugia 1988 p.6). In 1988, there were 15,947 licensed hunters. Working on the average of 9.03 turtle doves and 1.2 quails per shooter, this results in a total of 144,001 turtle doves and 19,136 quails. To this, one must add the number of turtle doves trapped. The number of turtle dove trappers in 1988 is not known as they required no special licence, but if one asssumes that the number remained the same in 1995, when the number of turtle dove trappers stood at 928, then the number of turtle doves trapped amounts to 5,700, bringing the collective spring bag of 149,701. From the same table, one can conclude that 28 per cent of the turtle doves seen were shot or trapped. Since there were a number of shooters at the same locality, it is probable that when a bird was seen, but not killed, it may have been seen by other shooters, who may have reported it in their list of sightings. If this happened, then the number of birds seen may be higher than the number of birds which actually migrated and may account for the seemingly low percentage of birds shot. With quail, it is a different matter since the shooter who flushes a quail is most likely to be the only person to see it, and thus, the number of quails given may be more accurate. Working on the figures in Table 7.6, it appears that shooters shot 72 per cent of the quails they saw.

For Table 7.6, it was stated that observations were carried out between 15 April and 15 May 1988 between sunrise and 10.00 am, hence the table ignores any birds seen or shot after 10.00 am and in the afternoon. It is a known fact that many hunters start looking for quail late in the morning, when there is no migration of turtle doves or other birds. It also ommits the birds shot between 16 and 21 May, when the season officially closes.

Table 7.6
Statistics for turtle dove and quail shot and trapped in 1988

Locality	Number of hunters	Number of trappers	Turtle dove seen	Turtle dove shot/hunter	Quail seen	Quail shot/hunter	Total shot turtle dove	Total shot quail	Total trapped turtle dove
Hal-Far	4	0	80	8	30	3	32	12	0
L-ibragg	6	2	200	10	10	2	60	12	5
Mizieb	8	0	250	11	1	0	88	0	0
Girgenti	5	0	300	12	3	0	60	0	0
Kuncizzjoni	3	0	90	3	3	1	9	3	0
L-ahrax	7	3	250	7	10	2	49	14	7
Total	33	5	1,170	9.03	57	1.24	298	41	31

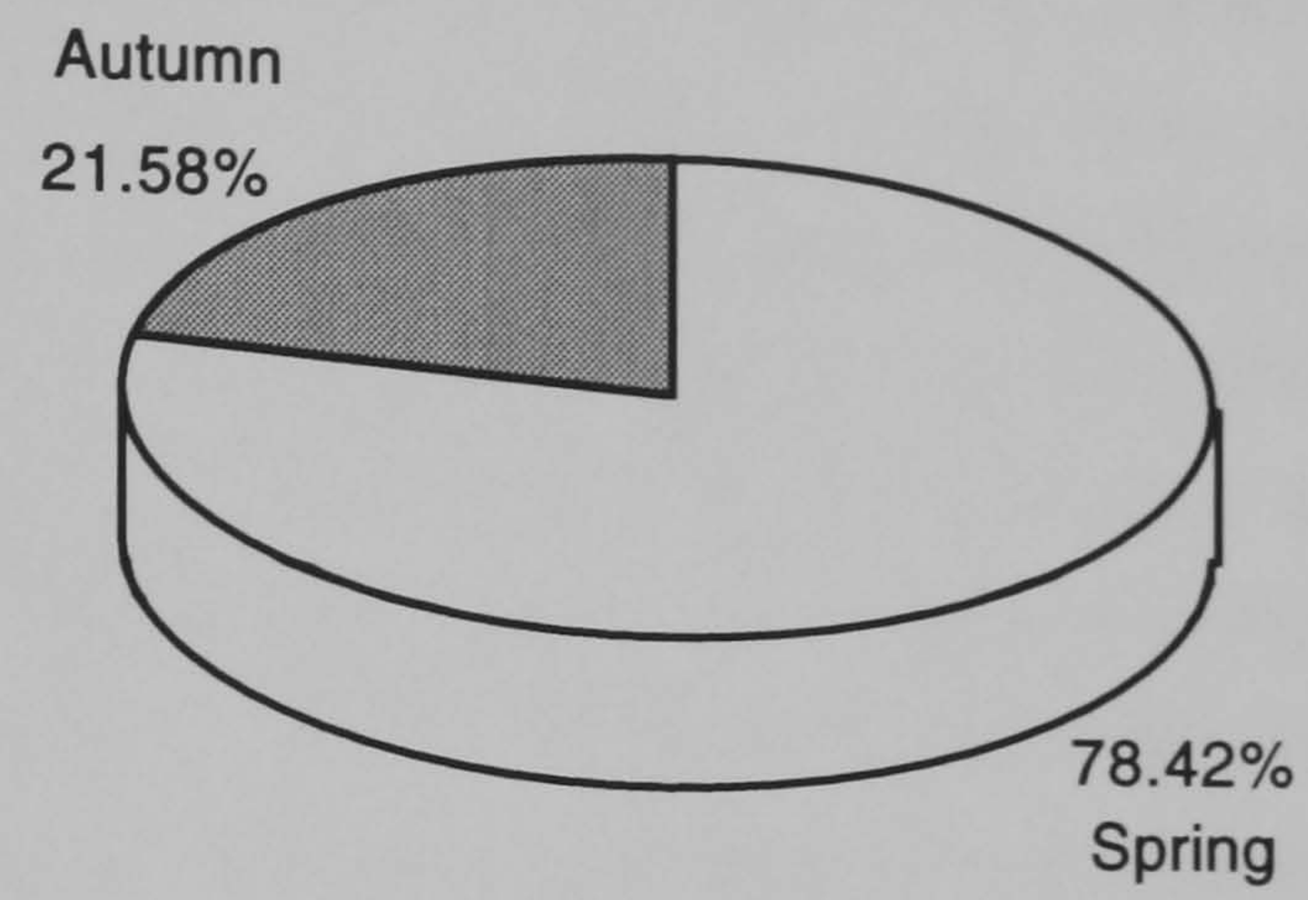
Number of turtle doves shot and trapped, as a percentage of the number of doves seen	28.1
Number of quails shot and trapped, as a percentage of the number of quails seen	2.2

Source: Computed from figures given by Farrugia 1988

Tucker and Heath (1994) note that the Eastern population of turtle dove fell between 1970 and 1990 and particularly in Western Europe. The authors attribute the decline to severe drought in the bird's African wintering grounds, shooting in winter and during spring migration and the intensification of agriculture in the breeding areas, and recommended that spring shooting of the species should be stopped and winter shooting regulated. The authors state that spring shooting in Morocco, where more than 15,000 turtle doves are killed and in south-west France, where it is estimated that over 40,000 are killed, "may have contributed to and acceletared the decline of west European populations" (Tucker and Heath 1994 p.321). The European breeding numbers are esimated to lie between 2,700,000 and 13,000,000, with the largest numbers being in Spain, Russia and Turkey (Tucker and Heath 1994). The breeding success of turtle doves is low, with less than half of eggs laid resulting in fledglings (Murton 1968). Turtle doves are known to migrate on broad fronts, with the Eurasian population taking a south-westerly orientation. Various populations use same routes on migration and turtle doves breeding in western Europe migrates over France and Spain while central European birds migrate over Italy and Malta (Cramp 1985). Ringing recoveries indicate that turtle doves come to Malta from Italy (50,000-100,000 breeding pairs) and eastern countries such as former Czechoslovakia (60,000-120,000 breeding pairs). Uncontrolled shooting, while not having a 'global' effect, may be detrimental to the local populations involved.

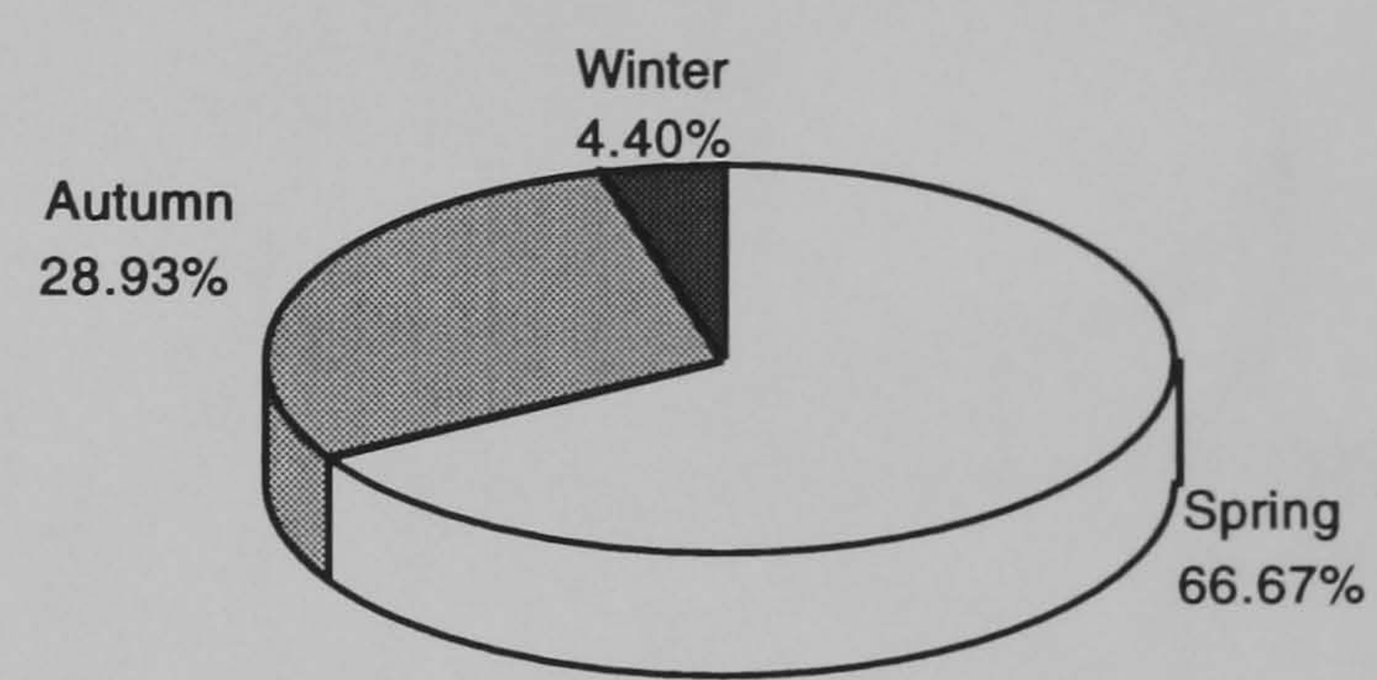
As Figure 7.9 shows, close to 80 per cent of the turtle doves shot in Malta are taken in spring. As Figure 7.7 (p.295) shows, turtle dove comprises 46.15 per cent of the April bag, 52.82 per cent of the bag in May and 33.3 per cent of the June bag. In autumn, turtle dove constitute 11.48 per cent and 46.56 per cent of the August and September bags respectively.

Figure 7.9
Seasonal distribution of turtle dove bags



A similar pattern exists with quail, where 66.7 per cent of the birds are taken in spring, 28.9 in autumn and 4.4 per cent of the bag is shot in winter (Fig 7.10). A small number of quails try to winter and some arrive in late December, January and February. It is these birds which comprise the winter bag and it is likely that these birds would breed if left unmolested. It is estimated that hunters kill one to two quail each, bringing the total annual bag to between 16,000 and 32,000 quails (Fenech 1992). Thus a between 11,000 and 21,000 quails are shot in spring, between 4,500 and 9,000 are killed in autumn and between 700 and 1,400 are killed in winter. The figure for the number of quails shot in spring are supported by figures published by the Association for Hunting and Conservation summarised in Table 7.6 (p.298), which stated that the average bag of 33 hunters between 15 April and 15 May 1988 of 1.2 quails per shooter. Working on the number of licensed hunters during that year, it seems that 19,136 quails were bagged. Again, this figure is an underestimate since quails are also shot after 10.00 am, when observations ceased. One also has to take into consideration that prior to the 1993 regulations, quails were also shot in March. Assuming that only as little as ten per cent of the quails shot in spring would remain to breed, there can be at least between 35 to 70 breeding pairs of quail each spring.

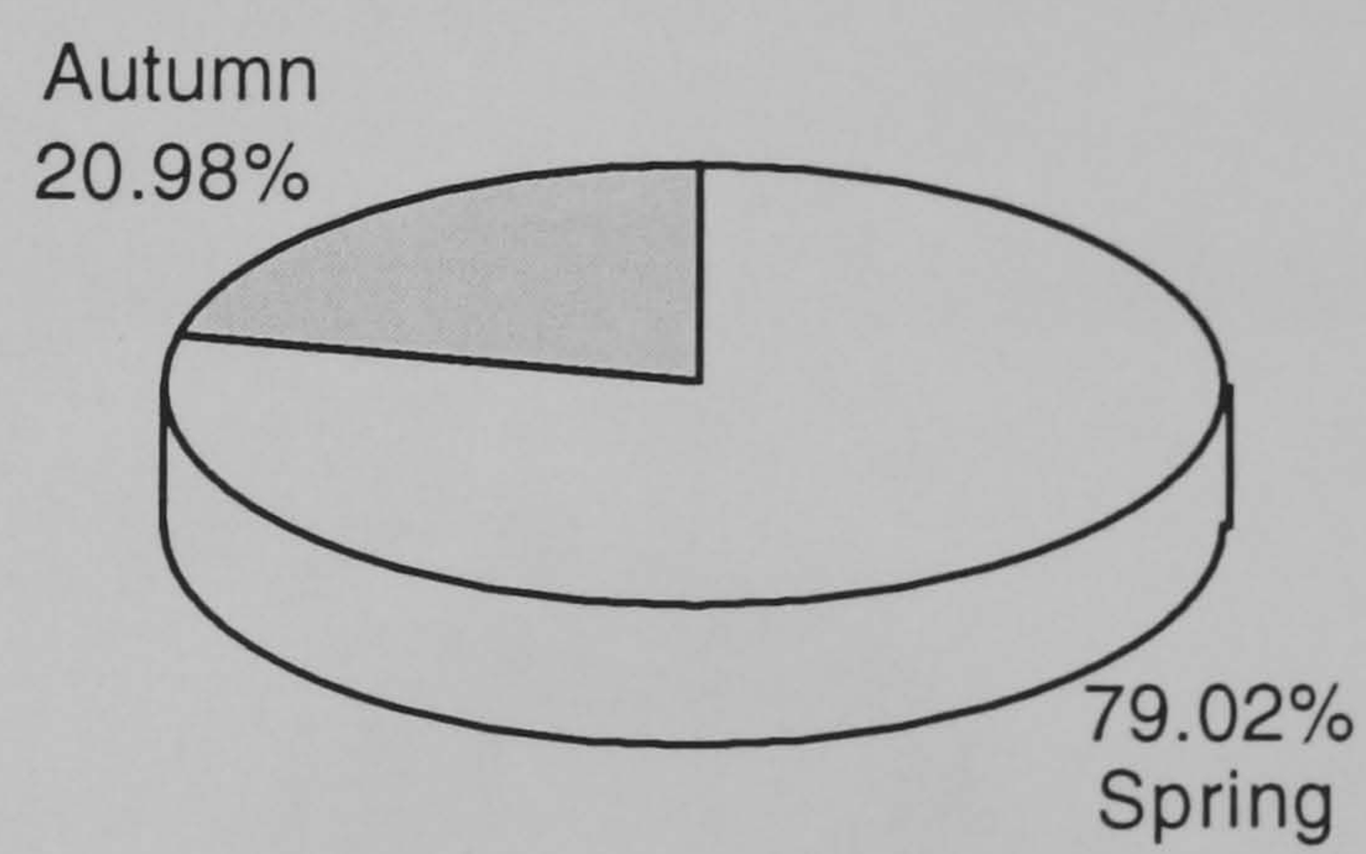
Figure 7.10
Seasonal distribution of quail bags



Colourful birds

Colourful birds such as hoopoe, golden oriole, roller, bee-eater, cuckoo, kingfisher, and nightjar are more commonly shot in spring than in autumn. Bag records indicate that 79 per cent of these species are shot in spring while almost 21 per cent are shot in autumn. In spring, colourful birds form over 30 per cent of the total number of birds bagged in March, over 34 per cent of the April bag and over 29 per cent of the bag in May. In autumn, colourful birds make up over 24 per cent of the bags in August, close to 21 per cent of the September bag and just over two per cent of the October bag. The figure of colourful birds shot in spring would be higher if the rock thrush, which is a colourful bird, was added. This bird, which is mostly shot in spring, has been grouped with thrushes as it belongs to the thrush family. As Figure 7.11 illustrates, close to 80 per cent of the colourful birds killed are shot in spring. The most common colourful birds shot is the golden oriole. Bag records indicate that hunters bag five orioles each year, which amount to the total of up to 80,000 birds a year. The other most common colourful birds shot, in order of the largest number of birds killed, are: cuckoo (55,000), hoopoe (16,000 to 48,000), nightjar (32,000), bee-eater (5,000) and kingfisher (1,700) (Fenech 1992).

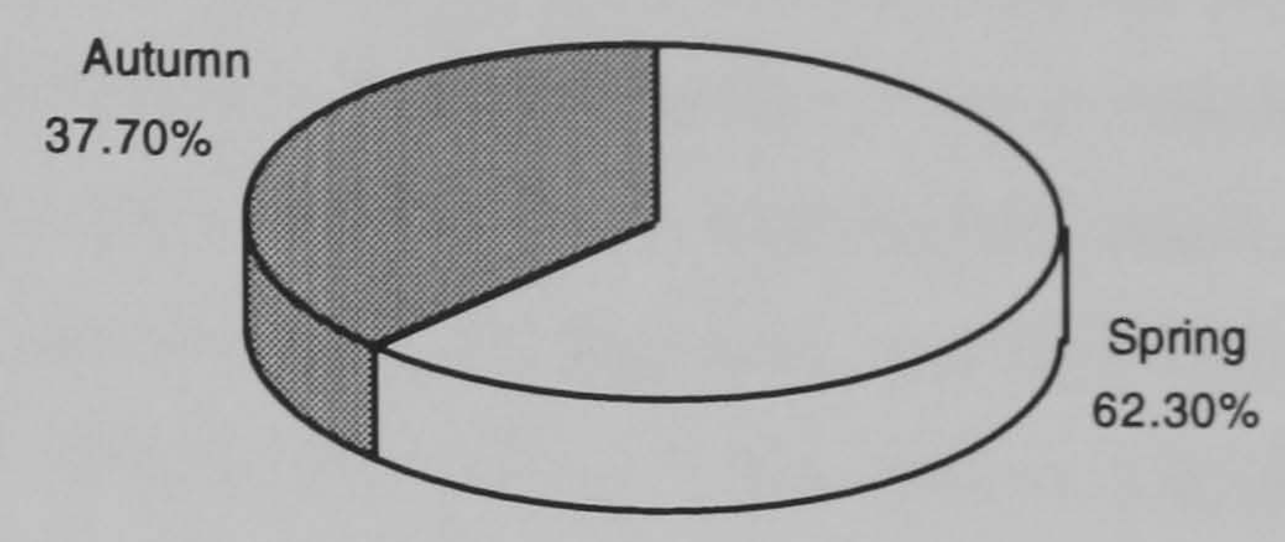
Figure 7.11
Seasonal distribution of colourful birds shot



Herons

Herons depend on the availability of natural and semi-natural wetlands for survival. Most species of herons need extensive freshwater areas rich in amphibians and fish. Drought in Africa often presents serious hazards to some heron species and a network of wetlands along their migratory route and within the wintering quarters has been suggested as a means of conservation (Tucker and Heath 1994). Various species of herons are under threat: the status of night heron is "declining", while that of little bittern, squacco heron and purple heron is "vulnerable" (Tucker and Heath 1994). The population of night heron has declined, or remained stable, in most European countries, with the exception of Italy, France and the Czech Republic, where slight increases have been noted. In Malta, herons are protected by law, but like many other large or colourful species, they are illegally shot. Herons are more frequently shot in spring than in autumn (Figure 7.12). The most common species of heron shot is the night heron, of which some 12,000 to 16,000 are shot each year. It is estimated that up to 32,000 herons and egrets are killed, which also include some 5,500 little egret, 3,000 purple heron, 2,500 little bittern, 2,500 squacco heron and 2,100 grey herons. Fig 7.5 discussed earlier shows that Malta bound herons originate from specific European populations and thus, large scale shooting is likely to have a detrimental effect on the populations concerned.

Figure 7.12
Seasonal distribution of herons shot



Birds of Prey

Large numbers of birds of prey, or raptors, are taken both in spring and in autumn. It is estimated that up to 96,000 raptors are killed annually. The most common bird of prey shot is the kestrel, of which some 32,000 birds are shot each year. Harriers are also commonly shot with up to 16,000 birds shot annually, some 70 per cent of which are marsh harriers. Kestrels may be shot practically all year round as some birds try to winter while others attempt to breed. As Figure 7.13, most kestrels are shot during the month of October, April, March and May. Red-footed falcons are shot in very large numbers when the birds abound. These small falcons may be conspicuous by their absence after a very good season. It is estimated that in a good year, some 18,000 such falcons are killed. These falcons are almost exclusively shot in spring.

Figure 7.13
Monthly pattern of months when kestrels are shot

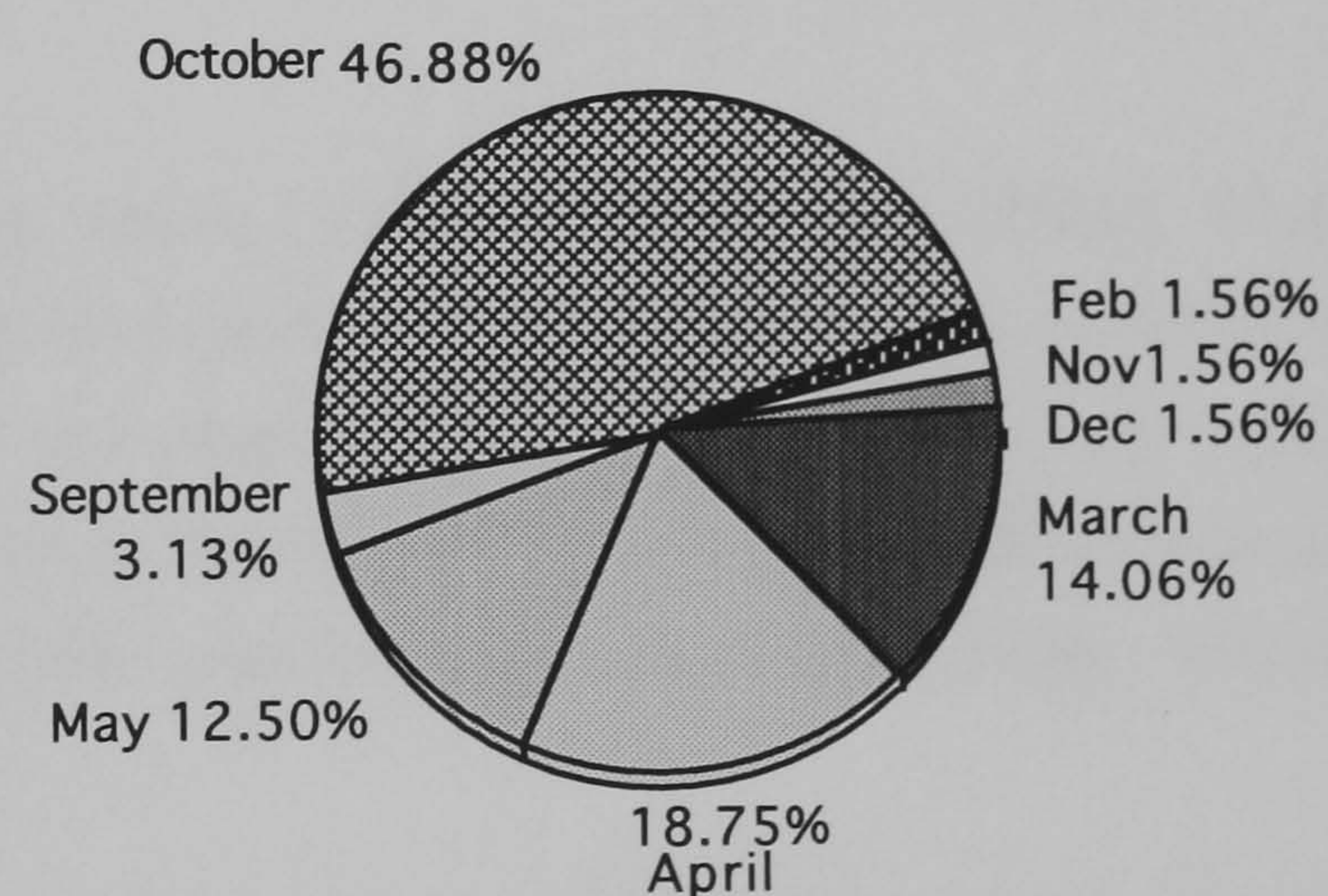
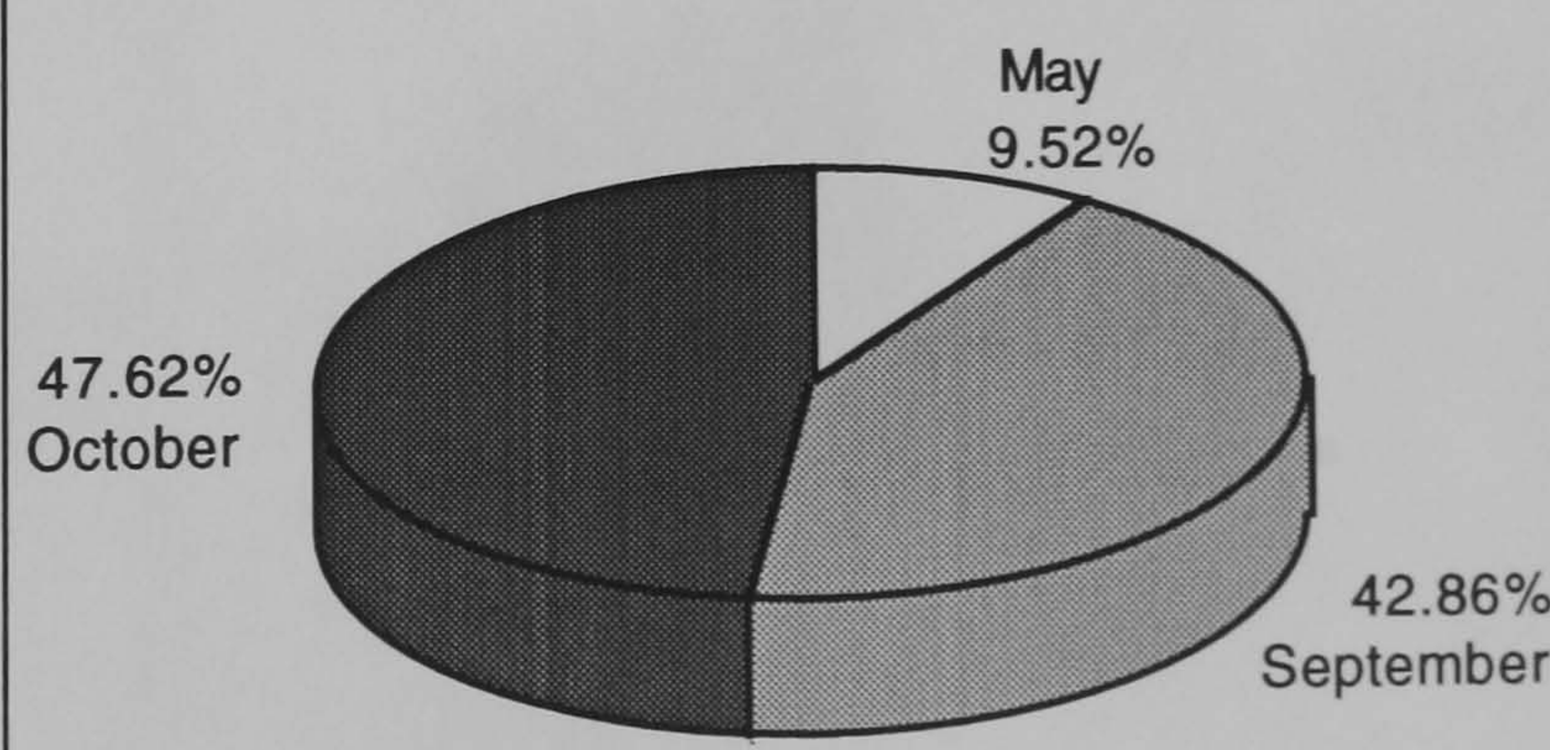


Figure 7.14
Monthly pattern of months when hobbys are shot



Another common falcon shot in Malta is the hobby, of which some 6,500 are estimated to be killed each year. The hobby is more commonly shot during the outward migration in autumn but a considerable number of birds are also shot in spring (Figure 7.14). Like most other birds of prey, the hobby is classified as a strictly protected species in all European countries and is considered as a species in need of special protection. Some 3,500 honey buzzards are also killed, most of which are killed during the month of September. Marsh harriers are also killed in large numbers, mostly in April and September (Fig 7.15). Some 16,000 harriers, of which 10,000 are marsh harriers are estimated to be killed each year (Fig 7.16).

Figure 7.15
Monthly pattern of months when honey buzzards are shot

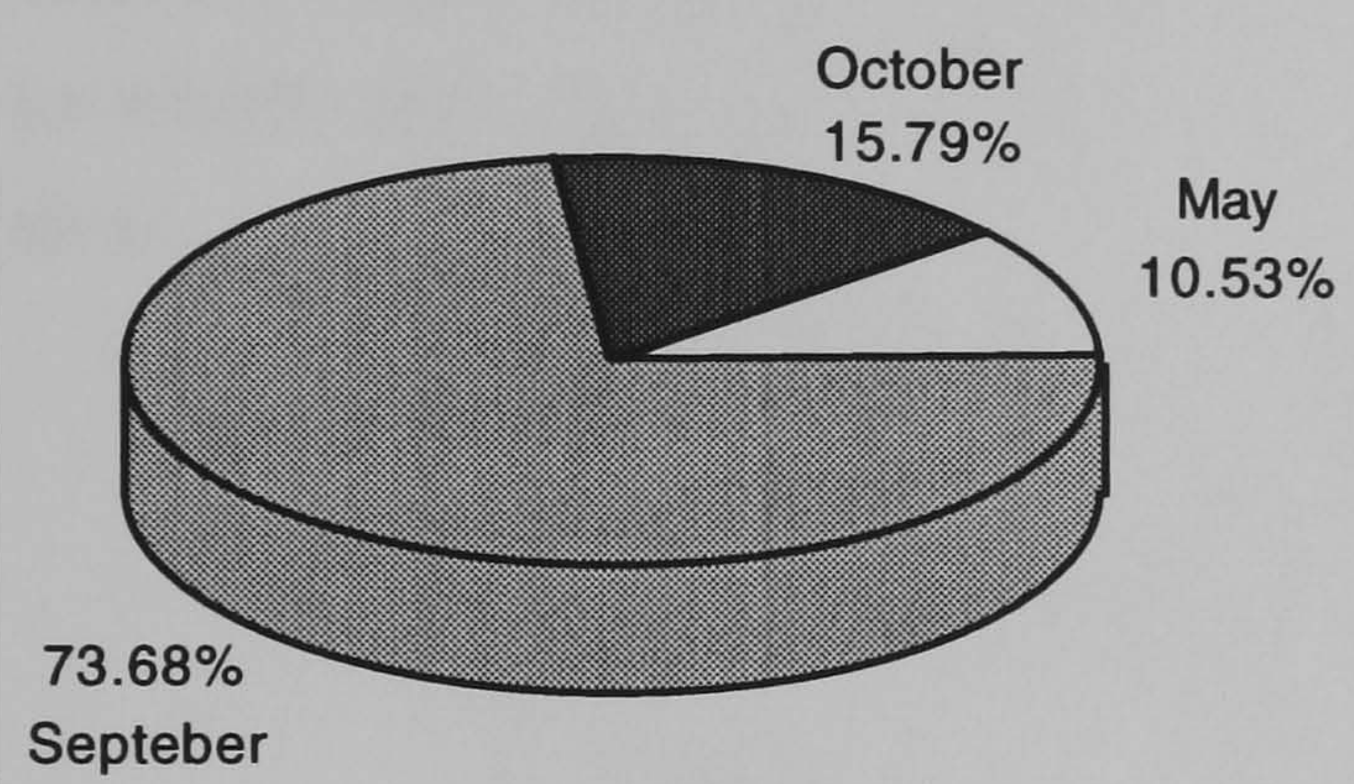
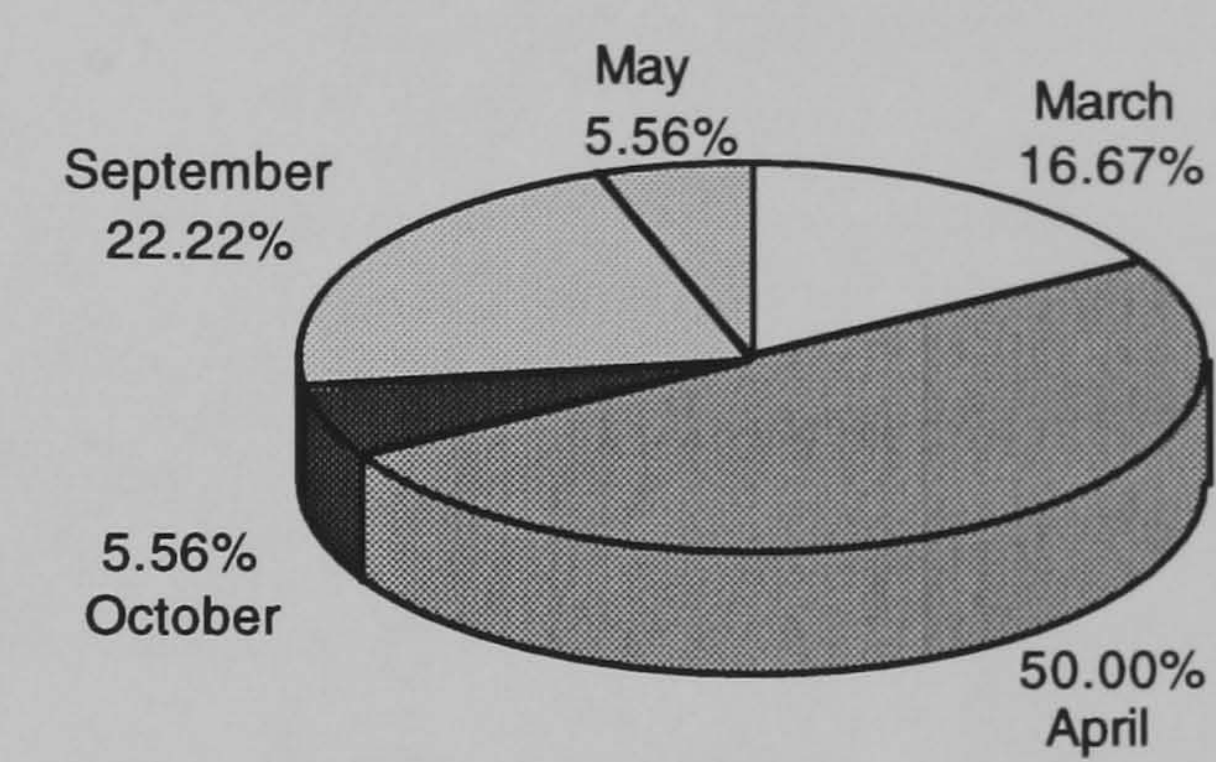


Figure 7.16
Monthly pattern of months when marsh harriers are shot



Apart from diurnal birds of prey, some 11,500 owls are also killed. These include close to 5,000 short-eared owls, over 6,000 scops owls and over 300 long eared owls. While most scops owls are shot in October (Fig 7.17), more short eared owls are shot in November than in October (Fig 7.18). Short eared owls are shot mainly in autumn and winter while a considerable number of scops owls are shot in April.

Figure 7.17
Monthly pattern of months when scops owls are shot

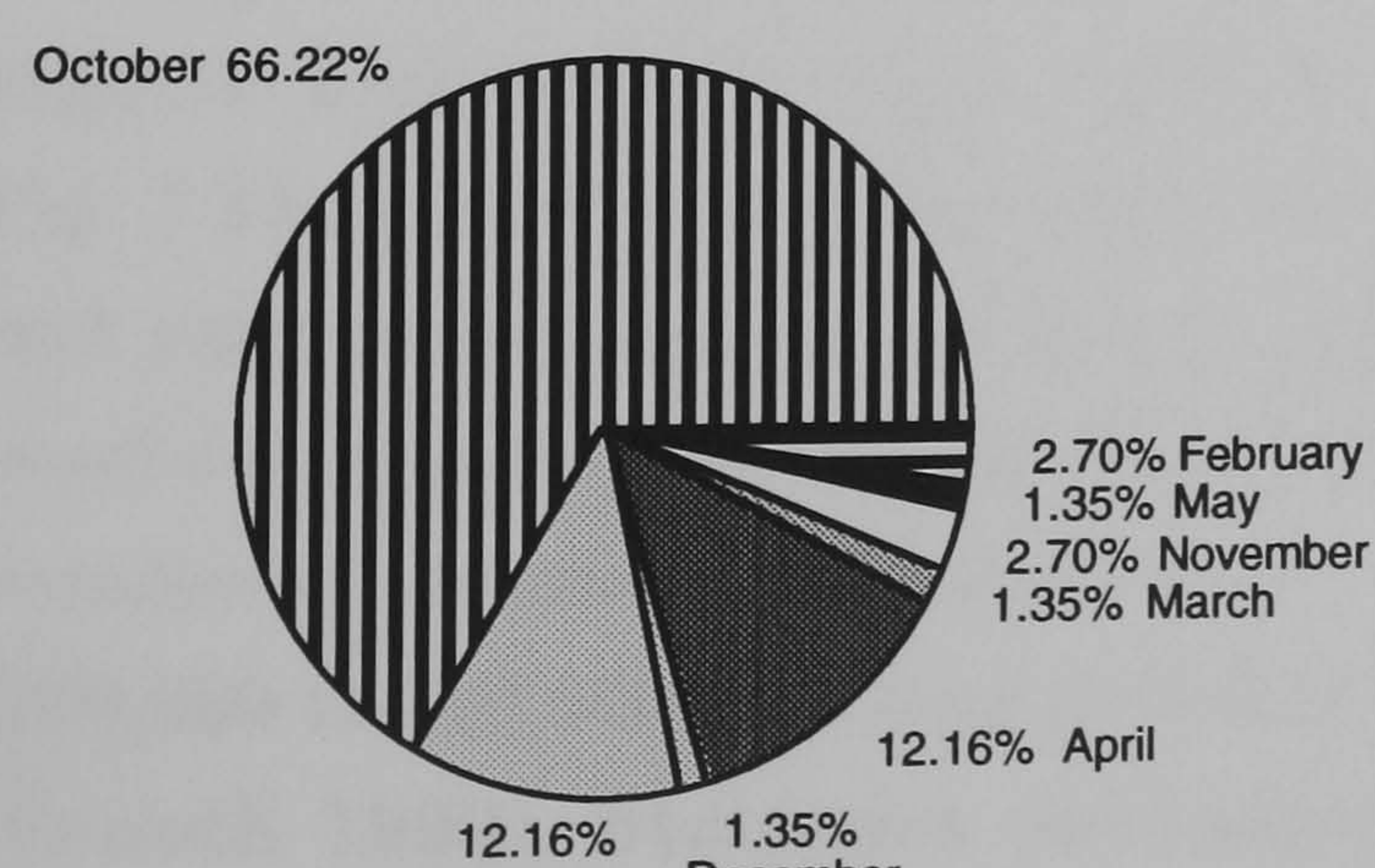
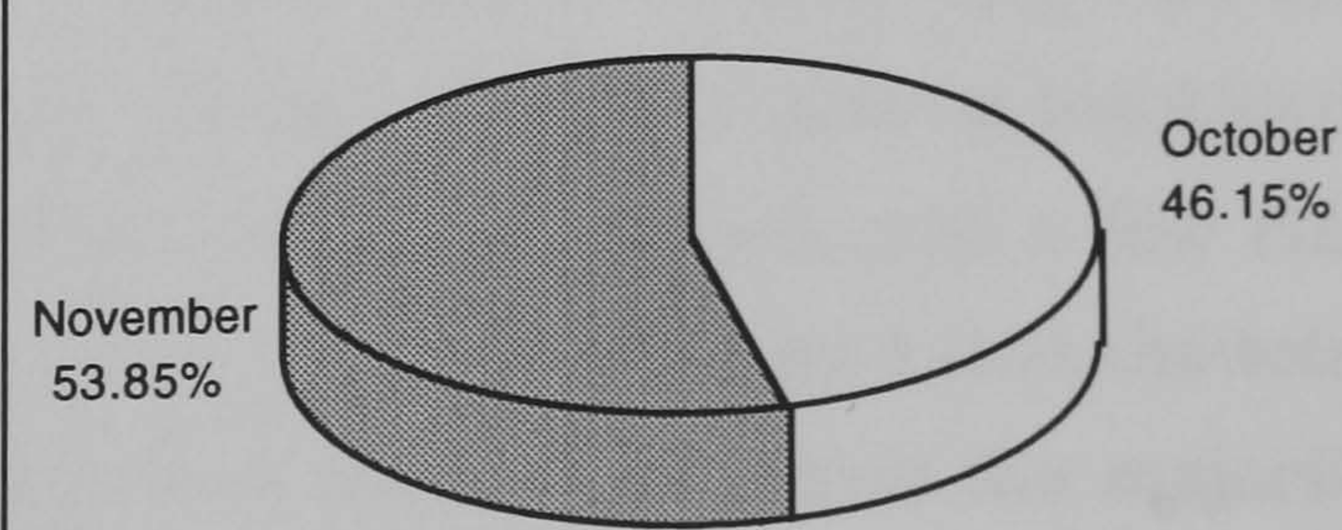


Figure 7.18
Monthly pattern of months when short-eared owls are shot



More raptors are shot in autumn than in spring. Of the total number of raptors shot in Malta, 44.08 per cent are shot in spring and some 54.08 per cent are killed in autumn (Figure 7.19). This means that almost 52,000 raptors are killed in autumn and over 43,000 are killed in spring while some 1,700, mostly owls, are shot in winter. The impact of the loss of some 43,000 raptors in spring cannot be under scored. Apart from the commoner species, rare species such as ospreys (at least 50 are shot each year), eleonora's falcon, merlin, individual Egyptian vultures and small eagles are shot. Figure 7.19 and Table 7.7 summarise the data for selected raptor species and months in which they are most commonly shot.

Figure 7.19
Seasonal pattern of raptor shooting

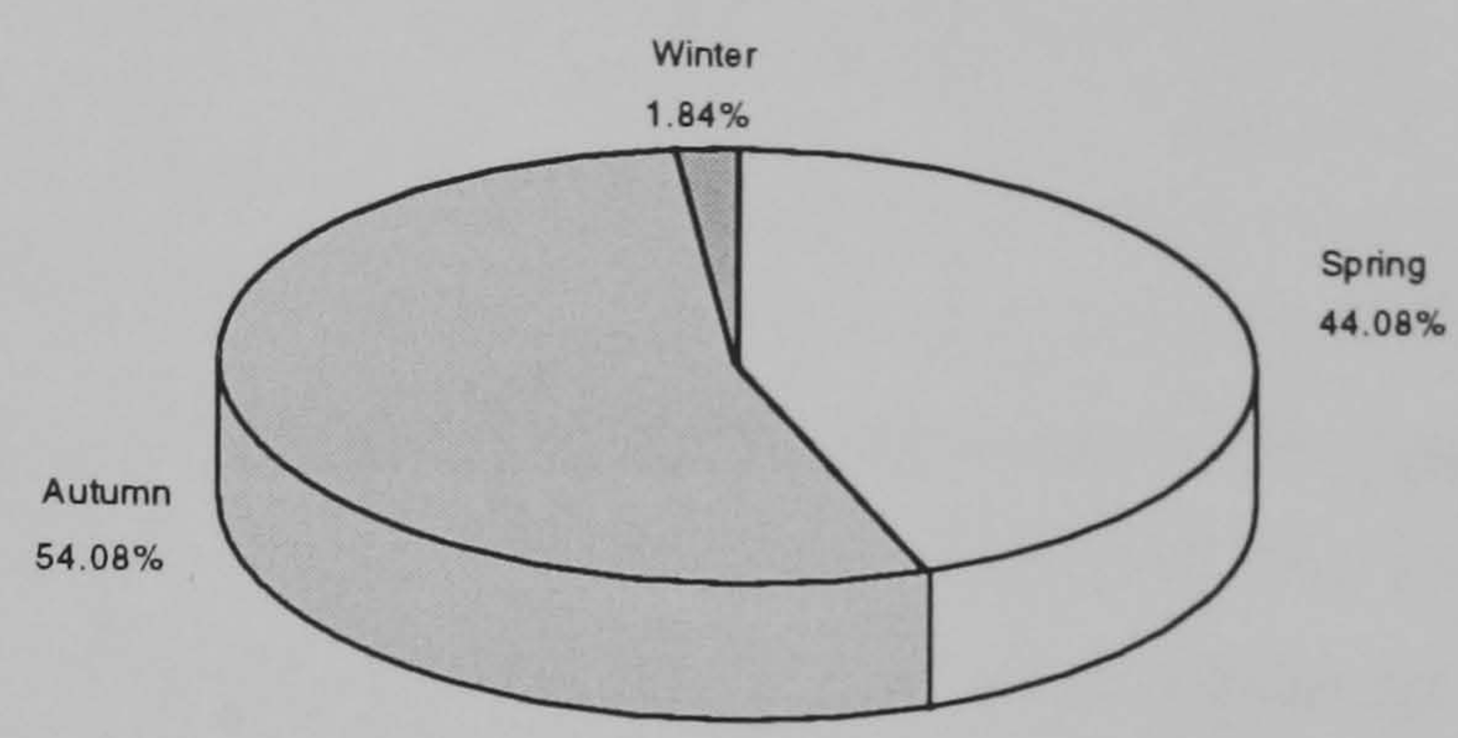


Table 7.7
Selected species: months in which they are most commonly shot

Kestrel	October	April	March
Marsh harrier	April	September	March
Montagu's harrier	April	March=September	
Honey buzzard	September	October	May
Red-footed falcon	May	April	
Scops owl	October	September=April	
Short-eared owl	November	October	

Source: Tables 7A.1, 7A.2

HUNTING IN AUTUMN

In autumn, thrushes, starlings and waders such as golden plover, lapwing, dottorel, snipes and woodcock occur in variable quantities. Undoubtedly the commonest species to be met with in autumn are song thrush, starling and skylark. Both song thrush and starling are shot mostly in autumn (Fig 7.20 and Fig 7.21). Apart from song thrush, various species of thrush such as blackbirds and later in the season, fieldfares, redwings and mistle thrush and a few ring ouzel can be met from October until early February. It is estimated that the total number of thrushes shot amounts to 240,000 to 550,000, of which the majority (200,000 to 300,000) are song thrushes (ten to 30 thrushes per shooter per year) (Fenech 1992). Statistics published by the Association for Hunting and Conservation following a 'wing inquiry survey' stated that it resulted that "an

Figure 7.20
Seasonal pattern of thrush shooting

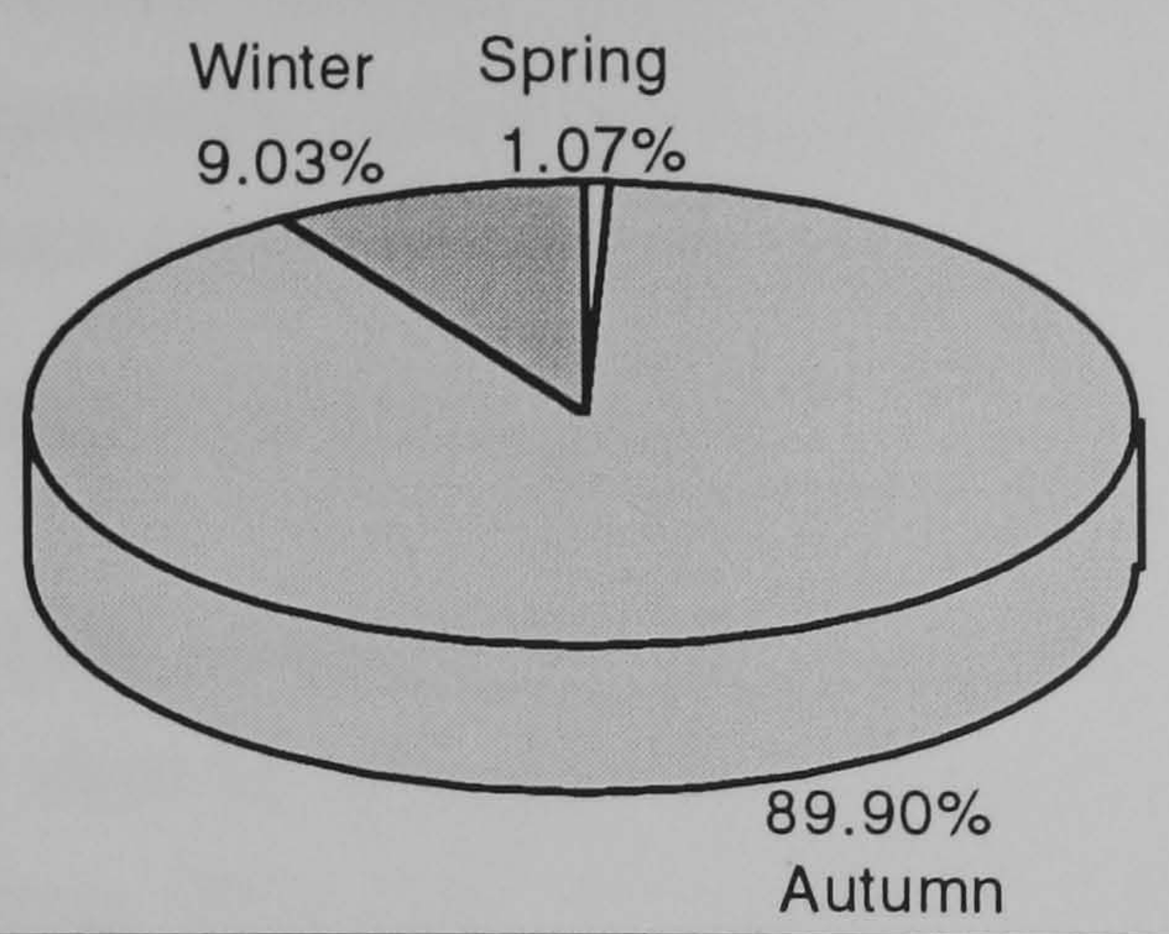
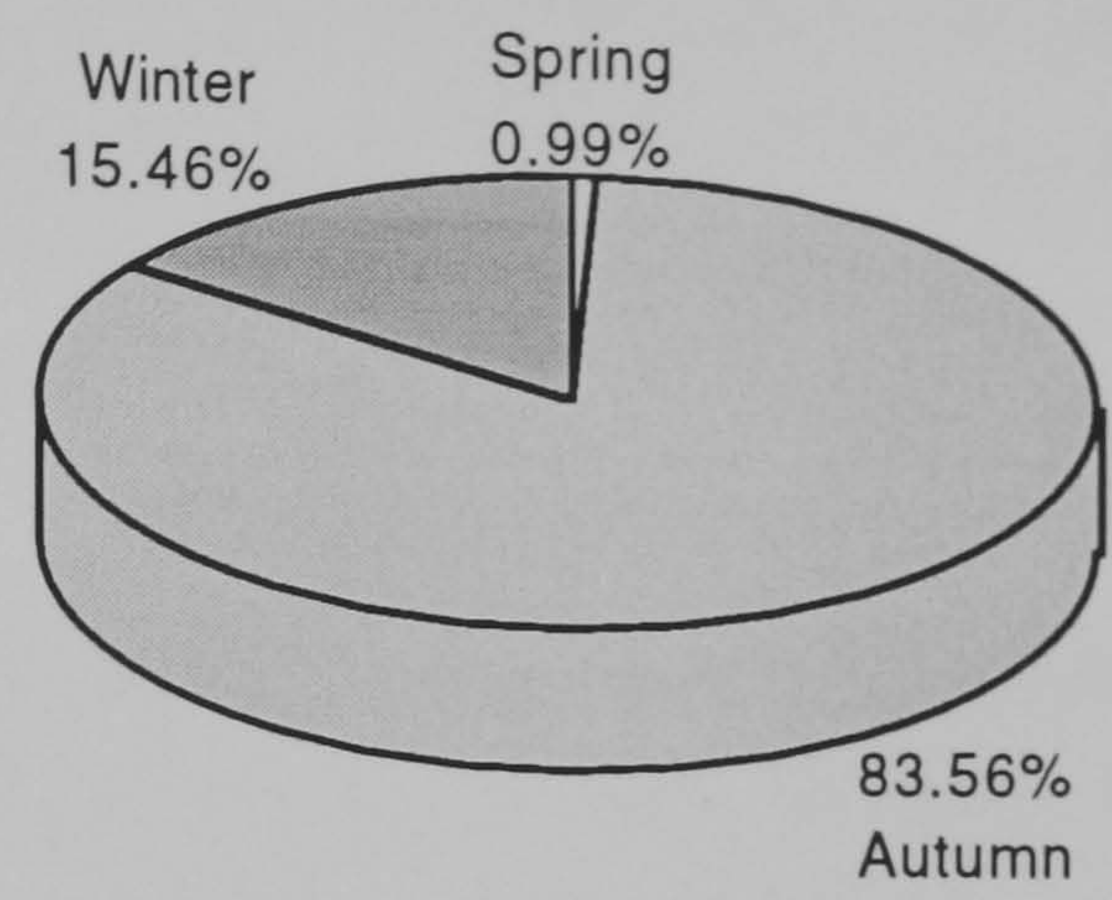
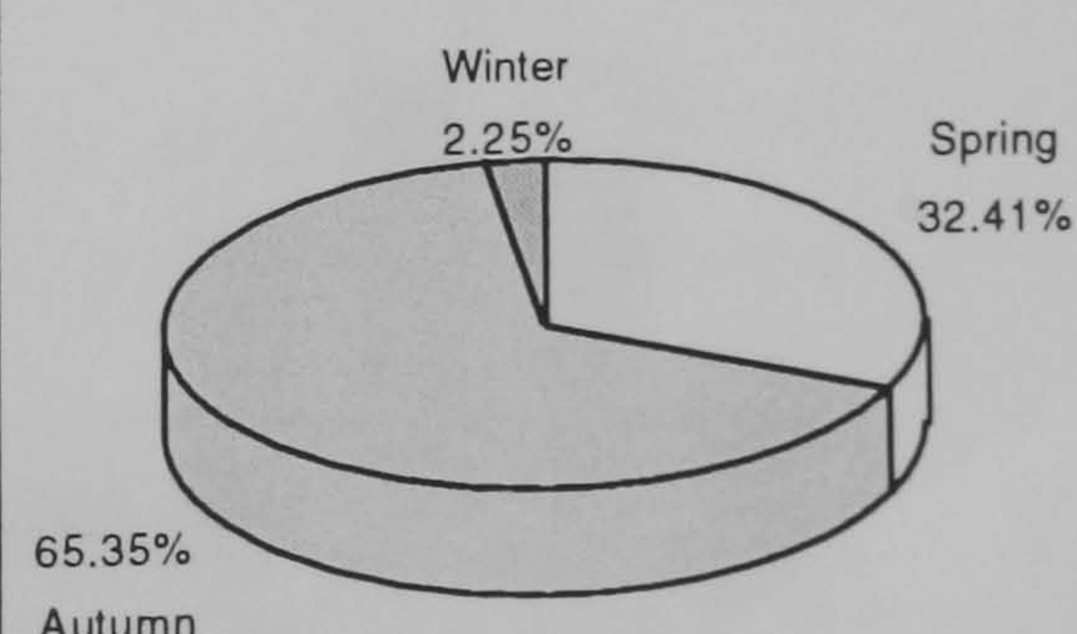


Figure 7.21
Seasonal pattern of starling shooting



average result of less than 150,000 song thrushes were shot in autumn 1991" (Farrugia 1995 p.3). Although this statement gives the impression of huge discrepancies, essentially the figures released confirm the validity of the bag records as the 200,000 to 300,000 thrushes mentioned can be divided into 180,000 to 260,000 (or 89.9 per cent) in autumn and 20,000 to 27,000 (or 9.03 per cent) in winter (Fig 7.20). The figure given by the Association for Hunting and Conservation is slightly lower because it took into consideration only the thrushes shot in autumn. The 'wing inquiry survey', which consisted of the collection of one wing from each bird shot to establish the ratio of first year birds to adults shot. The result survey, for which it was not said how many wings were submitted, was that the ratio of first year birds to adults was 1.68:1, that is 62.7 per cent of the birds shot were first year birds while 37.3 per cent were adults. In the opinion of the author, this "confirmed the fact that adult birds migrate less" (Farrugia 1995 p.3). The author seemed to ignore the fact that bird populations in autumn include a large percentage of first year birds fledged during the previous spring and summer. The song thrush is known to breed twice a year and clutches vary in size from three to five eggs. With an overall fledgling rate of 55 per cent (Cramp 1988), the song thrush population practically doubles as soon as the second brood fledges and the findings that in autumn more young birds are shot than adults does not surprise. What should be studied more in depth is whether the 'harvesting' of 37.3 per cent adult birds is sustainable.

Figure 7.22
Seasonal pattern of wader shooting



Waders are also more commonly shot in autumn. Snipes, plover, woodcock and lapwing are taken in considerable numbers in autumn, while other waders are such as sandpipers, ruffs and shanks are more commonly shot in spring and summer. Figure 7.22 shows the pattern of waders shot per season. Although the number of waders shot in spring is relatively small, waders shot at this time are not the species internationally recognised as game species but are mostly protected species. There have been no studies to determine the age and sex composition of the waders shot in winter to determine whether the shooting of certain species in winter is sustainable.

Birds at taxidermists

Many of the birds shot in Malta end up at taxidermists. Although more birds are shot in autumn than in spring, more birds are taken to taxidermists in spring. This may be explained both because birds tagged as 'colourful' are commoner in spring, as well as because birds in spring are in breeding plumage and more attractive, while autumn birds are more likely to be immature birds in dull plumage.

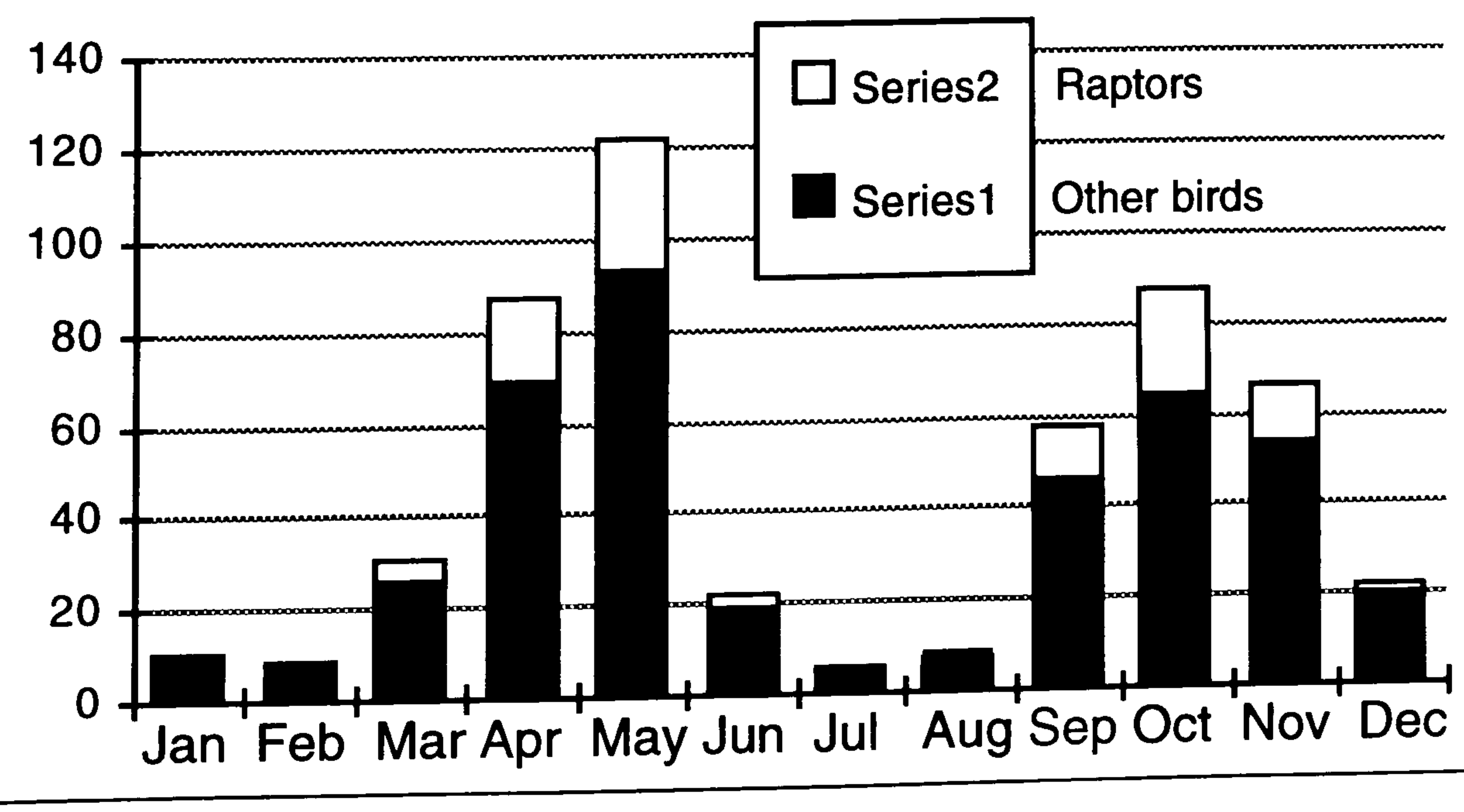
Table 7.8
Mean percentage of birds mounted per month
during the period 1976-1986

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
% other birds	2.2	2.0	6.0	16.6	22.4	4.4	1.0	1.9	10.8	15.3	12.8	4.6
% raptors	0.4	0.0	5.1	16.5	25.5	3.6	1.3	0.3	11.8	21.3	12.2	2.0

Source: the data has been compiled from log books kept by two part-time taxidermists. Taxidermist A, who stuffed birds between 1976-1982 and Taxidermist B, who stuffed birds during the years 1983-1986

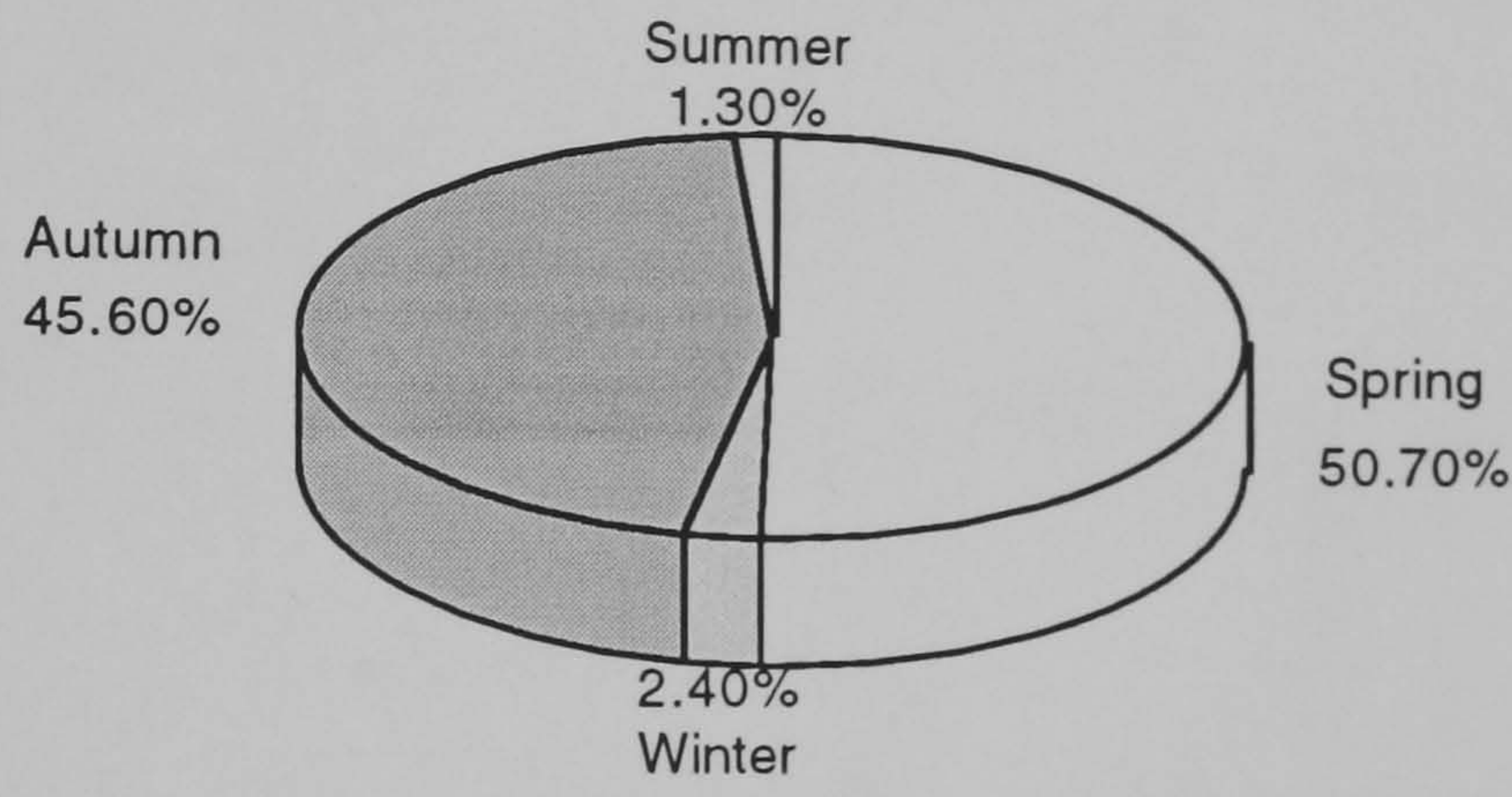
Over 55 per cent of the number of birds stuffed are taken to taxidermists in spring. Figure 7.23 and Table 7.8 show that May is the month during which most birds are taken to taxidermists. A total of 22.4 per cent of the total number of birds taken to the taxidermists are registered during the month of May with

Figure 7.23
Composition of birds at taxidermists



April ranking second, (16.6 per cent) followed by October (15.3 per cent) and November (12.8 per cent). More birds of prey are shot in autumn than in spring, but again, the largest number of birds of prey are taken to taxidermists in spring. As Figure 7.24 shows, close to 51 per cent of the birds of prey at taxidermists are found in spring while 45.6 per cent are found in autumn. Some 2.4 per cent and 1.3 per cent are taken in winter and summer respectively. The peak months for bird of prey mounting are May (25.5 per cent), October (21.3 per cent), April (16.5 per cent), November (12.2 per cent), September (11.8 per cent) and March (5.1 per cent).

Figure 7.24
Seasonal distribution of birds of prey at taxidermists



Although 57 per cent of the birds of prey shot are killed in autumn, taxidermists handle only 33 per cent of the total number of birds of prey they stuff and mount during this time. While in spring, taxidermists handle over 47 per cent of the total number of raptors they mount, when comparatively speaking, less raptors are shot than in autumn. The table shows that while no birds of prey are shot in summer, taxidermists had a number of birds. This is likely the result of hunters keeping birds they shoot in late spring in their home freezers and take them to the taxidermists in summer, when the work load would have decreased. It is common practice for taxidermists to tell hunters to keep the birds in their home freezers, especially if the taxidermnist has more work than he can cope with. The comparative figures of birds of prey shot and stuffed in different seasons are given in Table 7.9. The reason for the difference in the number of birds shot and the percentage which ends up at taxidermists could be that less birds are taken to taxidermists in autumn because most birds are immatures in dull plumage and most involve commoner species such as kestrels, while in spring the birds shot are more likely to be adults in breeding plumage, which are more colourful, hence more sought for collections.

Table 7.9
Birds taken to taxidermists per season

	raptors shot	taken to taxidermists
Autumn	57.0	33.3
Spring	40.7	47.1
Winter	2.2	14.6
Summer	0.0	5.1

Source: Bags and taxidermists records

The reliability of the data being used to support the information in this chapter can be seen from data summarised in Table 7.11. The figures given relate to seven taxidermists, of which Taxidermist B used to stuff birds between 1976-1982 and Taxidermist C mounted birds between 1983-1986, that is, before the enactment of new hunting regulations in 1994. Most of the extrapolations used are based on the data from these two taxidermists as well as the bag records (Table 7A.5 in the appendix). The data for the other taxidermists (D, E, F, G and H) in Table 7.A1-24 in the appendix) was released by the police following raids at these taxidermists' premises.

Table 7.10
Birds processed by seven taxidermists

Locality Taxidermist	Tarxien B	%	Balzan C	%	Kirkop D	%	Luqa E	%	B'Kara F	%	Tarxien G	%	Mtarfa H	%	Mean total	Mean %
Duck	38	2	40	2	92	5	0	0	2	1	0	0	6	20	178	3
Quail, Turtle Dove	60	2	32	2	35	2	3	4	10	3	1	5	1	3	142	2
Thrush,starling,lark	141	6	87	4	56	3	0	0	20	7	0	0	1	3	305	4
Woodcock,snipe,plover	142	6	121	6	32	2	0	0	12	4	0	0	0	0	307	4
Other waders	207	8	138	7	168	9	1	1	32	11	5	24	5	17	556	8
Rails, Crakes, Coot	62	2	56	3	26	1	0	0	5	2	1	5	1	3	151	2
Colourful birds	562	22	484	24	254	13	12	16	84	29	2	10	5	17	1,403	20
Herons	315	12	200	10	178	9	13	17	24	8	4	19	5	17	739	11
Seabirds	199	8	208	10	117	6	4	5	8	3	1	5	1	3	538	8
Raptors	559	22	487	24	770	39	34	45	58	20	6	29	5	17	1,919	28
Owls	109	4	97	5	177	9	1	1	5	2	1	5	0	0	390	6
Small birds	127	5	102	5	66	3	8	11	26	9	0	0	0	0	329	5
TOTAL	2,521	100	2,052	100	1,971	100	76	100	286	100	21	100	30	100	6,957	100
Protected birds	2,140	85	1,772	86	1,756	89	73	96	242	85	20	95	22	73	6,025	87
Game birds	381	15	280	14	215	11	3	4	44	15	1	5	8	27	932	13
Total	2,521	100	2,052	100	1,971	100	76	100	286	100	21	100	30	100	6,957	100

Source: Taxidermists B and C records and data released by Malta Police

Taxidermist D was raided in May 1994 while Taxidermist H was apprehended in late 1995. In spite of the fact that the data for the first two taxidermists and the last five are separated by at least eight years, and that the data for Taxidermists B and C are more comprehensive as they comprise the data of a ten year period while data for the other taxidermists involve the birds found on one particular day, the data is strikingly similar. This leads one to conclude that very little changed in spite of the new regulations and their enforcement. Indeed, as the figures show, there is an increase in the number of protected birds handled by taxidermists. To cite a few examples, while the mean number of birds of prey handled by Taxidermists B and C amounted to 27.4 per cent of the total number of birds they handled, the mean number of birds of prey handled by the five taxidermists raided by the police in and after 1994 was 33 per cent. The mean number of herons handled by Taxidermists B and C was 11.1 per cent while the mean of the other five taxidermists was 14.05 per cent. The overall ratio of protected to unprotected birds handled by Taxidermists B and C was 85.65 per cent while 87.6 per cent of the birds handled by the other five taxidermists were protected. The pie charts in Figure 7.25 to Figure 7.31 showing the composition of birds handled by the seven taxidermists illustrate this argument more clearly. As Figure 7.32 shows, only just over 13 per cent of the birds handled by taxidermists are game birds. In the pie charts, waders means all species of excluding woodcock and snipe; game includes turtle dove, quail, woodcock and snipe while colourful birds includes alpine swift, nightjar, rock thrush, blue rock thrush, shrikes, wryneck, hoopoe, roller, bee eater, cuckoo, kingfisher, golden oriole.

Figure 7.25
Birds handled by Taxidermist B

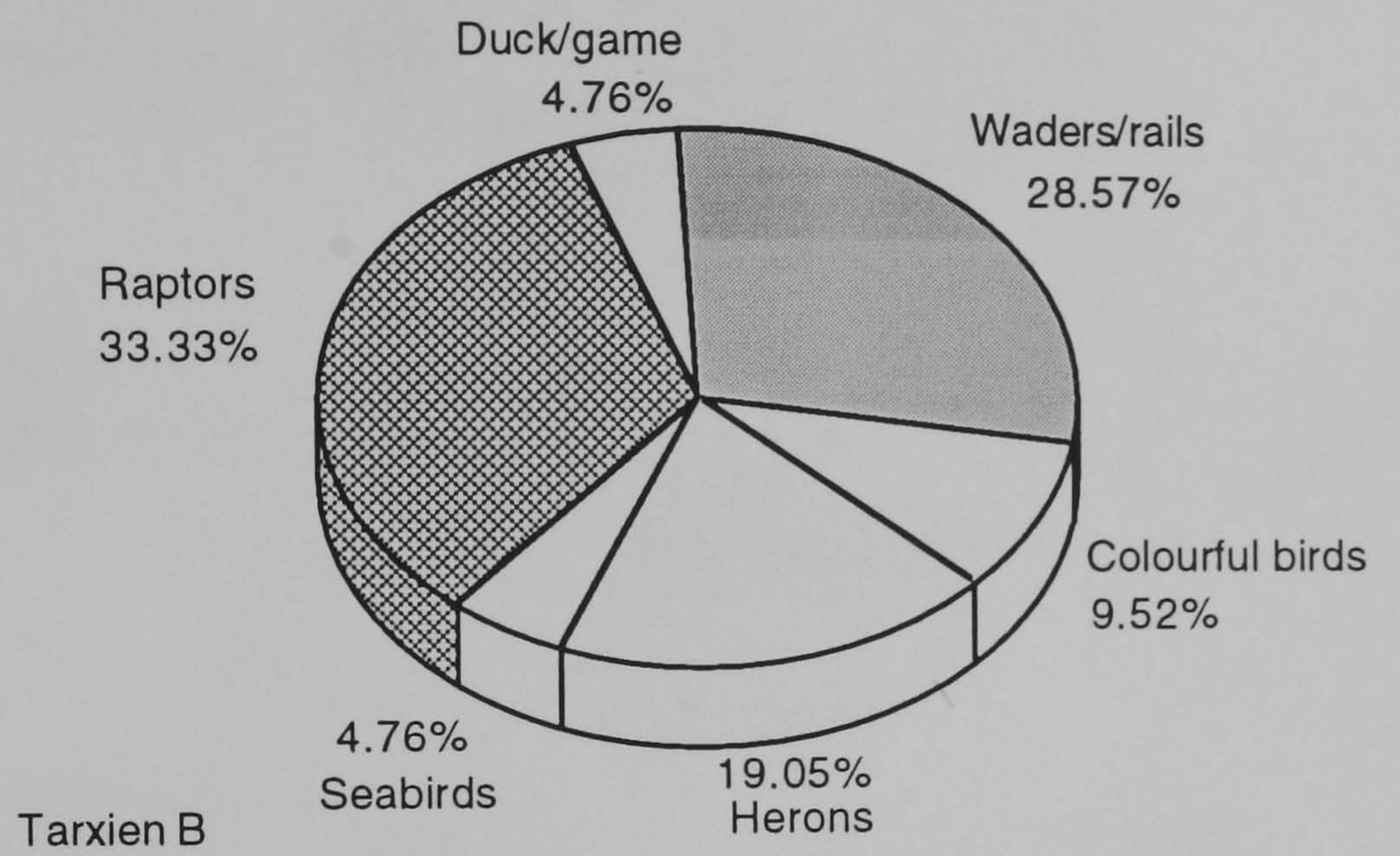


Figure 7.26
Birds handled by Taxidermist C

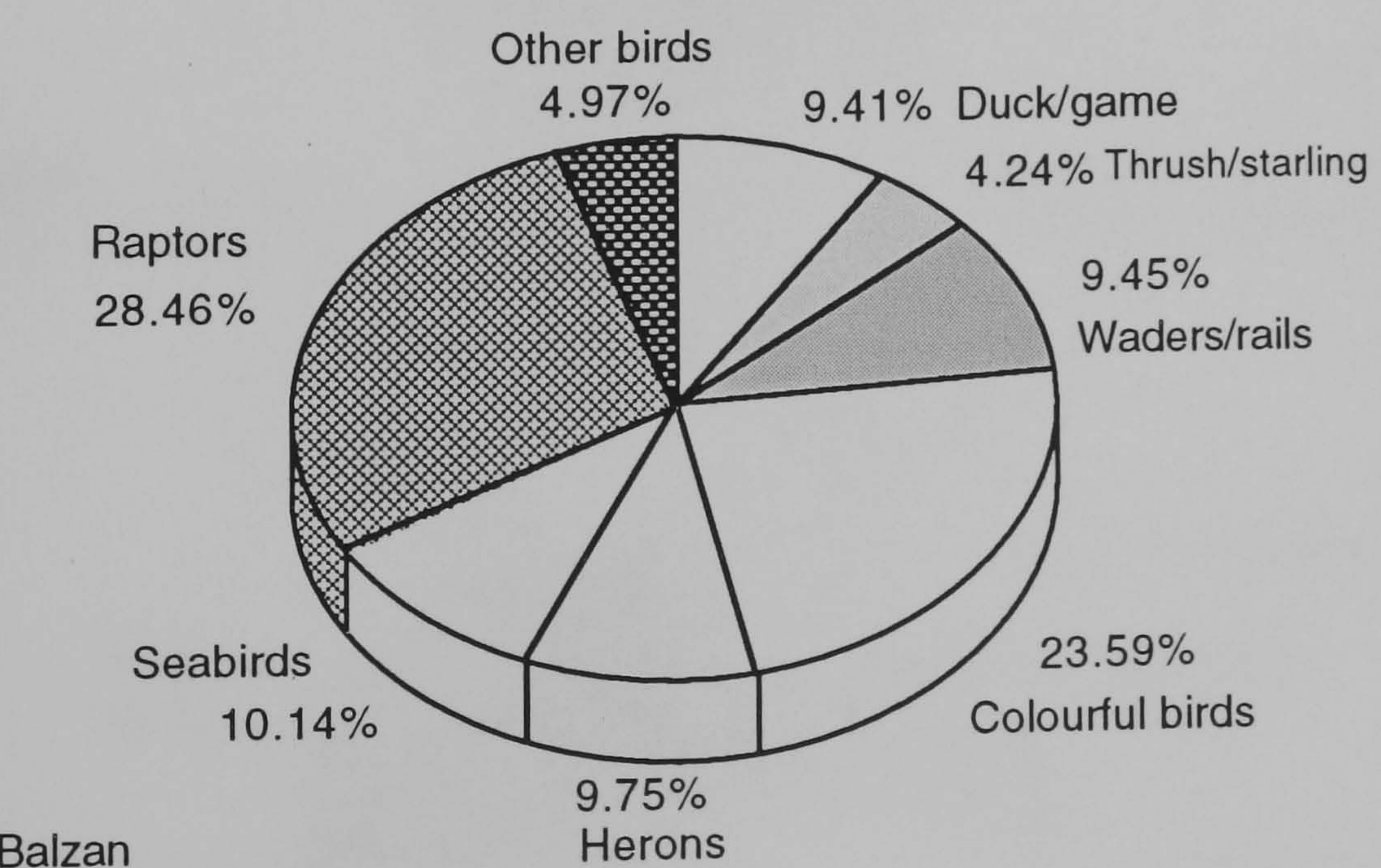


Figure 7.27
Birds handled by Taxidermist D

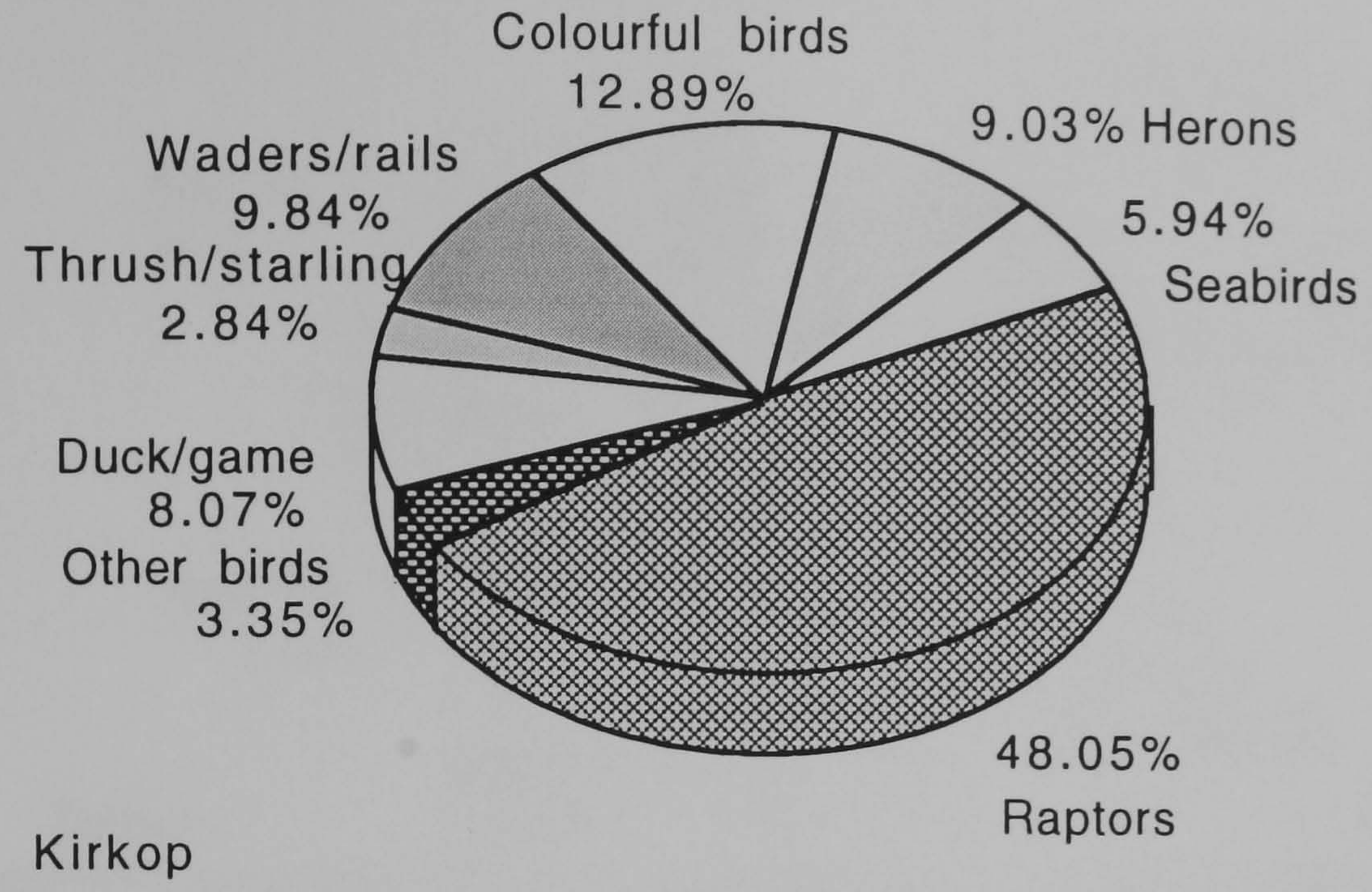


Figure 7.28
Birds handled by Taxidermist E

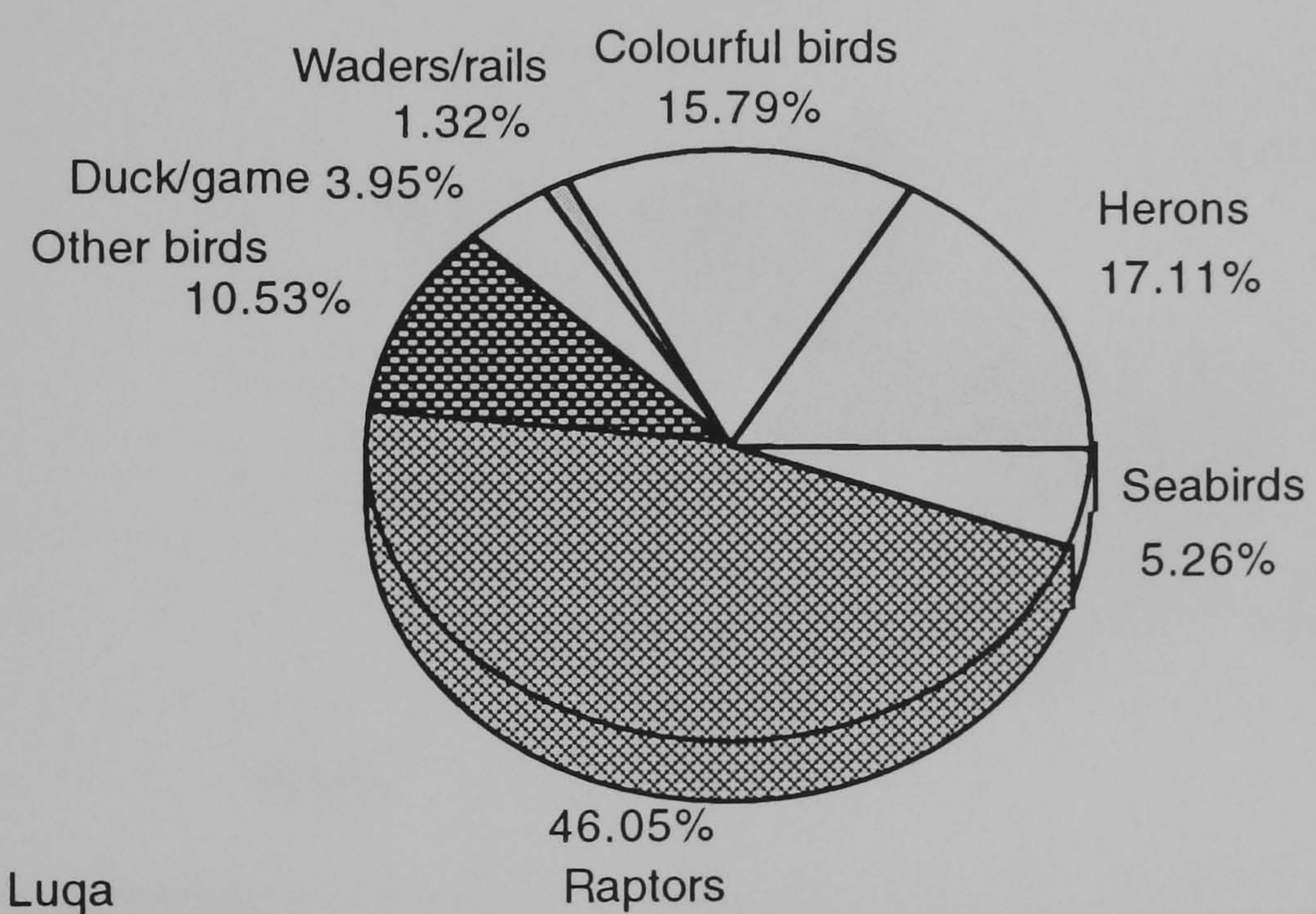


Figure 7.29
Birds handled by Taxidermist F

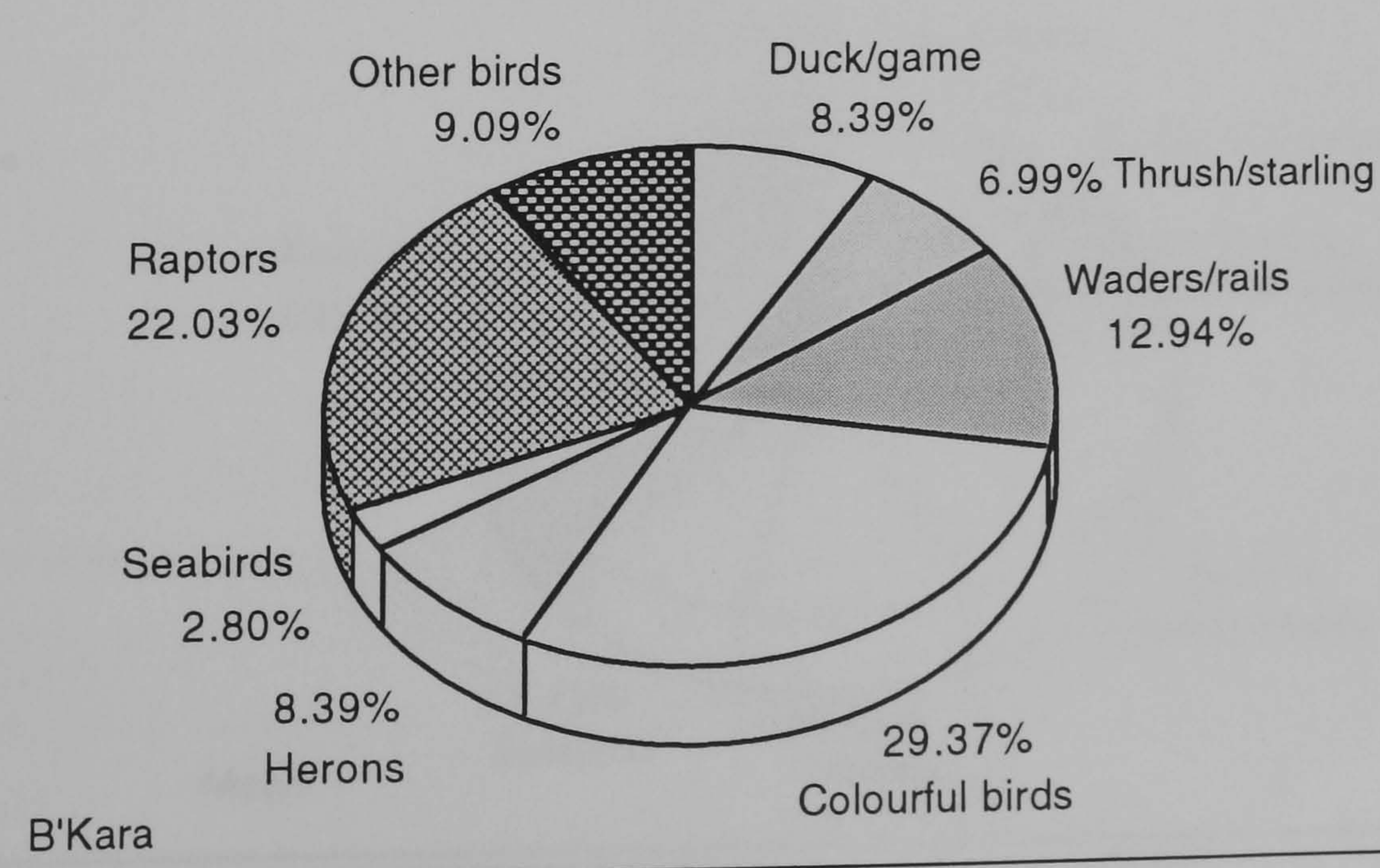


Figure 7.30
Birds handled by Taxidermist G

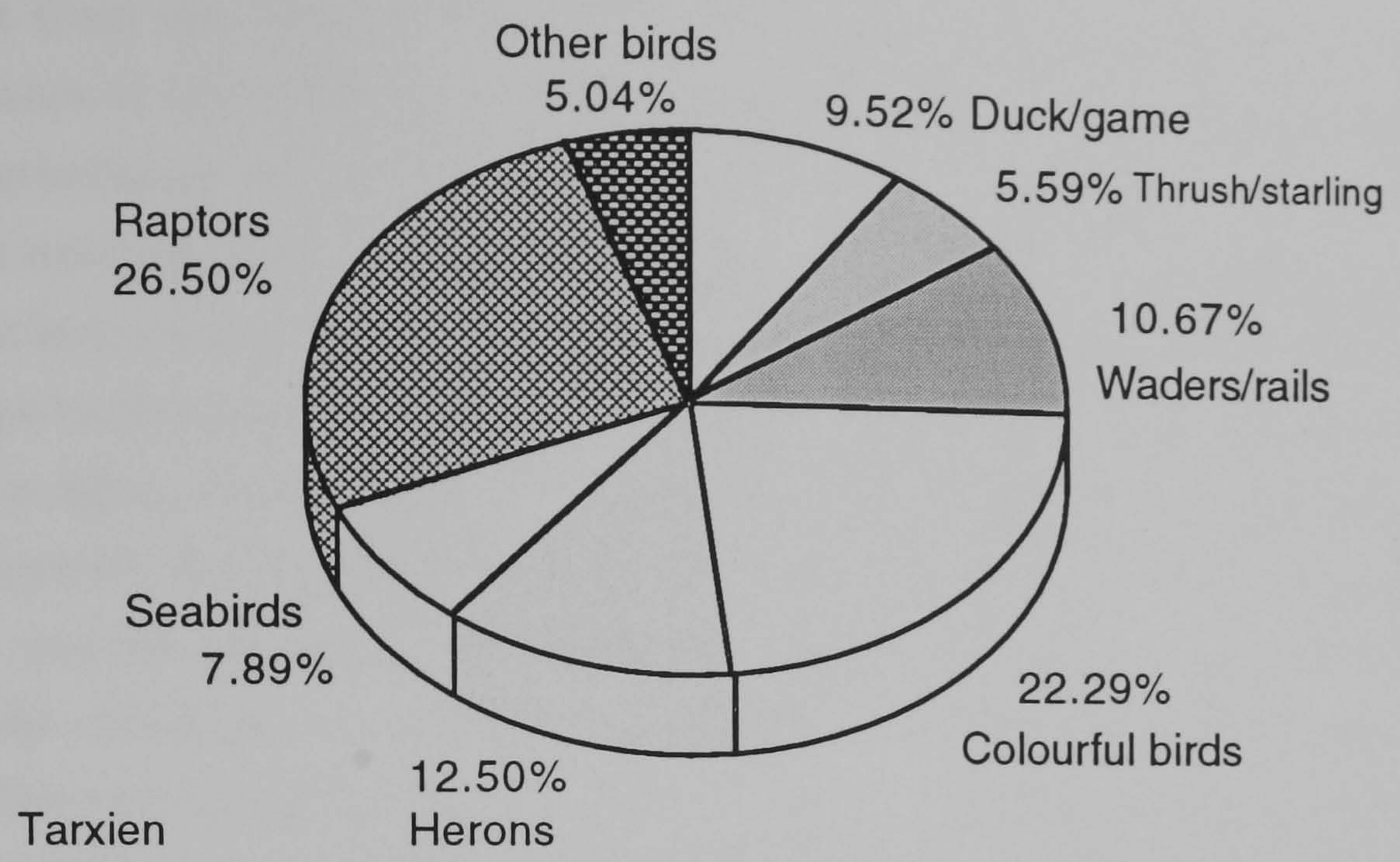


Figure 7.31
Birds handled by Taxidermist H

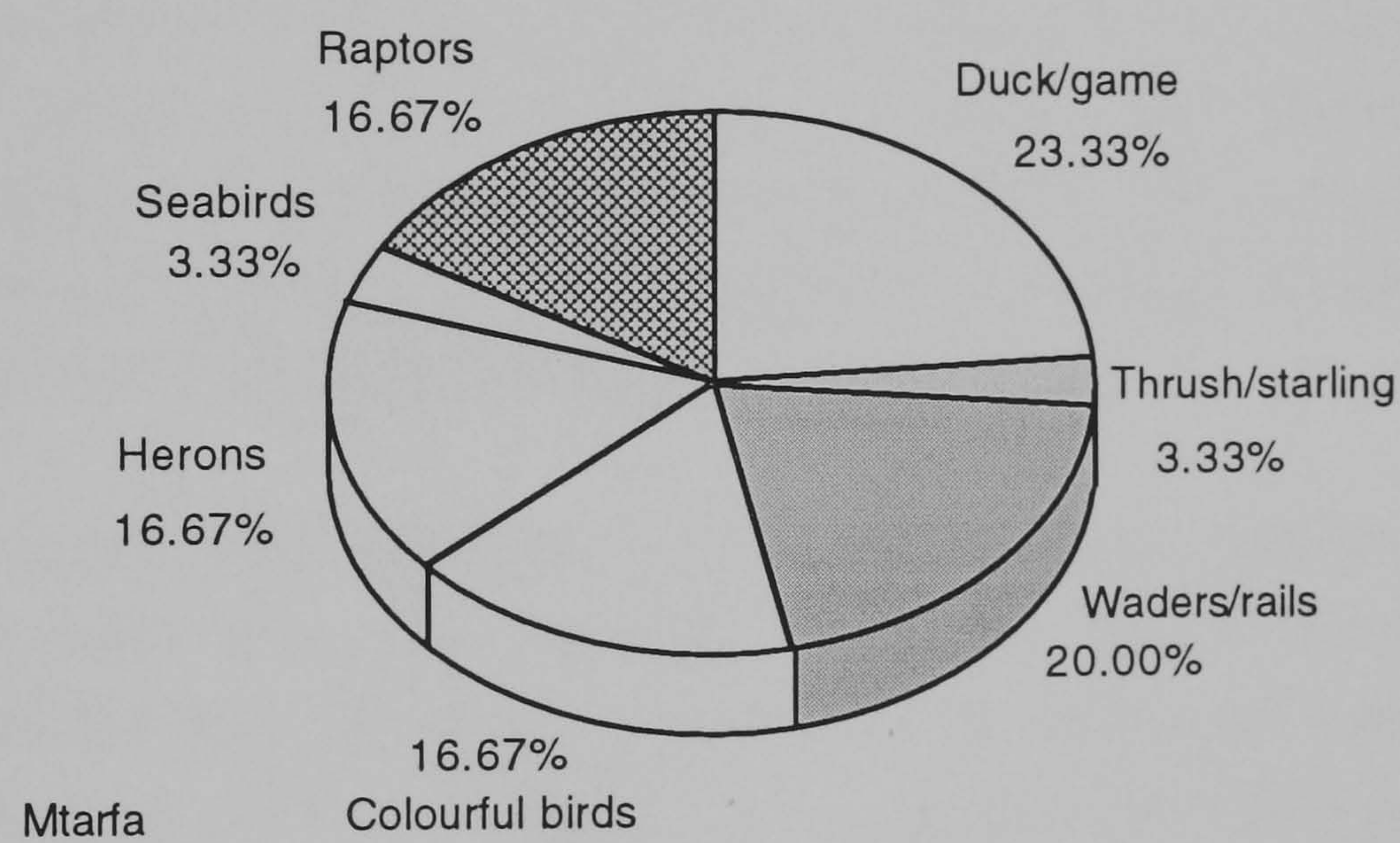
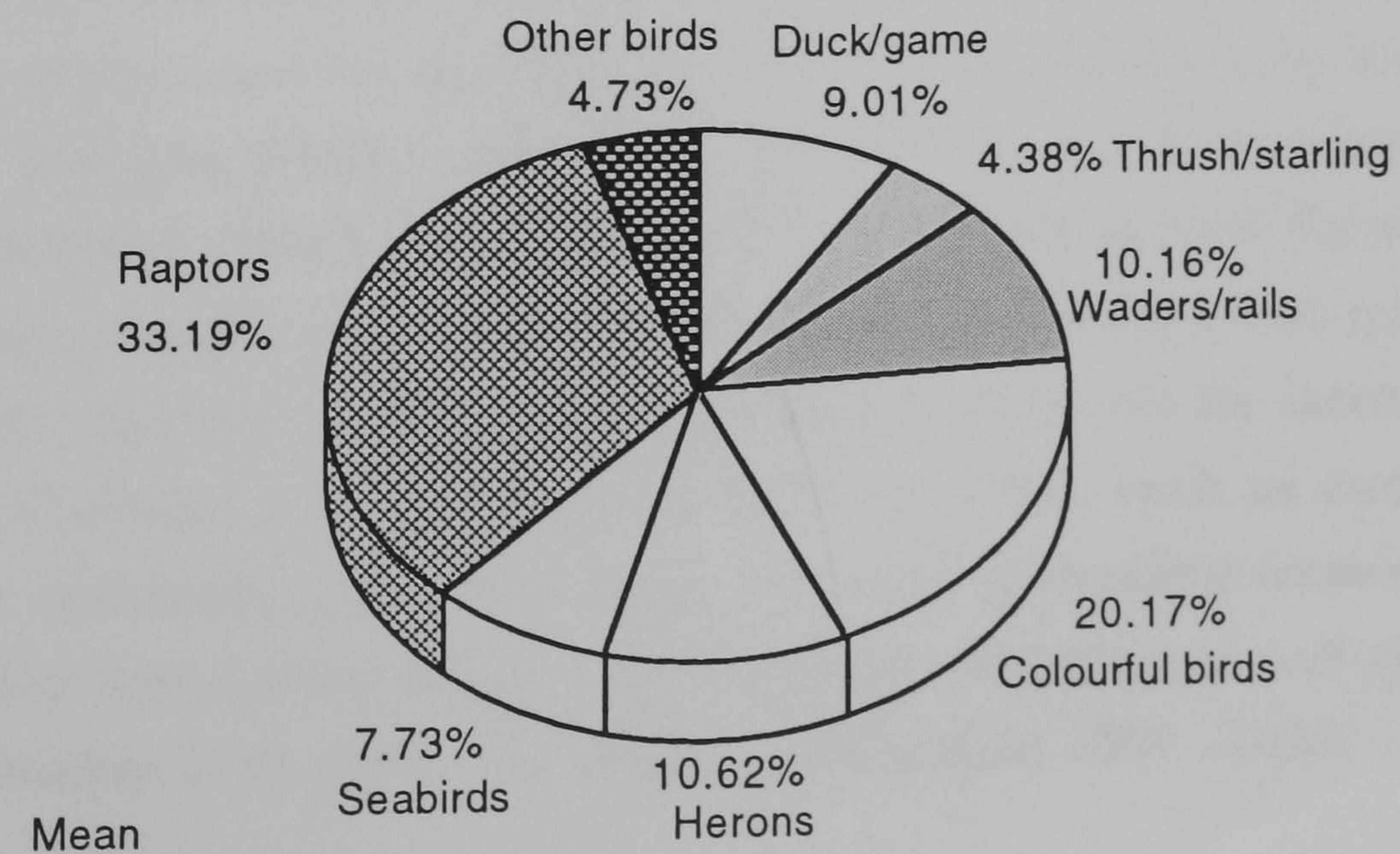


Figure 7.32
Mean number of birds handled by all taxidermists (B to H)



Apart from the direct effect of hunting and trapping, these activities cause disturbance to breeding species, irrespective whether they are game birds or not. The disturbance of species is brought about firstly by the large number of hunters moving about in the countryside. The Maltese countryside is relatively undisturbed, except during the weekends and on public holidays. Maltese people like to go to the countryside mostly on Sunday afternoons and on public holidays, and then again, few are those who wander off long distances beyond where their car is parked. Hunters however, visit the countryside regularly, some go to hunt twice a day. In the countryside, hunters roam randomly in an attempt to flush any birds which may be resting on the ground and throw stones in trees to flush birds. The trampling by hunters as well as by their dogs may disturb breeding species. Species such as quail, which is hunted, is practically prevented from breeding. Other species such as the short-toed lark, which besides being trapped illegally by some trappers, is prone to disturbance from hunting dogs in search of quarry. Fledglings are often taken when nests are located. The effects on nests of ground dwelling species and on species which build nests in low vegetation such as fan-tailed warbler, corn bunting, spectacled warbler and sardinian warbler is hard to assess, but is nevertheless another impact of hunting on breeding bird populations. However, direct persecution gets most attention.

Sultana and Gauci (1982) noted that "almost all the larger breeding species (i.e. peregrine, kestrel, rock dove, barn owl, turtle dove and woodchat shrike seem to have declined since the mid-nineteenth century whilst the stone curlew has become extinct as a result of persecution. Quails are nowadays prevented from breeding and even the blue rock thrush has been seriously reduced in some localities by the depredations of cage-bird enthusiasts" (Sultana and Gauci 1982 p.24). In the introduction to the birds' section in the *Red Data Book for the Maltese Islands* (Schembri and Sultana 1989) it is noted that "the main factors which cause threat may be summed up as human interference, mainly bird shooting and trapping which is carried out intensively, and disturbance and loss of habitat" (Sultana 1989 p.138). Woodchat shrikes and spotted flycatchers are very scare but probably annual breeders and certain species like quail, turtle dove, chaffinch and serin might breed regularly were it not for intense human interference (Sultana and Gauci 1992). Other species, such as cuckoo, little ringed plover and tawny pipit, have been recorded as breeding occasionally and would probably breed more often were it not for disturbance and persecution (Gauci and Dunlop 1992-1994, *The Malta Independent* 1995, Galea and Coleiro 1992-94).

Yellow Legged Gull

The yellow legged gull was a common breeding bird but its numbers have declined sharply in recent years, mostly due to shooting (Sultana 1989). This gull breeds mainly on inaccessible cliffs and on Filfla. A number of young are taken from the nest, mostly by fishermen who climb down sea cliffs for fishing purposes. But the taking of individual chicks from the nests is not a determining factor in the decline in population as the practice of taking chicks is not widespread. This decrease is more likely be due to increased hunting from seacraft, which is also one of the reasons blamed for the decline in shearwaters. Decline in number of breeding gulls was noted at Ta' Cenc Cliffs, Gozo where 80-100 pairs were estimated to breed up to the early 1970s (Sultana *et al* 1975). By 1976 only some 50 adults were counted in April-May (Sultana and Gauci 1982), while only seven pairs were found occupying the site in 1987 (Borg and Cachia Zammit 1988). Educating hunters and enforcing the law effectively all year round would result in an increase in the population of this species, more so now that a number of fish farms exist in the vicinity of the birds' breeding sites.

Cory's Shearwater

Cory's shearwaters breed in colonies in suitable sea cliffs on Malta, Gozo and Filfla. Recent studies on breeding status of this bird show a decline in the breeding population. Shearwaters come to the nest at night and spend most of the day at sea. While disturbance of nests is a factor which may lead to a decrease in population, the shooting of these birds at sea is more likely to have a more immediate and drastic effect. Adult shearwaters have few natural predators and breed when they are at least three years old. They lay only one egg and due to the long incubation and nestling period, they are not able to raise more than one offspring annually.

The islet of Filfla is the most studied seabird area in the Maltese Island. Bird ringers from the Malta Ornithological Society have been carrying out regular ringing sessions there every summer since 1968. The breeding population of cory's shearwaters on Filfla was estimated to be "at least 200 pairs" (Sultana and Gauci 1982 p.32). Recent visits (to Filfla) revealed that a decline in numbers of shearwaters had taken place. In mid-August 1990, extensive research found only thirteen nests occupied by young birds. Borg and Sultana (1990) concluded that "the present population numbered less than 100 breeding pairs". The authors noted that apart from changes in habitat due to natural elements such as wave action and heavy storms, shooting from sea craft was one of the determining factors for the decrease.

In a four year study (1983-86) on 16 localities where cory's shearwaters breed, Cachia Zammit and Borg (1986) concluded that the mean successful fledging rate was 72 per cent. In the cases of failure, it was due to the disappearance of one of the adults. In the study, 71 per cent of the birds returned to the same site as a pair. One bird was found nesting in the same burrow for 11 consecutive years and three birds for at least six years while a pair is known to have stayed together for six years, the mean survival of adult shearwaters was established at 79.4 per cent, which is very low for a seabird. A four year study carried out in the Aegean established the survival rate for first year birds at 87 per cent, second year birds at 85 per cent and 93 per cent survival rate for third year birds, giving an average of survival of about 88.3 per cent, approximately nine per cent higher than the survival rate for the Maltese Islands. Adult survival has been studied in other shearwater species, all of which gave a survival rate of 89 per cent, while in Malta adult survival rate is 79.4 per cent.

Barn Owl

In 1975, the barn owl was listed as a very scarce breeding resident and it was estimated that about ten pairs were breeding (Sultana *et al* 1975). In 1975, a pair was shot after the female had laid six eggs in a crevice. Other authors noted that a few years previously, a breeding pair was shot and their newly fledged were taken to be stuffed (Bannerman and Vella Gaffiero 1976 p.254-5). In 1976 it was only recorded at four different sites during the breeding season (Sultana and Gauci 1977-78) while it was recorded from only two sites in 1978 (Cachia Zammit and Attard Montalto 1980). In 1982, the barn owl was noted from at least one locality (Sultana and Gauci 1982). In 1988 the last known breeding pair of barn owls was shot and five young owls were found dead at the nest site (Fenech and Balzan 1988). A few barn owls are recorded (mainly shot) each autumn. These birds are likely to be birds dispersing from nearby Sicily and would establish themselves if left unmolested, but the birds surviving winter are unlikely to survive the spring shooting season.

Short-eared owl

Odd pairs of short-eared owls used to breed in Malta in the 19th century. Antonio Schembri, considered as the father of Maltese ornithology, wrote that a few pairs breed near Qrendi and in some localities in Gozo (Schembri 1843). A few years later, Charles A. Wright, who wrote extensively about Malta's bird life states that the short-eared owl "has been known to breed here" (Wright 1864 p.49). Three nests were found during this century: in May 1906 a brood of five was found in the vicinity of Siggiewi and a nest was found at Wied Znuber in

May 1909 (Despott 1917). The most recent breeding attempt was in 1983, when a nest with five eggs was found at Comino in March. The nest was destroyed a few days later. During the same period in which the nest was under observation only one owl was seen and a short-eared owl was shot from a dinghy just off Comino in mid-March (Sultana and Gauci 1984-85). Short-eared owls are scarce passage migrants in spring and autumn while some try to winter here. Some of the wintering ones may be tempted to breed if persecution was not so intense.

Moorhen

The moorhen was first recorded breeding in 1984 (Doublet and Portelli 1986-87). One of the constraints this species faces is lack of suitable habitats since it breeds in freshwater habitats, which are scarce. The few areas which exist are heavily visited by hunters. A few pairs are recorded breeding every year at a reservoir in Ghajnsielem, Gozo, where the farmer keeps people out of his land and thus there is very little human disturbance. Three to four pairs of moorhens bred there in 1988, just a year after the reservoir was dug (Sultana *et al* 1988). At least two pairs bred at a new reserve at Xemxija in 1995 (*The Malta Independen*t 1995).

Black-eared wheatear

The only breeding record of black eared wheatear was noted in July 1982. The male was noted feeding three fledged young while the female was found dead. The corpse was at least five days old when found. On further examination, the bird was found to have been shot (Sultana and Gauci 1981-3a). The black eared wheatear is a scarce spring migrant which is occasionally recorded in June. More individual pairs may be likely to breed more regularly were it not for disturbance.

Stone curlew

The stone curlew was regarded as a game bird up to until 1993, when it became a protected species. Schembri stated that the stone curlew was a resident bird and breed in the areas least frequented by humans around Mellieha (Schembri 1843). Wright stated that it "may almost be considered resident" and that it bred "on the barren rocks in the uncultivated parts of the Island, particularly about Marfa" (Wright 1864 p.140). While a mere 50 years later Despott wrote: "it appears that the few individuals which arrive in the spring, if fortunate enough to escape the guns of our sportsmen, remain here to breed and do not depart before the middle of summer" (Despott 1917 p.504). In another publication, the author states that he saw a bird in down feathers in

June 1909, which was "taken" in the limits of Ghar Hasan in 1909, while two eggs were taken to him in June 1911 from a locality in the vicinity of Siggiewi (Despott 1916 p.18). There have been no breeding records since.

Jackdaw

One of the birds Malta has lost due to shooting is the jackdaw. Once so plentiful that the Knights of the Order of St John issued bans proclaiming a bounty to be paid on every egg, head and pair of legs handed in to the Grand Falconer (AOM Libr 429 Vol 9 f.29, 20 May 1785, AOM Libr 355 June 1773 f.10), it is now extinct from our Islands. Schembri (1845), who was then secretary to the agrarian society *Società Economico Agraria del gruppo di Malta* suggested that those handing in jackdaws should be reimbursed with the cost of a shot for each bird they hand in and a prize be also given to those who hand in nests, eggs or young bird. A mere 70 years later, Despott wrote: "It is said that in other countries few are the places where the jackdaw cannot find a home. Well, it must be said that in Malta few are the places where it can find one, such is the persecution the poor bird suffers all the year round, and during the breeding season especially.... If speedy protection is not afforded to this bird I am afraid that its extinction as a breeding species in Malta will be a question of the very near future" (Despott 1916 p.14). Despott's prediction materialised in 1945, when it was exterminated from Malta. A few pairs survived in Gozo until 1956. The last surviving bird was shot by a Maltese hunter at id-Dabrani, Gozo (Anon 1963). There have been no records since then.

Peregrine falcon

Like all other birds of prey, the peregrine is heavily persecuted by shooters. Formerly a breeding bird which bred along a number of sea cliffs, the peregrine cannot be regarded as a breeding bird any longer. Single birds are observed in winter and early spring practically each year. But most are shot inland when they wander in search of prey. Those which attempt to breed are often shot from sea craft with which hunters venture close to the nesting sites. In 1982, for instance, Sultana and Gauci noted that the "peregrines did not breed at Ta' Cenc — both birds were shot from a sea craft from below the cliffs in February" (Sultana and Gauci 1982 p.21).

Kestrel

In 1994, a pair of kestrels bred for the first time in 22 years on Comino (*The Malta Independent* 1994). The last confirmed breeding record was in 1972, when a pair and three young were seen in Gozo in July (Sultana and Gauci 1982). The kestrel used to be a regular breeding bird at the beginning of this century. Despott states that nests of kestrels, though uncommon, can be found each year (Despott 1916). What was said for the peregrine holds for the kestrel. The few which manage to survive long enough to attempt to breed end up being shot. While the peregrine can manage to breed in cliffs and hunt out at sea, the kestrel has to hunt inland and its chances of surviving are slimmer. A pair of kestrels bred again on Comino in 1995 but the adult birds "disappeared" leaving four eggs in the nest (*The Malta Indpenendent* 1995).

Blue rock thrush

The blue rock thrush is not systematically persecuted by hunters. It is the National bird of Malta and it can be said that most hunters do not shoot this bird. Some however, shoot a specimen or two for their collection. During the police raid at a taxidermist in Kirkop in May 1994, ten blue rock thrushes were found amongst the 2,000 birds found in the freezers. This type of shooting depletes the population as hunters are usually after birds in breeding plumage for their collection. Most often shooters shoot only males in their bright plumage but some tend to prefer to have a pair in their collection and try to shoot a female as well. A number of blue rock thrushes, mainly first year birds which wander inland, are mistakenly shot during the thrush shooting season in autumn.

Although it is not trapped, the young of the blue rock thrush are often taken from the nest to be reared in captivity. Galea and Caruana (1988) noted that such predation takes place even on Comino, which is practically uninhabited, besides being a bird sanctuary. Sultana (1989) states that it has decreased drastically during the past 25 years mainly due to human interference especially nest robbing and disturbance.

House martin and swallow

House martins first recorded breeding in June 1981, just a year after the closed-season was introduced by the hunting laws of 1980. Two nests were built under a balcony opposite the Mosta church. The following year, a pair raised two broods in a nest beneath one of the clocks at Mdina Cathedral. Another pair was found breeding at Filfla in August 1982 (Sultana and Gauci 1981-3b). House martins are shot for fun by many shooters, and were it not for such persecution, it is likely that a few would breed every year. The same can be said for swallows. A pair bred in an old farmhouse at Bidnija in 1995 (*The Sunday Times* 1995). The last breeding record was in 1971 (Sultana *et al.* 1975).

Quail

Quails bred regularly and scattered pairs still bred up to the early 1950s (Roberts 1954). The last confirmed records are in the 1970s when a nest with five newly hatched young was seen at Faqqanija in 1972 (Bannerman and Vella Gaffiero 1976) and another nest with eggs at Xaghra Gozo in June 1976, which was destroyed during harvesting (Sultana and Gauci 1976). A few pairs were recorded breeding in spring 1994 before the hunting season opened on April 10 (*The Malta Independent* 1994). Quail chicks start feeding independently within a few hours of hatching and the young are able to fly freely just after 19 days. Birds breed in early summer and if the early breeders are not killed, it is possible that they may breed again in autumn. It is also known that female and juvenile quails breeding in North Africa cross the Mediterranean in mid-summer and these often breed soon after their arrival, hence augmenting the local breeding population (Cramp 1980).

As bag records indicate, some 9,000 quails are killed in autumn and between 700 and 1,400 are killed during the winter months. As stated earlier, if only as little as ten per cent of the wintering quails would remain to breed, there can be at least between 35 to 70 breeding pairs of quail each spring. There have been no records of quail breeding in autumn yet, but then, they are hardly given any chance to do so. Quail comprises over 1.5 per cent of the bags in September.

Turtle dove

Turtle doves are likely to breed if persecution in spring were to stop. Each year, towards the end of May and in early June, individual birds are observed displaying. Sultana and Gauci noted that "each year, males may be heard crooning and observed indulging in the brief soaring display flight. This activity was more in evidence in 1981, the first year of the introduction of the closed season from 22 May. Pairs were reported attempting to breed at Buskett, Girgenti, Mizieb and Lunzjata valley (Gozo) but successful breeding could not be confirmed. Most of the birds were eventually illegally shot (Sultana and Gauci 1982). In 1954 a pair bred at Lunzjata valley, but the adults were shot and the single nestling stolen (Attard 1964).

Starling

The first confirmed breeding record of starlings was in 1994. Five birds, two adults and three young were seen in Gozo, and two of the young birds were shot on 19 May 1994 (M. Bosios pers. comm.). Another pair bred at Floriana (Galea 1992-94). Other pairs were seen in summer at Comino, Burmarrad and

Ghammieri but breeding could not be confirmed (*The Malta Independent* 3 July 1994 p.68).

Finches

Some finches are likely to breed regularly and some already try to breed in spite of the heavy persecution. Trappers are known to have attempted to catch adult birds with nets over water holes even in summer when it was known that they were breeding. A few linnets breed regularly, mostly in Gozo (Sultana and Gauci 1982). Two pairs of serin bred at Buskett in 1982 and one raised three young (Sultana and Gauci 1981-3c) while greenfinches bred at the Addolorata Cemetry in 1995 (*The Malta Independent* 1995). If finch trapping in spring is stopped and if the laws are enforced, some species of finches may gradually start to breed in a relatively safer environment.

Impact of hunting on flora and fauna

There are some other species which are not exploited for hunting purposes but which are deliberately killed during hunting activity. Weasels are often killed either to be stuffed and placed among collections of stuffed birds or because they are regarded as harmful. In a raid at a taxidermist in Kirkop in May 1994, police found 14 weasels, a bat and a snake apart from close to 2,000 carcasses of birds. In another raid at another taxidermist in B'Kara in October 1995, seven weasels were found. Other animals such as snakes are frequently killed by trappers when snakes attempt to take decoy birds. Hunters may shoot snake as well as bats. Larger species of bats may end up stuffed while the smaller ones are often shot for target practice. Other species which are occasionally shot include hedgehogs, which are sometimes shot by rabbit hunters at night, lizards, skinks and geckos, which are shot either because some are afraid of them, or just for the fun of shooting.

Impact of lead shot

Birds are sometimes shot at while they are sitting, either on the ground or in trees or shrubs. They are also shot when flying in or out of trees. The effects of lead shot hitting trees and other vegetation has not yet been studied in the Maltese Islands and is an area which may merit some research to establish whether there is any negative impacts such as spoilation of fruit and trees due to shooting. Shotgun cartridges used for hunting contain different gauges of lead shot, depending on the species they are intended for. Heavy gauge cartridges containing from less than 100 large lead pellets to a few hundreds for gauge four pellets are used for ducks and large birds. The most commonly used cartridges in hunting are size seven to size ten pellets. Cartridges loaded with 34 grams pellets ranging in size from gauge seve to ten contain up to 800 pellets. Vella (1990) estimated that 200 tons of lead shot is imported every year for hunting purposes. This is roughly equivalent to 7.1 million cartridges each with 34 grams of lead, to which one must add another 2.5 million cartridges which are imported ready made (Fenech 1992). Assuming that 2.5 million cartridges are loaded with 34 grams of shot, this results in another 71,400 kilograms of lead shot — a conservative estimate when considering that imported cartridges are usually heavy loads with 38 to 50 grams of shot.

Since most hunting activity takes place on land, most of this lead shot ends up in fields or on garigue habitats. Lead is a potential soil pollutant. Soil samples collected from areas where shooting takes place had 48.45 ug of lead per gram of soil, over twice the amount of lead found in other areas (Cachia and Taliana 1991). When one considers that the area of the Maltese Islands is 351.5 km^2, of which about 42.5 km^2 are developed, it results that each square metre of unbuilt land receives close to a gram of lead shot each year. A percentage of lead shot gets lodged in crops and produce, from where it may end up ingested, mostly by animals such as cows, sheep and goats which are fed on fodder. No studies have yet been undertaken to see whether there are any negative effects on animals ingesting lead shot. Butchers working at the Civil Abbattoir say that slaughtered cows contain "a handful of lead shot" in their stomachs (Fenech 1992 p.2). A comparative study made by the Swedish Karolinska Institute in 1985, revealed that the Maltese have the highest levels of lead in the blood of the countries surveyed, which were Sweden, Malta, Mexico and Belgium (Bruaux and Svartengren 1985). It is not clear where this lead is originating from. Certainly leaded petrol as well as the use of lead based paint, from which lead may end up in the bread when the scrapped painted wood is used to fire bakers' ovens, may be partly to blame. But the heavy figure of 271 tonnes of lead shot which ends up in the countryside each year, cannot be taken lightly.

LITTER DUE TO HUNTING

Spent plastic cartridges are a form of litter which is evident wherever one walks in the countryside. Some ten million cartridges are used in Malta each year, of which it is estimated that about one million are used for clay pigeon shooting (Fenech 1992). Very few hunters load their own cartridges, and those who do, either buy new shells or re use plastic shells normally bought in bulk from clay pigeon shooting ranges. Thus even a percentage of cartridges used at shooting ranges eventually ends up in the countryside. If one were to ignore completely the cartridges used on shooting ranges, and assuming that only nine million cartridges are used for hunting each year, and again considering the size of the Islands less the built up and developed areas where hunting is not permitted, it results that on average, each square metre of unbuilt land ends up with over 29 spent cartridges. Such concentration cannot be seen in each square meter of the countryside, as most shooting takes place from fixed hides. The concentration of the number of cartridges around such hides at the end of the shooting season is bound to impress people, even though hunters may at times gather most of the cartridges and burn them to remove the mass of accumulated litter.

OTHER SIDE EFFECTS

Shooting has other side effects: the sound of shooting close to inhabited areas is a source of inconvenience to people living there. Raffin (1994) noted that showers of lead shot raining down give a sense of insecurity, even though the risk of injury from it are very small. Other aspects, which will be dealt with in the chapter dealing with economic aspects include deaths and injuries resulting from hunting, damage to private property due to shooting, trampling of crops and produce, and damage to overhead telephone cables.

SHOOTING AND TRAPPING HIDES

Shooting and trapping hides at the turn of the century and up to the early 1970s were semicircular structures made of rubble stone, and stood about one meter high. Trappers' hides had a vertical slit in the front to accomodate the ropes which triggered the nets. The slit also gave the trapper complete vision on to the netting area. Many of these hides are now much higher and larger. Some hunters are building high stone structures in plantations of fast growing trees such as eucalyptus and acacia trees which are specifically planted to attract birds for shooting purposes. Shooting hides from other material such as scaffolding material are becoming increasingly common.

Trapping sites often have two hides so that the trapper stays in the best one depending on the wind and weather conditions. Today, the trappers' hides are usually roofed with corrugated iron or other material. Apart from the hide, trappers often build a small room just behind their hide. A technical report which forms part of the Structure Plan for the Maltese Islands says that shooting and trapping hides are becoming increasingly intrusive: "Some have even been built of concrete. Apart from the intrinsic ugliness of these modern *duriet*, they are intrusive on the normal rural landscape. Additionally, it is common for users of these *duriet* to take their vehicles directly to the structure with the result that many unofficial pathways have emerged leading from existing roads to the hides. This further intrudes upon the landscape as well as damages natural habitats. The hides used by trappers are worse in that these incorporate a large area in front of the hide on which the nets are spread. Trappers keep these areas clear of vegetation by weeding, and in some cases by using herbicides. These practices are already endangering some wild species (For example, Sicilian iris and Maltese star-thistle). Additionally, the use of birdseed as a lure is causing the introduction of alien weed species into the Maltese countryside, to the detriment of the native flora" (Malta Structure Plan 1991 p.69).

Measurments of 350 trapping sites at Dingli, Ghajn Tuffieha, Delimara, Hal-Far, Mellieha, Ghar Lapsi, Ta' Cenc and Gharb indicate that the area occupied by the nets and one of the hides in a trapping site is about 100 square metres. But effectively a trapping site may occupy over 500 square metres as decoy birds in small cages are placed around the nets and the most distant ones are often five to ten metres away from the perimeter of the nets. Trapping sites are often constructed on archaeological sites, and megaliths and boulders are often shifted either to form part of the hide or are moved out of the way if they are in the trapping area. Cases in point may be seen at Hal-Far, Dingli, Clapham junction and at Ta' Cenc, Gozo. Apart from the effects mentioned in the Structure Plan report, trapping sites in garigue habitat are often constructed, a shallow boundary wall is built and the area is filled with soil and rubble until the surface on which the nets are laid is level, this activity obliterates the indigenous flora.

The proliferation of trapping sites has a knock on effect. Some areas, particularly those around the coast, where the density of trapping sites is at its highest, become no go areas during the trapping season for anyone except the trappers, even though the land is public. Delimara in the south, is a classic example. Most land there is government owned, yet it has one of the highest concentration of trapping sites on the islands. Trappers just build their trapping sites and people are prevented for walking even along public footpaths as decoy birds in cages are strewn along the walls of the paths. Trapping takes place between October and the end of January, which is the time most people go to the countryside. Trapping also takes place in March, which is also ideal for walks in the countryside.

The map in Figure 7.33 show the number of trapping sites in Gozo. As in Figure 7.34, the trapping sites were counted from a aerial survey of the Islands in 1989 commissioned by the Planning Division of the Works Department to enable it to draw survey sheets for the islands. The grid used is the same one used in the aerial survey.

The maps, which are the first study of their kind, clearly show that the coastal

Figure 7.33

Map of Gozo showing number of trapping sites

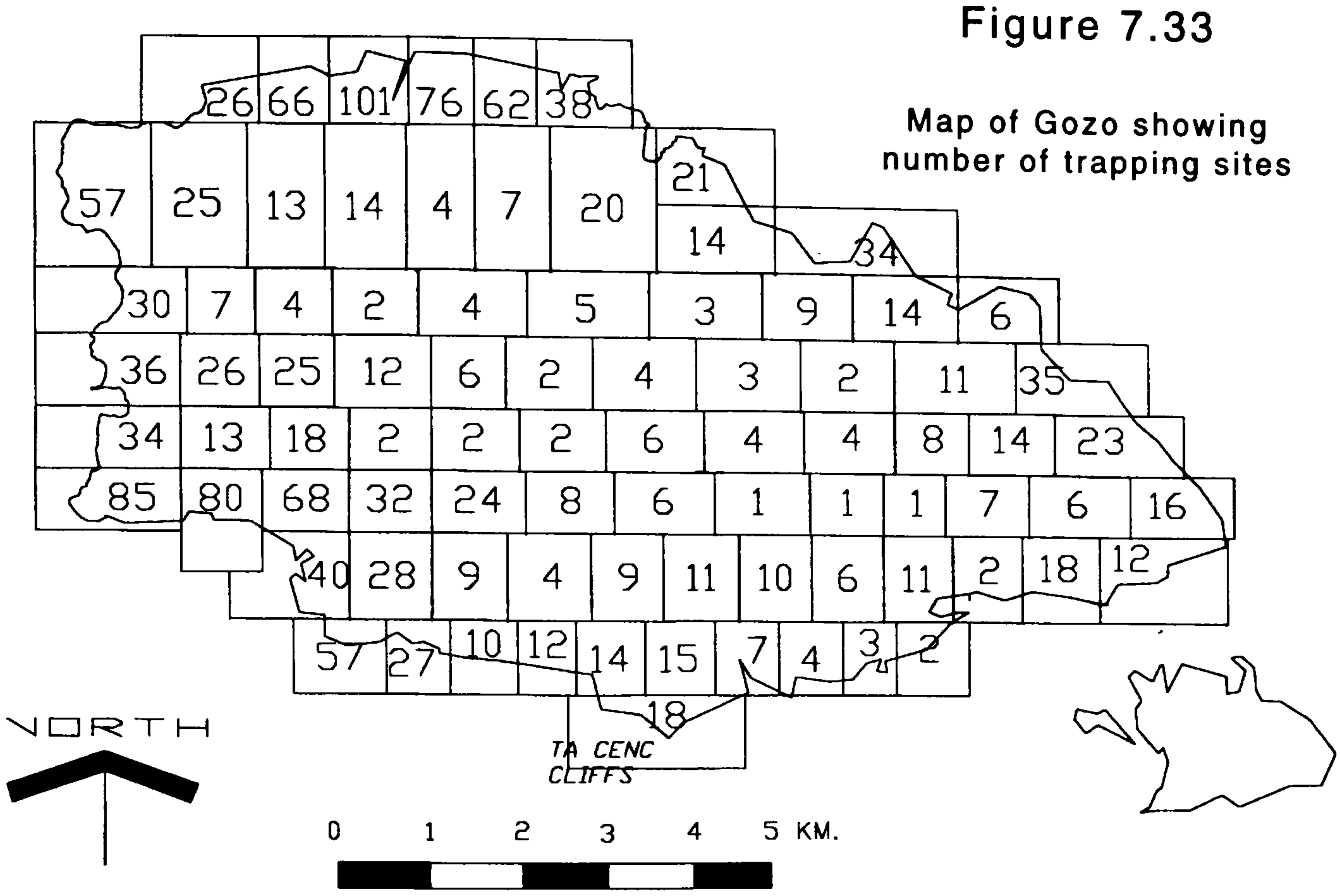
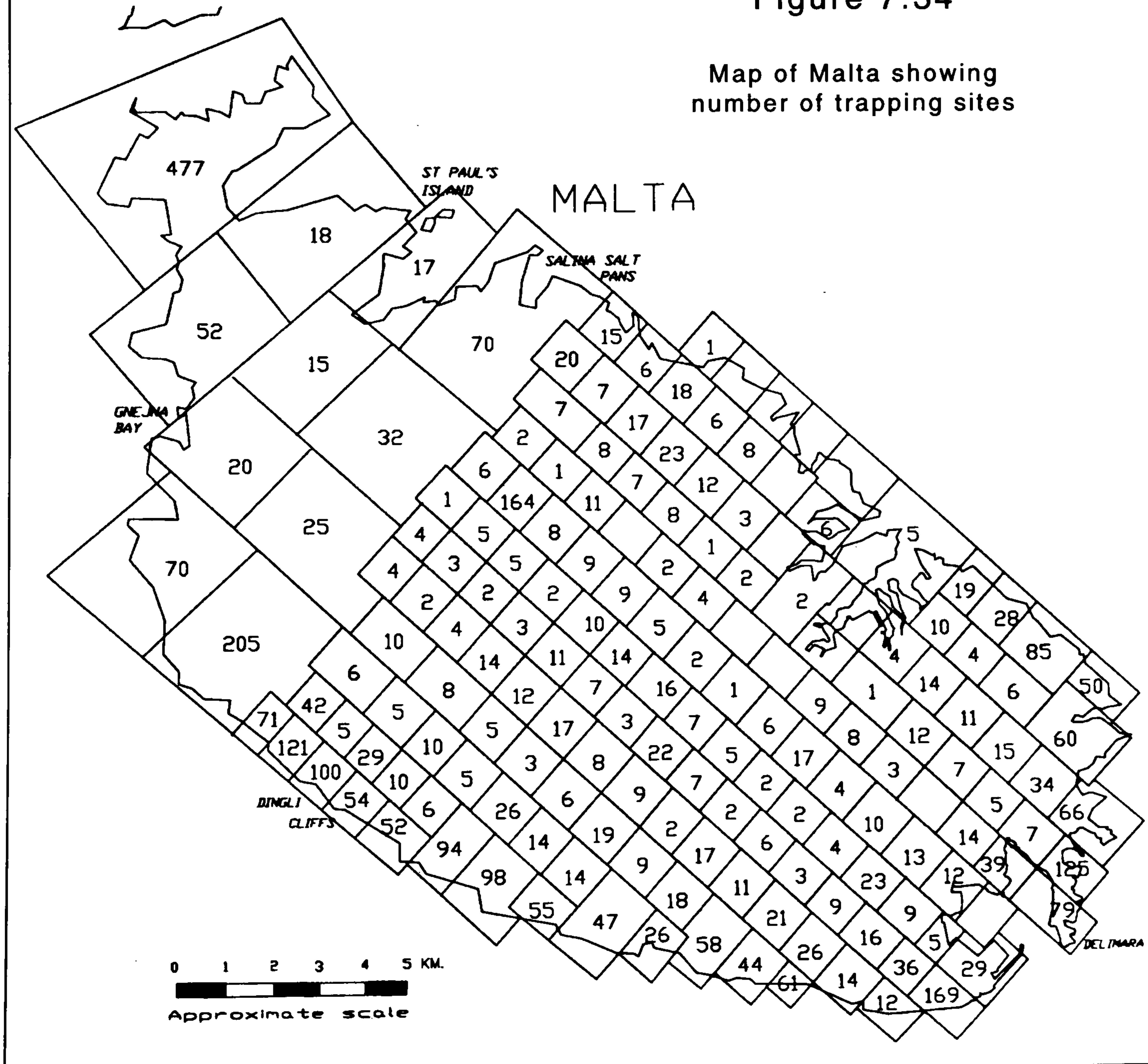


Figure 7.34

Map of Malta showing number of trapping sites



regions, especially those on the south, west and north on both Malta and Gozo have the highest density of trapping sites. Migratory birds are more often first seen close to the coast and are easier to catch or shoot since they are often tired and attempt to land on the first suitable grounds. As Table 7.11 shows, the southern region in Malta and Gozo have the highest densities of trapping sites, with close to 30 trapping sites per km^2. The Harbour and Central regions have the lowest density of trapping sites. This is not surprising, considering that these areas are heavily urbanised. Still, the few open spaces within these regions contain a substantial number of trapping sites. The Central region was the only one in which there was a decrease in the number of trapping sites. This can be explained as development during the review period was more intensive in this region.

Table 7.11
Number of trappers and trapping sites per region

Region	Area of region km2	Number of trapping sites in 1990	Trapping sites/km2 in 1990	Number of trapping sites in 1995	Trapping sites/km2 in 1995	% change in number of trapping sites
Harbour	13.7	59	4.3	65	4.7	9.2
Central	52.6	414	7.9	317	6.0	-30.6
Western	71	1,172	16.5	1,368	19.3	14.3
Northern	55.2	643	11.6	759	13.8	15.3
Southern	53.2	1,343	25.2	1,576	29.6	14.8
Gozo	67.1	1,658	24.7	1,939	28.9	14.5
Total	313	5,289		6,024		37.5
average	52.1	881.5	16.9	1,004.0	19.3	6.3

Source: trapping sites counted from aerial surveys, Planning Authority.

The impact of trapping on bird populations is not easy to quantify since most trappers do not keep a record of what they catch and those few who do are unwilling to publish them. If one were to judge from the number of birds on the Sunday market and in pet shops, before and during each migration season, one is bound to get an idea of the quantities of birds which are trapped. As stated in the section dealing with the effect on local breeding species, when finch trapping was forbidden in spring of 1994 and 1995, a few pairs of finches were noted to breed immediately. The catching of finches in spring has a direct effect on populations since trappers catch potential breeding birds.

Finch mortality

With a consierable number of finches being trapped season after season, one is bound to wonder whether the demand for birds can ever be satisfied. A look at the mortality rate of finches in captivity provides the answer. A five year study carried out by 16 bird enthusiasts, ten of whom were Maltese trappers, showed that only 47 per cent of the birds were still alive during the fifth year (Gauci, A. 1991a and b). Of the 475 birds trapped in Malta, only 100 (or 21 per cent) survived. The study involved 702 birds, 475 of them from Malta, and 227 from the UK, Wales and Belgium (Three, one and two trappers respectively). The results are summarised in Table 7.1. Some species such as goldfinch, linnet and serin had a very high mortality rate. More hardy species such as chaffinch, had a high survival rate and explains why the prices of these finches are always low compared to others.

Table 7.12
Mortality rate of finches in captivity

Species	Total in captivity	Survived in captivity	% survival	% mortality
Goldfinch	150	30	20.0	80.0
Linnet	190	48	25.3	74.7
Serin	30	9	30.0	70.0
Greenfinch	200	130	65.0	35.0
Siskin	22	15	68.2	31.8
Chaffinch	110	98	89.1	10.9
Total	702	330	47.0	53.0

Source: Adapted from Gauci 1991a and Gauci 1991b

The study period was between October 1985 and October 1990. The study established that contrary to what is believed, finch mortality in March is similar to mortality of finches trapped in autumn. Survival rates were 71% during the first year, 61% during the second, 47% during the third, 32% during the fourth year, and 25% during fifth year. Such high mortality rates demonstrate why there is an insatiable demand for freshly caught finches.

Robin trapping

Robins are not shot but many are trapped, especially by children. Robin trapping may have decreased from what it used to be ten or fifteen years ago, but there are no statistics from those times to be able to compare. A survey carried out between November 1991 and January 1992 reveals that over 25 per cent of children aged 11-15 still trap robins. A sample of the survey form used and the entire results can be found in Table 7A.8 in the appendix. The survey was personally conducted at Hamrun Boys' Juniour Lyceum in November and December 1991. Another teacher carried out the survey on my behalf at Mount

Carmel College, St Venera during January 1992. The Hamrun Lyceum is a public school while Mount Carmel College is a private Church school. Both schools are boys' secondary schools where the age of Form 1 pupils ranges between 11-12, Form 2 between 12-13, Form 3 between 13-14. Form 4 between 14-15 and Form 5 between 15-16.

Thirty three classes were surveyed at the Hamrun Lyceum, while eight classes (two from each Form except Form 5), were surveyed at Mount Carmel College. A total of 946 questionnaires were analysed. Of these, 766 questionnaires were filled in at the Hamrun Lyceum, while 180 were completed at Mount Carmel College. The survey contained a number of questions related to Social Studies, the subject I was then teaching. The questionnaire was divided into a number of broad sections, and had six questions related to birds and hunting spread amongst the various sections. The questionnaire sheet was given to students at the beginning of a lesson, and students were asked to fill it in without discussing it with each other and without writing their names on it. Pupils were told that the results of the survey will be drawn in graph form and displayed in class. The results of the survey were computed and different graphs were drawn when discussing related topics, such as the family, pastimes and different kinds of jobs.

Table 7.13
Percentage of students trapping robins

Class	Age group	Mt. Carmel College %	Hamrun Lyecum %	Total	Average %
Form 1	11—12	16.0	20.4	36.4	18.2
Form 2	12—13	14.6	20.0	34.6	17.3
Form 3	13—14	22.5	42.1	64.6	32.3
Form 4	14—15	25.1	36.8	61.9	31.0
Form 5	15—16	30.8	—	30.8	30.8

note: Form 5 students ay the Hamrun Lyceum were not surveyed due to high absenteeism which occurs before GCE exams
Source: Survey conducted at Hamrun Junior Lyceum and Mt. Carmel College in December 1991 and January 1992

The results of the survey tabulated in Table 7.13 show that the older the children were, the more they were inclined to trap robins. The average percentage of students aged 11-12 who trap robins was 18.2 per cent while almost 31 per cent of those aged 14-16 said they trapped robins. This may be due to a number of reasons, including being older and more independent. It could also be that they were not yet reached by educational campaigns organised in this respect. When one considers that the survey was conducted at Junior Lyceums and Private schools, where the level of education and the ability of children is considerably higher than in trade schools, one is inclined to think that it does not represent a true picture of the real number of children who trap robins. The percentage of children who trap robins is likely to be higher in trade schools and area secondary schools. These schools are attended by children who failed to make it to Junior Lyceums and those whose parents cannot afford to send them to private schools. As the Gallup Poll cited in Chapter 5 showed, support for hunting and trapping comes more from those in the lower socio-economic groups. Children hailing from such families are more likely to indulge in hunting related activities both because of their family backgrounds as well as reinforcement and peer pressure from their colleagues at school. Parental pressure to concentrate on studying, rather than waste time on other activities, is far less on children attending trade schools and area secondary schools than on those attending Junior Lyceums or private schools.

The catchment are of both schools was also biased towards the central part of the Island, which is more heavily urbanised. Villages like Rabat, Zebbug and Siggiewi, where there are large numbers of hunters and trappers, were not represented in the survey as children from these villages attend another Lyceum. But if one were to extrapolate on the figure obtained from the survey and work on an average of 10-15 robins per child, it results that over 50,000 robins are trapped by children aged between 11 and 15. To this one must add a considerable number that are trapped by younger and older children as well as adults.

Conclusion

In this penultimate chapter, the environmental aspects of hunting have been examined. The seasonal movements of birds to and from the breeding grounds has been discussed and different categories of migrants which fly at different times of the day and those which use point to point migrations as well as those who follow broad fronts, have been discussed. The hazards of migrations, both natural and man-induced, have been dwelt upon. It has been argued that while some of the human impacts may be a necessary evil, others, like hunting, are merely capricious. Through various examples, it has been shown how a number of species fly consistently in the same routes and thus hunting pressure of migratory species is likely to have a detrimental effect on restricted populations. Various data of different families of birds is used to support this theory. Examples of different types of migrants were given to illustrate the various modes of migration for different species and results of bird ringing recoveries were used to establish a pattern from which countries Malta bound birds originate during both migrations. It has been shown that Malta is a staging post for a number of species and that the number of birds is often bigger in certain climatic conditions. Analysis of ringing records has shown that many species would spend several days on the islands during the migration period. Waders, for instance, may spend up to six days in spring and 29 days in autumn. But hunting pressure is too intense and it has been shown how most birds are shot within a very short period of time after their arrival. Ringing statistics show that on average, 36 per cent of the birds are shot within two days of ringing. For several species, half of the birds are killed within a week while the percentage gets higher the bigger the bird is. While one can argue that Malta gets only a representative sample of broad front migrants, the same argument cannot be applied to migrants using the Mediterranean flyways, such as birds of prey and herons, which all come from specific populations in Europe. It has been shown that birds of prey originate mostly from Scandinavian countries, herons come from eastern Europe while most species of finches originate in central and eastern Europe.

Bag records of hunters and records from taxidermists were analysed to get an indication of which species are shot in which months of the year. A discussion on selected species is given to illustrate the kind of impact hunting can have on particular bird populations. It was argued that although the records available cannot be termed 'scientific' they are more than just 'indicative' since independent sets of data supported the findings of one another. It is argued that both hunting in spring and in autumn can have adverse impacts on the bird populations as while in spring most of the birds killed are likely to be adult birds returning to their breeding quarters, hence each bird killed is likely to result in a nest less, in autumn, a significant proportion of the birds killed are also adults returning to the wintering grounds. The only two articles by hunters quantifying their bags, are quoted. These figures support the estimated number of birds shot discussed which the shooters claimed were "inflated". Shooters' figures indicate that hunters killed 72 per cent of the quails and 28 per cent of the turtle doves they saw. Extrapolations made on the bags given by hunters yields results which are very similar to those discussed in this chapter, even though the figures released by hunters are conservative ones since they include only the birds shot between sunrise and 10.00am, while shooting takes place all day long during the hunting season.

The seasonal distribution of species in hunters bags is discussed, and it emerges that the spring bag is composed mainly of colourful species, turtle dove and birds of prey while the autumn bag is dominated by thrushes and starling.

More birds of prey are shot in autumn than in spring, while more turtle doves, quail, colourful species and herons are shot in spring than in autumn. Taxidermists handle most birds in the months of May, April and October. Protected species account for 87 per cent of the birds handled by taxidermists. Some 28 per cent are birds of prey, 20 per cent are colourful species, 11 per cent are herons while game birds account for only 13 per cent. The hunters' argument that the birds killed in autumn are mostly young birds, many of which would have died of natural causes during their first year is challenged using hunters' own records. From an "inquiry" about thrush shooting in autumn made by hunters, it resulted that over 30 per cent of the birds shot were adults.

It has been shown that hunting and trapping have a direct effect on local breeding species and the breeding species were discussed individually in some detail. It was shown how all the larger species suffer because of hunting and that all raptorial breeders have been exterminated and are prevented from breeding while other species are kept in check because of nest robbing and shooting.

Finally, the other negative environmental impacts of hunting are also discussed. These include the effect of hunting on non-target species to pollution. It has been shown that pollution resulting from spent lead shot amounts to 270 tons a year. Soil samples taken from areas frequented by hunters have twice the amount of lead from other areas. Other negative effects such as litter from spent cartridges, as well as the impact of shooters' and trappers' hides both on the landscape and on the ecosystem, have been discussed. It has been shown how trapping sites destroy the local fauna in various habitats. A detailed study showing the density of trapping sites in the Maltese Islands has also been made and a map showing the density of trapping sites has been made. From the studies made, it results that Gozo and the southern part of Malta have the highest concentration of trapping sites, with some 25 trapping sites per km^2. The life expectancy of finches in captivity was also discussed from published studies by a local trapper. The high mortality rate described in this study explains why there is an insatiable demand for finches.

In the following concluding chapter one shall look at some possible solutions to mitigate both environmental damage as well as pinpoint areas where possible future research might provide more information on which one can base a strategy to wean hunters off hunting while still giving them an experience as close to hunting as possible. This could lessen any negative impacts on the social and environmental levels.

Conclusion, Recommendations and Prospect

Overscoring the importance of hunting

Philosophers, researchers and scholars in different eras have overemphasised the importance of hunting. Very often, statements made hundreds of years ago are still quoted as fact without being questioned. Such statements are frequently taken out of their context: they may have made sense when they were first voiced, but due to the changes which took place over the years, they can hardly be said to be relevant today. Leopold (1966) sums this up rather well when he argues that because everybody from the Greek philosophers to Roosevelt said that sport hunting has value, it is assumed that this value is indestructible.

It is not only the value of 'sport' hunting which has been over stressed, hunting was thought to be the activity which made 'man' human. Yet, as research quoted shows, humanity does not owe its existence to hunting. Both scavenging and gathering were as important, if not more important, than hunting. Many anthropologists have over emphasised the importance of hunting in their studies of 'hunter-gatherer' communities. It is known that gathering is more important than hunting and contributes more to the diet of the peoples involved. Yet, anthropologists persist in speaking about 'hunter-gatherer' communities rather than 'gatherer-hunters'. The argument that hunting is an instinct has also been shown to be fallacious. Hunting is practised by a very small minority of the population. If hunting were an instinct, it would be a much more widely practised activity. More importantly, hunting is practically an all male activity throughout the world. If it were truly an instinct, the number of women who practise hunting would roughly equal that of men. If primitive people had an instinct, this was to obtain food, not to hunt. Hunting is a learnt behaviour, involving conditioning. Shepard argues that hunting is important to hunters as whenever they were suppressed, they rebelled. It is not only hunters who rebel after the suppression of their activity. Criminals, drug addicts and even ordinary people tend to rebel if their routine is interfered with. If one learns how to divert one's energy to other similar activities, the suppression of any activity should not prove to be such an emotionally negative experience.

Hunting activity has produced many negative impacts on the environment, starting with the decimation of forests which were gradually burned to drive out game in pre-historic times to the extinction of several species. Hunting has also changed the relationship between 'man' and beast. It is taken as the norm that animals should flee at the sight of humans, but even the most avidly hunted animals soon learn that humans do not harm them when they are in parks or in reserves. Ducks are amongst the most tame species of birds in many parks, in spite of the fact that they are hunted throughout the world.

It has also been argued that the concepts of the 'noble savage' and that hunting takes one back to nature are myths. There is ample evidence to prove that primitive people killed more than they needed just as some of today's hunters do. Both the importance and the significance of hunting have changed over time. From a food procurement activity, hunting was seen as training for war, then became a symbol of aristocracy and rich men hunted for sport. The symbolism of certain hunts later became associated with imperialism. Some, especially eco-feminists, have pointed to the sexual imagery in hunting. Evidence of this in the Maltese context is found in the names of the birds 'traditionally' considered as 'game', which almost all bear female names.

Eco-feminists and many environmentalists argue that hunting is all about power — a parallel to imperialism. Metaphors of power are found in both hunters' attire as well as in their weapons and ammunition. Many cartridges convey messages of power through their names. Some cartridges bear words with military connections — a number of examples of cartridges called after missiles have been cited in this thesis. While the element of power is a central element for hunters, who want to over-power game by killing it, they often try to disguise that their pastime kills. Hunters talk with equivocation when talking to non-hunters, but use hyperbolic verbs when discussing the subject among peers. Hunters world-wide are using euphemisms to camouflage their language, which is now saturated with jargon such as 'culling', 'harvesting', 'taking' and so on. Killing hardly ever features, albeit it being the end result of most hunting practices. The names of hunters' organisations also hide what hunters do: the three associations in Malta are called: The Association for Hunting and Conservation, the word conservation being a key element; the Gun and Trap Enthusiasts a name which is easily mistaken with some collectors' club, and the Followers of St Hubert — anyone mistaking this hunters' association with a religious group will be obviously be forgiven. It is not only Maltese hunters; organisations who camouflage their names. The Game Conservancy, The British Association for Shooting and Conservation and Ducks Unlimited are names of British and American hunters' associations which say very little about the activities practised by their members. The fact that hunters try to hide what they do with the non-hunting sector of the public signifies that deep down they know that what they are doing is unacceptable.

Birds have attracted the attention of man for a very long time. Their meat and their feathers were put to different uses around the globe. Malta was no exception. Although there is no evidence of the use of feathers, bird meat must have been a welcome supplement to people's diet over the ages. But apart from utilitarian uses, birds have left their imprint on the earlier Maltese cultures who gave names to tracts of land, some of which bear names of birds. A number of families still have nicknames with avian connections.

Although birds feature in the earliest examples of Maltese art: a number of bird pendants and engravings have been found in various sites associated with prehistoric cultures, examples of hunting in Maltese art are not common. There are a few pencil sketches of hunters, some water colours and a number of oil paintings in which hunters feature, the oldest of which dates back to the mid-17th century. There are three distinct phases in Maltese hunting related art: in the first phase is the earliest in which hunters are part of the landscape. A second phase, a very short contemporary one coming from a single artist who is also a hunter, is a romantic view, showing hunters moving with guns in a countryside which teems with birds. The hunter is hardly ever seen shooting, except on two occasions: in one instance he is shooting at a duck while a bird of prey is also within range (in real life, the shooter would choose the bird prey), while in another instance, a hunter is seen shooting at a pigeon. The latter is a cover of a book with a story about an arrogant hunter who killed pigeons and later the farmer to whom they belonged. The third, current trend is of either not featuring hunters or portraying hunters and hunting as abominable: pot bellied men standing next to signs that the property is a hunting area, or a hunter full of muscles, wielding a smoking gun while white (pure) fragile birds are seen falling to the ground.

Hunters feature very commonly in newspaper cartoons. As early as 1867, cartoonists were poking fun at hunters. Although hunters have their own monthly newspaper, which regularly features cartoons, there have never been any pro-hunting cartoons in it and hardly any cartoons featuring hunters. Most cartoons in the hunters' paper try to poke fun of something or someone else. The same hunting related traits visible in art are also evident in literature. Works of the early 1900s are not harsh in their condemnation of hunting. In fact, the activity hardly ever features. But romanticism, which resisted hunting, is absent from both Maltese literature and art. Hunting and trapping are hardly ever the central elements of Maltese literature. When hunters feature, they are usually the scapegoat of some silly joke or a subject of ridicule. The literature of the 20th century, which surfaced after the birth of the conservation movement in the 1960s, one finds references from various authors who lament at the way birds are treated. Certain hunting practices are seen as cruel and used as metaphors of people's suffering. Contemporary literature condemns both hunters and hunting. Authors are annoyed by the sound of gunfire which shatters the tranquillity of the countryside, they bemoan they fate of robins and other migratory birds. In spite of the large number of hunters, there is no literature exhalting hunting. The same trait visible in literature is seen in songs. There are very few references to hunting in songs. The older genre may occasionally mention hunters as part of a landscape. Later songs make fun of hunters but today's songs speak against them. As in literature, there are no songs which glorify hunting.

An analysis of other forms of popular culture, such as proverbs and folk tales, also shows that hunting was not a very relevant part of daily life in Malta. In the earliest collection of proverbs, one finds nine proverbs related to birds, of which two are related to the 'taking', that is netting, of birds. Netting was an important activity more than hunting as nets were often set and left unattended. The scope of netting was that people wanted meat and derived no particular joy from netting itself. Catching for fun developed much later when people had the time to spare. The fact that there are more hunting related proverbs now confirms that hunting is an activity which started becoming more popular recently. Hunters are also practically absent from folk tales of Maltese origin. They do feature in universal folk tales which have been translated into Maltese, but they are practically absent from indigenous tales. The absence of hunting from the popular art shows that hunting is not an ingrained, essential part of Maltese culture.

A RECENT PHENOMENON

Malta has the highest concentration of hunters in the Mediterranean: over 53 shooters per km^2 when the average number of hunters in the Mediterranean is just over four hunters per km^2. There are also over 6,000 bird trapping sites, an average of close to 20 trapping sites per km^2. It has been shown that the increase in the number of hunters and trappers is not related to demographic growth. While the male population in Malta increased by 4.4 per cent between 1985-1990, the number of licensed hunters increased by over 27 per cent. The situation in Gozo was even more dramatic: while the male population increased by six per cent, the number of licensed hunters practically doubled as it increased by 92 per cent.

The age structures of hunting and trapping licence holders show that the population of those practising such activities is an ageing one. The relatively large number of hunters in the middle age brackets indicates that many became hunters late in life. This could be a result of many factors, ranging from returned migrants to men who take up hunting either as a result of peer pressure or after they start accompanying hunters in the field. Age structures discussed in this study show that while just over 17 per cent of the hunters are in the 21-30 age group, there are over 57 per cent in 31-50 age groups while over 25 per cent are over 51.

If one were to compare the percentage number of hunters with the percentage number of males in the same age brackets, there are some interesting discrepancies: while over 21 per cent of the male population is aged between 21 and 30, only just over 17 per cent of the hunters are in the same age bracket — there are four per cent less hunters in the same age bracket. 30 per cent of the hunters are in the 31-40 age group and just over 27 per cent in the 41-50 age group while over 25 per cent are over 51 (over 11 per cent of which are over 61 years old). The percentage number of hunters aged between 31 and 50 is over nine per cent higher than the percentage number of males in these ages. This shows that the hunters' population is more concentrated in the middle aged groups while the younger generation is less interested in hunting.

The lack of interest of the younger generation in trapping is even more pronounced. Only ten per cent of those who pay a finch trapping licence are between 21 and 30, 24 per cent between 31 and 40, 28 per cent between 41 and 50 while 37 per cent are over 51. The age structure of those who pay a licence to trap quail and turtle dove is similar, except that 40 per cent aged between 41-50 and 24 per cent are over 51.

THE POLITICS OF HUNTING

Hunting in Malta is a political issue. Political parties win or lose the elections by a majority which is hardly over five per cent of the electorate and politicians are very weary not to upset large sections of the voting population, especially close to the elections. Traditionally, hunters always lobbied against reforms in hunting laws. Protests became more vociferous following the setting up of the first hunters' organisation in the 1970s. Currently there are four associations, but the original one remains the most vociferous and powerful one. Of the three parties in the political arena of the 1990s, the Malta Labour Party is the party with the most pro-hunting policy. A survey on the opinion of candidates and MPs who contested the 1992 elections showed that all felt that hunting should be controlled and laws should be made more stringent. While the majority were willing to speak against illegal hunting, more Labour MPs were willing to speak in favour of hunting. Although the survey showed that MLP candidates opposed hunting more than Labour MPs did, a section of new candidates who contested the 1996 elections for the first time, openly showed they are amenable to hunting.

Hunters pretend to have a strong voting lobby, but their political clout is not evident at the polling booths. The MLP, which supported hunters, failed to get elected in the elections held in 1987 and 1992. Pro-hunting candidates from both parties failed to get elected in both elections. Some were elected in 1996, but an analysis of their votes and the number of hunters in their districts shows that they did not make it to Parliament because of the hunters' votes. There is also no relationship between the swing against the Nationalist Party and the number of hunters in each electoral district. The largest swings were in the first and 13th district where the number of hunters in the former amounted to about 400 while in the 13th district, hunting licence holders amounted to almost 4,000. Yet the swing in both districts was the same.

In lobbying, local hunters use a different strategy than that used by other gun lobbies on the continent. The largest gun lobby in the world, the National Rifle Association (NRA) chooses to be invisible. The NRA is careful not to be associated with violence, which is easy to erupt in demonstrations. The NRA knows that in any crowd of hunters, some will appear in clothing more suitable for the hunting field, which appears odd to city dwellers. The local association frequently takes to the streets and organises 'public' activities ranging from open air meetings and car cades. Violence and vandalism frequently erupt following these rallies, generating more opposition to hunting. However, local hunters seem to believe that by stressing their power, they are likely to be feared and remain untouchable by both the political parties as well as the non-hunting section of the public. Another difference is that while gun lobbies abroad lobby individual candidates and then hopes that these candidates sound the NRA's opinions within the party, the local association targets the party collectively. The hunters' association tries to change the party policy by overt messages that the opposing party is giving in to its demands, implying to its members that they should vote for the party which gives the association most mileage.

The public perception of hunting can be judged by the amount of items in the press. Between the years 1962 and 1992, the number of pro-hunting items in the press trebled while the number of anti-hunting items increased by almost eight times. An opinion poll conducted in 1993 show that 65 per cent of the people do not agree with hunting and trapping. While 19 per cent wanted the activities banned, 59 per cent wanted stricter laws. The poll showed that over 13 per cent of the population are involved in hunting and trapping activities while official figures show that only five per cent of the population have a hunting licence. Although many of those who said they practised hunting and trapping could be by-standers who accompany hunters and trappers, this can also be an indication that many people hunt or trap without a licence. Another indication of this is the number of trapping sites in Malta: while there are over 5,000 trapping sites in the Maltese Islands, the number of licensed trappers does not exceed 2,000. Between the years 1990 and 1995, there has been an increase of over six per cent in the number of trapping sites while the number of licensed trappers decreased by almost 18 per cent.

The opinion poll also showed that while hunting is practised by individuals from all socio-economic groups, there were no trappers in the A-B socio economic group. Five per cent of those interviewed said they were hunters. Again, it is the lower socio-economic groups which support hunting and trapping most: the socio economic groups C2, D and E and from the 55-64 age group showed greatest amenability to hunting and trapping practices, while most opposition to hunting came from the A-B and C1 socio economic groups and from the younger age groups (18 to 35).

Economic considerations

In spite of the number of shops which sell hunting related goods and the small manufacturing companies which manufacture cartridges, hunting cannot be said to have any positive effects on the economy. Even the revenue earned by the government through the payment of licences does not match the cost of the same revenue. Because of hunting, leave is taken *en masse* particularly in April and May and in October and November. This, coupled with the taking of sick leave for hunting purposes, can have a detrimental effect in production related industries. Hunting is not productive either. One kilogram of turtle dove meat costs about Lm127, if one had to apply a basic hourly rate to the time a hunter spends in the field to bag five turtle doves. The costs excludes other real expenses such as the cost of ammunition, fuel to arrive at the hunting place and any fees for shooting rights. Hunting has an adverse effect on the tourist industry, which is the mainstay of the Maltese economy. The current government policy of attracting more tourists during the shoulder months in spring and autumn conflicts with hunting and trapping practices which are at their peak during these seasons.

Environmental impacts

This study has shown that hunting has several environmental impacts which cannot continue to be ignored. Hunting takes a considerable toll of migrants in both the return migration in spring, when adult birds are returning to their breeding grounds in the European continent, as well as on the outward migration in summer and autumn when birds leave their breeding area to fly towards their wintering areas in Africa.

Migration itself poses several natural hazards to the birds, which include severe climatic conditions such as cold, drought or rainy seasons which makes both feeding and travelling difficult. Migration also exposes birds to man induced hazards, which range from habitat modification to direct persecution. Direct human persecution hardly plays a role in central Europe, but is of great significance around the Mediterranean and in Africa. Birds fly through corridors formed by boundaries of favourable and unfavourable terrain. In the Mediterranean there are three main flyways: over the Bosphorus in the east, over Italy in the central Mediterranean and over the straits of Gibraltar in the west.

In Malta, large passages of birds occur when fine weather and favourable winds are followed by a sudden period of adverse weather which grounds migrants. Bird ringing shows that small migrants in spring spend four to six days while in autumn they spend up to ten days. Ringing data also shows that hunting takes quite a toll of birds: close to 30 per cent of the medium sized birds ringed in Malta were reported shot within a few days of ringing. Considering that hunters report only a small percentage of the ringed birds they shoot, the figure of 30 per cent takes on added significance. The kind of hunting pressure existing can be seen by looking at the percentage number of birds of prey killed in Buskett gardens, which is supposed to be a bird sanctuary. Close to 24 per cent of the birds of prey seen at Buskett are shot in autumn.

Contrary to popular belief, Maltese hunters kill birds originating from specific populations. Ospreys shot in Malta originate mostly from Finland and Sweden, herons come from Yugoslavia and Hungary, gulls originate from particular regions in Russia while Caspian terns originate mostly in Sweden. Finches originate mostly from Yugoslavia, Hungary, Czechoslovakia and parts of Russia.

Thus, the killing of various species of birds in Malta can have long term effects on the populations concerned.

The intensity of hunting pressure on several species of birds can also be seen through the analysis of hunters' bag records and taxidermists' records. Although it has been explained that the sample size is too small to call the data used 'scientific', nevertheless it is reliable as independent sets of data computed separately yielded practically the same results. Although as from 1997, hunters have to fill in a form declaring what they shot during the previous year before their licence is renewed, the possibility of having accurate bag records from hunters is very remote as hunters nowadays fear that any data on birds hunted will be used to curb their pastime. The ineffectiveness of such records will be accentuated as hunters are not required to keep a log book of what they shoot, but are merely requested to fill in the form which is handed to them when they go to renew their licence. Furthermore, the form hunters have to fill in lists only the birds that can be hunted and data on illegally killed birds cannot be obtained officially.

Bag records and data from taxidermists show that a large proportion of the hunters bag is made up of colourful birds and birds of prey between March and early June. Close to 80 per cent of the bag in October and November is made up of thrushes and starlings. Birds of prey account for nine per cent of the bag during these months. Figures released by hunters show that they kill 28 per cent of the turtle doves and 72 per cent of the quails they see. The percentage number of turtle doves shot is likely to be an underestimate since turtle doves fly at an altitude where they can be seen by many hunters, but only one hunter effectively registers the kill. Thus it is likely that the number of turtle doves 'seen' was inflated as hunters reported seeing a number of turtle doves, a percentage of which was also seen by other hunters who also included them in their total number of birds seen. Bag records indicate that 78 per cent of the turtle doves killed in Malta are shot in spring, and 22 per cent are killed in autumn. With quails, 66 per cent of the quails shot are taken in spring, close to 29 per cent in autumn and just over four per cent are shot in winter.

Herons and colourful birds are more commonly shot in spring while birds of prey, thrushes, starlings and waders are more commonly shot in autumn. While for some species, such as colourful birds, the distribution of the bag between spring and autumn is pronounced: 79 per cent are killed in spring while 21 per cent are shot in autumn, with birds of prey the difference is not so marked: while 44 per cent of the raptors are taken in spring, 54 per cent are taken in autumn.

The rest are shot in winter and summer. The difference in seasonal bags hardly shows at taxidermists, who handle half of the birds in spring, 45 per cent in autumn, the rest in winter and summer. Birds of prey make up 33 per cent of the birds handled by taxidermists, colourful birds account for 20 per cent, herons make up ten per cent, duck and game birds account for nine per cent, seabirds account for eight percent while just over four per cent is made up of thrushes.

Hunting has an impact on the breeding populations of several species of birds, whose numbers have been reduced while others are prevented from breeding. The peregrine falcon, kestrel and barn owl are all locally extinct breeding birds while the number of breeding yellow legged gulls and shearwaters has been decreased considerably. Finches hardly ever breed, although there are several breeding attempts each year. More birds would breed if hunting pressure was not so intense. Proof of this can be found in the fact that species such as the moorhen, little ringed plover and reed warbler have started breeding over the past few years. All the birds have bred in reserves and other areas which are effectively closed to hunters.

Apart from the impact on bird life, hunting can be a cause of lead pollution. Studies show that soil samples taken from areas where hunting takes place had twice the amount of lead than soil samples taken from other areas. Although there is no direct evidence of environmental damage yet, the presence of high quantities of lead in the countryside can hardly be called beneficial.

The practice of trapping, which also takes a toll of migratory birds and prevents various species of finches from breeding regularly, has an impact on land use. There are over 5,000 trapping sites, each of which occupies a minimum of 100 square metres. Apart from taking up the land area in question, areas where intensive trapping takes place become no-go zones for the general public, who is discouraged from walking past trapping sites. Herbicides and other weed killers are used to clear trapping sites of any vegetation. The use of such chemicals in the countryside does not have a beneficial effect, especially when used in habitats containing endemic flora and fauna. Trapping sites are often constructed, with soil and other material being dumped to level the land for the nets. Such practices have resulted in the destruction of habitats and in at least one instance, it has destroyed a rare population of endemic tulip. Robin trapping, a pastime practised mainly by children, has decreased considerably over the past few years, but is still commonly practised by 25 per cent of the children aged between 11 and 15 years.

Hobsbawm states that "traditions which appear or claim to be old are often quite recent in origin and sometimes invented" (Hobsbawm and Ranger 1983 p.1). He argues that inventing traditions is essentially a process of formalization and ritualization, characterised by reference to the past. Using Hobsbawm's criteria, it has been argued that hunting in Malta is not a traditional sport and that sport hunting is an invented tradition. For Hobsbawm, 'invented tradition' includes both traditions actually invented, constructed and formally instituted and those emerging in a less easily traceable manner within a brief and datable period and establishing themselves with great rapidity. Hobsbawm makes distinctions between traditions, conventions and routines. Conventions and routines have no significant ritual or symbolic function and their justifications are technical rather than ideological. He argues that wearing hard hats when riding makes practical sense but "wearing a particular type of hard hat in combination with hunting pink makes an entirely different kind of sense. If this were not so, it would be as easy to change the 'traditional' costume of fox-hunting as it is to substitute a differently shaped helmet in the armies if it can be shown to provide more effective protection" (Hobsbawm and Ranger 1983 p.3).

The concept of inventing traditions is predominant in the west, where there are attempts to justify practices because they are "traditional". Although it is not always easy to distinguish between a genuine culture and an invented ritual, a careful dissemination of the culture of primitive peoples shows that it is often based on wildlife, while the culture of western civilisation lies elsewhere. The Indians inhabiting the plains of America not only ate buffalo, but the animal largely determined their architecture, dress, language, arts and religion.

An analyses of the cultural traits of the American pioneer-hunters such as Davy Crockett and Daniel Boone in the early 19th century, one would see that an accelerated shift in hunting trends has taken place. Leopold (1966) states that the pioneer's 'go light' and 'one bullet one buck' ideas were essential for his survival: the pioneer went light out of necessity and shot with economy and precision because he lacked the transport, means and weapons requisite for machine-gun tactics. Yet these ideas evolved into a code of 'sportsmanship'. But then came the sporting-goods dealer, whose contraptions not only equipped hunters but also substituted the knowledge they needed to have of nature. Thus anyone could become a hunter irrespective of his level of knowledge of wildlife. Leopold offers an example to illustrate his point: "Consider the duck-hunter, sitting in a steel boat behind composition decoys. A put-put motor has brought him to the blind (hide) without exercise. Canned heat stands by to warm him in case of a chilling wind. He talks to the passing flocks on a factory caller, in what he hopes are seductive tones; home lessons from a phonograph record have taught him how. The decoys work, despite the caller, a flock circles in. It must be shot at before it circles twice, for the marsh bristles with other sportsmen, similarly accoutoured, who might shoot first. He opens up at 70 yards, for his polychoke is set for infinity, and the advertisements have told him that Super-Z shells, and plenty of them, have a long reach. A couple of cripples scale off to die elsewhere. Is this sportsman absorbing cultural value? Or is he just feeding minks? The next blind opens up at 75 yards; how else is a fellow to get some shooting? This is duck shooting, current model. It is typical of all public grounds, and of many clubs. Where is the go light idea, the one-bullet tradition?" (Leopold 1966 p.199).

If Leopold was writing now, instead of 30 years ago, his tone would have been more tongue in cheek as technology has changed hunting more radically during the course of the past 30 years and the attitude of today's hunters is far removed from that of their predecessors. For those who had no hunters as predecessors, their attitude is even more far removed. The changes in the economy have enabled many who do not hail from a hunting family, to buy guns and become hunters. Reading through shooting related items in the Maltese press over the past 50 years, one is bound to realise that the same phenomenon Leopold is speaking about has also affected the local scenario: the 'real' hunting enthusiast has become an endangered species. It has been argued in the first chapter, that those hunters who really take pleasure from being in nature, rather than from killing, can have their fulfilment without the need to kill. Writing over twenty years ago, the late Albert Gauci, who was a keen hunter and one of the founder members of the largest hunting organisation in Malta, wrote: "the joy of handling guns was not enough in itself, but was superseded by the crazy joy of the kill. In the simple days the shooter took comfort from the enjoyment of the countryside, the occasional thrill of the chase, the healthy sun and air, as well as the friendly chat with the farmer. The few and far between such sportsmen today constitute the laughing stock of the multitude armed to the teeth with tons of expensive ammunition, chrome plated guns and all the paraphernalia which the trade offers for sale" (Gauci 1974b). This statement was made over twenty years ago, and the situation has since deteriorated.

Hunters of the old school used to write about hunting in a poetic vein, and even if one disagreed with the final result of hunting, their writing reflects both a knowledge of bird behaviour as well as their love and commitment for the 'sport'. Nowadays hunters no longer seek the old man in particular villages who made plover calls out of reeds cut during a particular time of the year and from particular places and dried and worked in particular ways. Today, electronic bird calls are the order of the day. They need no skill other than inserting a small cassette, switching them on and occasionally changing their pencil batteries. They are more effective compared to the laborious process of trying to lure a birds with a mouth blown call. One gadget the size of a packet of cigarettes can play the call of at least ten species of birds at the touch of a button rather than having different calls for different species of birds. Hunters can no longer boast of their ability to call a bird to bring it within range. When talking about this subject to old timers say they often had two calls for species such as quail and plover — one with a lower frequency to call the birds at a distance and another to call the birds as they draw nearer. These men often joyfully recount how they used to lure plovers and get them to settle a few paces away and pitying them, they would let them go, only to try to call them again instead of shooting them. Such statements have to be taken with a pinch of salt, but they demonstrate a certain gentlemanly conduct, at least at heart.

The way Leopold argues about the fate of the American sportsman applies to the Maltese scenario, even though Leopold wrote over thirty years ago. Leopold argues that the American sportsman does not know what is happening to him. He is baffled by bigger and better gadgets "it has not dawned on him that outdoor recreations are essentially primitive, atavistic; that their value is a contrast value; that excessive mechanisation destroys contrast by moving the factory to the woods or to the marsh. The sportsman has no leaders to tell him what is wrong. The sporting press no longer represents sport; it has turned billboard for the gageteer. Wildlife administrators are too busy producing something to shoot at to worry much about the cultural value of shooting. Because everybody from Xenophon to Teddy Roosevelt said sport has value, it is assumed that this value must be indestructible" (Leopold 1966 p.200).

There seems to be no end to the technologies applied in the hunting field. Electronic gadgets such as "trail masters" are easily found in mail order catalogues specialising in outdoor sports. These can be fixed in any environment and are able to detect and record data about the presence of animals such as deer. Thus a hunter can find out the time deer cross a trail without having to watch and wait. Compact infrared game detectors, small enough to fit a shirt's pocket, are also available. The sensitivity of these instruments is advertised as being capable of locating even ducks, pheasants and quail; "they can be used to help the dog pinpoint hidden game", the advert reads, boasting of the instrument's capability of detecting a deer at a distance of 500 feet (Cabela's 1993).

The face of hunting has changed so much that were it not for its name, the practice would today be hardly linked to where it started from. From a food procurement activity, hunting became the sport of the nobility and then then became accessible to all social classes, where again, at least in the beginning, hunting and trapping were valuable means of acquiring meat. The nobility indulged in trophy hunting while lower social classes were catching birds and animals for the pot. As the standard of living started increasing, trophy hunting no longer remained a prerogative of the upper classes and although few Maltese hunters could afford to venture in Africa in search of ivory tusks and bison heads, bird stuffing and mounting introduced in the late 1800s started gaining ground during the early 1900s and had become popular by the 1950s. Today's hunters have a collection of stuffed birds and such collections are the *raison d'etre* of hunting in Malta. Leopold states that the trophy hunter is the caveman reborn; trophy-hunting is the prerogative of youth, and nothing to apologize for. "The disquieting thing is the trophy hunter who never grows up" (Leopold p.268). What is striking to note is that while literature about hunters on the continent argues that hunters loose their bloodlust with age and that the trigger happiness of youth is a form of rite of passage which wanes by time, the age structure of Maltese hunters shows that the large percentage of hunters are over 40 years old and that these hunters still keep trying to add birds to their collection. This different behaviour offers scope for further research in this field.

When doing research for a thesis, one is bound to venture further in the field than originally planned as new material comes to light and leads to other facets related to the same study. On concluding, one is also bound to start seeing new avenues and ideas for further research. Although I have tried to be as exhaustive as possible, this thesis is by no means an encyclopaedia of hunting practices in Malta. In the final year before concluding the thesis, I realised that it would have been a good idea to try and find out more about the characteristics of hunters and how hunters perceive themselves. It would have been interesting to study their micro politics and social networks, but as discussed in this study, hunting has become a very emotive subject and I could not conduct such research myself, even if I wanted to. Having family commitments and being employed on a full time basis with a weekly newspaper and doing research during scarce leisure time and late at night poses insurmountable time constraints, and I believe that even if the situation permitted me to do such a study, time would have not.

Having been involved in the environmental movement in Malta and having been among the core group within a number of organisations which campaigned against the killing of birds, my name does not go down too well with hunters. This would have provided a major stumbling block had I tried to speak directly to hunters to see how they perceive themselves, their micro politics and social networks. I believe that few would have agreed to speak to me about the matter and even so, I doubt whether their answers would have been genuine. Such research would be difficult even if it is to be done by someone who is a stranger to the issue. Hunters have become very suspicious of anyone who is not a hunter asking questions about their activities. It would also have been useful to carry out a survey with licensed hunters to find out more about them. The sudden growth rate of hunters in the 1980s and 1990 may imply that people who had no hunters in the family started to hunt. It would be interesting to find out from hunters the percentage of them whose father, grandfather and great grandfathers hunted to see how deeply ingrained are the family connections with hunting. It would also be interesting to find out how and why those whose fathers were not hunters became hunters. But again, for reasons mentioned before, I could not conduct such research myself. Neither can one commission an independent agency involved in conducting surveys as the names and addresses of licensed hunters is not available.

As this thesis has demonstrated, the number of hunters has increased dramatically, and although the growth rate has begun to slow down, the number of hunters is still too large for the size of the Islands. The large density of shooters dictates that action has to be taken both to control the growth and to start reversing it. Even a cursory glance at Table C.1 comparing the number of shooters in Malta to other Mediterranean and European countries, suffices to

Table C.1

Compasrison of hunting licences and land area in some Mediterranean and European countries

Country	Number of hunters	Number of hunting licences per 100 km2	Number of hunting licences per 1,000 inhabitants
Italy	1,500,000	498	27.0
France	1,700,000	313	30.0
Greece	350,000	265	36.0
Malta	16,000	5,312	44.4
Germany	266,000	107	4.3
Luxembourg	2,600	100	7.6
Denmark	170,000	394	34.0
Great Britain	200,000	87	3.7
Ireland	79,600	646	59.0
Netherlands	340,000	94	2.4

Source: Adapted from World Almanac and book of facts 1996, questionnaires used in Chapter 2, while information about hunting licence statistics for European countries was obtained from the respective authorities, such as Game and Wildlife administrations or environment departments.

show the gravity of the problem. The closest country one can compare Malta to in the European Union from the points of view of population is Luxembourg. Yet the number of hunting licences there is so small that it is practically insignificant.

A number of new applicants for hunting licences are still being registered each year in Malta, and although this may be smaller than the number of hunters who stop hunting, the decrease in the number of hunters could be accelerated further, preferably with measures which will not upset hunters too much so as not to create too much antagonism.

No effort should be spared to induce in existing hunters a proper code of ethics for hunting. Leopold argues that there is value in any experience that exercises those ethical restraints collectively called 'sportsmanship'. It is not enough to make illegal the use of accessories and efficient lures in hunting. Technology develops fast and by the time a gadget is made illegal, another more sophisticated one finds itself in the hands of hunters before the legislators know it. The idea of shrinking the role of gadgets in pursuit of wild things should be made one of the pinnacles in the code for sportsmanship.

FURTHER RECOMMENDATIONS

Maltese hunters are still able to shoot migratory birds in spring. The spring hunting season should be gradually shortened by a number of days each year until it is eventually phased out. To lessen the number of hunters in the countryside, it might be good to introduce the concept where hunters can hunt only three to four days during a week or to hunt on alternate days. The enforcement of such a legislation seems impossible, but if the system adopted in Italy is introduced, enforcement would become rather easy. Hunters have to carry a small notebook on which they register the days when they hunted as well as each bird shot the moment they shoot it. In Italy, this is done to keep tabs on the number of birds killed because hunters have a bag limit and hunters who are found in possession of game which is not registered in their log books are prosecuted. The introduction of such log books is also valuable as it can produce more reliable bag records than simply filling in a form at the police station when one goes to renew his licence, as is the current practice.

In an effort to stem the growth in the number of hunters, no more special licences for hunting in spring should be issued, but only renewals should be permitted. Shooting competitions with attractive prizes should be held during the hunting season. If prizes include holidays abroad, it would be good if visits to nature reserves or parks where one can see birds and other forms of wildlife are part of the package. Not only would such a prize make it more attractive to hunters, but the fact that they are able to see birds in their natural habitat might help them think about the effects of hunting.

One should also look into the possibility of rearing game birds such as quail or pheasant. Due to the small size of the Maltese Islands, there cannot be many sites where controlled shooting of such reared birds can take place and this would necessitate measures controlling the number of hunters which can hunt at a given time as well as the number of birds they can shoot. Such measures can help in entrenching the concept of bag limits and of regulating the hunting of migratory birds.

The concept of bag limits should also be extended to trappers and since trade in wild caught finches is already forbidden, the number of finches a trapper may have in captivity should also be controlled. A maximum number of birds caught from the wild of each species a trapper could have at any given time should be established. This should not apply to birds reared in captivity, which can be easily marked with closed rings which are inserted in the birds legs a few days after they hatch. Trade in such birds should not be restricted and captive breeding should be encouraged as this may eventually lead to less demand on birds caught from the wild. Such birds also tend to be tamer and are less prone to injuries in cages, to which they are accustomed since the time they fledge. An effective way to prevent the increase in the number of trappers would be to stop issuing new licences and to control the number of trapping sites, especially those on public land.

The hunting of rabbit with net and ferret in summer should be encouraged rather than the use of guns. Hunters who encounter birds while hunting rabbits are likely to shoot them. While if armed with a net and a ferret or a rabbit hound, they would be unable to shoot. Taxidermists should be strictly controlled and they should keep a detailed register of the birds in their possession and who brought the birds in. Existing stuffed bird collections should be marked so that any new additions are immediately evident. The penalty for possession of unmarked protected birds should be stiff to serve as a deterrent.

Education on how to make better use of free time is important at all levels of society. This will not only help in the hunting problem, but in many other vices which undermine the values of a sane society. A survey made purposely for this thesis reveals that although eight per cent of the children stated that their father is a shooter, 14 per cent said that they went to shoot birds. This means that children go to shoot with relatives or friends. This does not augur too well for conservation as shooters recruited at a young age are likely to remain hooked, while those who are not, are less likely to become shooters. It should be illegal for shooters to take children under the age of 18 with them when they go to shoot.

At a young age, many are introduced to hunting by their father. Older children are influenced and supported by peers. They can also be influenced by others to whom they are related or by those who are socially intimate to them. Young shooters acquire the skills, behaviour and attitudes of those who recruit them. Since the largest proportion of shooters are indiscriminate, tomorrow's shooters cannot be expected to be more educated in this respect.

The import duty on all items related to bird shooting should be raised considerably. Currently, the import duty on a shotgun is set at 15 per cent. Considering that this was not a deterrent when it was 80 per cent, this should be made much higher. Locally manufactured cartridges are very cheap. A hundred cartridges can be bought for Lm5. A cartridge costs the equivalent of two cigarettes, hence it is not surprising that shooters shoot at anything that flies. A higher price of cartridges would at least ensure that small birds would not be shot. On the other hand, the cost of cartridges sold at shooting ranges for clay pigeon shooting purposes should be made cheaper. The hunting licence fee should also be raised. As things stand, a hunting licence is cheaper than the rental of a telephone set and equivalent to the television licence.

There should also be an educational drive both in schools and in the media. But the educational drive must be complimented by the upgrading and the enforcement of the existing hunting laws. As the age structure of shooters shows, over 80% of the shooters' population are over thirty. At this age people have a family commitments and social obligations. Thus they are more likely to be cautious and law abiding if the law is enforced. If there is no surveillance, there is no incentive for shooters to abide by the laws, because as most of them say, if a bird approaches them and they don't shoot, the shooter next to them will. If the law is enforced, even those in the 21-30 age bracket will have to think twice before pulling the trigger.

One can learn a lesson from nearby Sicily in this respect. Stiff fines coupled by effective enforcement have brought about a dramatic decrease in the illegal shooting of birds in the straits of Messina over the past ten years. Penalties ranging from £300 to five years in prison have taught shooters what a long educational campaign had failed to teach them.

If the environment groups in Malta keep hoping, as most of them do, that education holds the key to conservation, they are allowing themselves to be fooled by false hopes. To give just one example, the Malta Ornithological Society organises a "Robin campaign" each year. This campaign has been held for the past ten years and consists of selling stickers to school children in all local schools, publishing of posters and leaflets for younger classes and organising a sponsored marathon "walk for the Robin". The campaign generates a considerable amount of money for the Society, but what does it do for the robin?

Robin trapping may have decreased from what it used to be ten or fifteen years ago. Unfortunately we have no statistics from those times to be able to compare. A recent survey cited in Chapter 7 revealed that over 25 per cent of children aged 11-15 still trap robins. If one were to extrapolate on the figure and work on an average of 10-15 robins per child, it results that over 50,000 robins are trapped by children aged between 11 and 15. To this one must add a considerable number that are trapped by younger and older children as well as adults. This does not mean that the robin campaign should not go on. On the contrary. The robin campaign must be made bigger and pressure has to be brought to bear on Government to enforce the law and start booking robin trappers. In spite of the campaign, robin traps are still sold openly in a number of shops and on the open air market and people trapping robins can still be seen even in areas where shooting and trapping are prohibited.

One cannot hope to educate everyone with stickers and posters alone. It is also possible that we have reached the saturation point where education cannot do much more. The rest has to be done the hard way and it will be surprising what effect the enforcement of law can have on saving robins as well as other species. Trappers and hunters should be involved in the management of nature reserves where no hunting is allowed to take place. The fact that hunters will be able to see birds which are not shot at by other hunters for a length of time may, in time, instill a yearning for conservation and eliminates the competition of who kills the birds first.

The government can help to ease the pressure of migratory bird hunting not only by enacting legislation restricting hunting but also by taking steps to help shooters move from bird to target shooting. The encouragement of the setting up of gun clubs and shooting ranges, through which members can practise in and out door target shooting at all times of the year can prove to be viable alternative for those who like to shoot. Now that the importation of air guns and black powder weapons has been allowed and one only needs a licence to keep such weapons, the number of firearms that are imported each year for hunting purposes needs to be more controlled. Since the law forbids the use of repeater shotguns which use more than three cartridges, the importation of these shotguns, as well as their spare parts, should be banned. The government should encourage the opening of shooting ranges so that gun enthusiasts do not necessarily have to become hunters to be allowed to shoot. Shooting ranges for clay pigeon shooting and sporting ranges where the flight of clay pigeons resembles the flight of a bird or the run of a rabbit, should also be encouraged. These latter ranges can also be used for testing the ability of new hunting licence applicants. They can also be used during the peak times of the hunting season, which should coincide with the organisation of plenty of competitions with attractive prizes.

Another incentive to target shooters may be in the form of reducing the age for obtaining the shooting licence. The minimum age limit for obtaining a sport shooting licences can be reduced to 14 years (from 21 years), as long as they are accompanied by an instructor or an experienced licence holder. On the other hand, the age at which one can obtain the hunting licence should be raised at least to 26. The idea being that if one is getting enough satisfaction from shooting inanimate targets, one will not be tempted to shoot birds. There will be a small number who will still want to hunt. It is time that new hunting licences should be issued only to persons holding a title to tract of a land or who produce evidence that they have bought shooting rights over an area. To prevent accidents as well as to ensure that not more than one licence is issued over the same area, a minimum size of the territory on which the licence can be issued should be established. This should at least be equivalent to the range of a gun in all directions from the shooting butt.

Probably the idea of shooting of reared birds is resisted because it is incompatible with the current notion of "free hunting" — migratory birds come for free. Hunters do not take any trouble in rearing them and their only expense other than that for equipment is paying a hunting licence. Time will eventually come when hunters will start having to pay for what they are taking from nature. It is only then that they might be tempted to switch to other targets. But in the meantime, one of the solutions is to enforce the laws more strictly in the field. With a smaller number of shooters, these will eventually be easier to control. The penalties for infringing regulations should be a real deterrent. A person found guilty of having shot protected species who will have the whole collection of stuffed birds confiscated will think twice before killing a protected bird. The mere loss of a shotgun, or the suspension of a licence for a limited period of time seems not to be much of a deterrent as there have been a number of hunters who were charged repeatedly in court with hunting related offences.

Leopold argues that hunters "thrill to beauty" and try to "reduce that beauty to possession" (Leopold 1966 p.213). Although writing about hunters in another time and in a far off continent, Leopold's words hold for the majority of Maltese hunters. The primary reason for most hunting in Malta is the collection of specimens. The encouragement of bird related arts and crafts should eventually provide an alternative to some collectors, both existing and aspiring ones. Courses where one can learn 'decoy carving', which is an established art on the continent and is a booming business in the United States, can be organised and people can learn to carve birds and build their own collections of bird sculptures. Apart from being time consuming, albeit relaxing activities, these arts give a lot of satisfaction to those pursuing them and can even prove to be profitable if marketed properly. Twinned with nature photography and watching, these arts and crafts can help deviate the attitude of hunters from a destructive one to one which appreciates and protects. Although there is plenty of access to wildlife documentaries on television, there have been only a few amateurish attempts to film documentaries on Maltese wildlife. These can serve to show that although limited in size, the beauty of nature can be enjoyed in Malta too.

The situation in Malta is not an encouraging one at the moment, but given time and the right incentives, Maltese hunters will not be any different from their counterparts elsewhere in the civilised world.

Table 2A.1

SAMPLE OF THE QUESTIONNAIRE SHEET ON THE HUNTING SITUATION IN THE MEDITERRANEAN

A SURVEY OF BIRD HUNTING IN THE MEDITERRANEAN REGION

1. NATIONAL LEGISLATION

a. What is the exact name of the hunting law? _______________

____

____

____

b. In which year was it enacted ____________________________

c. Has it been amended since then? If yes, when? _____________

d. Give a summary of the most important parts of the hunting law (use a separate sheet if necessary. If possible attach a copy of the hunting laws.)

____

____

____

____

____

____

____

____

2. INTERNATIONAL LEGISLATION

a. Did your country sign and ratify any of the following conventions?

	signed	ratified	made exceptions
BERNE	______	______	_____________
BONN	______	______	_____________
RAMSAR	______	______	_____________
CITES	______	______	_____________

3. HUNTING WITH GUNS

a. List the species which may be shot according to national legislation.

____

____

____

____

____

____

____

____

b. List the times of the open seasons. When these vary according to species, please list the species and the dates of the open season.

Species	Open Season	Species	Open Season
____________________		____________________________	
____________________		____________________________	
____________________		____________________________	
____________________		____________________________	
____________________		____________________________	

c. Are hunters allowed to hunt every day during the shooting season?____.

If no, on which days are they not allowed to shoot?

____

d. Which guns are allowed:

Single barrel yes___ no___ double-barreled guns yes___ no___

Automatic repeaters yes___ no___ Air-rifles yes___ no___

Rifles yes___ no___ Other (please specify) _____________

e. What is the average cost of a gun?____________________

f. What is the average price for cartridges ? ________________

g. Are cartridges manufactured in your country ___________

or are they imported ?__________________________________

h. Do foreigners come to shoot in your country ? _____________

i. From which countries do foreigners come ?________________

j. Do they come because there are more birds to shoot _________

less enforcement_________ or both _____________

m. Are any checks carried out foreign shooters to see what they shot:

Always______ sometimes_______ never________

other ____________________________________

n. At which times of the year do they come and what do they shoot?

____

____

o. How many foreigners come to shoot each year?_____________

p. How many days do they spend shooting?___________________

q. Who organises these tours?_____________________________

r. Do they have special regulations________, permits_________

special hunting areas____________

s. Do foreign hunters observe the laws?______________________

t. Do shooters from your country go to shoot abroad?_________

u. Do they go on organised tours_____ or do they go alone ____

v. To which countries do they go? ___________________________

4. OTHER HUNTING METHODS

a. Is falconry practised in your country? _____________

b. Is it allowed by law?________

c. Are any special permits needed____________

d. Which birds of prey are used?_________________________

e. Are they trapped locally ________ imported? ___________

taken from the nest? __________ smuggled ____________

d. Are any of the following items used? (write yes or no)

traps____ mist-nets____ manually operated nets___

lime/glue ____ powerful lights at night ____ poison _____

other methods (please specify)_____________________

e. Is hunting from sea-craft allowed? ___________________

f. Is it practised? ____________

g. Which kinds of boats are used? (fishing boats, rubber dinghies etc.)

____

f. Which species are shot from sea-craft? ________________

____

____

g. Is hunting with means other than guns allowed ? If yes, which means are used and which species can be killed/poisoned/trapped?

Species	method
__________________	____________________________
__________________	____________________________
__________________	____________________________

5. NUMBER OF BIRDS KILLED/TRAPPED

a. Is the average number of birds which are killed/trapped each yea available? Please attach a copy of these figures and state the source. Do you agree or disagree with these figures? If no, why?

____

____

____

b. Is there a bag limit? (state the bag limit per species).

Species	bag limit	Species	bag limit
___________	_______________	_________	______________
___________	_______________	_________	______________

6. SHOOTING LICENCES

a. What is the minimum age for obtaining a shooting licence? ___

b. Does one need to have an area where one can shoot to have a hunting licence? _______________

c. How much does a shooting licence cost per year?___________

d. Is there a test before one obtains a licence?_____________

e. Does it test: knowledge of law______ bird identification_____ gun handling ability____.

7. CALLS AND DECOYS

a. Are bird calls used?____________

b. For which species are they used? ________________________

c. Are tape recorded bird calls used?____

d. For which species are they used?________________________

e. Can you sketch or attach photos/photocopies of the calls used?

f. Are live bird decoys used? ________

g. For which species are they used?__________________________

h. Are plastic decoys used?___________________________________

i. For which species are they used?__________________________

j. Are any other special decoys used? (please specify)

____

k. For which species are they used?__________________________

l. Are decoys locally manufactured or imported?_______________

m. Where are they imported from?______________________________

8. LAW ENFORCEMENT

a. Who is responsible for administering the law? (name of Ministries, Departments/Authority at national or regional level)

____

____

____

b. Who is responsible for enforcing it? (The Police, wardens?)

c. What are the penalties? ________________________________

d. Do shooters generally observe the laws? _________________

e. Do you consider law enforcement as: non-existent __________

ineffective ______ not good enough _____ effective ______

very effective _____ unnecessary _______

f. How many shooters are charged in Court every year? _______

g. What is the number of licensed hunters? _________________

h. Are statistics of the number of shooters over the last ten years available? If yes, please attach such data.

9. TRADE

a. Does any trade in live birds take place? _________________

b. Does any trade in dead birds take place? _________________

c. Which species are traded? ____________________________

____

____

d. Give an estimate of the quantity of birds involved?

____

____

____

e. Give estimates of current prices____________________________

f. Is the trade legal or illegal? ________________________________

g. Does it take place openly? If yes, where___________________

h. Is taxidermy (bird stuffing) popular? ______________________

i. Which species are most commonly involved? ________________

j. Are stuffed birds collected by shooters?_____________________

k. Are stuffed birds exhibited in: shooters' shops ______________

other shops __________, restaurants_______, bars_________,

other places (please specify) _______________.

l. Are they sold to locals _____ tourists _____ exported _____

m. What is the cost for a stuffed heron _______ buzzard ______

falcon ______ Colourful bird (golden oriole or hoopoe) ____

n. Do shooters trade or exchange stuffed birds ? _____________

o. Do shooters exchange/buy bird skins from other countries? (if yes specify with which countries)

____

p. Are there many people employed in the hunting industry? ___

q. Are there many shops which sell shooters' goods? _________

10. WHY DO HUNTERS HUNT ?

a. Do they hunt for food______________

b. For sport _________________

c. Because they have nothing better to do ____________

d. Because it gives them social status _______________

e. Because their fathers were hunters ______________

f. Any other reason (please specify) _________________

g. Do shooters take children with them when hunting? Yes/No

h. Is hunting an all male activity or are there any female

hunters as well ?______

What is the percentage of female hunters? ______

11. ORGANIZATIONS

a. Which is the oldest conservation society _________________

b. When was it founded?____________ Is it still active?_____

c. Which are the environment groups that oppose all forms of hunting in your country? How many members do they have (approximately.)

Name	address	number of members

d. Are these influential politically?_________________________

e. List the environment organizations (or individuals) which work on the hunting issue

Name address number of members

____

____

____

____

____

____

f. Are these influential politically?________________________

g. List the hunting organizations

Name address number of members

____

____

____

____

h. Are these influential politically?__________________________

i. Do shooters have a magazine/special paper?________________

j. Can you please enclose a copy?

k. What are the attitudes of the general public towards hunting?

Do they accept it ______ are they indifferent ________

don't like it ___________ other _________________

l. Are there any proverbs or sayings about hunting? (if yes, can you list a few examples?)

12. CONSERVATION MEASURES

a. Do the media promote environmental consciousness?_______

b. Is environmental awareness the same as ten years

ago ________ much better ______

still limited to a few people __________ other _______________

____

c. Is local literature about nature/conservation: easily

available___, available but uncommon ___, non-existent____.

d. Do hunters: support conservation policies ________________ ,

oppose them ___________ , ignore them __________________ ,

say they support them but do otherwise __________________ .

e. Are there any nature reserves ____ and hunting reserves ___

any other reserves _________ (specify types)

f. Is it legal for hunters to shoot:

over land which is not theirs?___________________________

over public land? ________ in nature reserves? ___________

in protected areas? _____________

g. If any of the above activities are illegal but shooters still shoot, please indicate.

____

13. CREDITS

Thank you for filling in this questionnaire.

a. Can you suggest other people/organizations to whom this can be sent?

Name / organization and address

____

b. Do you wish to be credited?

Dr/Mr/Ms____

Address____

Telephone number__________ Fax Number _________________

If you prefer to remain anonymous, please state.

If there is anything else you have to add, please use the space below or a separate sheet.

____

____

____

____

____

____

____

____

Table 3A.1
Some expressions used by hunters

Sparajt ghal buqrajq, gibtu stoppa	I shot a nightjar and turned it into oakum
Tajra safra ghamiltha raghad	I shot a golden oriole and smashed it to smithereens'
Giet tajra kahla, ixxuttjajtha bit-tir	I shot a cuckoo, and kicked it with the shot
Dahalli seqer, qsamtu	A kestrel came within range and I blasted it into two
Sparajt ghal pespus, zelligtu	I shot at a meadow pipit and smeared it over the ground
Il-huttaf nifqghu bit-tir	I shoot at swallows and burst them with the shot
Il-huttaf ingiddmu the swallows	I shoot are plagued with shot
L-imlievez tihom go darhom	Hit the thrushes on the back
Il-gamiem niehu gost inqattghu bit-tiri	I enjoy shooting and tearing turtle doves to pieces with shots
Sparajt ghal kuccarda, issussajta bit-tir	I shot a honey buzzard and lifted it with shot
Sparajt ghal buqrajq, gibtu stoppa	I shot a nightjar and turned it into oakum

Table 3A.2
Proverbs related to hunting

1.1 *Meta tiekol it-tamra, ghall-kacca tibda n-namra*
When you begin to eat dates, the passion for hunting starts

1.2 *April bl-ixkubetta w bl-azzarin*
April carries a gun and rifle

1.3 *L-ahjar toqtol zewg aghsafar bi skartocc wiehed*
It pays to kill two birds with one cartridge

1.4 *L-ajru akbar mit-tajra*
The sky is bigger than the fowl

1.5 *Min ibakkar u jwahhar jiehu l-pluvieri minghajr ma jsaffar †*
He who goes out early and stays out late, takes golden plover without calling

1.6 *Rfiegh ir-rih, kacca fil-qiegh*
When the wind becomes strong, the chances of shooting birds diminishes

1.7 *Mill-Kuncizzjoni sal-Milied, erfa l-mohriet minn halq il-wied u qieghed l-ixkubetta fuq l-utied*
From the day of the feast of the immaculate conception (8 december) until christmas, take the plough from the mouth of the valley and put the fowling piece on the peg.

1.8 *La jigi l-Milied, erfa xkubettietek fuq il-farxa tal-bieb*
When christmas comes, put your fowling piece on the door shelf

1.9 *F'Jannar u Frar, l-ixkubetta halliha d-dar*
In January and February, leave your fowling piece at home

Table 3A.3
Proverbs related to bird trapping

2.1 *L-aghasafar trid l-aghsafar*
Birds seek the company of birds

2.2 *Ghasfur li jgerri jehel fix-xibka†*
(var. *Ghasfur gerrej fix-xibka jehel bhallixejn ††*
ghasfur li jhobb jiggerra, jew ghad jaghli jew jisferra
ghasfur li jhobb jiggerra, dur dur jinqabad
A bird that moves about gets entangled in the net

2.3 *Ghasfur li wehel fix-xibka ghandu qawwi sa ma johrog†*
(var. *Ghasfur li dahal fix-xibka ghandu qawwi sa ma johrog††*
ghasfur li dahal fix-xibka ghandu qawwi sa ma jibqa
A bird that gets caught in the net won't easily get out of it

2.4 *F'San Anard, l-isponsun ma jmiddx saqajh mal-art*
On St Leonard's day (6 November), the chaffinch does not rest its feet on the ground

2.5 *Santa Katerina itfa' l-gabbjetti gol-kantina*
On St Catherine's day (25 November) put the nets (cages) in the cellar

2.6 *Meta tisma l-qerd in-nahal, erfa x-xbiek mur lejn ir-rahal*
When you hear the bee-eater, pack your nets and go home

2.7 *F'San Martin jitfghu l-ixbiek fuq in-newl*
On St Martin's day (11 November) the nets are put aside on the loom (the quail trapping season ends)

TABLE 3A.4
PROVERBS RELATED TO MIGRATION

3.1 *Meta tisma' l-bukaghwar ighajjat saffar lis-summiena*
When you hear the black beetle calling, call for quail

3.2 *Nhar il-Lunzjata tigi l-bilbla u tmur l-alwetta*
On the feast of the Annunciation (25 March), the short-toed lark arrives and the skylark leaves

3.3 *Kull fejn hemm il-qniepen hemm ukoll il-bliebel*
Where the church bells toll, there are short-toed larks. Larks appear and breed in late spring, and summer, when most village feasts are celebrated. Church bells toll incessantly during feasts.

3.4 *Nhar San Guzepp jidher il-buqrajq*
On St Joseph's day (19 March) the nightjar appears

3.5 *Passa alwett passa lampuki*
When skylarks migrate dolphin fish migrate too

3.6 *Nhar San Mikiel l-alwetta tidher xi mkien*
On St Michael's day (29 September) the skylark appears somewhere

3.7 *Fid-Duluri tmur il-bilbla w tigi l-alwetta*
On the day of Our lady of Sorrows (15 September), the short-toed lark leaves and the skylark returns

3.8 *Santa Katerina fora gallina*
On st Catherine's day (25 November) the woodcock goes away

TABLE 3A.5
PROVERBS RELATED TO BIRDS AND WEATHER

4.1 *Alwett bil-gziez, xita bla qies*
When skylarks appear in large numbers, expect rain

4.2 *Meta l-gawwi joghla flimkien, ikun gej ir-rih*
When gulls fly high up together, expect a strong wind

4.3 *Meta fl-art jidhol il-gawwi, stenna rih qawwi*
When gulls fly inland, expect a strong wind

4.4 *Meta l-gru jghaddi fl-gholi jkun gej il-maltemp*
When cranes fly high, expect bad weather

4.5 *Meta jigu l-pluvieri, jigi l-maltemp*
When golden plovers arrive, so does bad weather

4.6 *L-gharienaq il-maltemp iqanqlilhom il-gwienah*
Bad weather moves the wings of the crane

4.7 *Moghdija tal-aghsafar kbar sinjal tal-maltemp*
Big birds flying over are signs of bad weather

4.8 *Meta tara l-huttaf tkun gejja x-xita*
When you see swallows, rain is approaching

4.9 *Il-malvizz izekzek bil-lejl, rih nofs in-nhar*
When the song thrush calls during the night, expect a southerly wind

4.10 *Ja ghasfur tbahbah u nfela, waslet ghalik ir-rebbiegha la darba x-xghir mela*
O bird preen yourself, spring is here as the barley wheat is now in crop

TABLE 3A.6
METAPHORICAL PROVERBS RELATED TO BIRDS

5.1 *Kull ghasfur imur mar-rih, izda l-bies imur kontrieh*
Every bird flies with the wind, but the falcon flies against it

5.2 *Min jibza mill-gharnuq ma jizrax fult ††*
He who is afraid of cranes should not sow beans

5.3 *Cawl u ghorob, af illi jiekol, ma jitmax*
Jackdaws and ravens want to eat but do not feed (their young)

5.4 *Ghorb u cawl ma jgibu l-ebda risq*
Ravens and jackdaws do not bring any luck

5.5 *Il-ghorab bi hsieb l-ohrajn swied††*
The raven became black by worrying about others

5.6 *Il-ghorab ma jaqlax ghajn lil siehbu†*
The raven does not fight his comrade

5.7 *Jekk int cawla, tipprovax taghmilha ta seqer*
If you are a jackdaw, don't pretend to be a falcon

5.8 *In-naspla saret u c-cawla taret*
When the medlar fruit is ripe. the jackdaw leaves the nest

5.9 *Qasba mgengla tajba biss ghal caqciqa biex tnaffar ic-cawl*
var: *qasba mgengla tajba biss ghac-cekcika biex tnaffar ic-cawl††*
A cracked reed is only good to scare crows

5.10 *Cawla bajda qatt ma dehret†*
There never appeared a white jackdaw

5.11 *Kull tajr jifrah b'rixu†*
var: *kull ghasfur jifrah b'rixu††*
Every bird is proud of its own feathers

5.12 *Rixiet sbieh jaghmlu aghsafar sbieh*
Fine feathers make fine birds

5.13 *Meta l-ghasfur itir, imbaghad kollu ghalxejn*
When the bird has flown away, it's all in vain.

5.14 *Gagga miftuha sinjal li l-ghasfur mejjet*
var: *qafas miftuh, ghasfur mejjet jew ghasfur tar*
A cage with an open door means that the bird died (or escaped)

5.15 *Il-hbar hi li l-ghasfur tar u l-ghoxx baqa battal*
The news is that the bird has flown away and the nest is empty

5.15 *F'Marzu kull ghasfur ifittex il-martu†*
In March, every bird looks for its mate

5.16 *F'Marzu kull tajr ibid*
In March every fowl lays its eggs

5.17 *Kull ghasfur ghandu l-bejta tieghu*
Every bird has its nest

5.18 *Iggorr, iggorr, sa l-bajda ttorr*
Carry and carry straws until the nest is built

5.19 *Mghakksa dik it-tajra li titwieled f'gebel hazin†*
var: *imsejkna dik it-tajra li tfaqqas f'bejta hazina*
Poor is that bird which hatches in the wrong nest

5.20 *Tal-bahar u tal-ajru, iddum biex issajru*
Fish and birds are not easy to cook (because they are difficult to catch)

5.21 *Bufula kiel nemusa, farfar rixu w telaq jghanni††*
The warbler ate a grub and flapped its wings and began to sing

5.22 *Bufula qalet "skond m'ahna qantarna"*
"According to our station is our burden," a warbler said.

5.23 *Il-kokka 'l uliedha tara sbieh*
The owl percieves its young as beautiful

5.24 *Iz-zakak jaqbez u jitfarfar izda l-hamiem izoqq u jgargar*
The wagtail hops and flaps but the dove feeds and coos

5.25 *Il-bniedem jixbah lit-tajra†*
var: *il-bniedem jitwieled biex jahdem u l-ghasfur biex itir*
Man is born to work and birds are born to fly

5.26 *Meta tidhol il-qorti int tiekol sardina u l-avukat jiekol gallina*
When you go to court, you eat a sardine while the lawyer eats a woodcock (or chicken)

5.27 *Min jahdem jiekol sardina, min ma jahdimx jiekol gallina*
Who works eats a sardine and who doesn't eats chickens

5.28 *Ahjar ghasfur f'idek milli mija fl-ajru*
A bird in the hand is worth two in a bush

5.29 *Karta f'idejn pastaz, ghasfur f'idejn tifel*
A bird in a boy's hand is like a piece of paper in the hands of a fool

5.30 *Xortiha hazina l-makkuwwa; jew tinzel 'l isfel u tikolha z-zabrija jew titla 'l fuq u tahtafha l-gawwija*
The little fish is ill fated — if it dives down it is eaten by bigger fish, if it surfaces it is eaten by gulls

5.31 *Il-hamiem li jafda s-seqer itemmu †*
var: *hamiema bla hjiena (hazen) is-seqer itemmha*
The foolish pigeon is killed by the falcon

5.32 *Il-mara tal-kaccatur hi bhal mara tal-furnar bi driegh wiehed*
The hunter's wife is like a fisherman's wife, with one arm

These proverbs have been compiled from: Gatt, E.C. 1984, Vassalli, M.A.1828, Aquilina, J. 1972, Manduca, J.S. and Mifsud, G. 1989 and Cassar Pullicino, J. 1992.

Note proverbs marked † are from Gatt's work on Agius de Soldanis while those marked †† are from Vassalli. The rest are from the contemporary works cited.

TABLE 3A.7
HUNTERS' SAYINGS RELATED TO BIRDS

6.1 *L-alwett fotti tiri*
Skylarks makes you waste cartridges

6.2 *Meta l-ghansar jisbieh, il-gamiem istennieh*
When the sea squill blossoms, expect turtle doves

6.3 *Suffara tal-pluvieri tintiret mhux tinxtara*
A plover call is inherited, not bought

6.4 *Ghas-summien, mill-ghoxrin (ta' April) sal-ghoxrin (ta' Mejju)*
Between the 20th (April) to the 20th (May) is good for quail

6.5 *Ghas-summien, kelb ta' mitt lira u senter ta' sold*
For shooting quail one needs an expensive dog and a cheap gun

6.6 *(Fil-passa) kisser il-pinnur w ohrog kulljum*
(During migration) ignore the weather vane and go out every day

6.7 *Ix-xbiek bin il-bnazzi*
To trap birds one needs good weather

6.8 *Bin-nofs kaccatur*
If you kill half of what you shoot at, you are a good shooter

6.9 *It-tajjeb imur hazin darba, il-hazin imur tajjeb darba*
The good shooter goes wrong once, the bad one gets it right once

6.10 *Ic-comb dici tutta kacca*
Size 10 pellets are good for all kinds of game

6.11 *Ta' l-ajru daqs tlieta*
A flying bird presents a target three times a sitting one

6.12 *Spara fit-tir, halli ma toqtolx*
Shoot within range, even if you fail to kill

6.13 *Bi skartocc wiehed jixkatta senter*
A gun ruptures with just one cartridge

6.14 *Li xkubetta jikkargaha l-kaccatur u jisparaha x-xitan*
The hunter loads the muzzle loader but the devil fires it

6.14 *Min jispara hafna, fl-ahhar jolqot**
He who shoots plenty of shots will finally hit

6.15 *Il-kacca ghall-gabillot**
Hunting is for the farmer (because he wakes up early)

6.16 *Dakinhar li tigi l-kacca jkun tempha!**
The day game appears would be the ideal weather!

6.17 *Kaccatur bla kelb, kaccatur pastur***
A hunter without a dog is like a crib figurine

These sayings are listed as "proverbs" and "sayings" by Azzopardi 1985, *Il-Passa* 1996 *. The last one (6.17) was communicated to me by Dr Stefan Fendo. None of these sayings are not found in any of the major works about proverbs.

Table 3A.8
Sayings relating saints and birds

7.1 *Bejn il-pawlijiet ghal malvizz ahmar*
Redwings appear between the feasts of St Paul (25 January— 10 February)

7.2 *Nhar San Girgor ghas-summien*
Quail shooting starts on the feast of St Gregory (12 March)

7.3 *Nhar San Gorg l-ewwel passa tal-gamiem*
On the feast of St George (23 April) occurs the first migration of turtle doves

7.4 *Il-festa tas-Salib it-tieni passa tal-gamiem*
The feast of the Holy Cross (3 May) marks the second migration of turtle doves

7.5 *Nhar San Filep it-tielet passa tal-gamiem*
The third migration of turtle doves takes place on the feast of St Philip (12 May)

7.6 *Il-gamiem sa ta' Pompei**
Turtle doves appear until the feast of Our Lady of Pompei (8 May)

7.7 *Sa l-Imnarja tista tara l-gamiem*
Turtle doves can be seen until the feast of St Peter and St Paul (29 June)

7.8 *Fl-Imnarja tibda l-kacca tal-fenek*
On the feast of St Peter and St Paul (29 June), the rabbit hunting season starts

7.9 *Fil-Vitorja tibda l-passa tal-gamiem*
On the feast of Our Lady of Victory (8 September), turtle dove migration starts

7.10 *Nhar San Mikiel, l-alwetta tidher x'imkien*
On St Michael's day (29 September), the skylark appears somewhere

7.11 *Is-summien tal-harifa mal-kwattru tempri*
Autumn quail appears with the feast of *kwattru tempri* (in early September)

7.12 *F'Santa Tereza jibda l-insib*
On the feast of St Theresa (16 October), trapping starts

7.13 *Ix-xahar tar-ruzarju kollu tajjeb ghall-alwett*
The month of the rosary (October) is good for skylarks

7.14 *Il-qaddisin kollha jifthu l-imlievez*
All saints' day (1 November) marks the thrush migration

7.15 *(L-aqwa tal-pluvieri) il-kwinta ta' Novembru**
The best time for plovers is the full moon in November

7.16 *Qabel in-novieni, tistenniex pluvieri**
Do not expect plovers before the 15 December

7.17 *Nhar San Anard tmiem l-insib*
Saint Leonard (6 November) marks the end of the trapping season

7.18 *Il-Milied tmiem il-kacca tal-fenek*
Christmas spells the end of the rabbit hunting season

TABLE 5A.1

SAMPLE OF THE SURVEY CONDUCTED IN 1992 WITH MEMBERS OF PARLIAMENT AND CANDIDATES ON THEIR OPINION ON HUNTING

1. Do you think that hunting, as practised in Malta, is a sport?

   Yes______ No_____ Don't know_____

2. Do you think hunting in Malta should be controlled?

   Yes______ No_____ Don't know_____

3. Do you think hunting laws should be made stricter?

   Yes______ No_____ Don't know_____

4. Do you think public opinion is for or against hunting

   In favour of hunting ____ Against hunting ___ Don't know_____

5. How would you vote in a hunting referndum?

   In favour of abolition ______ , In favour of retaining hunting_________ ,

   Would not vote _________

6. Did you experience any pro-hunting pressure before the elections?

   Yes______ No_____ Don't know_____

7. Did you have pressure by environmentalists before the elections?

   Yes______ No_____ Don't know_____

8. Which was the biggerst pressure?

   The hunters'______, the environmentalists' ________, Don't know_____

9. Are you prepared to speak in public, or in Parliament:

   in favour of environmental protection____ , in favour of hunting,_____,

   against illegal hunting______, against hunting in Malta______,

10. Do you think political parties should form a common policy on hunting?

    Yes______ No_____ Why_____

TABLE 5A.2

RESULTS OF THE SURVEY ON THE OPINION OF MEMBERS OF PARLIAMENT AND CANDIATES WHO CONTESTED THE ELECTIONS OF FEBRUARY 1992
(REPLIES GIVEN IN PERCENTAGE FORM)

	Members of Parliament						Candidates								
	PN			MLP			PN			MLP			AD		
	Yes	No	?	Yes	No	?	Yes	No	?	Yes	No	?	Yes	No	?
1. Do you think that hunting, as practiced in Malta, is a sport?	29.4	52.9	17.6	44.4	44.4	11.1	26.7	66.7	6.6	6.2	81.3	12.5	0	100	0
2. Do you think hunting should be controlled?	100	0	0	100	0	0	100	0	0	100	0	0	100	0	0
3. Do you think hunting laws should be made more stringent?	88.2	5.9	5.9	66.7	33.3	0	93.3	6.7	0	100	0	0	100	0	0
4. Do you think that public opinion is for or against hunting?	23.5	47.1	29.4	33.3	22.2	44.4	13.3	26.7	60	0	68.8	31.2	0	85.7	14.3
5. In a referendum, would you vote so that hunting is abolished, in favour of hunting or would you abstain?	52.9	35.3	11.8	44.4	55.6	0	53.4	33.3	13.3	68.8	25	6.2	100	0	0
6. Did you have pressure from hunters before the elections?	41.2	52.9	5.9	11.1	88.9	0	20	73.3	6.7	18.7	81.3	0	0	100	0
7. Did you have pressure from environmentalists?	29.4	64.7	5.9	22.2	77.8	0	53.3	46.7	0	6.3	93.7	0	14.3	85.7	0
8. Which was the biggest pressure, the hunters' (a), the environmentalists' (b) or don't you know (c)?	(a) 35.3	(b) 17.6	(c) 47.1	(a) 22.2	(b) 22.2	(c) 55.6	(a) 20	(b) 26.7	(c) 53.3	(a) 12.4	(b) 6.3	(c) 81.3	(a) 0	(b) 14.3	(c) 85.7
9. Are you prepared to speak in Parliament or in public in in favour of hunting, against illegal hunting, against hunting?	23.5	88.2	5.9	33.3	66.7	33.3	13.3	86.7	20	6.3	68.8	37.5	0	85.7	85.7
10. Do you think political parties should formulate a common hunting policy?	88.2	11.8	-	88.9	11.1	-	93.3	6.7	-	93.8	6.2	-	85.7	14.3	-

TABLE 7A.1
LIST OF BIRDS STUFFED BY TAXIDERMIST A DURING THE YEARS 1958-1977.

year	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	totals
Little grebe	1	-	1	1	-	-	1	2	1	1	3	1	2	1	3	-	-	-	-	-	18
Great crested grebe	1	1	-	2	-	-	2	3	1	1	-	1	1	-	-	2	-	2	1	2	20
Black necked Grebe	2	-	-	1	-	1	1	-	3	-	2	-	-	7	3	8	7	11	9	2	57
Cory's shearwater	-	1	-	8	1	3	8	7	14	9	11	23	2	4	19	13	9	15	20	12	179
Manx shearwater	-	-	-	-	2	2	-	-	1	2	1	1	-	-	-	-	-	1	1	1	12
Storm petrel	-	-	-	1	-	-	-	1	3	2	-	-	-	-	-	-	-	1	-	-	8
Gannet	-	1	-	-	-	-	2	-	1	-	2	-	-	-	1	1	-	-	-	-	8
Cormorant	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4	1	5	1	1	-	13
Bittern	-	-	-	-	1	-	-	-	-	-	4	2	2	-	7	1	1	3	1	1	23
Little bittern	-	-	-	2	3	5	4	3	8	10	18	14	16	11	13	10	25	18	19	32	211
Night heron	1	10	8	10	11	14	19	24	26	24	25	45	32	32	77	42	38	87	55	106	686
Squacco heron	-	5	11	22	11	16	34	18	16	17	19	17	14	16	14	35	16	25	29	40	375
Cattle egret	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Great white egret	-	-	-	-	2	4	-	-	-	-	-	-	-	-	1	-	-	1	1	1	10
Little egret	-	-	9	12	18	17	16	18	14	15	11	18	13	14	10	10	13	16	15	22	261
Grey heron	-	3	-	-	-	6	2	-	2	-	5	-	-	6	8	11	10	6	27	9	95
Purple heron	1	7	6	13	14	18	18	14	21	14	39	28	15	18	40	42	29	38	60	51	486
Glossy ibis	-	-	1	-	-	1	2	3	-	-	-	1	2	2	-	4	12	-	1	3	32
Spoonbill	-	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	-	-	4
White stork	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Black stork	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	2
Pink-footed goose	-	-	-	-	-	-	-	-	1	4	-	-	-	-	1	1	-	-	-	-	7
Grey-lag goose	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	3
Bean goose	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
Shelduck	-	-	-	-	-	-	1	-	-	1	-	1	-	-	3	1	2	-	-	-	9
Wigeon	-	-	-	-	-	-	1	-	3	-	3	2	-	-	-	-	-	-	-	-	9
Teal	-	-	-	-	-	1	1	-	-	-	-	4	-	2	1	2	4	2	-	-	17

Mallard	-	2	1	1	-	2	-	2	1	3	-	2	-	2	4	13	3	5	10	17	68
Pintail	1	-	-	-	-	-	-	-	-	-	-	1	-	1	8	4	7	3	1	1	27
Garganey	-	-	-	-	-	-	-	3	2	3	1	1	-	6	4	87	27	7	3	2	146
Shoveler	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	3	2	1	2	-	11
Pochard	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	4	3	1	1	-	12
Ferruginous duck	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	2
Red-breasted merganser	-	-	-	-	-	-	-	-	-	-	1	2	-	-	2	-	-	4	-	4	13
Honey buzzard	-	3	5	4	3	6	7	9	13	16	37	24	5	30	21	22	30	23	35	31	324
Black kite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	3	8
Lesser-spotted eagle	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Booted eagle	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Egyptian vulture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Short-toed eagle	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	1	1	4
Marsh harrier	-	4	7	9	8	9	7	7	13	5	13	23	11	17	37	19	43	52	36	67	387
Ringtails (harriers)	-	1	1	-	-	2	1	1	5	4	3	4	3	1	-	-	-	2	-	4	32
Sparrowhawk	-	3	-	-	-	-	-	1	-	-	-	1	-	1	1	1	2	1	1	-	12
Osprey	-	-	-	-	-	1	-	1	-	-	2	-	-	-	-	-	1	2	2	1	10
Kestrel / lesser kestrel	2	10	24	25	32	23	38	31	43	38	36	57	22	28	71	28	60	60	95	54	777
Red-footed falcon	-	-	-	13	3	3	5	2	-	10	4	7	-	-	1	14	-	5	1	42	110
Merlin	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	3
Hobby	-	-	-	7	2	5	5	5	6	9	3	15	-	-	4	17	15	33	11	28	165
Eleonora's falcon	-	-	1	-	2	-	1	-	2	2	1	1	-	2	1	3	1	2	1	1	21
Saker falcon	-	-	-	-	-	-	1	-	-	-	1	1	-	-	-	-	-	-	-	-	3
Peregrine falcon	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	2	2	1	-	7
Quail	-	-	1	1	2	-	2	3	8	6	4	1	1	5	9	3	9	14	15	16	100
Spotted crake	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	6
Little crake	-	1	-	1	-	-	1	1	-	-	1	1	-	1	1	-	-	-	-	-	8
Baillon's crake	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	3
Corncrake	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Moorhen	-	5	8	6	11	10	12	19	6	11	27	28	2	13	23	24	19	28	26	11	289
Coot	1	-	-	-	-	-	-	-	-	-	-	2	-	5	2	13	1	26	19	18	87
Crane	-	-	1	1	-	1	-	-	7	1	-	1	-	-	-	1	1	-	5	-	19
Little bustard	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1

Black-winged stilt	-	-	-	-	-	-	-	2	1	2	1	-	1	-	1	1	10	2	-	2	23
Avocet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Stone curlew	-	1	1	-	6	2	3	1	5	1	7	4	5	3	15	7	9	2	6	13	91
Cream-coloured courser	-	-	-	-	-	-	-	2	1	-	-	-	-	2	2	2	-	-	-	3	12
Pratincole	-	-	-	-	-	1	-	-	-	-	2	4	-	1	-	1	2	5	3	1	20
Little ringed plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	2	7
Ringed plover	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	5	-	-	1	-	8
Dottorel	-	1	-	-	-	1	4	3	3	4	2	4	4	8	11	10	8	8	21	10	102
Golden plover	-	1	3	4	-	4	4	12	7	9	4	12	1	4	20	46	6	40	20	35	232
Grey plover	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2	1	-	4
Lapwing	1	1	4	3	1	7	12	14	9	27	12	6	2	7	4	40	12	17	24	46	249
Little stint	-	-	-	-	-	1	-	1	-	1	-	-	-	-	-	-	1	-	-	7	11
Curlew sandpiper	-	4	1	3	-	2	-	-	1	2	-	4	-	-	-	6	2	-	7	-	32
Ruff	-	2	-	1	-	-	4	3	2	-	-	-	-	1	1	4	1	-	-	2	21
Jack snipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	2
Snipe	-	3	2	-	2	1	4	6	9	2	5	10	8	8	21	11	11	21	14	14	152
Great snipe	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	9	2	-	-	-	14
Woodcock	3	1	4	2	1	5	3	11	6	4	7	14	-	19	14	30	19	69	17	29	258
Black-tailed godwit	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Whimbrel	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Curlew	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2
Spotted redshank	-	-	-	1	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	5
Redshank	-	-	-	-	-	-	-	1	2	-	-	-	-	-	2	-	1	-	-	-	6
Marsh sandpiper	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Greenshank	-	1	-	1	-	-	1	1	-	4	1	2	-	-	1	1	1	3	1	9	27
Green sandpiper	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Wood sandpiper	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	-	-	3
Common sandpiper	-	1	1	4	2	6	7	7	12	8	12	10	5	2	10	18	13	21	12	8	159
Turnstone	-	-	-	-	-	-	4	-	-	-	1	2	-	-	-	-	-	-	-	-	7
Arctic skua	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
Little gull	1	-	-	-	-	-	2	-	-	2	1	2	-	2	1	2	2	5	2	3	25
Black-headed gull	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	-	-	4	2	3	12
Slender-billed gull	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Herring gull	-	2	1	-	1	4	8	2	6	3	13	5	7	5	11	7	6	10	16	12	119
Sandwich tern	1	-	-	6	-	3	6	-	1	-	-	-	-	-	1	3	12	1	1	1	36
Black tern	-	-	-	-	-	1	1	-	1	2	2	-	5	4	2	2	-	5	6	9	40
Woodpigeon	-	-	2	-	-	-	1	-	-	1	1	-	1	-	-	-	2	-	-	-	8
Turtle dove	-	-	-	-	2	2	4	7	5	3	5	1	1	4	10	3	-	13	9	15	84
Palm dove	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2
Great spotted cuckoo	-	-	-	-	-	-	1	-	-	-	2	-	1	-	-	1	-	1	-	1	7
Cuckoo	-	1	1	1	1	4	6	11	6	4	8	13	3	1	10	15	8	27	14	24	158
Barn owl	5	6	12	5	3	7	9	14	10	14	3	14	-	5	12	11	10	13	7	10	170
Scops owl	-	-	6	3	3	1	7	8	6	4	5	11	2	9	23	17	24	17	34	18	98
Long-eared owl	-	-	-	-	2	2	1	-	-	1	2	-	-	3	4	-	2	3	-	7	27
Short-eared owl	2	5	7	5	1	6	5	9	14	13	17	11	6	7	32	15	39	52	81	3	30
Nightjar	-	-	-	-	1	2	1	2	-	2	1	7	-	1	-	3	6	2	1	2	31
Swift	-	-	-	2	1	4	-	1	1	1	1	1	-	1	-	-	2	-	2	-	17
Alpine swift	-	-	-	-	-	2	2	3	2	1	2	2	1	2	1	2	3	2	3	5	33
Kingfisher	2	2	2	6	1	1	8	2	5	1	2	2	3	5	2	4	1	22	8	7	86
Bee-eater	-	5	10	8	10	16	34	30	31	17	19	21	19	17	27	29	27	24	28	38	410
Blue-cheeked bee-eater	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
Roller	-	20	20	11	17	23	27	13	17	37	16	45	12	10	21	15	33	44	14	12	407
Hoopoe	-	2	1	5	5	10	16	26	22	12	20	31	8	13	12	7	27	16	14	22	269
Wryneck	1	-	1	-	-	2	1	1	6	2	2	6	6	2	1	1	1	12	1	4	50
Calandra lark	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	1	3
Wood lark	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Skylark	2	-	-	-	-	1	-	1	-	1	2	-	-	-	1	-	-	1	2	7	18
Red-throated pipit	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Tawny pipit	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Meadow pipit	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Yellow wagtail	-	-	-	-	-	1	2	-	1	-	-	-	-	-	-	1	-	-	-	-	5
White wagtail	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Dunnock	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Wheatear	-	-	-	-	-	-	-	11	4	3	2	1	3	2	3	2	2	2	7	1	43
Rock thrush	-	-	-	1	1	2	-	3	8	-	14	14	5	4	16	4	6	6	7	4	95
Blue rock thrush	-	1	1	-	-	-	2	2	3	3	4	6	4	1	4	3	3	6	1	3	47

Rin ouzel	-	-	-	1	-	1	1	1	1	1	1	2	1	-	1	4	-	1	2	1	19
Blackbird	1	-	-	3	-	-	3	2	3	-	-	4	-	4	1	-	1	-	-	-	22
Fieldfare	-	-	-	1	-	-	1	19	7	2	4	3	2	4	7	11	17	43	9	11	141
Song thrush	2	-	2	3	-	-	4	8	2	2	7	9	1	7	6	13	8	31	5	7	117
Redwing	-	-	-	-	-	1	1	1	1	-	-	1	-	-	-	-	-	1	-	2	8
Sardinian warbler	-	1	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	5
Chiffchaff	-	-	-	-	-	-	2	-	1	-	2	-	-	-	-	-	-	-	-	-	5
Goldcrest	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Golden oriole	-	19	18	56	43	63	53	29	41	38	29	70	15	12	31	58	33	64	23	103	798
Woodchat shrike	-	-	-	1	-	-	2	3	4	7	3	1	-	1	-	-	5	4	-	6	37
Starling	5	7	2	5	3	3	2	2	8	15	10	11	2	8	28	15	21	15	10	26	198
Rose-coloured starling	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Spanish sparrow	1	1	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	2	7
Wren	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	3
Chaffinch	2	-	-	-	-	-	-	-	2	-	-	1	1	-	-	-	-	-	-	-	6
Greenfinch	2	-	-	-	-	-	1	1	3	4	-	1	-	-	-	-	-	-	2	5	19
Goldfinch	4	-	1	-	-	2	9	8	6	2	2	1	-	-	-	-	-	-	-	4	39
Siskin	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	3
Linnet	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2
Hawfinch	-	-	-	-	-	-	-	1	2	-	-	1	-	4	-	-	4	2	1	-	15
Ortolan bunting	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Corn bunting	-	1	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	4
Snow bunting	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Yellow hammer	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1						
year	1958	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	
tot																					
total	45	147	190	282	235	352	486	479	512	476	546	701	280	424	768	883	808	1144	953	1146	10,857

Note that the records for 1970 and 1971 do not cover the whole years. The records for 1970 cover the months January to April only, while for the year 1971, the records from May to August, were not available.

Table 7a. 2

A list of birds which were stuffed by Taxidermists B and C during the years 1976-1986

Years	1976	77	78	79	80	81	82	83	84	85	86	total
Little grebe	-	-	-	-	-	-	-	-	-	1	1	2
Great crested grebe	-	1	-	-	3	-	-	1	-	1	1	7
Black-necked Grebe	3	2	2	2	2	3	2	5	5	3	4	33
Cory's shearwater	1 1	2	4	1	7	5	7	1	2	1	32	
Manx shearwater	1	2	1	2	7	4	6	3	2	2	1	31
Storm petrel	1	-	-	-	-	-	-	1	-	-	-	2
Gannet	-	-	1	1	-	1	-	3	-	1	5	12
Cormorant	1	-	-	-	-	1	1	3	-	1	5	12
Bittern	2	-	-	-	-	-	1	1	-	2	-	6
Little bittern	5	6	3	3	3	3	3	14	6	5	7	58
Night heron *	16	15	14	19	16	18	17	21	16	14	16	182
Squacco heron *	5	4	2	3	7	7	11	4	2	2	3	50
Little egret *	3	5	3	5	5	6	14	8	4	6	6	65
Grey heron *	4	2	3	5	3	3	7	6	3	7	6	49
Purple heron *	5	18	10	7	6	5	8	8	3	8	4	82
Glossy ibis	-	-	-	-	3	-	-	-	2	2	1	8
Spoonbill	1	-	-	-	-	-	-	-	-	-	-	1
Flamingo	-	-	-	-	-	-	-	-	1	-	-	1
Goose sp.	-	-	-	-	-	-	-	1	-	-	-	1
Shelduck*	-	-	-	-	-	-	-	2	2	-	-	4
Wigeon *	-	-	-	-	-	2	-	-	2	1	1	6
Teal *	2	2	-	-	-	2	2	2	4	4	4	22
Mallard *	-	-	2	-	-	-	-	6	-	2	1	11
Pintail *	-	1	-	-	-	2	-	2	4	2	-	11
Garganey *	1	-	-	-	6	3	12	20	7	7	5	61
Shoveler *	-	-	-	-	-	-	-	-	-	3	-	3
Pochard *	-	-	-	-	-	-	-	1	-	-	-	1
Ferruginous duck *	-	-	1	-	-	-	-	2	2	5	2	12
Honey buzzard	11	9	12	29	15	12	14	23	25	14	22	186
Black kite	-	-	1	1	-	1	-	-	-	1	1	5
Red kite	-	-	-	-	-	-	-	1	-	-	-	1
Short-toed eagle	-	-	1	-	-	-	-	-	-	-	-	1
Marsh harrier	12	10	14	11	9	16	18	24	20	26	26	186
Hen harrier	1	1	-	-	1	-	3	-	2	-	-	8
Pallid harrier	1	-	1	1	-	2	1	6	1	-	-	13
Montagu's harrier	2	3	2	2	2	3	2	10	9	5	9	49
Sparrowhawk	1	-	1	2	1	1	1	3	1	1	1	13
Buzzard	-	-	-	-	-	-	-	-	1	1	1	3
Osprey	-	-	-	2	-	-	-	-	1	-	1	4
Lesser kestrel	3	2	2	4	3	4	3	3	1	1	2	28
Kestrel	28	21	24	45	26	22	18	22	27	18	23	274
Red-footed falcon	6	8	10	8	12	7	23	48	19	10	18	169
Merlin	-	-	-	-	1	-	-	-	3	-	1	5
Hobby	4	4	5	8	4	7	10	19	10	8	12	91
Eleonora's falcon	-	-	-	-	1	-	2	-	1	3	1	8
Peregrine falcon	1	-	-	-	-	-	-	1	-	-	-	1
Quail *	2	2	1	4	1	2	8	8	2	1	2	33
Water rail *	-	-	-	-	1	1	1	1	-	7	3	14
Spotted crake *	-	1	-	-	3	-	-	1	-	-	1	6
Little crake *	-	-	-	-	-	-	1	-	-	-	-	1
Corncrake *	-	-	-	-	2	-	-	3	-	-	-	5
Moorhen *	4	3	5	7	9	7	12	9	5	5	7	73
Coot *	1	-	-	-	2	1	1	4	3	3	3	18
Crane	-	-	-	-	1	-	-	-	1	-	-	2
Black-winged stilt	1	2	1	3	1	2	1	9	5	3	3	31
Stone curlew *	-	3	1	2	1	1	1	1	2	3	2	17
Avocet	-	-	-	-	-	-	-	-	-	1	-	1

Cream-coloured courser	-	-	-	-	-	-	-	1	-	1	-	2
Pratincole	1	1	-	-	1	-	2	-	1	-	1	7
Little Ringed plover	3	-	-	2	2	3	5	1	-	-	-	16
Ringed plover	1	4	-	1	-	-	1	4	4	2	-	17
Kentish plover	-	1	1	1	-	-	-	-	1	-	-	4
Dottorel *	5	1	2	6	2	1	4	2	3	5	4	35
Golden plover *	2	3	3	8	1	6	5	2	6	8	7	51
Grey plover	1	1	-	2	-	-	1	3	-	-	4	12
Lapwing *	4	1	5	3	4	10	1	2	3	4	3	40
Sanderling	-	-	-	3	-	-	-	-	-	-	-	3
Little stint	5	-	1	5	1	1	5	1	2	1	1	23
Curlew sandpiper	-	1	-	-	3	3	1	-	-	-	-	8
Dunlin	-	-	2	-	-	1	1	2	4	1	2	13
Ruff	2	4	2	4	5	2	3	2	2	12	7	45
Jack snipe *	-	-	-	3	-	-	-	2	2	6	5	18
Snipe *	4	1	4	1	1	5	8	7	3	5	4	43
Great snipe *	1	-	-	-	2	-	1	7	1	1	1	14
Woodcock *	3	2	5	6	5	6	7	10	6	5	7	62
Black-tailedgodwit	1	-	-	-	-	-	-	-	-	-	-	1
Whimbrel	1	1	-	-	-	-	-	-	-	1	-	3
Curlew	-	-	3	-	-	-	-	1	3	1	1	9
Spotted redshank	-	1	1	-	-	-	-	-	2	-	-	4
Redshank	2	-	-	3	1	-	1	1	1	2	1	12
Marsh sandpiper	-	-	-	-	1	-	-	-	-	-		1
Greenshank	2	2	-	-	1	-	-	-	-	3	1	9
Green sandpiper	-	-	1	-	4	1	3	2	2	1	-	14
Wood sandpiper	3	2	3	3	1	1	4	2	1	4	1	25
Common sandpiper	4	3	9	9	4	9	7	3	6	4	3	61
Turnstone	1	-	-	-	-	-	2	1	-	-	-	4
Pomarine skua	-	-	-	-	1	-	-	1	-	1	-	3
Long-tailed skua	-	-	-	1	-	-	-	-	-	-	-	1
Mediterranean gull	1	1	-	4	5	3	1	1	1	4	2	23
Littlegull	1	2	3	2	2	2	2	2	3	1	2	22
Black-headed gull	4	2	3	3	5	8	6	8	3	6	7	55
Slender-billed gull	-	-	-	-	7	-	-	2	2	1	1	13
Lesser black-backed gull	-	-	1	-	-	-	-	-	-	-	-	1
Herring gull	7	1	2	3	11	4	4	4	4	6	6	52
Kittiwake	-	-	-	-	-	-	-	-	1	-	-	1
Caspian tern	1	-	-	2	-	-	-	1	-	1	-	5
Sandwich tern	1	2	-	-	4	2	1	5	5	2	4	26
Roseate tern	1	-	-	-	-	-	-	-	-	-	-	1
Black tern	3	1	1	2	1	1	1	1	2	1	1	15
White-winged black tern	-	1	-	1	-	-	-	3	1	2	-	8
Turtle dove *	3	2	4	8	8	5	10	5	3	5	6	59
Great Spotted cuckoo	-	-	1	-	1	-	-	-	1	-	-	3
Cuckoo	10	10	11	10	11	10	19	10	16	20	24	151
Barn owl	-	-	-	-	-	1	-	-	-	-	-	1
Scops owl	2	8	2	15	8	5	1	8	9	4	7	69
Long-eared owl	1	2	1	1	-	1	-	1	-	2	1	10
Short-eared owl	10	5	7	12	5	11	11	10	16	20	18	125
Nightjar *	9	3	1	4	5	8	11	3	2	4	3	53
Swift	1	3	1	4	2	1	2	2	1	1	2	20
Alpine swift	2	2	2	3	2	4	4	2	4	2	3	30
Kingfisher	3	3	1	1	2	1	2	13	5	6	9	46
Bee-eater	7	5	5	5	7	9	9	11	24	18	19	119
Roller	2	2	2	1	-	1	3	4	3	4	4	26
Hoopoe	10	12	11	12	18	15	18	25	13	29	28	191
Wryneck	1	1	1	8	2	4	4	3	2	3	2	31
Short-toed lark	-	-	-	1	1	-	-	-	1	-	-	3
Skylark *	-	-	1	1	4	5	1	-	1	1	2	16
Swallow	-	1	-	-	-	1	-	-	2	1	-	5
Red-rumped swallow	-	-	1	-	-	-	-	1	-	1	-	3
Tree pipit	-	-	-	-	1	-	1	-	-	1	-	3
Tree pipit	-	-	-	-	-	1	-	1	-	-	-	2
Meadow pipit	-	-	2	3	1	1	-	1	-	1	1	10
Yellow wagtail	-	-	-	-	-	1	-	-	1	-	-	2

White wagtail	-	-	-	1	-	-	-	2	1	-	2	6
Alpine accentor	-	-	-	-	-	-	1	-	-	-	-	1
Robin	-	-	-	1	-	1	-	1	1	2	1	7
Nightingale	-	-	-	3	1	-	-	1	-	1	-	6
Bluethroat	-	-	-	-	-	-	1	-	-	-	-	1
Black redstart	-	-	1	-	1	-	-	1	-	1	1	5
Redstart	1	-	-	1	-	1	-	1	1	2	1	8
Stonechat	-	-	-	1	1	-	-	2	1	-	1	6
Wheatear	-	1	1	5	-	3	2	2	2	1	2	19
Black-eared wheatear	1	-	-	1	1	1	1	-	1	-	1	7
Rock thrush *	2	5	3	7	3	7	12	7	5	7	6	64
Blue rock thrush	5	2	4	6	2	2	1	1	2	1	3	29
Ring ouzel *	1	-	-	1	3	4	2	-	-	2	1	14
Blackbird *	3	2	2	7	4	8	2	3	2	5	4	42
Fieldfare *	1	1	2	2	2	7	2	4	4	3	3	31
Song thrush *	4	2	3	4	2	6	1	5	3	9	6	45
Redwing *	2	1	1	3	3	3	3	2	1	1	2	22
Mistle thrush *	-	-	-	1	-	1	1	4	1	6	2	16
Great reed warbler	-	-	-	1	-	-	-	1	-	1	-	3
Dartford's warbler	-	-	1	1	-	-	-	-	-	-	-	2
Spectacled warbler	-	-	2	2	-	-	-	-	1	-	-	5
Sardinian warbler	-	1	-	-	-	1	-	-	-	1	-	3
Chiffchaff	-	-	-	-	-	-	1	-	-	1	-	2
Firecrest	-	1	2	3	-	1	1	-	1	-	-	9
Spotted flycatcher	-	-	-	1	-	-	-	1	-	-	-	2
Pied flycatcher	-	-	-	-	2	-	-	2	-	1	-	5
Golden oriole	10	14	14	12	18	16	33	39	24	22	26	228
Red-backed shrike	-	-	-	1	-	-	-	-	1	-	-	2
Woodchat shrike	1	2	2	13	3	19	12	5	4	6	6	73
Starling *	4	4	5	6	4	7	2	1	1	5	3	42
Spanish sparrow *	-	-	2	2	2	-	1	1	1	2	-	11
Tree sparrow	1	-	2	-	-	-	-	1	-	1	-	5
Chaffinch *	-	-	-	1	-	-	-	2	-	1	1	5
Brambling	-	-	-	1	-	-	-	-	1	-	-	2
Greenfinch *	-	-	-	4	3	-	1	2	2	1	1	14
Goldfinch *	2	-	2	-	-	-	1	3	2	1	1	12
Siskin *	-	-	-	1	-	-	1	-	1	1	-	4
Linnet *	-	-	-	-	1	-	1	-	3	1	-	6
Crossbill	-	-	-	1	-	-	-	-	-	-	-	1
Hawfinch*	-	-	-	3	-	-	-	1	1	1	1	7
Ortolan bunting *	-	-	-	-	-	1	-	-	-	-	-	1
Reed bunting	-	-	-	-	1	-	-	-	1	-	-	2
Corn bunting	-	-	1	4	1	-	2	1	2	2	1	14
Totals	293	262	281	448	369	399	467	597	454	496	494	4560

* denotes that the bird is not protected by the Bird Protection Regulations of 1980.

Taxidermist B used to stuff and mount birds for an average of 35 shooters between the years 1976 and 1982, while Taxidermist C, who catered for 30 shooters, stuffed birds between 1983 and 1986.

Table 7A.3

Birds of prey and other birds stuffed per month per year by two part-time taxidermists (B & C) during the years 1976-82, 1983-86

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1976													
Birds (all sp)	10	5	17	44	24	5	0	11	27	73	48	29	293
Raptors	0	0	4	15	21	0	0	0	4	24	10	4	82

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1977													
Birds (all sp)	6	1	15	81	59	0	0	3	26	33	29	9	262
Raptors	2	0	2	21	23	0	0	0	4	19	3	0	74

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1978													
Birds (all sp)	3	6	20	40	51	2	2	10	44	54	32	17	281
Raptors	0	0	2	19	22	2	0	0	8	25	4	1	83

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1979													
Birds (all sp)	10	5	22	81	100	14	4	11	56	76	50	19	448
Raptors	0	0	12	27	30	0	0	1	20	31	15	5	141

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1980													
Birds (all sp)	6	3	17	68	83	9	3	9	43	70	46	12	369
Raptors	0	0	8	25	13	0	0	0	14	17	10	1	88

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1981													
Birds (all sp)	14	7	25	76	90	12	3	8	47	61	47	9	399
Raptors	0	0	7	19	14	0	0	0	18	19	14	2	93

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1982													
Birds (all sp)	10	8	28	79	102	29	1	2	60	71	63	14	467
Raptors	0	0	10	19	24	0	0	0	17	21	14	2	107

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1983													
Birds (all sp)	8	12	30	68	152	55	20	17	71	62	72	30	597
Raptors	1	0	8	21	50	27	12	0	24	23	10	3	179

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1984													
Birds (all sp)	4	5	26	40	142	25	8	12	28	71	68	25	454
Raptors	1	0	2	8	53	4	3	3	4	39	26	2	145

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1985													
Birds (all sp)	18	22	36	90	107	30	2	3	38	65	60	25	496
Raptors	1	0	4	13	24	6	1	0	15	23	24	4	115

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1986													
Birds (all sp)	12	18	37	88	110	18	4	2	52	63	67	23	494
Raptors	0	0	5	20	45	6	0	0	19	25	22	2	144

Totals for 1976-86

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
Birds (all sp)	101	92	273	755	1020	199	47	88	492	699	582	212	4560
Raptors	5	0	64	207	319	45	16	4	147	266	152	26	1251
average (birds)	9.2	8.4	24.8	68.6	92.7	18.1	4.3	8	44.7	63.5	52.9	19.3	414.5
av. (Raptors)	0.5	O	5.8	18.8	29	4.1	1.5	0.4	13.4	24.2	13.8	2.4	113.7

Note: the data has been compiled from log books kept by two part-time taxidermists. Taxidermist A stuffed birds between 1976-82 while Taxidermist B stuffed birds during the years 1983-86.

Table 7A.4
Birds of prey stuffed per year by two part time taxidermists
(Taxidermist B stuffed birds from 1976-82, Taxidermist C from 1983-86)

Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	Total
Honey buzzard	11	9	12	29	15	12	14	23	25	14	22	186
Black kite	0	0	1	1	0	1	0	0	0	1	1	5
Red kite	0	0	0	0	0	0	0	1	0	0	0	1
Short-toed eagle	0	0	1	0	0	0	0	0	0	0	0	1
Marsh harrier	12	10	14	11	9	16	18	24	20	26	26	186
Hen harrier	1	1	0	0	1	0	3	0	2	0	0	8
Pallid harrier	1	0	1	1	0	2	1	6	1	0	0	13
Montagu's harrier	2	3	2	2	2	3	2	10	9	5	9	49
Sparrowhawk	1	0	1	2	1	1	1	3	1	1	1	13
Buzzard	0	0	0	0	0	0	0	0	1	1	1	3
Osprey	0	0	0	2	0	0	0	0	0	1	1	4
Lesser kestrel	3	2	2	4	3	4	3	3	1	1	2	28
Kestrel	28	21	24	45	26	22	18	22	27	18	23	274
Red-footed falcon	6	8	10	8	12	7	23	48	19	10	18	169
Merlin	0	0	0	0	1	0	0	0	3	0	1	5
Hobby	4	4	5	8	4	7	10	19	10	8	12	91
Eleonora's falcon	0	0	0	0	1	0	2	0	1	3	1	8
Peregrine falcon	0	1	0	0	0	0	0	1	0	0	0	2
Barn owl	0	0	0	0	0	1	0	0	0	0	0	1
Scops owl	2	8	2	15	8	5	1	8	9	4	7	69
Long eared owl	1	2	1	1	0	1	0	1	0	2	1	10
Short eared owl	10	5	7	12	5	11	11	10	16	20	18	125
Total	82	74	83	141	88	93	107	179	145	115	144	1251

TABLE 7A.5

Bag records of shooter 1

Species	1972	73	74	75	76	77	78	79	80	81	82	83	tot
Little grebe	-	-	-	-	-	-	-	1	-	-	-	-	1
Black-necked grebe	-	-	-	1	-	-	-	1	-	-	-	2	4
Cormorant	-	-	-	-	-	-	1	-	-	-	-	-	1
Little bittern	1	-	-	-	-	-	-	2	-	-	1	-	4
Night heron	1	1	1	1	6	1	2	1	5	2	1	2	24
Squacco heron	-	-	-	-	-	-	-	-	2	-	-	-	2
Little egret	-	-	-	-	-	-	-	1	2	2	-	-	5
Grey heron	-	-	-	-	-	-	-	-	1	-	-	-	1
Purple heron	1	-	-	-	1	-	-	-	-	-	-	-	2
Shelduck	-	-	-	-	-	-	1	1	-	-	-	-	2
Mallard	-	-	-	-	-	-	-	1	-	-	-	-	1
Teal	-	-	-	-	-	1	1	1	-	-	-	-	3
Wigeon	-	-	1	1	-	1	-	1	2	-	-	-	6
Pintail	-	-	-	1	-	-	-	1	-	-	10	-	12
Garganey	-	1	-	-	-	-	-	-	6	6	2	-	15
Shoveler	-	-	-	-	-	2	-	-	-	11	-	-	13
Pochard	-	-	-	-	-	-	-	-	3	-	-	-	3
Ferruginous duck	1	-	-	-	-	-	-	-	-	-	5	-	6
Red-br'sted merganser	-	-	-	1	-	1	-	-	-	-	-	-	2
Honey buzzard	-	-	-	-	-	-	-	1	-	1	1	1	4
Black kite	-	-	-	-	-	-	-	-	-	1	-	1	2
Pallid harrier	-	-	-	-	-	-	-	-	-	-	1	-	1
Montagu's harrier	1	-	-	-	1	-	-	-	-	1	2	-	5
Marsh harrier	-	-	1	-	-	-	-	1	1	3	1	-	7
Hobby	1	-	-	1	1	-	1	1	1	1	3	2	12
Red-footed falcon	-	-	-	-	-	4	-	-	-	-	3	2	9
Lesser kestrel	-	-	-	-	-	-	-	-	1	1	-	-	2
Kestrel	1	1	1	2	13	1	1	3	7	1	5	4	40
Quail	3	1	1	1	1	1	1	1	1	1	2	1	15
Water rail	-	-	1	-	-	-	-	1	-	-	-	-	2
Crake sp.	-	-	-	-	-	-	-	-	1	-	-	-	1
Moorhen	-	-	1	-	1	2	1	-	1	-	1	-	7
Coot	-	-	-	-	-	-	1	1	1	-	-	-	3
Ringed plover	-	-	-	-	-	-	-	-	-	1	-	-	1
Little ringed plover	-	-	-	-	1	-	-	-	1	-	-	-	2
Dottorel	-	-	-	-	-	-	1	-	-	-	-	-	1
Golden plover	-	-	-	1	1	-	-	1	-	1	-	-	4
Grey plover	-	-	-	-	-	-	-	2	-	-	1	-	3
Lapwing	-	1	-	-	1	-	-	-	-	1	1	-	4
Turnstone	-	-	-	-	-	-	-	-	1	1	-	-	2
Ruff	1	-	1	-	-	1	2	-	1	-	1	-	7
Common sandpiper	2	1	3	2	1	-	1	1	-	-	2	1	14
Spotted redshank	-	-	-	-	-	1	-	-	-	1	-	-	2
Redshank	1	-	-	-	1	-	-	-	1	-	2	-	5
Greenshank	-	-	-	-	-	1	-	-	-	6	1	-	8
Bar-tailed godwit	-	-	-	-	-	-	-	1	-	-	-	-	1
Curlew	-	-	-	-	-	-	-	1	-	-	3	-	4
Whimbrel	-	-	-	-	-	-	-	-	3	-	-	-	3
Woodcock	-	-	-	1	-	1	1	-	-	-	2	-	5
Snipe	-	-	1	1	1	1	1	3	1	1	1	-	11
Jack snipe	-	-	-	-	-	-	1	-	-	1	-	-	2
Black-winged stilt	-	-	-	-	-	-	-	1	-	-	-	-	1
Avocet	-	-	-	-	-	-	-	2	-	7	-	-	9
Stone curlew	-	-	-	-	-	-	-	-	1	1	1	-	3
Mediterranean gull	-	-	-	-	-	-	1	-	1	-	-	-	2
Black-headed gull	1	1	2	3	1	1	3	1	2	1	1	1	18
Slender-billed gull	-	-	-	-	-	-	-	-	1	1	-	-	2
Herring gull	-	-	1	-	-	-	-	2	1	-	-	-	4
Audouin's gull	-	-	-	-	-	-	-	-	1	-	-	-	1
Black tern	-	-	-	-	-	-	-	-	2	-	-	-	2
Caspian tern	-	-	-	-	-	-	-	1	-	-	-	-	1

Sandwich tern	-	-	-	-	6	1	-	1	-	1	-	-	9
Little tern	-	-	-	-	-	-	-	-	1	-	-	-	1
Pigeon	1	-	-	1	-	-	1	1	-	-	1	-	5
Collared dove	-	-	-	-	-	-	1	-	-	-	-	-	1
Turtle dove	13	12	7	33	40	57	18	46	19	21	33	51	350
Cuckoo	1	1	1	1	2	7	3	2	1	2	1	1	23
Short-eared owl	-	-	-	1	-	-	-	-	1	-	-	-	2
Long-eared owl	-	-	-	-	-	-	-	-	-	-	-	1	1
Nightjar	2	2	1	4	2	2	1	2	1	2	1	1	21
Kingfisher	-	-	-	-	-	1	-	-	-	-	-	-	1
Bee-eater	-	-	1	-	3	-	-	-	-	-	-	-	4
Roller	-	-	1	-	-	-	-	-	2	-	-	-	3
Hoopoe	3	1	2	1	2	2	2	1	2	2	1	3	22
Rock thrush	-	-	-	-	-	-	-	-	2	-	1	-	3
Ring ouzel	-	-	1	-	-	-	-	-	-	-	-	-	1
Blackbird	-	1	1	-	-	-	3	2	1	-	-	-	8
Redwing	-	-	-	-	-	-	-	1	-	-	-	-	1
Song thrush	7	9	28	29	10	13	13	47	3	2	13	5	179
Rose-coloured starling	-	-	-	-	-	-	-	-	-	1	-	-	1
Starling	34	2	21	20	17	7	8	12	1	9	11	5	147
Golden oriole	4	5	7	4	5	6	4	3	5	9	5	5	62

TABLE 7A.6
BAG RECORDS OF SHOOTER 2

years	82	83	84	85	86	87	Tot
Manx shearwater	-	-	6	-	2	-	8
Black-necked grebe	-	-	-	-	1	1	2
Little bittern	1	-	-	1	-	-	2
Night heron	-	1	-	1	-	-	2
Squacco heron	1	-	-	-	-	-	1
Little egret	-	1	1	-	-	-	2
Purple heron	-	1	-	-	-	-	1
Mallard	-	1	-	-	-	-	1
Honey buzzard	2	1	2	-	-	1	6
Pallid harrier	-	-	-	1	-	-	1
Montagu's harrier	-	1	1	-	1	3	
Marsh harrier	2	1	-	1	2	-	6
Hobby	-	3	2	-	-	-	5
Red-footed falcon	-	-	-	-	-	5	5
Kestrel	4	1	1	2	2	3	13
Merlin	-	-	1	-	-	-	1
Quail	5	1	2	-	-	-	8
Water rail	-	-	-	1	-	-	1
Moorhen	1	1	-	1	-	1	4
Coot	-	1	-	-	-	-	1
Ringed plover	-	-	-	-	-	2	2
Little ringed plover	-	-	-	-	-	2	2
Dottorel	-	-	-	2	-	-	2
Golden plover	-	-	1	-	1	-	2
Lapwing	-	-	-	1	-	1	2
Ruff	-	-	2	-	1	-	3
Common sandpiper	-	-	3	-	-	3	6
Woodcock	2	2	2	-	-	-	6
Snipe	1	1	-	2	-	1	5
Jack snipe	1	-	-	1	-	-	2
Great snipe	-	-	-	-	-	1	1
Black-winged stilt	-	-	-	-	-	1	-
Stone curlew	1	-	-	-	-	-	1
Mediterranean gull	-	1	-	-	-	-	1
Black-headed gull	1	1	-	1	-	-	3
Slender-billed gull	-	-	1	-	-	-	1
Herring gull	-	-	1	-	-	-	1
Turtle dove	11	47	28	29	8	8	131
Cuckoo	-	5	22	4	4	7	42

Scops owl	4	4	4	5	-	3	20
Short-eared owl	1	-	2	-	-	-	3
Nightjar	4	3	2	8	-	-	17
Alpine swift	-	-	3	-	-	-	3
Kingfisher	-	1	-	-	-	-	1
Bee-eater	-	-	-	6	-	-	6
Roller	-	-	2	-	-	-	2
Hoopoe	1	3	4	2	5	1	1
Rock thrush	-	-	-	2	1	1	4
Blue rock thrush	-	1	-	-	-	-	1
Blackbird	1	4	1	-	-	-	6
Mistle thrush	-	1	-	-	-	-	1
Fieldfare	-	-	-	1	-	2	3
Redwing	-	1	1	-	-	-	2
Song thrush	71	150	80	66	8	7	332
Starling	1	27	12	11	11	5	67
Golden oriole	1	23	12	11	4	3	54

note that the records of 1982 include only the months of September to December

TABLE 7A.7
BAG RECORDS OF SHOOTER 3

years	82	83	84	85	86	87	88	89	total
Manx shearwater	-	-	5	-	-	-	-	-	5
Great crested grebe	-	-	-	-	-	-	-	1	1
Black necked grebe	-	-	-	-	-	-	-	2	2
Cormorant	-	-	-	-	-	-	-	1	1
Little bittern	-	-	1	-	-	1	-	1	3
Night heron	4	1	-	-	-	-	-	-	5
Squacco heron	-	1	-	-	-	-	-	-	1
Little egret	-	2	-	-	-	-	-	3	5
Grey heron	1	-	-	-	-	2	-	2	5
Mallard	1	-	-	-	-	-	-	-	1
Teal	1	-	-	-	-	-	-	-	1
Wigeon	1	-	-	-	-	-	1	-	2
Osprey	-	-	-	-	-	-	-	1	1
Buzzard	-	-	-	-	-	1	-	-	1
Honey buzzard	-	1	1	1	1	-	1	2	7
Pallid harrier	-	1	-	-	-	-	-	-	1
Montagu's harrier	-	-	1	1	-	1	-	-	3
Marsh harrier	-	-	2	1	1	-	2	4	10
Hobby	2	1	1	1	-	1	-	-	6
Eleonora's falcon	-	-	-	-	-	-	-	1	1
Red-footed falcon	-	-	-	-	-	10	-	-	10
Lesser kestrel	-	-	-	-	1	-	-	-	1
Kestrel	1	1	3	3	5	7	4	3	27
Merlin	-	1	-	-	-	-	-	-	1
Quail	2	1	1	3	3	-	-	1	11
Water rail	-	-	-	-	-	-	-	-	1
Moorhen	-	1	-	1	1	-	-	1	4
Coot	5	-	-	-	-	-	-	-	5
Little ringed plover	-	-	-	1	-	1	-	-	2
Common sandpiper	-	-	2	2	2	2	1	-	9
Golden plover	4	-	-	-	-	-	-	-	4
Grey plover	-	-	-	-	-	-	-	1	1
Lapwing	-	-	-	-	-	1	-	-	1
Ruff	-	1	-	3	-	-	1	-	5
Curlew	-	-	-	-	-	-	-	1	1
Woodcock	1	1	2	-	-	-	1	1	6
Snipe	4	1	2	-	4	-	-	1	12
Jack snipe	4	-	-	-	-	-	-	-	4
Black-winged stilt	-	1	-	-	-	-	-	-	1
Stone curlew	1	-	-	-	-	-	-	-	1
Black-headed gull	-	3	19	-	-	-	-	-	22

Slender-billed gull	-	-	1	-	-	-	-	-	1
Herring gull	-	-	-	-	2	-	-	-	2
Black tern	-	-	-	-	-	-	-	1	1
Sandwich tern	-	-	-	-	-	-	-	1	1
Turtle dove	8	32	30	39	19	20	31	27	206
Cuckoo	-	3	9	3	12	16	5	1	49
Short-eared owl	-	-	2	-	-	1	-	-	3
Scops owl	4	1	7	3	-	3	4	3	25
Nightjar	1	3	5	1	3	3	1	4	21
Alpine swift	-	-	1	-	-	1	1	-	3
Kingfisher	-	-	-	-	1	-	-	-	1
Bee-eater	1	-	-	-	-	-	-	-	1
Hoopoe	-	1	1	7	3	3	1	-	16
Rock thrush	-	-	-	-	1	-	-	-	-
Blue rock thrush	-	1	-	-	-	-	-	-	1
Ring ouzel	-	-	1	-	1	-	-	-	2
Blackbird	-	6	6	2	1	-	1	-	16
Fieldfare	-	1	-	-	-	-	2	1	4
Mistle thrush	1	1	-	-	-	-	-	-	2
Redwing	1	6	4	1	-	1	4	2	19
Song thrush	33	113	95	115	50	90	87	46	629
Starling	1	14	29	42	10	109	45	9	259
Golden oriole	3	10	11	7	7	8	6	2	54

TABLE 7A.8
BAG RECORDS OF SHOOTER 4

years	82	83	84	85	86	total
Black-necked grebe	-	-	-	-	2	2
Little bittern	-	1	-	1	-	2
Night heron	1	2	-	2	2	7
Squacco heron	-	-	-	1	-	1
Little egret	-	1	-	1	-	2
Grey heron	-	-	-	-	1	1
Purple heron	-	-	1	-	-	1
Honey buzzard	-	1	-	1	-	2
Montagu's harrier	-	1	-	-	-	1
Marsh harrier	-	-	1	-	1	2
Hobby	-	2	-	-	-	2
Red-footed falcon	-	1	-	3	-	4
Kestrel	2	2	1	2	2	9
Quail	2	-	-	1	-	3
Moorhen	1	-	-	1	1	3
Coot	-	1	-	-	-	1
Golden plover	1	-	1	-	1	3
Lapwing	-	1	-	1	-	2
Ruff	1	-	-	1	-	2
Woodcock	-	1	3	1	-	5
Snipe	2	-	1	-	1	4
Common sandpiper	2	2	1	1	1	7
Mediterranean gull	-	1	1	-	-	2
Black-headed gull	-	2	2	2	1	7
Herring gull	-	-	-	1	-	1
Black tern	-	-	-	1	-	1
Turtle dove	7	18	8	23	11	67
Cuckoo	-	1	9	1	2	13
Short-eared owl	-	1	-	1	1	3
Scops owl	2	2	1	4	-	9
Nightjar	1	3	5	2	2	13
Kingfisher	-	-	1	-	-	1
Bee-eater	-	2	-	-	-	2
Hoopoe	1	1	1	1	1	5
Blue rock thrush	1	-	1	1	-	3
Blackbird	-	1	-	-	2	3
Redwing	-	1	-	-	-	1

Song thrush	14	56	59	38	47	214
Mistle thrush	1	-	-	-	-	1
Starling	6	15	1	5	1	28
Golden oriole	-	13	13	4	-	30

TABLE 7A.9
BAG RECORDS OF SHOOTER 5

years	84	85	86	87	total
Night heron	1	-	1	1	3
Squacco heron	1	-	-	-	1
Little egret	-	-	-	1	1
Purple heron	-	-	1	-	1
Honey buzzard	2	-	-	-	2
Montagu's harrier	-	1	-	-	1
Marsh harrier	-	-	1	-	1
Hobby	1	-	-	-	1
Red-footed falcon	-	-	-	5	5
Kestrel	2	1	1	1	5
Quail	2	2	1	2	7
Moorhen	1	-	1	-	2
Ringed plover	-	-	1	-	1
Golden plover	-	1	-	-	1
Lapwing	1	-	-	-	1
Woodcock	3	1	1	-	56
Snipe	1	1	1	1	4
Common sandpiper	3	-	-	-	3
Stone curlew	-	-	1	-	1
Black-headed gull	-	1	-	1	2
Herring gull	-	1	-	-	1
Turtle dove	7	13	16	8	44
Cuckoo	6	2	2	2	12
Scops owl	3	3	4	-	10
Short-eared owl	-	-	1	-	1
Nightjar	6	2	2	-	10
Kingfisher	1	-	-	-	1
Bee-eater	-	1	-	-	1
Hoopoe	1	1	1	1	4
Rock thrush	1	-	-	-	1
Blue rock thrush	1	-	-	-	1
Blackbird	-	3	1	-	4
Song Thrush	26	56	35	-	117
Fieldfare	-	2	1	-	3
Starling	-	7	3	-	10
Golden oriole	6	8	6	4	24

TABLE 7A.10
BAG RECORDS OF SHOOTER 6

years	84	85	86	87	total
Little bittern	-	1	-	-	1
Night heron	-	-	2	-	2
Squacco heron	1	-	-	-	1
Little egret	-	1	-	-	1
Honey buzzard	-	-	-	1	1
Montagu's harrier	1	-	-	-	1
Hobby	-	2	-	-	2
Red-footed falcon	-	1	-	-	1
Kestrel	-	1	1	-	2
Quail	1	2	1	-	4
Moorhen	1	-	1	-	2

Dottorel	-	1	-	-	1
Lapwing	-	1	-	-	1
Woodcock	1	1	-	-	2
Snipe	1	1	-	1	3
Great snipe	1	-	-	-	1
Common sandpiper	2	-	1	1	4
Black-headed gull	2	-	1	-	3
Turtle dove	5	3	4	3	15
Cuckoo	7	1	-	-	8
Scops owl	1	3	-	-	4
Long-eared owl	1	-	-	-	1
Nightjar	5	-	-	1	6
Bee-eater	1	-	-	-	1
Hoopoe	1	-	2	-	1
Song thrush	5	3	2	4	14
Starling	3	-	-	-	3
Golden oriole	2	3	2	4	5

note: the records for 1984 are for September to December, while those for 1986 are the records of the month of April Only

TABLE 7A.11
BAG RECORDS OF SHOOTER 7

years	84	85	tot
Night heron	1	-	1
Purple heron	1	-	1
Marsh harrier	-	1	1
Red-footed falcon	-	1	1
Kestrel	-	1	1
Sparrowhawk	1	-	1
Quail	1	1	2
Woodcock	1	-	1
Snipe	-	1	1
Turtle dove	1	10	11
Cuckoo	-	5	5
Scops owl	3	1	4
Nightjar	-	3	3
Alpine Swift	1	-	1
Hoopoe	-	4	4
Blue rock thrush	1	-	1
Blackbird	1	-	1
Song thrush	57	11	68
Fieldfare	-	1	1
Starling	11	6	17
Golden oriole	1	1	2

note that the records for the year 1984 are for the months of September to December, while those for 1985 are for the months January-May.

TABLE 7A.12
BAG RECORDS OF SHOOTER 8

years	84	85	86	87	total
Black-necked grebe	-	1	-	-	1
Little bittern	-	-	1	-	1
Night heron	-	2	-	-	2
Little egret	-	1	-	-	1
Mallard	-	1	-	-	1
Honey buzzard	-	-	1	1	2
Montagu's harrier	-	1	-	-	1
Marsh harrier	1	1	-	-	2

Red-footed falcon	-	2	-	-	2
Lesser kestrel	-	1	-	-	1
Kestrel	-	1	-	1	2
Quail	2	2	-	-	4
Moorhen	1	2	-	-	3
Little-ringed plover	1	-	-	-	1
Golden plover	1	1	-	-	2
Lapwing	-	-	1	-	1
Ruff	-	-	-	-	2
Woodcock	2	1	-	-	3
Snipe	1	1	1	1	1
Great snipe	1	-	-	-	1
Black-headed gull	1	-	1	-	2
Turtle dove	12	21	14	14	61
Cuckoo	3	1	1	1	6
Short-eared owl	-	1	-	-	1
Scops owl	-	3	-	-	3
Nightjar	-	1	1	-	2
Alpine swift	-	-	-	1	1
Kingfisher	-	-	1	-	1
Bee-eater	1	-	-	-	1
Hoopoe	1	3	1	1	6
Song thrush	6	7	6	-	19
Starling	1	-	-	-	1
Golden oriole	1	9	5	3	18

note: the records for 1986 and 87 are partial, hence I divided the total by 3 as the number of years.

TABLE 7A.13
BAG RECORDS OF SHOOTER 9

years	84	85	86	87	total
Night heron	2	-	-	-	1
Little egret	1	-	-	-	1
Grey heron	1	-	-	-	1
Red-footed falcon	-	2	-	-	2
Kestrel	1	-	-	1	2
Golden plover	1	-	-	-	1
Lapwing	1	-	-	-	1
Ruff	1	-	-	-	1
Woodcock	2	-	-	-	2
Snipe	1	-	1	-	2
Jack snipe	-	1	-	-	1
Turtle dove	10	3	9	8	30
Cuckoo	2	1	2	3	8
Scops owl	1	-	-	-	1
Short-eared owl	1	-	-	-	1
Nightjar	4	-	-	-	4
Hoopoe	1	1	1	1	4
Song thrush	10	9	11	-	30
Starling	2	3	2	2	9
Golden oriole	2	3	2	1	8

Note: data for 1985 comprises only the months of September and October, 1987 comprises only the months of April and May, while data for 1986 includes only the months of April, September and October.

Table 7a.14
Bag records of shooter 10

years	84	85	86	87	total
Little egret	-	1	-	-	1
Night heron	2	-	1	-	3
Short-toed eagle	-	1	-	-	1
Marsh harrier	-	-	1	-	1
Red-footed falcon	-	1	-	-	1
Kestrel	-	-	-	1	1
Quail	-	2	-	1	3
Moorhen	-	1	1	-	2
Ruff	1	1	-	-	2
Snipe	1	1	1	1	4
Great snipe	-	1	-	-	1
Turtle dove	1	7	2	2	18
Cuckoo	1	-	1	-	2
Scops owl	1	1	-	3	5
Short-eared owl	-	-	1	-	1
Nightjar	1	-	-	-	1
Hoopoe	1	1	1	2	5
Song thrush	6	9	-	-	15
Starling	2	2	1	3	8
Golden oriole	2	2	2	3	9

Table 7A.15
Bag records of shooter 1

1972	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	1	1	-	-	-	-	-	1	-	-
Duck	-	-	1	-	-	-	-	-	-	-	-	-
Raptors	-	-	1	1	-	-	-	-	-	1	-	-
Quail	-	-	1	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	3	-	-	-	-	10	-	-	-
Other waders	-	-	1	-	-	1	-	-	1	-	1	-
Col. birds	-	-	1	6	1	-	-	-	1	1	-	-
Thrush	1	-	-	-	-	-	-	-	-	5	1	-
Starling	1	1	7	-	-	-	-	-	-	11	12	2
Other	-	-	-	-	-	-	-	-	-	-	-	1

1973	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	1	-	-	-	-	-	-	-	-	-
Duck	-	-	1	-	-	-	-	-	-	-	-	-
Raptors	-	-	1	-	-	-	-	-	-	-	-	-
Quail	-	-	1	-	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	8	-	-	-	-	4	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Other waders	-	-	-	-	-	-	-	-	1	-	-	-
Col. birds	-	-	3	5	-	-	-	-	2	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	10	-	-
Starling	-	-	-	-	-	-	-	-	1	1	-	-

1974	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	1	-	2	-
Herons	-	-	-	-	-	-	-	-	1	-	-	-
Duck	-	-	-	-	-	-	-	-	-	-	1	-
Raptors	-	-	-	1	1	-	-	-	-	-	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	5	1	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Other waders	-	-	-	2	-	-	-	-	2	-	-	
Col. birds	-	-	-	5	7	-	-	-	1	-	-	-
Thrush	1	-	-	-	-	-	-	-	-	20	9	-
Starling	4	-	-	-	-	-	-	-	-	3	14	-
Other	-	-	-	1	-	-	-	-	-	-	-	1

1975	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	2	2
Herons	-	-	-	-	-	-	-	-	1	-	-	-
Duck	-	-	-	-	-	-	-	-	-	-	2	1
Raptors	-	-	-	3	1	-	-	-	-	-	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	25	8	-	-	-	-	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	1	1
Other waders	-	-	-	2	-	-	-	-	-	-	-	-
Col. birds	-	-	-	4	4	-	-	-	2	-	-	-
Thrush	-	-	-	1	-	-	-	-	-	27	1	-
Starling	-	-	-	-	-	-	-	-	-	7	7	6
Other	-	-	-	-	-	-	-	-	-	-	-	1

1976	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	6	1	-
Herons	-	-	4	-	-	-	-	-	2	1	-	-
Raptors	-	-	1	1	2	-	-	-	10	1	-	-
Quail	1	-	-	-	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	17	20	-	-	-	3	-	-	-
Waders	-	1	1	-	-	-	-	-	-	-	1	-
Other waders	-	-	2	-	-	-	-	1	-	-	-	-
Col. birds	-	-	1	7	4	-	-	-	2	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	6	4	-
Starling	2	-	-	-	-	-	-	-	-	5	9	1
Other	-	-	1	-	-	-	-	-	-	-	-	-

1977	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	1	1	-
Herons	-	-	-	-	-	-	-	-	1	-	-	-
Duck	-	-	-	2	-	-	-	1	-	-	1	1
Raptors	-	-	-	5	-	-	-	-	-	-	-	-
Quail	-	-	-	-	-	-	-	1	-	-	-	-
Turtle dove	-	-	-	33	21	-	-	-	3	-	-	-
Waders	-	-	-	1	-	-	-	-	-	-	1	-
Other waders	-	-	-	2	-	-	-	1	-	-	-	-
Col. birds	-	-	-	8	9	-	-	-	1	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	12	-	1
Starling	-	-	-	-	-	-	-	-	-	7	-	-
Other	-	-	-	-	-	-	-	-	1	-	-	1

1978	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	1	2	2
Herons	-	-	-	-	-	-	-	-	2	-	-	-
Duck	-	-	-	-	-	-	-	-	-	-	1	1
Raptors	-	-	-	-	-	-	-	-	2	-	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	10	7	-	-	-	1	-	-	-
Waders	-	-	-	1	-	-	-	-	-	-	2	-
Other waders	-	-	-	2	1	-	-	-	-	1	-	-
Col. birds	-	-	-	3	5	-	-	-	2	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	10	3	3
Starling	-	-	-	-	-	-	-	-	-	-	5	3
Other	-	-	1	1	-	-	-	-	-	1	-	1

1979	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	1	-	2	2	2
Herons	-	-	-	3	-	-	-	-	-	1	-	-
Duck	-	-	-	-	-	-	-	-	-	-	3	2
Raptors	-	-	-	1	1	-	-	-	2	2	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	22	18	-	-	1	5	-	-	-
Waders	-	-	-	1	1	-	-	-	-	2	2	-
Other waders	-	-	-	-	2	1	-	-	-	1	2	-
Col. birds	-	-	-	2	4	-	-	-	-	2	-	-
Thrush	6	-	-	-	-	-	-	-	-	4	39	1
Starling	1	-	-	-	-	-	-	-	1	1	6	3
Other	-	-	-	-	-	-	-	1	-	1	-	1

1980	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	1	-	2	-	-	-	1	-	1	-	1	3
Herons	-	-	5	1	-	-	-	1	1	1	1	-
Duck	-	-	6	-	-	-	-	-	-	3	-	2
Raptors	-	-	3	5	-	-	-	-	1	2	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	12	4	-	-	-	3	-	-	-
Waders	-	-	1	-	-	-	-	-	-	-	-	-
Other waders	-	-	2	1	-	-	4	1	-	-	-	-
Col. birds	-	-	1	3	5	-	-	-	2	-	-	-
Thrush	-	-	2	-	-	-	-	-	-	3	1	-
Starling	1	-	-	-	-	-	-	-	-	-	-	-
Other	1	-	-	2	-	-	-	-	-	-	-	-

1981	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	1	-	-	-	-	-	-	-	1	1
Herons	-	-	2	-	-	-	-	-	2	-	-	-
Duck	-	-	-	-	-	-	-	-	-	-	11	6
Raptors	-	-	-	5	3	-	-	-	1	-	-	-
Quail	-	-	1	-	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	10	9	2	-	-	-	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	1	2
Other waders	-	-	6	2	-	2	-	4	-	-	3	-
Col. birds	-	-	2	3	3	-	-	-	4	3	-	-
Thrush	-	-	-	-	-	-	-	-	-	1	1	-
Starling	-	-	-	-	-	-	-	-	-	7	2	-
Other	-	-	-	-	-	-	-	-	-	1	-	-

1982	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	1	-	-	-	-	-	1	-	-	-
Duck	-	-	17	-	-	-	-	-	-	-	-	-
Raptors	-	-	1	13	-	-	-	-	1	1	-	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	22	3	-	-	-	8	-	-	-
Waders	-	-	1	-	-	-	-	-	-	1	2	-
Other waders	-	1	-	2	1	-	-	3	1	-	3	-
Col. birds	-	-	1	2	2	-	-	-	1	2	-	-
Thrush	-	-	-	1	-	-	-	-	-	9	4	-
Starling	-	6	-	-	-	-	-	-	-	3	2	-
Other	-	-	-	-	-	-	-	-	-	1	1	-

1983	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	2	1
Herons	-	-	-	2	-	-	-	-	-	-	-	-
Raptors	-	-	-	2	5	-	-	-	2	1	1	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	20	25	-	-	1	5	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	-	-
Other waders	-	-	-	-	1	-	-	-	-	-	-	-
Col. birds	-	-	1	2	3	-	-	1	3	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	5	-	-
Starling	-	-	-	-	-	-	-	-	-	-	3	2
Other	-	-	-	-	-	-	-	-	-	-	1	-

TABLE 7A.16
BAG RECORDS OF SHOOTER 2

1982	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	-	-	-	-	-	-	5	-	-	-
Duck	-	-	-	-	-	-	-	-	-	3	-	-
Raptors	-	-	-	-	-	-	-	-	3	4	-	-
Quail	-	-	-	-	-	-	-	-	1	-	1	-
Turtle dove	-	-	-	-	-	-	-	-	8	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	13	-
Other waders	-	-	-	-	-	-	-	-	-	-	1	-
Col. birds	-	-	-	-	-	-	-	-	5	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	21	14	-
Starling	-	-	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	-	-	-	-	-	-	-	3	2

1983	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	-	3
Herons	-	-	2	-	1	-	-	-	1	-	-	-
Raptors	-	-	1	1	-	-	-	-	2	2	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	9	20	-	-	-	3	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	1	-
Other waders	-	-	1	1	-	-	-	-	-	-	-	-
Col. birds	-	-	2	11	-	-	-	2	1	1	-	-
Thrush	-	-	-	-	-	-	-	-	-	103	9	16
Starling	-	-	-	-	-	-	-	-	-	2	9	3
Other	-	-	-	-	-	-	-	-	-	1	1	-

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	3	-	-	-	-	-	5	1	-	-	16
Herons	-	-	-	-	-	-	-	1	-	-	-	-
Raptors	-	1	2	1	1	-	-	-	4	7	1	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	14	12	-	-	1	3	-	-	-
Waders	1	-	1	-	-	-	-	-	-	-	2	-
Other waders	-	-	1	-	-	-	-	1	-	-	-	-
Col. birds	-	-	-	12	9	-	-	1	1	3	-	-
Thrush	5	6	-	-	-	-	-	-	-	62	28	5
Starling	6	-	-	-	-	-	-	-	-	2	11	10
Other	-	-	-	-	-	-	-	-	1	-	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	1	1	1	-	-	-	4	3	-	-
Quail	-	-	-	2	-	-	-	-	-	1	-	-
Turtle dove	-	-	-	26	5	-	-	-	8	-	-	-
Other waders	-	-	3	1	-	2	-	-	-	-	-	-
Col. birds	-	-	7	7	4	-	-	-	-	-	-	-
Thrush	5	2	1	-	-	-	-	-	-	89	20	1
Starling	4	3	-	-	-	-	-	-	-	8	26	1
Other	-	-	-	-	-	-	-	-	-	1	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	2	-	-	-	-	-
Raptors	-	-	-	2	1	-	-	-	1	4	-	-
Quail	-	-	-	2	1	-	-	-	-	-	-	-
Turtle dove	-	-	-	11	4	-	-	-	4	-	-	-
Waders	-	-	3	-	-	-	-	-	-	-	1	-
Other waders	-	-	2	-	-	-	-	-	-	-	-	-
Col. birds	-	-	-	15	7	-	-	-	4	-	-	-
Thrush	1	-	-	1	-	-	-	-	-	35	16	-
Starling	4	-	-	-	-	-	-	-	-	6	-	-
Other	-	-	-	1	-	-	-	-	-	-	-	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	2	-	1	-	-	-	-	-	-	-
Raptors	-	-	4	-	12	-	-	-	1	6	1	-
Turtle dove	-	-	-	3	13	-	-	1	3	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Other waders	-	-	2	-	1	-	-	-	-	-	-	-
Col. birds	-	-	2	21	6	-	-	-	1	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	55	31	5
Starling	7	-	-	-	-	-	-	-	-	10	81	11
Other	-	-	1	-	-	-	-	-	-	-	-	-

1988	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Duck	-	-	-	-	-	-	-	-	-	-	-	1
Raptors	-	-	-	3	2	-	-	-	1	5	-	-
Turtle dove	-	-	-	10	2	-	-	1	18	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Other waders	-	-	-	-	-	-	-	-	1	-	1	-
Col. birds	-	-	-	3	3	-	-	-	5	2	-	-
Thrush	-	-	-	-	-	-	-	-	-	79	10	5
Starling	-	-	-	-	-	-	-	-	-	7	26	12
Other	-	-	-	1	-	-	-	-	-	-	-	-

1989	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	2	-	2	2
Herons	-	-	1	1	-	-	-	-	2	2	-	-
Raptors	-	-	-	2	-	-	-	-	8	3	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	16	3	-	-	-	8	-	-	-
Waders	-	-	1	1	-	-	-	-	-	-	-	-
Other waders	-	-	-	-	-	-	-	1	-	-	1	-
Col. birds	-	-	-	3	1	-	-	-	1	2	-	-
Thrush	5	-	-	-	-	-	-	-	-	44	-	-
Starling	2	-	-	-	-	-	-	-	-	7	-	-
Other	-	-	-	-	-	-	-	-	1	-	-	-

TABLE 7A.17
BAG RECORDS OF SHOOTER 3

1982	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	-	1
Herons	-	-	-	-	-	-	-	-	1	1	-	-
Raptors	-	-	-	-	-	-	-	-	5	6	1	1
Quail	-	-	-	-	-	-	-	-	-	-	4	1
Turtle dove	-	-	-	-	-	-	-	-	11	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	3	1
Other waders	-	-	-	-	-	-	-	-	-	-	1	-
Col. birds	-	-	-	-	-	-	-	-	5	-	1	-
Thrush	-	-	-	-	-	-	-	-	-	40	31	1
Starling	-	-	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	-	-	-	-	-	-	1	-	-

1983	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	-	2
Herons	-	-	-	-	1	-	-	1	1	-	-	-
Duck	-	-	1	-	-	-	-	-	-	-	-	-
Raptors	-	-	-	-	1	-	-	-	3	7	-	-
Quail	-	-	-	-	-	-	-	-	1	-	-	-
Turtle dove	-	-	-	18	23	-	-	-	6	-	-	-
Waders	-	-	1	-	-	-	-	-	-	-	2	-
Col. birds	-	-	1	16	15	-	-	2	1	-	-	-
Thrush	-	-	-	1	-	-	-	-	-	116	20	20
Starling	-	-	-	-	-	-	-	-	-	2	13	12
Other	-	-	-	-	-	-	-	-	-	-	1	1

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	7	1	-	-	-
Herons	-	-	1	-	-	-	-	-	-	-	-	-
Raptors	-	1	-	2	3	-	-	-	3	4	-	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	18	4	2	-	-	4	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	3	-
Other waders	-	-	2	-	-	-	-	3	-	-	-	-
Col. birds	-	-	1	35	3	-	-	2	-	1	-	-
Thrush	13	14	2	-	-	-	-	-	-	27	22	4
Starling	10	1	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	2	-	-	-	-	1	-	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	-	1	-	-	-	1	-	-	-	-
Raptors	-	-	-	5	1	-	-	-	1	1	1	-
Turtle dove	-	-	-	18	7	-	-	-	4	-	-	-
Waders	-	-	-	2	-	-	-	-	-	1	1	-
Other waders	-	-	-	-	-	-	-	-	2	-	-	-
Col. birds	-	-	1	9	14	-	-	-	6	1	-	-
Thrush	13	7	1	1	-	-	-	-	-	40	7	-
Starling	2	2	-	-	-	-	-	-	-	-	5	2
Other	-	1	-	-	-	-	-	-	-	-	1	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	2	-	1	-	-
Raptors	-	-	-	2	3	-	-	-	-	-	-	-
Turtle dove	-	-	-	4	1	-	-	-	3	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Other waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	1	11	-	-	-	1	-	-	-	-
Thrush	2	-	-	1	-	-	-	-	-	3	3	-
Starling	10	-	-	-	-	-	-	-	-	1	-	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Raptors	-	1	3	1	3	-	-	-	1	2	1	-
Turtle dove	1	-	-	3	1	-	-	-	3	-	-	-
Waders	-	-	1	1	-	-	-	-	-	-	-	1
Other waders	-	-	1	5	-	2	-	-	-	-	-	-
Col. birds	-	-	-	7	3	-	-	-	1	-	-	-
Thrush	2	-	1	-	-	-	-	-	-	7	-	-
Starling	-	-	-	-	-	-	-	-	-	5	-	-
Other	-	-	-	-	-	-	-	-	-	1	-	-

Table 7A.18

Bag records of shooter 4

1982	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	-	-	-	-	-	-	1	-	-	-
Raptors	-	-	-	-	-	-	-	-	1	2	1	-
Quail	-	-	-	-	-	-	-	-	-	-	2	-
Turtle dove	-	-	-	-	-	-	-	-	7	-	-	-
Waders	-	-	-	-	-	-	-	-	-	2	1	-
Other waders	-	-	-	-	-	-	-	-	3	-	-	-
Col. birds	-	-	-	-	-	-	-	-	2	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	4	12	-
Starling	-	-	-	-	-	-	-	-	-	6	-	-
Other	-	-	-	-	-	-	-	-	-	-	1	-

1983	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	-	3
Herons	-	-	-	1	-	-	-	-	2	1	-	-
Raptors	-	-	-	1	3	-	-	-	2	4	-	-
Turtle dove	-	-	-	10	7	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	2	-
Other waders	-	-	-	2	-	-	-	-	-	-	-	-
Col. birds	-	-	1	6	8	-	-	-	2	3	-	-
Thrush	-	-	-	-	-	-	-	-	-	52	5	1
Starling	-	-	-	-	-	-	-	-	-	10	4	1
Other	-	-	-	-	1	-	-	-	-	-	-	-

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	3	-	-	-	-	-	-	-	-	-	-
Herons	-	-	-	1	-	-	-	-	-	-	-	-
Raptors	-	-	-	-	1	-	-	-	1	1	-	-
Turtle dove	-	-	-	4	2	-	-	-	2	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	5	-
Other waders	-	-	-	-	-	-	-	1	-	-	-	-
Col. birds	-	-	-	16	8	-	-	-	2	3	-	-
Thrush	-	-	-	-	-	-	-	-	-	35	22	3
Starling	-	-	-	-	-	-	-	-	-	1	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	2	-	2	-
Herons	-	-	-	2	2	-	-	-	1	-	-	-
Raptors	-	-	-	1	4	-	-	-	1	3	2	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	14	3	2	-	-	4	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	1
Other waders	-	-	-	1	-	-	-	-	1	-	-	-
Col. birds	-	-	1	2	4	-	-	-	1	-	-	-
Thrush	2	1	-	-	-	-	-	-	-	23	10	3
Starling	-	-	-	-	-	-	-	-	-	5	-	-
Other	-	-	-	-	-	-	-	-	-	1	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	2	1
Herons	-	-	2	1	-	-	-	-	-	-	-	-
Raptors	-	-	-	2	1	-	-	-	-	-	1	-
Turtle dove	-	-	-	3	7	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	1	-
Other waders	-	-	-	1	-	-	-	-	-	-	-	-
Col. birds	-	-	-	3	2	-	-	-	-	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	35	14	-
Starling	-	-	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	-	-	-	-	-	-	-	1	-

TABLE 7A.19
BAG RECORDS OF SHOOTER 5

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	1	1	-	-	-	-	-	-	-	-
Raptors	-	-	-	-	-	-	-	-	1	7	-	-
Quail	-	-	-	1	-	-	-	-	-	1	-	-
Turtle dove	-	-	-	5	-	-	-	-	2	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	3	1
Other waders	-	-	-	3	-	-	-	-	-	-	-	-
Col. birds	-	-	-	10	2	-	-	1	2	5	-	-
Thrush	-	-	-	1	-	-	-	-	-	14	10	3
Other	-	-	-	1	-	-	-	-	-	-	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	1	-	-	-	-	1	-
Raptors	-	-	-	-	1	-	-	-	2	1	1	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	9	1	-	-	-	3	-	-	-
Waders	-	1	-	-	-	-	-	-	-	-	2	-
Col. birds	-	-	2	4	6	-	-	-	2	-	-	-
Thrush	4	-	-	-	-	-	-	-	-	50	7	-
Starling	-	-	-	-	-	-	-	-	-	7	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	-	1	-	-	-	-	-	1	-	-
Raptors	-	-	-	1	1	-	-	-	3	1	1	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	9	4	-	-	-	3	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	1	-
Other waders	-	-	-	1	1	-	-	-	-	-	-	-
Col. birds	-	-	-	3	6	-	-	-	2	-	-	-
Thrush	3	-	-	-	-	-	-	-	-	27	7	-
Starling	1	-	-	-	-	-	-	-	-	1	1	-
Other	-	-	-	1	-	-	-	-	-	-	-	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	-	2	-	-	-	-	-	-	-	-
Raptors	-	-	-	1	5	-	-	-	-	-	-	-
Quail	-	-	1	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	2	5	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	-	-
Col. birds	-	-	-	5	2	-	-	-	-	-	-	-

Table 7A.20
Bag records of shooter 6

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	-	2
Herons	-	-	-	-	-	-	-	-	1	-	-	-
Raptors	-	-	-	-	-	-	-	-	1	1	1	-
Quail	-	-	-	-	-	-	-	-	1	-	-	-
Turtle dove	-	-	-	-	-	-	-	-	5	-	-	-
Waders	-	-	-	-	-	-	-	-	1	-	2	-
Other waders	-	-	-	-	-	-	-	-	2	-	-	-
Col. birds	-	-	-	-	-	-	-	-	12	4	-	-
Thrush	-	-	-	-	-	-	-	-	-	3	2	-
Starling	-	-	-	-	-	-	-	-	-	3	-	-
Other	-	-	-	-	-	-	-	-	-	-	1	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	1	1	-	-	-	-	-	-	-	-
Raptors	-	-	1	2	2	-	-	-	-	2	-	-
Quail	-	-	2	-	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	3	-	-	-	-	-	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	2	-
Other waders	-	-	-	-	-	-	-	-	-	-	1	-
Col. birds	-	-	-	2	2	-	-	-	-	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	3	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	1	-	-	-	-	-	-	-	-
Herons	-	-	-	2	-	-	-	-	-	-	-	-
Raptors	-	-	-	1	-	-	-	-	-	-	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	4	-	-	-	-	-	-	-	-
Col. birds		-	-	4	-	-	-	-	-	-	-	-
Other waders	-	-	-	1	-	-	-	-	-	-	-	-
Thrush	-	-	-	2	-	-	-	-	-	-	-	-
Other	-	-	-	1	-	-	-	-	-	-	-	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	-	-	1	-	-	-	1	-	-	-
Turtle dove	-	-	-	-	2	-	-	-	-	-	-	-
Col. birds	-	-	-	-	1	-	-	-	-	-	-	-

Table 7A.21

Bag records of shooter 7

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	2	1	-	-	-	-	-	1	-	-
Raptors	-	-	-	-	-	-	-	-	-	1	1	-
Turtle dove	-	-	-	4	3	-	-	-	2	1	-	-
Waders	-	-	1	-	-	-	-	-	-	1	2	2
Other waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	1	6	-	-	-	-	1	1	-	-
Thrush	-	-	-	-	-	-	-	-	-	6	4	-
Starling	-	-	-	-	-	-	-	-	-	2	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	-	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	-	-	-	-	-	3	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Col. birds	-	-	-	-	-	-	-	-	5	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	9	-	-
Starling	-	-	-	-	-	-	-	-	-	3	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Turtle dove	-	-	-	8	-	-	-	-	1	-	-	-
Waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	-	5	-	-	-	-	-	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	11	-	-
Starling	-	-	-	-	-	-	-	-	-	2	-	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	2	6	-	-	-	-	-	-	-
Col. birds	-	-	-	3	2	-	-	-	-	-	-	-
Starling	-	-	-	2	-	-	-	-	-	-	-	-

Table 7A.22
Bag records of shooter 8

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	1	1	-	-	-	-	-	-	-	-
Raptors	-	-	-	-	-	-	-	-	-	1	-	-
Turtle dove	-	-	-	1	-	-	-	-	-	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	-	-
Other waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	1	2	1	-	-	-	-	1	-	-
Thrush	-	-	-	-	-	-	-	-	-	6	-	-
Starling	-	-	-	-	-	-	-	-	-	1	1	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	1	-	-	-	-	-	-	2	-	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	5	2	-	-	-	1	-	-	-
Waders	-	-	-	1	1	-	-	-	-	-	-	-
Other waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	1	2	-	-	-	-	-	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	9	-	-
Starling	-	-	-	-	-	-	-	-	-	2	-	-
Other	-	-	-	-	-	-	-	-	1	-	-	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	-	1	-	-	-	-	-	-	-	-
Raptors	-	-	-	-	-	-	-	-	1	1	-	-
Turtle dove	-	-	-	1	1	-	-	-	-	-	-	-
Col. birds	-	-	1	2	1	-	-	-	-	-	-	-
Waders	-	-	-	1	-	-	-	-	-	-	-	-
Starling	-	-	-	-	-	-	-	-	-	1	-	-
Other	-	-	-	-	-	-	-	-	-	-	1	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	-	-	-	-	-	-	-	4	-	-
Quail	-	-	-	1	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	1	1	-	-	-	-	-	-	-
Col. birds	-	-	2	2	-	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	1	-	-
Starling	-	-	-	-	-	-	-	-	-	2	1	-

Table 7A.23
Bag records of shooter 9

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Raptors	-	-	-	-	-	-	-	-	1	-	-	-
Turtle dove	-	-	-	7	4	-	-	-	1	-	-	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Waders	-	-	1	-	1	-	-	-	-	1	2	-
Other waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	-	4	2	-	-	-	-	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	2	4	-
Starling	-	-	-	-	-	-	-	-	-	-	1	-
Other	-	-	-	-	-	-	-	-	-	-	1	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	2	1	-	-	-	-	-	-	-	-
Duck	-	-	-	-	-	-	-	-	1	-	-	-
Raptors	-	-	2	2	3	-	-	-	-	2	1	-
Turtle dove	-	-	-	16	5	-	-	-	-	-	-	-
Quail	-	-	-	2	-	-	-	-	-	-	-	-
Waders	-	-	-	-	-	-	-	-	-	2	1	-
Other waders	-	-	2	-	-	-	-	-	-	-	-	-
Col. birds	-	-	3	5	5	-	-	-	1	-	-	-
Thrush	-	-	-	-	-	-	-	-	-	7	-	-
Other	-	-	-	-	-	-	-	-	-	1	1	-

1986	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Seabirds	-	-	-	-	-	-	-	-	-	-	1	-
Herons	-	-	-	-	-	-	-	-	-	1	-	-
Raptors	-	-	-	-	-	-	-	-	1	-	-	-
Turtle dove	-	-	-	-	-	-	-	1	11	2	-	-
Waders	-	-	-	-	-	-	-	-	-	-	-	-
Col. birds	-	-	-	-	-	-	-	2	7	-	2	-
Thrush	-	-	-	-	-	-	-	-	-	5	1	-

1987	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	-	1	1	-	-	-	-	-	-	-
Turtle dove	-	-	-	3	11	-	-	-	-	-	-	-
Waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	1	2	2	-	-	-	-	-	-	-
Other	-	-	1	-	-	-	-	-	-	-	-	-

Table 7A.24

Bag records of shooter 10

1984	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Herons	-	-	-	-	-	-	-	-	1	1	-	-
Raptors	-	-	-	-	-	-	-	-	-	3	-	1
Quail	-	-	-	-	-	-	-	-	1	-	-	-
Turtle dove	-	-	-	-	-	-	-	-	1	-	-	-
Waders	-	-	-	-	-	-	-	-	-	-	1	-
Thrush	-	-	-	-	-	-	-	-	1	22	33	4
Starling	-	-	-	-	-	-	-	-	-	-	7	4
Other	-	-	-	-	-	-	-	-	1	-	-	-

1985	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Raptors	-	-	2	2	-	-	-	-	-	-	-	-
Quail	-	-	1	-	-	-	-	-	-	-	-	-
Turtle dove	-	-	-	7	3	-	-	-	-	-	-	-
Waders	-	-	1	-	-	-	-	-	-	-	-	-
Col. birds	-	-	2	11	-	-	-	-	-	-	-	-
Thrush	5	5	2	-	-	-	-	-	-	-	-	-
Starling	2	3	1	-	-	-	-	-	-	-	-	-

Seabirds includes gulls, terns, shearwaters, grebes and cormorant
Herons include grey heron, purple heron, night heron, little egret, little bittern, bittern
Waders includes snipes, woodcock, golden plover, lapwing
Other waders includes all waders excluding the above
Col. birds includes hoopoe, cuckoo, golden oriole, bee-eater, roller, kingfisher, nightjar
Thrush includes song thrush, redwing, fieldfare, mistle thrush, rock thrush,
blue rock thrush, blackbird, ring ouzel
Other birds include rails, crakes, moorhen and coot and alpine swift

TABLE 7A.25

SELECTED RECOVERIES OF SOME FOREIGN RINGED BIRDS
recoveries noted are birds ringed in a previous summer including
young birds ringed in the nest
and recovered during the following autumn or winter

Cormorant	pull /?/	28.05.33 05.11.33	Pulitz St Paul's Bay	54.25 N, 30.20 E 35.57 N, 14.25 E	E. Germany Malta
Cormorant	pull +	06.06.81 18.10.81	Braendegards M'Xlokk	55.08 N, 10.24 E 35.49 N, 14.33 E	Denmark Malta
Night heron	juv +	02.07.12 14.10.12	Haros Senglea	47.23 N, 19.02 E 35.53 N, 14.31E	Hungary Malta
Night heron	? +	22.07.29 19.09.29	Astrakhan Comino	46.20 N, 48.55E 36.00 N, 14.9 E	USSR Malta
Night heron	pull +	20.07.51 07.10.51	Kisbalaton Zabbar	46.40 N, 17.15 E 35.52N, 14.32 E	Hungary Malta
Night heron	pull ()	20.07.57 30.10.57	Obedska bara Nadur	44.03 N, 20.05E 30.03 N, 14.17 E	Yugoslavia Gozo
Night heron	juv +	10.06.63 18.09.63	Srebarna Mosta	44.07 N, 27.05 E 35.55 N, 14.26 E	Bulgaria Malta
Night heron	pull ()	23.06.65 14.10.65	Carska bara Naxxar	45.20 N, 20.26 E 35.55 N, 14.27 E	Yugoslavia Malta
Night heron	pull +	01.04.66 10.10.66	Carska bara Gudja	45.20 N, 20.26 E 35.51 N, 14.30 E	Yugoslavia Malta
Night heron	pull +	22.05.66 13.10.66	Carska bara M'scala	45.20 N, 20.26 E 35.52 N, 14.34 E	Yugoslavia Malta
Night heron	pull +	10.06.66 20.10.66	Carska bara Rabat	45.20 N, 20.26 E 35.53 N, 14.23 E	Yugoslavia Malta
Night heron	pull +	12.07.68 26.10.68	Krapje Dol Malta	45.18 N, 16.50 E	Yugoslavia
Night heron	pull +	30.06.69 18.10.69	Drenov Dwejra	45.18 N, 16.50 E 36.03 N, 14.16 E	Yugoslavia Gozo
Night heron	pull +	23.06.70 00.09.70	Krapje Dol Malta	45.18 N, 16.50 E	Yugoslavia
Night heron	pull +	17.06.72 08.09.72	Bilje Tal-Handaq	45.37 N, 18.43 E 35.52 N, 14.28 E	Yugoslavia Malta
Night heron	pull +	15.06.77 15.10.77	Bilje Luqa	45.37 N, 18.43 E 35.51 N, 14.29 E	Yugoslavia Malta
Squacco heron	pull ()	29.06.13 13.09.13	Ujvidek Malta	45.16 N, 19.49 E	Yugoslavia
Squacco heron	pull +	26.06.72 03.09.72	Bosanska B. ic-caghaq	45.08 N, 17.15 E 35.56 N, 14.28 E	Yugoslavia Malta

Little Egret	pull x	24.06.69 19.09.69	Bilje Filfla	45.37 N, 18.43 E 35.47 N, 14.25 E	Yugoslavia Malta
Grey Heron	pull +	23.06.29 20.10.29	Karabogas Malta	41.28 N, 25.00 E	Bulgaria
Grey Heron	pull +	22.06.88 06.09.88	Obedska bara Anchor bay	45.43 N, 20.01 E 35.58 N, 14.21 E	Yugoslavia Malta
Purple heron	pull +	18.06.51 14.09.51	Gardony Valletta	47.10 N, 18.32 E 35.54 N, 14.31 E	Hungary Malta
Purple heron	pull +	24.06.75 09.09.75	Apatin Gharghur	45.38 N, 18.58 E 35.56 N, 14.27 E	Yugoslavia Malta
Purple heron	pull +	29.05.79 08.10.79	Palmonostora Gozo ca.	46.37 N, 19.26 E 36.02 N, 14.16 E	Hungary Gozo
Osprey	pull +	13.06.43 01.10.43	Granholmen S.E. Coast ca.	59.22 N, 17.26 E 35.55 N, 14.27 E	Sweden Malta
Osprey	pull +	30.06.46 06.10.46	Hagskar M'Xlokk ca.	59.19 N, 17.20 E 35.49 N, 14.33 E	Sweden Malta
Osprey	pull +	04.07.50 22.11.50	Langoren Gnejna bay	59.21 N, 17.23 E 35.55 N, 14.20 E	Sweden Malta
Osprey	pull +	30.06.62 28.09.62	Skokloster Bidnija	59.42 N, 17.37 E 35.54 N, 14.25 E	Sweden Malta
Osprey	pull +	27.06.64 12.10.64	Langmossen Naxxar	59.29 N, 18.13 E 35.55 N, 14.27 E	Sweden Malta
Osprey	pull +	06.07.65 25.09.65	Padasjoki Zabbar	61.21 N, 25.07 E 35.52 N, 14.32 E	Finland Malta
Osprey	pull +	30.06.67 00.10.67	Rodskar Tal-handaq	59.31 N, 16.56 E 35.52 N, 14.28 E	Sweden Malta
Osprey	pull +	15.07.69 14.09.69	Ansiolehti Zabbar	61.23 N, 24.36 E 35.52 N, 14.32 E	Finland Malta
Osprey	pull +	25.06.72 21.09.72	Stensbole Gudja	60.21 N, 25.43 E 35.51 N, 14.31 E	Finland Malta
Osprey	pull +	04.07.72 26.09.72	Lake Asnen Rabat	56.38 N, 14.40 E 35.53 N, 14.25 E	Sweden Malta
Osprey	pull +	11.07.72 14.10.72	Vouhiniemi Luqa	60.57 N, 24.07 E 35.52 N, 14.30 E	Finland Malta
Osprey	pull +	04.07.73 02.10.73	S. Silkesnas Zabbar	54.42 N, 14.37 E 35.53 N, 14.32 E	Sweden Malta
Osprey	pull +	12.07.73 01.10.73	Hara Benghisa	61.45 N, 26.02 E 35.49 N, 14.32 E	Finland Malta
Osprey	pull +	16.07.73 02.11.73	Rajazuo Tarxien	60.35 N, 27.21 E 35.52 N, 14.32 E	Finland Malta

Osprey	pull	23.06.74	Vastermo	59.20 N, 16.04 E	Sweden
	+	00.09.74	Buskett	35.51 N, 14.26 E	Malta
Osprey	pull	04.07.74	Kangasala	61.21 N, 24.00 E	Finland
	+	00.09.74	Zebbiegh	35.552 N, 14.23 E	Malta
Osprey	juv	01.07.75	Tammisaari	59.50 N, 23.00 E	Finland
	+	30.09.75	Malta ca.	35.55 N, 14.28 E	Malta
Osprey	pull	05.07.78	Hollola		Finland
	+	15.09.78	S. tal-gholja	35.51 N, 14.26 E	Malta
Osprey	pull	02.07.78	Lake Hurven	57.08 N, 13.08 E	Sweden
	+	30.09.78	S. tal-gholja	35.51 N, 14.26 E	Malta
Osprey	pull	22.06.80	Porvoo		Finland
	+	21.09.80	Buskett	35.51 N, 14.25 E	Malta
Osprey	pull	10.08.81	Murmo		Finland
	+	15.10.81	Buskett	35.51 N, 14.25 E	Malta
Osprey	pull	08.08.81	Melsliden	64.42 N, 20.00 E	Sweden
	+	13.11.81	Ghar Lapsi	35.52 N, 14.30 E	Malta
Osprey	pull	10.07.84	Joubsa		Finland
	+	16.09.84	Qrendi	35.50 N, 14.27 E	Malta
Osprey	pull	17.06.87	Granzin	35.22 N, 13.04 E	E. Germany
	+	11.09.87	Luqa	35.52 N, 14.30 E	Malta
Honey buzzard	pull	28.07.22	Gustavsstrom	60.04 N, 14.14 E	Sweden
	+	29.09.22	Gharghur	35.55 N, 14.27 E	Malta
Honey buzzard	juv	28.07.57	Lysegarden	57.55 N, 12.01 E	Sweden
	+	29.09.22	Zabbar	35.52 N, 14.32 E	Malta
Honey buzzard	pull	22.07.67	Radziadz	51.30 N, 16.57 E	Poland
	+	29.09.22	St Paul's Bay	35.57 N, 14.23 E	Malta
Honey buzzard	pull	24.08.70	Leippe	57.55 N, 12.01 E	E. Germany
	+	07.10.70	Mtarfa	35.53 N, 14.24 E	Malta
Honey buzzard	pull	11.08.72	Trasko-Storo	59.25 N, 18.46 E	Sweden
	+	00.09.72	Buskett	35.51 N, 14.26 E	Malta
Honey buzzard	juv	03.09.73	Kirkonkyla	62.55 N, 26.24 E	Sweden
	+	18.10.73	Rabat	35.53 N, 14.25 E	Malta
Honey buzzard	juv	18.07.81	Belmegyer	46.53 N, 21.13 E	Hungary
	+	15.10.81	Buskett	35.51 N, 14.26 E	Malta
Honey buzzard	pull	10.8.81	Nurmo	62.41 N, 23.04 E	Finland
	+	18.09.81	Gudja	35.51 N, 14.30 E	Malta
Montagu's Harrier	pull	08.07.72	Aventoft	54.54 N, 08.49 E	Germany
	+	16.09.72	Tarxien	35.52 N, 14.31 E	Malta
Montagu's Harrier	pull	01.05.94	Torfowisko	51.08 N, 23.30 E	Poland
	+	24.09.94	Zurrieq	35.50 N, 14.29 E	Malta

Marsh Harrier	pull	03.07.78	Zuvintas	54.28 N, 23.38 E	Lithuania
	+	20.09.78	Delimara	35.39 N, 14.33 E	Malta
Marsh Harrier	ad	03.06.87	Stawno	51.33 N, 17.21 E	Poland
	+	21.09.87	off Qawra	36.02 N, 14.26 E	Malta
Black kite	pull	11.06.37	Mte. Caprino	46.00 N, 09.05 E	Switzerland
	+	05.09.37	Victoria	36.02 N, 14.13 E	Gozo
Buzzard	juv	18.07.34	Balbieriskis	54.31 N, 23.53 E	Lithuania
	+	15.10.34	Malta		
Hobby	pull	02.08.58	Klaffenbach	50.46 N, 12.55 E	E. Germany
	+	28.09.58	St. Julians	35.55 N, 14.29 E	Malta
Kestrel	juv	02.07.35	Proskau	50.35 N, 17.52 E	Germany
	+	18.10.35	Marsa	35.49 N, 14.32 E	Malta
Kestrel	juv	22.07.55	Antiala	61.13N, 24.20 E	Finland
	+	18.10.55	Buskett	35.51 N, 14.26 E	Malta
Kestrel	pull	08.06.88	Krnov	50.05 N, 17.43 E	C'vachia
	+	09.09.88	Mtahleb	35.52 N, 14.31 E	Malta
Kestrel	adl	25.09.92	Olomouc	49.38 N, 17.09 E	C'vachia
	+	00.09.928	Mtarfa	35.53 N, 14.23 E	Malta
Avocet	pull	19.06.76	Nizovia	46.40 N, 31.09 E	USSR
	+	27.11.76	M'Xlokk	35.50 N, 14.33 E	Malta
Temmink's stint	juv	22.08.81	Ottenby	56.12 N, 16.24 E	Sweden
	v	06.09.81	Ghadira	35.58 N, 14.21 E	Malta
Ringed plover	ad	09.04.47	Lednice	48.46 N, 16.43 E	C'vachia
	+	24.09.47	Sliema	35.58 N, 14.25 E	Malta
Ringed plover	ad	04.08.62	Luvia	61.29 N, 21.21 E	Finland
	+	08.09.62	B'kara	35.50 N, 14.30 E	Malta
Dunlin	fg	10.08.76	Lagenwerder	54.02 N, 11.30 E	E. Germany
	+	20.10.76	Ta' Qali	35.54 N, 14.25 E	Malta
Turnstone	juv	02.09.78	Ujscie Wisly	54.21 N, 18.57 E	Poland
	+	09.10.78	Benghisa	35.49 N, 14.32 E	Malta
Mediterranean Gull	juv	02.07.49	Orlov Isles	46.17 N, 31.45 E	USSR
	/?/	02.01.50	Marsa	35.32 N, 14.30 E	Malta
Mediterranean Gull	juv	02.07.49	Orlov Isles	46.17 N, 31.45 E	USSR
	/?/	16.01.50	Malta		
Mediterranean Gull	juv	02.07.49	Orlov Isles	46.17 N, 31.45 E	USSR
	/?/	00.02.50	Malta		
Mediterranean Gull	juv	02.07.49	Orlov Isles	46.17 N, 31.45 E	USSR
	/?/	00.02.50	Malta		
Mediterranean Gull	juv	29.06.53	Orlov Isles	46.17 N, 31.45 E	USSR
	/?/	28.05.54	Malta		

Mediterranean Gull	juv /?/	04.07.54 30.01.55	Orlov Isles Sliema	46.17 N, 31.45 E 35.58 N, 14.25 E	USSR Malta
Mediterranean Gull	juv +	29.06.56 15.11.56	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Mediterranean Gull	juv ()	29.06.56 15.12.56	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Mediterranean Gull	juv +	28.06.56 15.12.56	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Mediterranean Gull	juv /?/	29.06.56 05.01.57	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Mediterranean Gull	juv x	28.06.58 05.01.59	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Mediterranean Gull	juv /?/	17.06.59 22.02.60	Orlov Isles Corradino	46.17 N, 31.45 E 35.53 N, 14.31 E	USSR Malta
Mediterranean Gull	juv ()	10.05.65 30.10.65	Orlov Isles ca. 1 mile off South coast	46.17 N, 31.45 E	USSR Gozo
Mediterranean Gull	juv ()	10.07.65 02.11.65	Orlov Isles ca. 6 mile off N.W. coast	46.17 N, 31.45 E	USSR Malta
Mediterranean Gull	juv x	10.07.69 00.01.70	Orlov Isles off Valletta	46.17 N, 31.45 E 35.55 N, 14.30 E	USSR Malta
Mediterranean Gull	juv +	23.06.71 00.01.72	Orlov Isles Zurrieq	46.17 N, 31.45 E 35.49 N, 14.27 E	USSR Malta
Mediterranean Gull	juv +	19.06.75 00.10.75	Smalenyi Isle Malta	46.15 N, 32.00 E	USSR
Mediterranean Gull	pull +	19.05.76 00.12.76	Smalenyi Isle Marsa	46.15 N, 32.00 E 35.53 N, 14.30 E	USSR Malta
Mediterranean Gull	pull +	24.06.76 00.01.77	Smalenyi Isle M'xlokk	46.15 N, 32.00 E 35.50 N, 14.33 E	USSR Malta
Mediterranean Gull	pull +	19.06.80 17.11.80	Smalenyi Isle off M'forn	46.15 N, 32.00 E 36.05 N, 14.19 E	USSR Gozo
Mediterranean Gull	juv +	29.09.80 15.12.80	Kiel Malta	54.20 N, 10.08 E 35.53 N, 15.30 E	W. Germany Malta
Black headed Gull	juv x	01.06.30 04.09.30	Vik Valletta	60.12 N, 25.00 E 35.54 N, 14.31 E	Finland Malta
Black headed Gull	juv +	09.06.31 01.01.32	Vik Paola	60.12 N, 25.00 E 35.52 N, 14.30 E	Finland Malta
Black headed Gull	juv /?/	21.06.35 23.12.35	Lake Babit Malta	56.55 N, 23.45 E	Latvia
Black headed Gull	juv +	04.06.52 25.11.52	Eschenbach Kalkara	49.45 N, 11.50 E 35.53 N, 14.32 E	W. Germany Malta

Black headed Gull	pull +	09.06.54 23.02.55	Retszilas Malta		Hungary
Black headed Gull	juv +	16.06.63 14.01.64	Jelas polje Mosta	45.09 N, 18.01 E 35.55 N, 14.26 E	Yugoslavia Malta
Black headed Gull	juv +	16.06.63 14.01.64	Jelas polje Valletta	45.09 N, 18.01 E 35.54 N, 14.31 E	Yugoslavia Malta
Black headed Gull	pull +	07.06.64 15.01.65	Zeged-Feherto B'Kara	46.20 N, 20.05 E 35.54 N, 14.28 E	Hungary Malta
Black headed Gull	(?) x	28.05.66 01.01.67	Forez Floriana	45.45 N, 04.10 E 35.54 N, 14.31 E	France Malta
Black headed Gull	pull ()	17.06.68 07.01.69	Saarioisjaru St Paul's Bay	61.09 N, 24.02 E 35.57 N, 14.23 E	Finland Malta
Black headed Gull	pull /?/	29.05.69 10.12.69	Bosanska Qormi	45.08 N, 17.15 E 35.53 N, 14.28 E	Yugoslavia Malta
Black headed Gull	pull +	15.07.74 06.01.75	Engure Lake off Dingli cliffs	57.17 N, 23.07 E 35.50 N, 14.22 E	Latvian SSR Malta
Black headed Gull	pull +	19.05.76 00.12.76	Ryazan region Marsa	54.33 N, 40.44 E 35.53 N, 14.30 E	USSR Malta
Slender billed Gull	pull x	06.06.71 11.12.71	Chott El Jem Salina bay	35.10 N, 10.15 E 35.58 N, 14.26 E	Tunisia Malta
Slender billed Gull	pull x	10.06.75 23.09.75	OrlovIsles nr. Flifla	46.17 N, 31.45 E 35.48 N, 14.25 E	USSR Malta
Lesser b. b. Gull	pull ()	04.07.36 00.04.37	Flackholmen B'Kara	57.32 N, 11.52 E 35.54 N, 14.28 E	Sweden Malta
Lesser b. b. Gull	pull +	07.07.37 00.01.38	Flackholmen S.E. coast	57.32 N, 11.52 E 35.56 N, 14.26 E	Sweden Malta
Lesser b. b. Gull	pull +	25.06.58 22.10.58	Lilla Karlso Gharghur	57.19 N, 18.03 E 35.55 N, 14.27 E	Sweden Malta
Lesser b. b. Gull	pull +	21.06.64 00.01.38	Vitharun Valletta	60.00 N, 22.07 E 35.56 N, 14.27 E	Finland Malta
Lesser b. b. Gull	pull +	09.07.87 11.10.87	Havik M'scala	59.19 N, 05.18 E 35.52 N, 14.34 E	Norway Malta
Caspian tern	pull +	25.06.57 00.04.37	Havenor B'Kara	60.15 N, 26.25 E 35.54 N, 14.28 E	Finland Malta
Caspian tern	pull +	30.06.64 00.04.37	Luvia Gzira	61.25 N, 21.20 E 35.50 N, 14.30 E	Finland Malta
Caspian tern	pull +	12.06.75 08.09.75	Dansskaren Ramla bay	58.06 N, 16.54 E 36.03 N, 14.16 E	Sweden Gozo
Caspian tern	ad +	12.06.76 06.11.76	Algsbadarna nr. Tarxien	57.41 N, 16.48 E 35.52 N, 14.32 E	Sweden Malta

Caspian tern	pull +	01.06.78 13.09.78	Sternarna off Delimara	60.38 N, 17.56 E 35.49 N, 14.34 E	Sweden Malta
Caspian tern	pull +	10.06.80 22.10.80	Danaflot Salina	56.04 N, 15.43 E 35.55 N, 14.25 E	Sweden Malta
Sandwich tern	juv ()	22.07.53 26.11.53	Orlov Isles Malta	46.17 N, 31.45 E	USSR
Sandwich tern	juv +	15.06.70 00.09.70	Orlov Isles M'scala	46.17 N, 31.45 E 35.52 N, 14.34 E	USSR Malta
Sandwich tern	pull +	24.06.76 19.09.76	Tendra bay M'scala	46.15 N, 32.00 E 35.52 N, 14.34 E	USSR Malta
Quail	ad +	01.06.39 27.09.39	Udine Malta	46.03 N, 13.14 E	Italy
Quail	ad +	12.05.48 16.10.48	Largo Castello Gudja	44.48 N, 11.38 E 35.51 N, 14.31 E	Italy Malta
Quail	ad +	18.05.50 15.09.50	Reggio Emilia Malta	44.42 N, 10.39 E	Italy
Kingfisher	juv +	30.07.49 29.9.49	Vizovice St Paul's Bay	49.13 N, 17.41 E 35.57 N, 14.25 E	C'vachia Malta
Wryneck	fg ()	25.08.65 30.09.64	Tampere M'scala	61.29 N, 23.50 E 35.52 N, 14.34 E	Finland Malta
Short-eared owl	pull +	11.07.77 28.10.77	Buddbyn B'kara	65.52 N, 21.41 E 35.53 N, 14.29 E	Sweden Malta
Swift	ad +	28.07.76 15.09.76	Lammi Tal-handaq	61.12 N, 25.07 E 35.52 N, 14.28 E	Finland Malta
Swallow	pj +	24.08.85 23.09.85	Koseze Zurrieq	46.04 N, 14.27 E 35.50 N, 14.29 E	Yugoslavia Malta
Sand Martin	(?) ()	30.07.64 30.09.64	Saasmaki Buskett	61.12 N, 24.03 E 35.51 N, 14.26 E	Finland Malta
White wagtail	pull x	08.05.81 00.11.81	Olomouch Malta ca.	49.49 N, 17.11 E 35.55 N, 14.30 E	C'vachia Malta
Chaffinch	ad ()	17.09.61 10.10.61	Nowa Pasleka Zebbug	50.26 N, 19.45 E 36.04 N, 14.14 E	Poland Gozo
Chaffinch	fg ()	08.10.86 17.11.86	Bergamo Ghar Hasan	45.48 N, 09.48 E 35.49 N, 14.31 E	Italy Malta
Chaffinch	fg v	02.10.86 25.01.87	Fulophaza Xemxija	46.53 N, 19.28 E 35.57 N, 14.23 E	Hungary Malta
Greenfinch	ad ()	23.07.50 30.10.50	Stobrec Kercem	43.30 N, 16.31 E 36.02 N, 14.13 E	Yugoslavia Gozo
Greenfinch	fg ()	07.09.68 08.11.68	Pedaso Xaghra	43.05 N, 13.50 E 36.03 N, 14.17 E	Italy Gozo

Greenfinch	juv ()	07.10.83 04.11.83	Piestany Delimara	48.36 N, 17.49 E 35.49 N, 14.34 E	C'vachia Malta
Greenfinch	fg ()	01.08.87 02.11.87	Piestany Ta' Cenc	48.36 N, 17.49 E 36.01 N, 14.14 E	C'vachia Gozo
Goldfinch	ad ()	11.10.69 27.11.69	Stobrec B'Bugia	43.30 N, 16.31 E 35.50 N, 14.34 E	Tunisia Malta
Siskin	ad +	24.09.33 17.11.33	Gardone M'scala	45.37 N, 10.34 E 35.55 N, 14.26 E	Italy Malta
Siskin	juv ()	07.10.59 05.11.59	Dittersdorf East coast ca.	50.45 N, 13.01 E 35.56 N, 14.28 E	Germany Malta
Siskin	fg ()	06.10.74 00.10.74	Zalog Malta	46.03 N, 14.37 E	Yugoslavia
Siskin	fg /?/	15.09.75 15.12.75	nr. Pape Ghaxaq	56.09 N, 21.02 E 35.51 N, 14.31 E	Latvian SSR Malta
Siskin	fg ()	04.10.75 05.11.75	Zalec/Celje Cospicua	46.15 N, 15.10 E 35.53 N, 14.31 E	Yugoslavia Malta
Siskin	ad ()	11.10.85 00.10.85	Kaliningrad Sarraflu	55.08 N, 20.24 E 36.04 N, 14.13 E	U.S.S.R. Gozo
Serin	ad ()	05.09.59 23.10.60	Kunratice Sannat	50.01 N, 14.30 E 36.01 N, 14.14 E	C'vachia Gozo
Serin	juv ()	01.09.83 10.12.83	Kolin Dingli	50.01 N, 14.30 E 35.52 N, 14.25 E	C'vachia Malta
Serin	ad ()	21.07.86 15.01.87	Kolin Sannat	50.01 N, 14.30 E 36.01 N, 14.14 E	C'vachia Gozo
Serin	fg ()	01.11.86 09.02.87	Ljubljana Wardija	46.13 N, 14.30 E 35.56 N, 14.23 E	Yugoslavia Malta
Serin	ad ()	01.10.87 04.11.87	Topolcany Ta' Cenc	48.38 N, 18.21 E 36.01 N, 14.14 E	C'vachia Gozo
Linnet	? /?/	04.08.56 14.9.56	Sinj Victoria	43.42 N, 16.27 E 36.02 N, 14.13 E	Yugoslavia Gozo
Linnet	ad /?/	18.10.59 23.10.59	Stobrec Zabbar	43.10 N, 16.31 E 35.52 N, 14.32 E	Yugoslavia Malta
Linnet	ad ()	19.06.60 27.10.60	Sinj Zebbug	43.42 N, 16.27 E 35.53 N, 14.27 E	Yugoslavia Malta
Linnet	juv ()	20.07.62 07.11.62	Trnava B'Kara	48.22 N, 17.35 E 35.53 N, 14.27 E	C'vachia Malta
Linnet	ad ()	12.10.67 15.12.67	Vrbanj Mosta	43.10 N, 16.39 E 35.55 N, 14.26 E	Yugoslavia Malta
Linnet	juv ()	01.07.71 25.10.71	Zuvintas Marsa	54.28 N, 28.38 E 35.53 N, 14.30 E	Lithuania Malta

Linnet	juv ()	04.10.72 15.10.72	Col de Bretolet Kercem	46.02 N, 06.08 E 36.02 N, 14.13 E	Switzerland Gozo
Linnet	ad ()	17.04.73 18.10.73	San Benedetto Zejtun	46.00 N, 11.10 E 35.52 N, 14.33 E	Italy Malta
Linnet	ad ()	09.08.74 02.11.74	Budapest Qormi	47.29 N, 19.03 E 35.53 N, 14.27 E	Hungary Malta
Linnet	fg ()	21.07.76 20.01.77	Budapest Munxar	47.29 N, 19.03 E 36.01 N, 14.13 E	Hungary Gozo
Linnet	juv ()	26.09.79 00.12.79	Sturovo Hal-Far	47.48 N, 18.43 E 35.49 N, 14.31 E	C'vachia Malta
Linnet	juv ()	05.09.79 17.01.80	Sedlec Gudja	48.47 N, 16.42 E 35.51 N, 14.31 E	C'vachia Malta
Linnet	juv ()	01.09.79 00.01.80	Sedlec Bidnija	48.47 N, 16.42 E 35.54 N, 14.23 E	C'vachia Malta
Linnet	juv ()	03.10.83 05.11.83	Piestany Mriehel	48.36 N, 17.49 E 35.53 N, 14.28 E	C'vachia Malta
Linnet	juv ()	28.08.83 19.11.83	Pomaz Gozo ca.	47.39 N, 19.02 E 36.01 N, 14.14 E	Hungary Gozo
Linnet	ad ()	03.06.82 29.10.82	Veszpreni Rinella	47.14 N, 17.51 E 35.53 N, 14.32 E	Hungary Malta
Linnet	juv ()	14.07.83 07.11.83	Sedlec Sannat	48.47 N, 16.42 E 36.01 N, 14.14 E	C'vachia Gozo
Linnet	juv ()	22.07.83 30.11.84	Barawya Mtahleb	46.05 N, 18.15 E	Hungary Malta
Linnet	ad ()	03.09.88 01.10.88	Biscupice Zejtun	49.05 N, 17.43 E 35.52 N, 14.32 E	C'vachia Malta
Robin	fg ()	03.09.81 31.10.81	Reningsverket Rabat	58.45 N, 17.05 E 35.53 N, 14.24 E	Sweden Malta
Robin	fg v	26.10.82 14.12.82	Longastrino Ghajn Zejtuna	44.35 N, 12.00 E	Italy Malta
Starling	pull +	18.05.88 17.05.88	Metschka Xaghra	43.37 N, 25.50 E 36.03 N, 14.16 E	Bulgaria Gozo

TABLE 7A.26
RECOVERIES OF FOREIGN RINGED BIRDS
ringed and recovered during the same spring.

Kestrel	juv +	11.04.56 04.05.56	El Houaria G'Mangia	37.05 N, 11.02 E 35.53 N, 14.30 E	Tunisia Malta
Kestrel	ad +	04.05.63 14.05.63	El Houaria Zabbar	37.05 N, 11.02 E 35.52 N, 14.32 E	Tunisia Malta
Kestrel	juv +	09.05.64 11.05.64	El Houaria Zabbar	37.05 N, 11.02 E 35.52 N, 14.32 E	Tunisia Malta

Sanderling	fg	08.02.75	Oliphant river	31.42 N, 18.12 E	South Africa
	+	22.05.75	M'scala	35.52 N, 14.34 E	Malta
Yellow wagtail	(?)	06.03.61	Kano	11.59 N, 08.51 E	Nigeria
	()	26.04.61	Gzira	35.50 N, 14.32 E	Malta
Yellow wagtail	(?)	04.01.64	Vom	09.44 N, 08.46 E	Nigeria
	()	12.04.64	Malta		
Yellow wagtail	(?)	09.04.68	Ascoli		Italy
	v	28.09.68	Malta		
Yellow wagtail	fg	18.03.67	Kano	11.59 N, 08.51 E	Nigeria
	()	11.04.67	Qormi	35.53 N, 14.27 E	Malta
Yellow wagtail	ad	29.03.73	Vom	09.44 N, 08.46 E	Nigeria
	()	23.04.73	Marsascala	35.52 N, 14.34 E	Malta
Goldfinch	ad	09.03.68	Mendjez el bab	36.39 N, 09.40 E	Tunisia
	()	24.03.68	Delimara	35.49 N, 14.34 E	Malta
Linnet	ad	16.03.83	Lestina	49.52 N, 16.56 E	C'vachia
	()	00.10.83	Malta ca.	35.54 N, 14.25 E	Malta

TABLE 7A.27

SELECTED RECOVERIES MALTA RINGED BIRDS
recoveries noted are those occuring within
the same season in spring

Manx Shearwater	fg	21.05.76	Filfla	35.47 N, 14.25 E	Malta
	x	18.07.76	Lagonisi	37.50 N, 23.45 E	Greece
House Martin	pj	25.05.68	Ramla valley	36.03 N, 14.17 E	Gozo
	x	14.07.68	Albacken	60.42 N, 13.43 E	Sweden
House Martin	fg	19.05.72	Ramla valley	36.03 N, 14.17 E	Gozo
	x	01.07.72	Schoenewerda	51.19 N, 11.22 E	Germany
House Martin	fg	09.05.77	Ramla valley	36.03 N, 14.17 E	Gozo
	()	15.05.77	Volokolamsk	56.00 N, 35.56 E	USSR
House Martin	fg	09.04.78	Lunzjata	36.03 N, 14.14 E	Gozo
	/?/	15.06.78	Aprilia	41.36 N, 12.39 E	Italy
Sand Martin	ad	10.04.71	Ramla valley	36.03 N, 14.17 E	Gozo
	v	27.04.71	Boughton	52.35 N, 00.31 E	England
Sand Martin	fg	02.05.75	Ramla valley	36.03 N, 14.17 E	Gozo
	v	12.07.75	Stellendam	51.48 N, 04.02 E	Netherlands
Sand Martin	fg	23.04.77	Ramla valley	36.03 N, 14.17 E	Gozo
	/?/	31.05.77	Beleno	43.39 N, 25.07 E	Bulgaria
Sand Martin	fg	13.05.77	Targa Gap	35.55 N, 14.25 E	Malta
	v	17.08.77	Siemionki	52.35 N, 18.20 E	Poland
Sand Martin	fg	09.04.78	Lunzjata	36.03 N, 14.14 E	Gozo
	x	mid.05.78	Ravenna	44.27 N, 11.49 E	Italy

Sand Martin		ad	09.05.82	Ghajn rihana	35.54 N, 14.25 E	Malta
		v	09.08.82	Gbely	48.43 N, 17.08 E	C'vakia
Sand Martin		ad	21.04.83	Ramla valley	36.03 N, 14.17 E	Gozo
		v	28.08.83	Skoflijica	45.58 N, 14.34 E	Yugoslavia
Sand Martin		ad	13.04.86	Lunzjata	36.03 N, 14.17 E	Gozo
	colony	v	24.06.86	Varennes	48.55 N, 02.46 E	France
Sand Martin		ad	13.04.86	Lunzjata	36.03 N, 14.17 E	Gozo
	colony	v	04.07.86	Parma	44.55 N, 10.15 E	Italy
Sand Martin		ad	11.04.89	Ghajn rihana	35.54 N, 14.25 E	Malta
	colony	v	05.07.89	Chaillon	48.57 N, 05.38 E	France
Sand Martin		ad	19.04.89	Ramla valley	36.03 N, 14.17 E	Gozo
	colony	v	21.06.89	Maglarp	55.23 N, 13.04 E	Sweden
Swallow		pj	08.04.71	Ramla valley	36.03 N, 14.17 E	Gozo
		+	15.04.71	Khora Sfakion	35.12 N, 24.08 E	Crete
Swallow		pj	06.04.71	Ramla valley	36.03 N, 14.17 E	Gozo
		v	14.05.71	Zossen	52.09 N, 13.24 E	Germany
Swallow		pj	10.04.71	Ramla valley	36.03 N, 14.17 E	Gozo
		x	19.06.71	Offenheim	49.44 N, 08.07 E	Germany
Swallow		pj	30.04.71	Ramla valley	36.03 N, 14.17 E	Gozo
		+	08.07.71	Derwitz	52.23 N, 12.50 E	Germany
Swallow		pj	06.04.71	Lunzjata	36.02 N, 14.14 E	Gozo
		x	10.07.71	Frauendorf	51.25 N, 13.46 E	Germany
Swallow		ad	02.04.78	Lunzjata	36.02 N, 14.14 E	Gozo
		v	08.04.78	Ascoli Piceno	43.00 N, 14.46 E	Italy
Swallow		ad	06.04.78	Lunzjata	36.02 N, 14.14 E	Gozo
		v	00.07.78	Ascoli Piceno	43.00 N, 14.46 E	Italy
Swallow		ad	10.05.77	Lunzjata	36.02 N, 14.14 E	Gozo
		v	17.06.77	nr Balakleya	49.32 N, 36.51 E	USSR
Swallow		ad	29.04.78	Lunzjata	36.02 N, 14.14 E	Gozo
		v	21.07.78	Prosecne	50.34 N, 15.41 E	C'vakia
Swallow		ad	02.05.78	Lunzjata	36.02 N, 14.14 E	Gozo
		x	29.05.78	Dabel	53.40 N, 11.54 E	E. Germany
Swallow		ad	29.04.78	Lunzjata	36.02 N, 14.14 E	Gozo
		v	21.07.78	Prosecne	50.34 N, 15.41 E	C'vakia
Swallow		ad	28.04.79	Lunzjata	36.02 N, 14.14 E	Gozo
		/?/	09.05.79	Tarriak	43.28 N, 24.03 E	Bulgaria
Swallow		ad	08.05.79	Lunzjata	36.02 N, 14.14 E	Gozo
		v	21.06.79	Komea	61.23 N, 26.13 E	Finland
Swallow		ad	15.05.81	Lunzjata	36.02 N, 14.14 E	Gozo
		x	08.11.81	Istres	43.31 N, 04.59 E	France

Swallow	ad	07.04.82	Lunzjata	36.02 N, 14.14 E	Gozo
	v	12.04.82	Osijek	45.33 N, 18.40 E	Yugoslavia
Swallow	ad	10.04.82	Lunzjata	36.02 N, 14.14 E	Gozo
	v	20.08.82	Starbottom	54.10 N, 02.05 E	England
Swallow	ad	29.04.86	Lunzjata	36.02 N, 14.14 E	Gozo
	x	15.05.86	Szezecin	53.35 N, 14.32 E	Poland
Swallow	ad	13.04.87	Lunzjata	36.02 N, 14.14 E	Gozo
	x	01.05.87	Majcichov	48.17 N, 17.38 E	C'vakia
Swallow	ad	17.04.94	Lunzjata	36.02 N, 14.14 E	Gozo
	v	21.05.94	Cagliari	39.14 N, 09.10 E	Sardenia
Scops owl	ad	16.04.94	Comino Is.	36.00 N, 14.18 E	Comino
	+	24.05.94	Teramo	42.38 N, 13.46 E	Italy
Tree pipit	pj	16.04.67	Ramla bay	36.04 N, 14.17 E	Gozo
	x	09.05.67	Bytow	54.10 N, 17.29 E	Poland
Garden warbler	pj	04.05.69	Xaghra	36.04 N, 14.16 E	Gozo
	+	16.09.69	Lorenzana	43.38 N, 10.22 E	Italy
Garden warbler	ad	20.05.79	Ghadira	35.58 N, 14.21 E	Malta
	+	20.08.79	Monzanbano	45.09 N, 10.51 E	Italy

TABLE 7A.28
RECOVERIES OF MALTA RINGED AUTUMN MIGRANTS AND WINTER VISITORS
recoveries noted are those occuring within the same season in autumn or the following winter

Herring gull	pull	30.05.83	Filfla	35.47 N, 14.25 E	Malta
	/?/	05.12.83	Homs	32.39 N, 14.15 E	Libya
Snipe	fg	26.09.81	Ghadira	35.58 N, 14.21 E	Malta
	+	30.09.81	River Aniene	41.58 N, 12.48 E	Italy
Robin	pj	26.10.71	Buskett	35.51 N, 14.26 E	Malta
	+	20.02.72	Mareth	33.37 N, 10.12 E	Tunisia
Robin	ad	02.11.72	Lunzjata	36.02 N, 14.14 E	Gozo
	()	25.01.73	Sbiba	35.33 N, 09.05 E	Tunisia
Robin	pj	23.10.72	Wied Znuber	35.49 N, 14.31 E	Malta
	/?/	06.03.73	Gafsa	34.28 N, 08.43 E	Tunisia
Robin	pj	31.10.81	Ghadira	35.58 N, 14.21 E	Malta
	+	22.11.81	Bou Thadi		Tunisia
Starling	fg	17.10.72	Wied Znuber	35.49 N, 14.31 E	Malta
/?/	07.02.73		Degache	33.59 N, 08.13 E	Tunisia
Rustic bunting	pj	13.10.76	Lunzjata	36.02 N, 14.14 E	Gozo
+	24.10.76		Rhodes	36.26 N, 28.14 E	Tunisia

Key to symbols and terms used

pull — pullus, a bird in the nest
juv — young bird able to fly freely
pj — post juvenile
FG — full grown, age uncertain
1Y — a bird in its first year of life
Ad — adult, at least one year old

v — caught or trapped and released again
+ — shot or killed by man
x — found dead or dying
/?/ — manner of recovery unknown
() — caught or trapped alive and not released, or released but with ring removed

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Table 7A.29

Results of a survey carried out at Dun Guzepp Brighella Junior Lyceum for Boys, Hamrun (November-December 1991)

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
1A	20	0	0	0	0	2	15
1B	29	4	3	3	2	8	24
1C	25	7	3	5	2	8	19
1D	23	2	2	2	2	9	14
1E	22	4	2	4	1	5	16
1F	25	6	6	7	4	6	20
Totals	144	23	16	21	11	38	108
%		16	11.1	14.6	7.6	26.4	75

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
2A	27	6	5	6	3	9	22
2B	26	4	3	5	2	5	20
2C	26	3	3	3	1	5	18
2D	30	11	11	11	7	13	23
2E	31	5	5	4	4	8	18
2F	30	1	1	0	4	4	21
2G	22	1	0	0	1	6	14
Totals	192	28	28	29	22	50	136
%		14.6	14.6	15.1	11.5	26.1	71

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
3A	25	3	2	2	2	7	20
3B	23	2	1	2	1	1	4
3C	18	3	3	3	0	2	11
3D	24	6	6	6	6	10	21
3E	24	12	5	5	5	15	21
3F	16	5	2	4	1	4	14
3G	29	5	2	5	3	12	23
3H	27	5	4	5	8	12	26
Totals	204	46	27	33	28	72	127
%		22.5	13.2	16.2	13.7	35.3	62.3

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
4A	17	4	1	4	0	5	11
4B	26	1	2	1	2	8	12
4C	19	5	3	5	6	8	15
4D	23	3	3	2	0	3	12
4F	26	12	9	12	9	12	19
4G	21	5	3	3	3	4	15
4H	14	6	5	6	3	7	11
4J	9	2	2	0	3	3	5
4K	17	4	1	2	0	7	17
4L	15	5	4	1	3	5	10
Totals	187	47	33	36	29	62	127
%		25.1	17.6	19.3	15.5	33.2	67.9

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
5H	17	8	4	5	2	5	11
5M	8	1	0	1	0	2	1
5L	14	3	1	0	0	3	10
Totals	39	12	5	6	2	10	22
%		30.8	12.8	15.4	5.1	25.6	56.4

Table 7A.30
Results of a survey carried out at Mount Carmel College, St Venera (January 1992)

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
1A	24	2	3	2	3	9	18
1B	25	8	7	10	7	13	16
Totals	49	10	10	12	10	22	34
%		20.4	20.4	24.5	20.4	44.9	69.4

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
2C	27	3	1	12	1	4	14
2D	28	8	6	6	6	10	17
Totals	55	11	7	18	7	14	31
%		20	12.7	32.7	12.7	25.5	56.4

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
3B	18	6	4	5	4	7	16
3C	20	10	4	3	4	11	17
Totals	38	16	8	8	8	18	33
%		42.1	21.1	21.1	21.1	47.4	86.8

Class	number of pupils	traps robins birds	goes to shoot birds	traps birds at home	father shoots at home	has stuffed birds	has live birds
4A	20	10	4	4	2	10	18
4B	18	4	2	1	2	7	14
Totals	38	14	6	5	4	17	32
%		36.8	15.8	13.2	10.5	44.7	84.2

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