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*Landscapes of Continued Deposition: A
reinterpretation of the burial of Romano- British and
Anglo-Saxon/Early Medieval lead tanks in Britain*

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Preliminary

Material Abstract

Lead tanks from the Romano-British and Anglo-Saxon/Early Medieval periods have become some of the most distinctive classes of artefact in Britain from those times. This thesis will be focussing on these artefacts at the time of the late fourth century to the late tenth century for evidence of continuity and change in depositional patterns between these periods.

Their findspots range from Cambridgeshire, Cumbria, Kent, Gloucestershire, Leicestershire, Lincolnshire, London, Norfolk, Nottinghamshire, Northamptonshire, Oxfordshire, Somerset, Suffolk, Sussex and Yorkshire as well as examples in Scotland at Stidriggs and Whithorn in Dumfries and Galloway.

As of 2022, there is a total of 63 discovered from both periods at these locations across Britain. There are currently 38 from the Roman period and a further 25 of their later Anglo-Saxon/Early Medieval counterparts. The main feature of this thesis will be the concept of landscapes of continued deposition. In this case, I searched for evidence of continued artefact deposition practices across both sets of discoveries regarding their state upon burial and the environment this occurred within. I assessed these alongside similar acts of deposition with Bronze and Iron Age cauldrons regarding choice in landscape, artefact buried and its state upon discovery to demonstrate evidence of landscapes of continued deposition. I also examined the abandonment of the tanks in their respective environments, comparing them with other patterns of artefact burial within these areas. I analysed them on a site to site basis as well as comparing evidence between sites. That created the opportunity to contextualise the burying of the tanks within broader depositional practices occurring in Roman and Anglo-Saxon/Early Medieval Britain

Keywords: lead tanks, Roman, Anglo-Saxon, Early Medieval, landscapes, deposition, context, state

Title Page

Landscapes of Continued
Deposition: A reinterpretation
of the burial of Romano-
British and Anglo-Saxon/Early
Medieval lead tanks in Britain

Maxime Jay Cotham Ratcliffe

PhD Thesis

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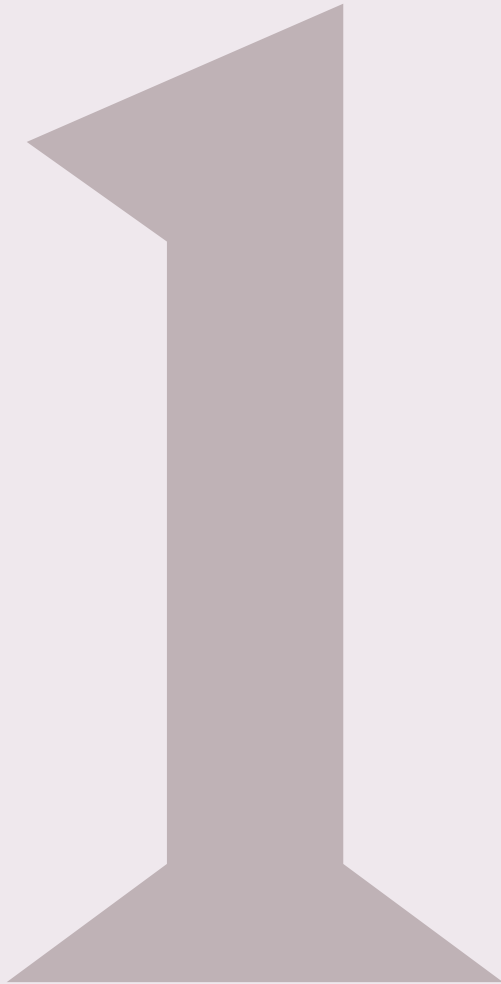
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Introduction



I. Introduction

In 1726 a discovery was reported by N. Salmon in the Victory County History of Suffolk. Salmon wrote that “about three years ago a leaden cistern was found here by a ploughman, the share striking against the edge of it” (Salmon 1728, 161; Mawer 1994, 232–233). This artefact was discovered near the village of Icklingham in West Suffolk on the north bank of the River Lark. It would be identified at a much later date by numerous authors as a fourth-century Romano-British lead tank (Toynbee 1953; Guy 1981, 271; Thomas 1981, 226–227; Petts 2003a, 128; Petts 2003b, 115). These are a class of artefact that has become distinctive to Britain during the Roman period, through their large size and highly decorated features. From 1970 onwards, metal detecting and excavations discovered similar vessels that archaeologists would date to the Anglo-Saxon/Early Medieval period owing to their discoveries at sites from the Middle and Late Saxon periods.

It led to the argument that the Roman tradition is dateable to the late fourth/early fifth century and then there are at least three centuries of discontinuation for these artefacts. Authors then believe the creation of these artefacts were re-established during the Middle to Late Saxon period, in this case from the eighth to tenth centuries (Blair 2010, 160–161). As Blair described it, there is an “intriguing but tantalisingly indirect” correlation between the Romano-British examples and their later Anglo-Saxon/Early Medieval counterparts through their similar shape and construction methods. This feature is visible in Figures 1 and 2 below, with these factors leading to authors such as Blair and Cowgill to note that whilst the Anglo-Saxon/Early Medieval tanks have a similar build to the Roman ones, they are far smaller than their earlier Roman counterparts and less finely made (Cowgill 2009, 82–83; Blair 2010, 160–161).



(Figure 1 The Romano-British lead tank discovered at Icklingham in 1939, ©Trustees of the British Museum)



(Figure 2 The Anglo-Saxon/Early Medieval period tank discovered at Corby in Northamptonshire, Birmingham Museums Trust)

As of 2022, 38 Romano-British and 25 Anglo-Saxon/Early Medieval lead tanks have been discovered across Britain. Most were found across England, although at least three Anglo-Saxon/Early Medieval examples have been found in the area of Dumfries and Galloway in Scotland. Their large scale and highly detailed decoration make these artefacts excellent examples of composite artefacts. It seems they have both a practical function through their shape and size and appear to be valuable display objects through their decorative features. This provides an excellent comparison to Bronze and Iron Age bronze cauldrons which authors such as Gerloff and Joy have provided a communal role such as feasting vessels (Gerloff 2010, 114–115, 196, 198; Joy 2014, 327–328, 341). Furthermore, their decoration allows them to be contextualised within broader Roman and Anglo-Saxon/Early Medieval decorative practices, which will be seen later in this thesis. Their deposition in a wide variety of contexts is comparable to the placement of metalwork from previous periods such as the Bronze and Iron Ages as well as large-scale hoarding practices from the Roman and Anglo-Saxon/Early Medieval periods. Their deliberate burial provides an insight and potential parallels to previous metalwork burials, thus allowing comparisons that will contribute towards my evaluation of their abandonment as ‘landscapes of continued deposition’. In this instance, I will focus upon evidence of continued artefact burial within the areas of retrieval of these tanks. This will involve an analysis of the contexts used for depositional practice and the types of artefacts deposited within these features.

II. Theoretical considerations and existing arguments on the tanks

Authors have described both sets of artefacts as tanks, circular-containers, cisterns, vessels, vats or tubs in connection with their shape and design (Curwen 1943, 155; Toynbee 1964, 353–354; Grew 1981, 341; Frere 1989, 319; Mawer 1994, 232; Elliot and Malone 1999, 88; Petts 2003a, 110; Leahy 2007; Naylor 2015). Their perceived functions have received constant analysis from a variety of authors from articles from 1934 until recently. Authors frequently tie their purpose to their description, with the Roman tanks usually interpreted as performing water storage as seen with earlier authors like Richmond (1945). Later authors such as Thomas and Watts would favour similar functions such as baptism or pedilavium (foot washing) (Thomas 1981; Watts 1988). In contrast, authors such as Blair and Cowgill believe that the Anglo-Saxon/Early Medieval examples had a functional role such as grain storage or as cauldrons owing to the burnt appearance of three tanks found at Garton-on-the-Wolds in Yorkshire (Cowgill 1994, 270–271; Blair 2010, 160–161). However, at least six Anglo-Saxon/Early Medieval tanks have been found either in association with tool hoards or containing said items. This led Leahy to question their purpose in Anglo-Saxon/Early Medieval society (Leahy 2003; Leahy 2007, 197–199; Leahy 2013, 235). Analysing these interpretations will be necessary, mainly as I aim to build upon them during this thesis and use these to aid my own analysis of the tanks.

Metalwork deposition has been the focus of extensive scholarship covering the Bronze Age to Middle Ages. This is particularly evident in Britain, where analyses have covered both ‘ritualized’ actions and more mundane explanations (Merrifield 1987, 47; Hill 1995; Fulford 2001; Hingley 2006; Haynes 2013). Depositions in ‘wet’ landscapes such as rivers, marshes, lakes, and wells have received a considerable focus concerning metalwork depositions, particularly as archaeologists have often believed these types of contexts to be ‘votively’ charged (Manning 1972; Fontjin 2002, 9; Bird 2004, 59–59, 147–9; Fontjin 2012, 62; Joy 2014, 330–1; Chadwick 2015, 40–41; Crease 2015, 211–12; Haselgrove 2015, 28; Bradley 2017, 46). The use of these contexts in connection with constantly changing metalworks deposition throughout the Bronze Age into the Iron Age saw different interpretations. For instance, it led Richard Bradley to argue that there was a continuing tradition of material loss into watery places extending into at least the first millennium AD (1988, 250). This is because these factors were also visible during the Roman and Early Medieval periods with metalwork deposition in watery landscapes. Bradley raised an interesting point that I will consider for the tanks in ‘wet’ contexts as well as those discovered in ‘dry’ environments such as ditches, pits, fields and buildings.

III. Main Aims of my Thesis

My thesis's main aims are to re-examine the lead tanks in their environments and compare both sets of examples.

Since the last articles on the tanks in 2012 and 2015, at least ten new Roman and Anglo-Saxon/Early Medieval/Early Medieval artefacts have come to light through metal detecting and excavation or excavation on their own. Recent discoveries have turned up on the Portable Antiquities Scheme database, which has expanded these objects' known distribution. I aim to focus on where these artefacts have been recovered as well as their proximity to rivers, roads and settlements alongside their distance from known lead mines/lead resources. I will then analyse the contexts where these artefacts have been recovered, alongside the types of landscape features chosen for these acts of deposition. I will also investigate their state upon retrieval and any associated finds with these tanks.

The reason for this is to explore the 'landscapes of continued deposition' concept, investigating whether similar features are visible with the Roman and Anglo-Saxon/Early Medieval lead tanks. Although previous authors discussed both the Roman and Anglo-Saxon/Early Medieval examples, there has been little comparative analysis. Some authors, notably Blair, Crerar and Cowgill and Naylor, have attempted it (Cowgill 1994; Cowgill 2009; Blair 2010; Crerar 2012; Naylor 2015). However, these approaches have mainly focussed on their design features rather than their find contexts and state upon deposition.

My thesis will take this in a new direction with direct comparisons between both groups, analysing both groups concerning the factors I mentioned above. With the new evidence, some new patterns concerning evidence of continuing patterns of deposition have become visible. That is particularly obvious with the choice of landscape features for deposition and the state of the artefacts. I will also compare the associated finds to investigate whether continued depositional patterns are visible with both sets of tanks. I will discuss all these aspects to see if their burial patterns represent 'landscapes of continued deposition'. Part of my approach will involve comparing these tanks' burial to important metalwork depositions from earlier periods like the Bronze and Iron Age. This will include large bronze cauldrons and their associated tool hoards.

Furthermore, I will also be investigating the burial of the tanks alongside other hoarding practices from the Roman and Anglo-Saxon/Early Medieval periods. This will include large-scale coinage, metalwork, and pewter hoards. That will lead towards my two main questions for the thesis: **what depositional patterns are visible amongst the Roman and Anglo-Saxon/Early Medieval lead tanks, and how can they display evidence of continuing methods of artefact loss.**


IV. Structure of the Thesis

The first chapter will consist of my literary analysis for the articles and books that discuss these artefacts. I will chronologically review the publications from the earliest articles discussing the tanks up until the last main articles in 2012 and 2015 and smaller journal articles on individual finds. That will involve analysing the shifting approaches, terminology and frameworks used to study this material. I will be investigating this alongside the development of theoretical frameworks such as 'votive' and 'structured' deposition since these have been used as frameworks to analyse the burial of the tanks.

Moreover, I will be investigating fragmentation theory as it is a concept frequently used with metalwork and hoarding. It has routinely been applied to either the Prehistoric such as with deliberate 'killing' of artefacts in a funerary context, Bronze Age 'founder's hoards' or later hoarding practices such as hacksilver (Chapman 2000, 25; Gerloff 2010; Barrowclough 2013, 34; West 2014, 18). However, I believe it is a valuable framework to analyse the tanks and recent authors have used this theory on Roman period artefacts, such as intentionally broken disc lamps from Roman Apollonia (Tal and Bastos 2012, 112). It will also involve critiques of these frameworks and how they developed, especially as they often create dichotomies as to whether deposition was deliberate or mundane. That will be necessary for defining the concepts that I will be using later in the thesis for analysis in Chapters Three and Four when I analyse the Roman and Anglo-Saxon/Early Medieval tanks.

Chapter Two will then be the methodology and approach to this thesis covering data collection and analysis. It will list some of the theoretical frameworks that I use to analyse the tanks as well as the challenges I faced whilst compiling and analysing my data and how I overcame this as well as a critique of my approaches.

Chapter Three will focus upon the apparent fourth century Romano-British examples, and Chapter Four will investigate their later Anglo-Saxon/Early Medieval counterparts. Chapter Five will serve then as a comparison chapter where I will examine and analyse all these aspects to compare the Roman tanks with the Anglo-Saxon/Early Medieval ones. I will be taking this approach to see whether the burial patterns with both sets of examples reveal 'landscapes of continued deposition' as well as bringing together other themes from this thesis such as types of deposition and types of damage. In Chapter Six I discuss the deposition of these artefacts in connection with other patterns of artefact deposition at these sites. This will enable an investigation of the burial of these artefacts' centres around certain features within those environments. Chapter Seven will be the conclusion and original contributions to knowledge that this dissertation has made focussing upon how it has advanced studies of the lead tanks.



How has academic
literature engaged with
the lead tanks and how
have the approaches
towards them changed,
especially concerning
ritual practice in
Roman Britain?

Chapter One: How has academic literature engaged with the lead tanks and how have the approaches towards them changed, especially concerning ritual practice in Roman Britain?

Introduction

There have been many debates surrounding lead tanks in Britain from the Roman and Anglo-Saxon/Early-Medieval periods concerning their sizes, differing finds' contexts and design and decoration (Herdman 1933; Richmond 1945; West and Plouviez 1976; Thomas 1981; Watts 1991; Cowgill 1994; Petts 2003; Crerar 2012; Naylor 2015). This chapter will focus on their treatment in academic literature. The lead tanks represent a small and selective group of finds, especially when comparing them to coin hoards, fine metalwork and metal-working deposits from these periods (Petts 2003, 127, Naylor 2015, 133). The chapter will centre around analysing the development of arguments about the classification, form, function and decoration alongside their links with religious practice such as 'votive' deposition. It will also investigate their analysis as part of the broader engagement with apparent Christian evidence in Britain. Doing this will provide a greater understanding of how specific religious and depositional theories have developed. This will be necessary for the analysis in the proceeding chapters.

1.1. History of Research - The Early approaches

Salmon was the first author to discuss the tanks, investigating the first tank discovered at the site of Icklingham in Suffolk in 1725 (Salmon 1728, 161; Mawer 1994, 232). Salmon described it as 'a lead cistern' found by a ploughman and decorated with cast-iron hoops and a large "A" (1728, 161; Mawer 1994, 233). Many authors referred to these tanks as 'basins', 'baths', 'cisterns', 'tanks', 'tubs' and 'vessels', all concerning their apparent function of holding liquids. Donovan suggested that they were a 'bath' or 'basin' (1933, 379), whilst Herdman described the tanks from Bourton-on-the Water as 'cylindrical or tub-like in appearance' (1933, 377-8). Herdman included a letter from her colleagues with their opinions on the function. They argued that an ornamental use rather than an industrial one was more likely due to the decorations (1933, 3801-381). Debates between a religious and an industrial function have been a recurring theme with the tanks (Crerar 2012). Herdman had noted the widespread use of lead in the Roman period to construct coffins and funerary urns but demonstrated that the tanks were different from such objects through their size and cylindrical shape (1933, 380-1). It was a limited degree of contextualisation but an important step that later authors would also use (Kraav 1942; Richmond 1945; Toynbee 1963).

His conclusions for a possible water storage function centred around the two tanks from Bourton on the Water. Excavators discovered these near a well in the remains of a building with a paved court. This caused him to suggest they were "**water butts for some utilitarian process**". He also noted other examples discovered in or near the beds of rivers, i.e., Pulborough, to further this argument (1943, 156-157). Curwen argued that this would have required a tremendous effort to remove them from contemporary dwellings, meaning they were likely too valuable to casually abandon (1943, 156-157). The article investigated their use in a religious context, noting the importance of apparent 'sacred symbols' on three of the available examples at the time. The use of such symbols and their proximity to water contexts such as rivers suggested to Curwen

that these objects might have a more appropriate function as vessels for baptism. This argument has consistently stayed with the tanks' interpretations and has resurfaced in some more recent literature (Aldhouse-Green 2018).

Kraav analysed the tank from Icklingham discovered in 1939, recording it as a 'large leaden vessel' which constituted an 'early Christian antiquity' (1942, 219). This represents one of the earliest attempts to classify these objects in a Christian context. Kraav used the Chi-Rho monogram on both sides of the tank to explain these artefacts. He noticed similarities of the Chi-Rho and Alpha and Omega decoration with a lead artefact discovered on the island of Anglesey that he insisted was in the same artefact class as the tanks (RCHM Anglesey 1937; Kraav 1942, 219). A year later, Curwen investigated the tank discovered at Pulborough (Sussex), the seventh example at the time. Curwen described it as a 'lead vessel or cistern' like the Icklingham finds. It is clear from Curwen's article that there was still much confusion about these artefacts' function. He wrote that 'little can be said regarding the purpose of these functions' but attempted to use the tanks' finds contexts to gauge their function (1943, 156-7).

His argument for a possible water storage function centred around the two tanks from Bourton-on-the-Water. Excavators discovered these near a well in the remains of a building with a paved court. This caused him to suggest they were 'water butts for some utilitarian process'. He also noted other examples discovered in or near the beds of rivers, i.e., those found at Huntingdon and Rochester, to further this argument (1943, 156-157). Curwen argued that it would have required a tremendous effort to remove them from contemporary dwellings, meaning they were likely too valuable to casually abandon (1943, 156-157). The article investigated their use in a religious context, noting the importance of apparent 'sacred symbols' on three of the available examples at the time. The use of such symbols and their proximity to water contexts such as rivers suggested to Curwen that these objects might have a more appropriate function as vessels for baptism. This argument has consistently remained a common interpretation and has resurfaced in some more recent literature (Aldhouse-Green 2018).

Richmond, also writing in 1943, analysed the tank discovered at Ireby in Cumbria in a similar manner. He used the decorations to demonstrate similarities amongst the tanks at the time. However, he was the first to note the variation in the known examples' size and capacity (1943, 163). Like Curwen, Richmond focussed on the tanks' contexts to a certain extent. He discussed the Huntingdon and Pulborough tanks' deposition in riverine environments far from obvious habitation (1943, 169). He used similar arguments to Curwen's, using the water contexts and the tanks' shape to argue that these objects had potentially multiple functions. Richmond believed they could have been used as 'water troughs' or steeping vats for 'dyeing, fulling or brewing' (1943, 169). However, he argued that brewing was the most likely answer through the abundance of corn (needed for both beer and bread) in Roman Britain (1943, 169). Such a method would have caused severe lead poisoning. Lead poisoning is a well-documented feature associated with lead through its widespread and multi-faceted usage, particularly in Roman Britain (Boulakia 1972, 144). An excellent example is a cemetery at Poundbury (Dorchester), where it was discovered that the skeletons of its inhabitants had very high concentrations of lead in their bones (Waldron 1988, 68, 69, 71).

Richmond also focused on the find spots of the tanks, noting that the Ireby tank was discovered 350m to the west of the village of Ireby in Cumbria (ibid. 1943, 163, 169). Many of these examples were retrieved from 'rural' areas far from 'urban' environments, and the location of the Ireby tank is a significant outlier to the other tanks. Richmond noted that the other seven examples were found in the south (the 'civilian' province) whilst Ireby was in the north i.e., the 'military' province (1943, 169). Richmond was the only author to make this sort of analysis, stating that other 'military' sites had no evidence of the tanks. Richmond argued that Ireby raised a problem that the more southerly examples did not as, since there was no evidence for 'military' occupation at Ireby, this led to him concluding that it was 'some sort of civilian settlement' (1943, 169-170). Whilst the evidence for 'military' and 'civilian' can often be blurred, Richmond argued that this settlement could have been 'civilian', providing it with access to resources in the area. He noted that the area adjacent to Ireby had sufficient deposits of lead whilst the Calbeck Falls (an area with sufficient lead resources) lay to the south west of Ireby (1943, 170-171). Access to lead has only briefly been considered regarding the tanks and will be discussed in more detail in later chapters. Richmond's focus on this aspect was important for considering how communities might have enough resources to produce these objects. With these earlier works, many of the analyses focused on understanding these objects' identity and function alongside similarities in decoration and creation method, approaches that would be reused by later authors.

1.2. Decorative analysis and gradual development of a Christian function from the 1950s–1970s

The next set of analyses of the tanks took a more art historical approach. This is particularly visible with Jocelyn Toynbee's work from 1953 and 1964. Her work in 1953 began by critiquing previous approaches to Christianity in Roman Britain, arguing that it had only briefly been covered by authors such as Collingwood, Richmond and Charlesworth (1953,1). Toynbee attempted to provide more insight into Christianity in Roman Britain, particularly through the development of its artwork. She focussed on the decoration, design and other stylistic features of the tanks (1953, 15; 1964, 110), which later authors like Guy, Thomas and Watts would adopt. Similar to Herdman's and Richmond's articles, Toynbee's work saw a limited degree of contextualisation of the tanks. In this instance, she compared them with engraved artefacts from Silchester and pewter stamps bearing Christian symbols from the River Thames. She also compared them with lead coffins and decorated pewter hoards from Appleford and Icklingham (1953, 17, 19). She used the similar decorations on these artefacts to provide a date of the late fourth century AD for the tanks (1964, 327, 353-4). The basis of her comparison between the tanks and the coffins was their 'monumental proportions', since the tanks and coffins would have required a significant amount of effort and resources to construct and decorate. A greater discussion of the tanks in comparison with artefacts such as the pewter hoards at Appleford and Icklingham would have been useful, mainly as this was an approach that later authors used (Petts 2003, 110; Crerar 2012).

Toynbee's work analysed the decoration by focussing upon the Chi-Rho monogram, such as those on the Icklingham and Pulborough tanks, and other decorative aspects which she termed as Christian symbols. She assigned a Christian identity or function to the tanks through these decorations, even for the ones without apparent Christian decorations (1964, 353-4). Authors have frequently used the decoration on the tanks, particularly the Chi-Rho monogram, to imply a specific function for these artefacts, as seen in Christopher Guy's later works (1981). Whilst it

would it be straight forward to distinguish decorated artefacts from undecorated ones, Joy has argued that it is often difficult to separate decorated from undecorated examples unless there was a mould for their production. He used Lowery's work with tools to emphasise this as well as other artefacts such as Iron Age swords (Lowery et al. 1971; Joy 2011, 207). Joy's arguments are visible to some extent with the decorative features on the tanks and their discussion by authors, particularly with Toynbee. She focussed on the Chi-Rho monogram and the similarity of the decoration on the tanks without this Christian monogram (1953, 15-16; *ibid.* 1964, 354-55). In this case, she argued that it was 'not unlikely' that all eight examples were used for Christian baptism through their similar construction methods and decorations.

Decoration has been frequently used by archaeologists and ancient historians as an important marker of identity and 'cultural' affiliations (Hill 2003, 180; Perring 2004, 94; Joy 2011, 206, 211). However, Toynbee only focussed upon this aspect from an artistic perspective rather than an archaeological one, discussing the development of artistic style through artefacts in Roman Britain. She also had her doubts about the identity of the tank fragments from Bishop Norton in Lincolnshire. Whilst the dimensions of the two fragments provided a large enough size for an initiate to have stood upright for baptism; she had doubts over the religious nature of its decorations and inscriptions (1964, 354-355). In this instance, it was explicitly clear that Toynbee was using the 'Chi-Rho' monogram as a distinct indication of a Christian identity, something that would occur with those following her, such as Guy, Thomas and Watts. She argued that the floral scrollwork from the and the inscription of DO FELIX FECIT could not possibly be a marker of a Christian identity for this tank. Toynbee's approach demonstrates the danger of having strictly defined ideas about what can constitute such practices.

1.3. An investigation into 'Christian' identity of the tanks

Following Toynbee's approach, the issue of Christianity took a much more significant role in debates over the tanks' identities and their subsequent functions. This can be seen with West and Plouviez' interpretations of the Icklingham evidence. They argued that the tanks found in 1939 and 1974 were clear indicators of Christian presence because of the Chi-Rho monogram (1976, 63,74). Whenever authors question the tanks' identity as Christian artefacts and their potential use in fonts, they frequently use the Icklingham example from 1971 to demonstrate this aspect (Thomas 1981, 130; Salway 1982, 730; Watts 1988, 215; Potter and Johns 1992, 207; Millet 1995, 117; Aldhouse-Green 2018, 190). West and Plouviez analysed these objects as evidence for Christianity through a combination of the Chi-Rho monograms, an associated cemetery with south-west orientated graves and an apparent baptistery (1976, 64-65, 74-78). This manner of identification became increasingly common in interpretations of the tanks with aspects of Christianity in Roman Britain. This is particularly evident with the works of Christopher Guy, Charles Thomas and Dorothy Watts. All wrote in a similar period where their works sequentially followed each other. Guy wrote his main article in 1981 and released a later article in 1989, whilst Thomas's work appeared in 1981 and Watts' followed soon after as she published work in 1988, 1991, 1995 and 1998. For all three authors, but especially for Thomas, their works appeared in the wider context of the first critical analysis of the wider evidence for the archaeology of Romano-British Christianity alongside articles such as Cookson's analysis of the Christian church in Roman Britain (1987, 426-7).

All three authors provided a Christian identity to the tanks and used this to argue about their specific functions, focussing on the Chi-Rho monogram as a clear indicator of Christian identity and basing their arguments for their functions around the tanks' supposed religious identity. They used the similarity of their design and shared decoration to date the tanks to the fourth century AD (Guy 1981, 273; Thomas 1981, 221; Watts 1995, 318). This is the period when Christianity began to be particularly active through its connections to the emperor from the reign of Constantine onwards, as seen on coins, and particularly during the reign Theodosius (AD 379-395) when it became the official state religion. (Grigg 1977, 469; Johns 1996, 67). All three authors discussed their uniqueness to Britain. Guy described them as a 'purely insular development' (1981, 271), whilst Thomas noted their 'peculiarity' to Britain as perhaps reflecting 'some particular liturgical need or custom' (1985, 226). Furthermore, Watts also argued that they were 'unique to Roman Britain' but contained decoration reflecting Christian symbolism of the Late Roman Empire as a whole (1991, 166). This was a relevant point as there were eighteen examples, in a complete or fragmentary state, at the time these authors were writing.

All three authors commented on the importance of their location as well, noting the prominence in the southern part of the diocese of Britannia (Guy 1981, 271; Thomas 1981, 22, 220; Watts 1991, 74-75). Relating to their location, Thomas believed that the pattern of distribution of the tanks was similar to those of lead coffins and caskets as the greatest concentration was in East Anglia at that time (1981, 220-221). Thomas argued that the location was irrelevant to lead sourcing since he believed that the lead would have been sourced either in the Mendips in Gloucestershire and the Peak District in Derbyshire. He used this point to consider access to lead, arguing that whilst lead was a widespread material employed in many contexts, it was by no means a cheap substance (1981, 221). He considered the tanks' locations in the lowlands of the 'civilian' province of Britain could have reflected the purchasing power and fashion of these areas. He noted that the size of the tanks and their shape would have required a large quantity of lead, an important factor that later authors would consider (Mattingly 2006, 349; Cowgill 2009, 269). Thomas only briefly considered this factor. However, it was certainly an important step in the right direction for considering why all but one of the tanks had been discovered in the south of Britain at the time he was writing. In contrast to Thomas, Watts made the point that the tanks' locations represented evidence for Christian practice in their locations in areas that had previously seen abundant finds for such practices (1988a, 215). Watts made a relevant point, noting how the majority of the tanks were located in rural rather than urban environments (1991, 74-75), a point that would be pursued by later authors (Potter and Johns 1992, 207; Watts 1998, 110-11; Cleary 2013, 139-140).

Links with Christianity became an increased focal point for analysis of the tanks, especially as Guy, Thomas and Watts released their work when more in-depth analyses of religion in Roman Britain were being conducted. When Henig analysed Christianity in Roman Britain, he argued that 'little need be added to Professor Thomas' account' (1984, 120-121). Henig's discussions of Christianity included its comparability to other eastern cults such as Mithraism, worship of Isis and most importantly Judaism through cult feasts and expressive donations. He used decorated pewter tableware and Chi-Rho decorated leaves of the Water Newton hoard to demonstrate this feature (1984, 123). Henig's statements demonstrate how important these works were in progressing the study of Christianity in Roman Britain, particularly with some of their arguments about the identity, function and deposition of the tanks. A Christian identity was a major focus for discussion of the tanks in this period, with multiple analyses of the symbols and decorations of the available examples. Guy showed this when he argued that

Christian ownership of at least some of the tanks is indicated by the decoration (1981, 274), and this supposedly demonstrated a function connected with Christian liturgy (baptism). Guy's argument for this was the decoration, noting the importance of the way all the examples at the time had the cable banding, disked motifs, and the use on saltire (cross) designs could be used to imply a Christian identity for all the tanks (Guy 1981, 273). Whilst Guy made some interesting points in noting the similarity of the decoration and construction method of these objects, his approach was also highly subjective. Like Toynbee, he used the Chi-Rho monogram to argue for a Christian ownership for at least those tanks decorated with it, and this feature was also used by the other writers from this period such as Grew's discussion of the Wilbraham tank in 1981 and Frere's analysis of the Caversham tank in 1989 (Grew 1981, 341; Frere 1989, 319). Both used the decoration as markers of identity through comparison with the other tanks, which would also be used in Thomas and Watts' more substantial volumes of work. Adopting the Chi-Rho as an instant marker for Christian identity is problematic especially as not every tank is decorated with this monogram. Connections with the Emperor could be an alternative theory, especially its widespread use in connection with the emperor following Constantine's victory at Milvina Bridge in AD 312 (Lane Fox 2011, 307).

Thomas and Watts would pursue similar agendas with almost matching approaches. These consisted of grading the tanks in relations to their potential as Christian evidence. Thomas used the Chi-Rho monogram as a definitive sign for objects possessing a Christian identity (1981, 109-110). In this case, the lead tanks served as an obvious choice, but he also used examples such as lead ingots found in London, spoons found in bullion hoards (an example of this would be the later Hoxne hoard discovered in 1992) and other pewter hoards such as those found at Appleton (1981, 109-110). He used a numbering system to assign the likelihood of objects being used by 'Christians'. He also used weighted distribution maps to display the spread of Christianity in Roman Britain. In this case, '3' meant that it was almost certain or highly probable that there was a Christian presence.

Meanwhile, '2' designated that there was a reasonable probability of there being a Christian presence. Finally, '1' was used to denote only a very slight possibility that there had been grouped or individual Christian presence at these areas (1981, 100). In this case, the highly probable evidence were the tanks with Chi-Rho monograms alongside structures such as churches and buildings with baptisteries, decorated mosaics and decorated metal hoards. This was and remained a highly subjective and sometimes flawed approach which would be critiqued for its subjectivity by later authors such as Petts (2003). It is up to the author to decide which items they consider to be used in a Christian context through singular symbols. There was often uncertainty over whether a Christian identity extended to all the tanks. That is because only a small number of the tanks were marked in this manner.

This is visible with the reasonably probable Christian presence marker (2). Thomas assigned this to 'relatively portable objects which could have possessed relative value and interest to people, especially Christians' (1981, 100-101). In this case, Thomas argued that this class of objects would likely be more relevant to their findspot. His evidence consisted of pottery and pewter vessels with Christian graffiti (unspecified but likely symbols other than the Chi-Rho monogram) alongside various bronze, pewter and lead objects (including coffins, seals, boxes and appliques). He mainly focussed on the undecorated tanks (the tanks without the Chi-Rho monogram), arguing that they were a reasonably probable marker based upon analogy alone (1981, 100-101). This analysis was not a certainty and could only be maintained through

comparisons with similarly decorated artefacts. For his final denomination where Christian presence was no more than probable (1), This designation was for sites or remains that potentially represented Christian churches but the evidence was highly doubtful (1981, 101).

Once again, Thomas used the factors of attractiveness, value to individual and probability, assessing whether objects in this category were outliers. This is because their place of manufacture was often unclear, and their recovery in these areas was a matter of luck. The main evidence for this assessment included finger rings, individually decorated pieces of pottery and a small group of late decorated bronzes and decorated imported glass typed as 'Wint Hill' (1981, 101). Whilst Thomas made some important points concerning their typologies, this was a highly subjective and complicated process. He tried to use this evidence to map areas of Christian related activity in Roman Britain. He built upon the earlier works mapping pagan sites and evidence for Christianity (1981, 97, 99). Thomas described their methods as often subjective and frequently overlapping. This is because they required the same methods and assessment of evidence to portray these features (1981, 97, 99). Ironically Thomas' own methods were just as subjective and based upon what he took as intrinsic values of evidence of Christian presence. It is an approach that Petts would later critique, arguing that it all comes to down to the authors perspective over what they believe to be obvious signs of Christianity and subsequent Christian activity (2003).

Watts' approach seven years later used a similar method to determine factors of 'Christianity' and Christian presence. In this instance, like Guy and Thomas, she used these objects' decoration to determine their evidence of a Christian identity. She used a system of bar-charts to determine the likelihood of objects being Christian. Using a very similar approach to Thomas', she determined that a Christian identity was assured for the tanks with Chi-Rho monograms at Ashton, Caversham, Icklingham, Pulborough and Walesby (1988, 215; 1991, 159). She also believed that 'Christian cemeteries' such as that discovered at Icklingham, graffiti on pottery sherds and objects marked with the Chi-Rho monogram should be afforded the maximum ranking as evidence of a Christian presence (1991, 132). She used a similarly highly subjective method to Thomas' to determine this effect and a similar set of evidence. From this period onwards, the Chi-Rho monogram became a definitive marker for at least some of the tanks being positively identified as Christian. This was used to map the presence of Christianity in Roman Britain in the fourth century AD. Watts also analysed other decorative features on the tanks to contextualise them in the larger scale of Christianity in the Roman Empire. She believed that whilst the evidence for a Christian identity was not easily available on the tanks without the Chi-Rho monogram, there was other evidence suggesting such a possibility. In this case, her evidence consisted of archaeological or textual evidence to provide certain parallels for these examples (1991, 159-161; 1998, 149).

She used the similar decorations of herringbone, cable and cross-hatching across all eighteen examples at that time to try and demonstrate a shared identity (1991, 159; 1995, 322). She also analysed other examples of decoration that could be used as markers for a Christian identity for those without the obvious Chi-Rho monogram. Here she used the crux decussata or 'St Andrew's Cross' (1991, 159-161; 1998, 149), discussing its use alongside the Chi-Rho on the Pulborough and Caversham tanks as evidence for Christian decorations (Guy 1981, 271; Thomas 1985, 221; Watts 1991, 159-161) and the cross alise pattée which occurred on the Oxborough tank (Webber 1971, 110; Watts 1991, 161). Watts noted the importance of these motifs throughout the Roman Empire. She argued that whilst these objects might be unique to Britain they could

certainly be seen in the wider framework of Christianity in the Empire (1991, 166). Watts' work was subjective, but she raised some valid points. Her work alongside Thomas' saw an important step in how the tanks' Christian identity was explored not just within the feature of Christianity itself, but also how it might be contextualised in both Britain and the Empire. These features would influence later authors such as Petts and Crerar, who would also attempt to contextualise the tanks within Britain and the Empire's religious framework.

1.4. 'Baptismal vessels' and a link to ritual ablutions

Guy, Thomas and Watts used similar methods and approaches concerning the apparent Christian identity of the tanks. However, they all had different interpretations on the tanks' functions. In this instance, Guy argued that they could have been linked to baptism by affusion (where the candidate stands upright and has the water poured over their head). This was the common practice of the fourth century AD, the date to which these tanks have been linked by stylistic and archaeological evidence. He used textual evidence from the late first/early second century AD in the *Didache*, an anonymous early Christian treatise which included instructions on how to baptise in its seventh chapter. In this instance, it argued that 'But if you have no living water, baptize into other water; and if you cannot do so in cold water, do so in warm. But if you have neither, pour out water three times upon the head into the name of Father and Son and Holy Spirit' (*Didache* 7.2, 5). It can be implied that affusion was a practical method for baptism in areas where riverine features and other accessibility to water features were not easily obtained.

Guy believed that the size of the complete tanks was large enough for a person to stand within whilst water was poured over their head. He used the apse structure located in Icklingham to promote this idea of the baptistery. This structure had an apse sunk into the floor (West 1976, 120), which Guy used to argue for a Christian function for the tanks. He also argued that if they were not used for baptism, they could have been used for ritual ablutions or even water containers for a cemetery (1981, 275). Icklingham had a cemetery that West had argued was Christian through an east-west orientation of the graves coupled with a distinct lack of grave goods (often seen as a sign of Christian burial). He analysed this in association with the lead tank discovered in an area near to the cemetery (1976, 120). He attempted to use this and the lead tank in Ashton, also discovered near a fourth-century cemetery, to investigate if this could be possible (1981, 274-275). He focussed on the likelihood that the tanks were able to be used as some form of water storage. However, he did argue that their irregular sizing meant it would have been difficult to use them as water troughs through the differing volumes of water they could hold. There would also have been the risk of lead poisoning (1981, 275), arguments which had occurred before with both Curwen and Richmond's earlier work. Likewise, he believed that Richmond's arguments about dyeing or fulling were unlikely owing to the decoration that occurred on the tanks, Christian or otherwise.

Following on from his work, Thomas and Watts also engaged with the baptismal aspect but with distinctly opposing views on the functions of these artefacts. Whilst they both agreed on a Christian identity for the tanks owing to the symbolism they were decorated with; they took opposing stances on their function. Whilst both believed they were used in ritual ablutions and had some sort of role in baptism rituals; they had differing ideas over what roles these objects played. Thomas argued that they were most likely for baptism by affusion, like Guy, arguing there was a possibility of this for the tanks decorated with the Chi-Rho monogram (1981, 224-5). Thomas pushed the potential portability of these objects to a high degree in his work,

analysing the lugs as a way of lifting them onto a cart or barge for movement (1981, 226). He used this evidence to drive forward his analysis that they were portable baptism fonts. He also focused on the decorative frieze on the Walesby tank, believed to show a possible baptism ritual in progress (1981, 221-3, 226; Watts 1991, 158). To provide credibility for this, Thomas argued the circumstances in areas like East Anglia meant that it would mean that it would be easier to provide the materials for baptism rather than have a dedicated group of individuals performing the rites (1981, 227). By this, he was referring to the possibility of the portable tanks providing such a service for the smaller communities within these areas (1981, 227). Thomas made an interesting point, but it is hard to agree with the portable aspect of their function. This is clear when assessing the size and heaviness of these objects in their complete form, especially when assessing the lugs on the tanks. In Guy's earlier work, he had argued that it was most likely that the lugs were too light for a portability aspect and instead were most likely for fixing a cover to them (1981, 273). This was an aspect that Jane Cowgill would argue for with the Anglo-Saxon/Early Medieval models in her later work (2009, 269).

In contrast, Watts argued against the portability aspect that Thomas was convinced about. She even criticised his arguments about their function as 'portable fonts' (1991, 74-75, 171, 203). Watts made a good case in that an artefact that takes four people to lift is very difficult to class as 'portable'. Instead, she argued that through the weight of the tanks and their irregular shapes and sizes, it is highly likely that they were used instead for the rite of pedilavium (foot-washing) rather than affusion (1988, 217-218; 1991, 170-172). In particular, she argued against Thomas' method and analysis for baptism by affusion, stating that whilst the tanks would be large enough for adults it would be hard to baptise children in them (1988, 216-7; 1991, 169). All three of the authors from this period focus on Christian identity and function for the tanks, owing to the analysis of the motifs and trying to tie in the design function with known baptism practices. Watts showed awareness of previous authors interpretations such as 'baths', for water storage or a religious use or whether were water-troughs or vats for dyeing, fulling or brewing. She also showed knowledge of West's interpretation of the tanks as 'not fonts but they had a connection to ritual ablutions' and added Frensd's later analysis of the tanks being used in baptismal rites (West and Plouviez, 1976, 78-9); Frensd 1979, 136). She likewise demonstrated a high degree of awareness of Guy's and Thomas' work a decade earlier and their arguments about the tanks, using these to argue her case in comparison with previous interpretations of the tanks.

This agenda was at times very difficult to prove, as it relied on the heavily subjective analysis of the Chi-Rho monogram and other supposedly Christian aspects of the tanks. This type of practice can be seen in Kenneth Painter's article in 1999, where he also took a similar approach to understand the identity of the Water Newton treasure discovered in 1975. The Water Newton Treasure is a hoard dated to the fourth century (much like the tanks) consisting of 27 silver items comprised of nine silver vessels including a jug, the lower part of a hanging bowl, an inscribed silver bowl, an inscribed silver cup and nine votive plaques inscribed with the Chi-Rho monogram (Painter 1977; 1999, 2). There is also a gold plaque inscribed with a Chi-Rho monogram. Painter used the Chi-Rho monogram on the large bowl and strainer alongside the votive plaques to argue for their use in a Christian church as liturgical offerings. He did question the use of decoration for such a purpose to a certain degree (1997, 10) but then suggested that such decoration could imply a Christian liturgical purpose, much like Guy, Thomas and Watts had done in their earlier work. The use of such features meant that from this point onwards, the tanks were viewed in a distinctly Christian outlook. This is clear even when they were examined as potential examples of ritual activity.

1.5. The tanks as objects of depositional practice and further debates about 'Christian' identity

Proceeding authors contextualised the tanks within the studies of Christianity to a greater degree as well as focussing on the deposition of the tank. David Petts' article in 2003 on the use of the tanks as evidence of 'votive deposition' demonstrates this (2003, 131). Whilst depositional practices received a far greater degree of attention in scholarship at this time, previous authors had engaged with this topic to a certain degree. The earliest examples included Ross' investigations of the use of pits, wells and shafts regarding acts of deposition (1968, 255). Manning's work in 1972 had a similar focus when he investigated the significance of the finds' contexts of iron objects from the Iron Age and Roman periods in Britain. He analysed the deposition of iron hoards from Wales and Northern and Southern Britain (1972, 226, 228, 238). Manning used his mapping approach to show the sharp contrast in find-spots for the Roman period hoards, noting how many of the hoards in the northern areas were found in 'military' sites. This made them a geographically separate group to their southern counterparts (Manning 1972, 226). It is likely he meant they were geographically separate through the places they were found and the inhabitants they were connected to: in this case, the 'military'.

This raised some important points relating to aspects of 'votive' and 'structured' depositional practices. This can be seen with his treatment of the contexts of the hoards as well as questioning the reasons behind their deposition. He noted that his were examples were discovered in two types of contexts: those associated with water (bogs, rivers and wells) and those not associated with water (pits) (1972, 238, 244, 249). Manning's work focussed on the importance of these contexts and their potential for 'votive deposition' alongside the change in focus for deposited materials. He noticed how the late Iron Age and early Roman deposits consisted mainly of iron tool hoards with bronze items. In contrast, the late third and fourth century AD finds contained a mixture of iron and pewter such as those found in the well at Silchester (1972, 247, 249). In Manning's view the reason behind such depositional acts was religious (1972, 248-249), and it is possible to see why. This is because many of these hoards were buried in a way that would have required a large amount of effort to retrieve. Manning's arguments about religious/'votive' deposition would strongly influence numerous authors writing about such practices in a positive way.

Following on from Manning, many authors would also investigate the circumstances behind the deposition of Roman material, such as pewter hoards. These are as burial in times of crisis for later retrieval or 'votive' purposes, a feature commonly attributed to metalwork hoards from multiple periods across Europe (Peal 1967, 23, 28; Brown 1973, 201-4; Cunliffe 1998b; Boon 1992, 46; Potter and Johns 1992, 135-6; Wells 2007, 471; Lee 2009, 77-79; Joy 2011, 214). Beagrie's later work suggested that the theory of 'votive deposition' would offer the best explanation for the contexts containing the later pewter hoards from this period of the fourth century AD (1989, 179). This was a feature that Petts would extensively investigate in his works in the early 2000s (2003, 125-126). These arguments provided the early foundations which many later authors analysing the tanks would build upon. This is especially clear with their investigations of the tanks' contexts, building upon the works of authors like Merrifield who discussed the significance of iron objects as deposition objects at depositional sites such as the lake at Llyn Cerrig Bach in Anglesey in Wales (1987, 27).

Merrifield also noted a similar deposition pattern when he analysed the significance of rivers such as the Thames and the Walbrook for artefact burials. This is a feature that many authors have used to characterise traits of 'votive deposition' from the Bronze Age to late Medieval in European archaeology (Levy 1982; Merrifield 1987, 26-27, Bradley 1990, 14-15; Cunliffe 1995, 194; Fonjtin 2002, 9; Ryalt and Bevan 2007, 222; Wells 2007, 468, 474; Yates and Bradley 2010, 406, 412-413; Joy 2011, 214; Fontjin 2012, 62; Bradley 2013, 124-5; Bradley 2017, 34; Radivojec and Roberts 2018). During this time, the concept of 'structured deposition' began under Richards and Thomas in 1984 and developed further by Hill in 1995. It was initially developed as a concept to explain depositional activities in the Neolithic and Iron Ages. From there, this concept has become increasingly prominent in the study of Roman artefacts. That is visible in the way that authors reacted to the shaping of ritual activities and their interaction with the landscape through acts of 'deliberately structured deposition' (Webster 1997, 199; Fulford 2002, 202; Hingley 2006, 213; Isserlin 2007, 187; Everson and Stocker 2011, 394-395; Chadwick 2012, 294; Cool and Richardson 2013, 206; Garrow 2013, 98-104; Haynes 2013, 7).

This concept was visible with the works of Petts and Crerar in their investigation of the deposition of the tanks but also with authors investigating the Anglo-Saxon and Medieval period examples (Steedman 1994, 226; Nicholson 1998, 390; Boyer et al. 2009b, 84; Cowgill 2009, 269; Crerar 2012, 151-153; Naylor 2015, 135-136). 'Structured deposition' differs from 'votive deposition' in the way that it focusses on the manner of deposition of artefacts. The Concise Oxford Dictionary of Archaeology described the term as **“Patterning in the way that artefacts are found when uncovered through excavation which allows the suggestion that behavioural regularities underlie how they were put into the ground in the first place”** (<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100538144>). This type of definition matches Richard and Thomas' earlier work in 1984. They focussed upon their idea that as ritual activities involve highly formalised, repetitive behaviour, we would expect any depositional patterns (associated with these) observed in the archaeological record to maintain a high level of structures" (Richards and Thomas 1984; Garrow 2013, 87). Therefore, it provided the term 'structured deposition'. They examined what they believed was 'ritual patterning' through the structuring of certain elements of material culture at the henge of Darlington Wells. They noticed what they termed a 'pattern of mutual avoidance' where certain areas of the site contained a large quantity of bone but little or no grooved pottery ware (1984, 204). For Richards and Thomas, this provided clear evidence of a pattern of formal deposition in a manner. They tried to use this to prove that such evidence of 'structured deposition' represented control of certain items on the site (1984, 204). However, at times it seemed optimistic. Thomas later critiqued this article in 2001 by noting how there was a distinct absence of considerations over how time would affect the patterns created at this site (2001, 380-3). The approach taken in 1984 would influence J.D Hill in 1995 where he investigated pits as signs of 'structured deposition'.

Hill used charts and graphs to map this apparent pattern of 'structured deposition' in Iron Age Wessex (1995, 38), investigating how these deposits would have formed over time and were not just random accretions of everyday household rubbish (1995, 96). This was a useful analysis, as these depositions are often divided into the 'ritual' and the secular (every day) occurrences (Garrow 2013, 98-99). Hill argued for two categories of deposition: in this instance, 'structured' compared with obvious demonstrations of 'ritual/votive' deposition (1995, 100-101). He chose to focus on how the gradual build-up of artefacts in certain layers such as pits at the site of Winnall (Hampshire) was evidence of 'structured deposition'. This was through the deliberate time and

care which had been invested in the formation of such deposits. He used a mixture of pits and the enclosure ditch at Winnall (which contained differing sets of material in certain places along its course) as displays of 'intensive, motivated and discursive patterns' (1995, 100). Hill used the manner of these depositions to demonstrate long dedication and planning involved with the build-up of certain artefact depositions in the pits he had chosen. This enabled him to analyse the recurring issue of 'special' compared with 'everyday' deposits, which have often been termed by archaeologists such as Bruck (1991, 153) and Guttman and Last (2000, 355) as rubbish. The concept of 'everyday' contrasted with 'special' depositions is a concept that would later be investigated relating to the tanks.

It is also an ongoing debate that remains relevant in archaeology, particularly when applied to hoarding and large-scale metalwork depositions seen during the Roman and Anglo-Saxon/Early Medieval periods (Johns 1999, 4; Painter 1999, 19; Hobbs 2006, 122-123; Bland 2015, 1, 14-15; Painter 2015, 67, 81-81). This can be seen with Gerrard's analysis of the Draper's Garden hoard in 2009, where he discussed the deposition of a hoard of twenty bronze, pewter, and iron vessels in the fill of a late fourth century well. The recovery of five coins, three of them being of late Constantinian issue and a further two being unworn Valentinian issues dating from AD 365-375, provided a terminus post-*quem* of roughly AD 375 alongside pottery from this period (Gerrard 2009, 165). The well contained twenty vessels and utensils comprising 15 copper-alloy, three lead alloy and two iron vessels, arranged in stacks and groups. These included a unique hanging bowl that was the largest discovered in Britain and the first to be recovered in a coin-dated, context (Gerrard 2009, 168-9). This collection of artefacts of different materials, many of which were still usable, indicates that it was not an apparent metalworker's hoard and that this was not a collection of scrap hidden for reuse or concealed for stock (Gerrard 2009, 178). It led to him noting that ritual or rational motivations are frequently attributed to depositional acts like those at Draper's Garden, using the remains at this site to assess these interpretations.

In this instance, he used the coins in the well for the 'rational' interpretation to link their deposition with events in the late fourth and fifth centuries, such as the usurpation of Constantine III in AD 406/7 and the Honorian Rescript in AD 410 (2009, 179). In Gerrard's opinion, these historical events, often associated with the abandonment of Britain by the Romans, could have created the scenarios for burial for safekeeping of the artefacts in the well. The alternative was the ritual motivations, with Gerrard noting the use of damp places, wells and shafts as ritual foci and discussing the focus literature has placed upon this aspect (2009, 179). He contextualised the Draper's Garden collections through comparisons with a Late Roman well at nearby Southwark Cathedral. This contained religious and funerary sculptures alongside articulated dog and cat skeletons. He compared these with the incomplete skeleton of a juvenile red deer in the fill above the Draper's Garden Hoard, noting that such remains are also visible in 'ritual' pits in London's Eastern Cemetery and a fourth/fifth century well at Bardock in Hertfordshire. In Gerrard's opinion, this skeleton constituted 'ritual' activity in a manner marking the well's final usage (2009, 179). Similar features are visible with some of the wells containing the tanks, particularly the Walbrook Mithraeum.

Petts would use these types of approaches when he analysed the tanks. He analysed the tanks in regards to their findspots and state upon retrieval. In this case, Petts focussed on the differences in find contexts and environments. He noted that some had been found in buildings such as the Bourton-on-the-Water examples from Gloucestershire, while others lacked contexts since they were found by metal detectorists or ploughing. These included the tank from Brough in

Nottinghamshire and the Walesby fragments (2003a, 110-111). The main aspect of his analysis was how he related the discovery of the tanks in pits, wells and riverine contexts 'to European and British traditions of ritual deposition' (2003a, 110-111; 2003b, 124; 2006, 227-228). He was referring to Richard Bradley's earlier arguments from 1990 and 1998. Bradley had categorised the metalwork finds from the European Bronze age into rather basic categories 'dry' and 'wet' contexts (1990, 14-15). Bradley was using earlier works to perform this categorisation and assess the idea of 'wet' hoards being votive instead of 'dry' hoards being of mundane (every day) origins (1990, 14-15). Alongside this influence, Petts' work can be seen alongside other authors from this period, such as Fulford's and Hingley's work. These also identified such contexts as standard features for acts of 'votive' and 'structured' deposition (Fulford 2001, 200, 202, 204; Hingley 2006, 221, 230).

Petts investigated the condition of the tanks upon their burial, noting how many of the tanks were deliberately fragmented before their deposition into the ground (2003b, 126; 2006, 230). Deliberate fragmentation of artefacts has also been a constant theme in archaeology used to assess whether acts of artefact deposition are votively charged or as a strategy for removing artefacts from circulation (Chapman 2000a; Pollard 2001, 315; Bruck 2006, 297, Haynes 2013, 10, 13; Tabay 2017, 79; Villac and Bottaini 2017, 128, 133; Davies 2019, 62). Petts argued against Guy and Watt's earlier statements about such damage being tied to the pagan revival under Julian the Apostate (Guy 1981, 275; Watts 1991, 224-5), instead linking the tanks to other lead and pewter finds from the period within a wider framework of potential 'votive deposition'. His analysis included the pewter finds buried in the riverbanks of Shepperton (Surrey) and St Albans (Hertfordshire) for instance (2003, 125), areas recorded by Poulton and Scott as both containing deposited pewter plates (1993, 116-117). There were five examples from Shepperton discovered in a silted-up gravel pit between alluvial channels in the Thames. Meanwhile, the finds from St Alban's instances were retrieved from bog mud beside the River Ver. The similar findspots and depositional practices of these finds to the tanks allowed Petts to contextualise the tanks within a broader framework. He also did this with pewter hoards such as those from Appleford (2003a, 112-133) and Silchester, noting the importance of iron tools located with these items much like the examples found in 1976 at Icklingham.

As mentioned earlier, archaeologists have continuously seen iron artefacts as prime examples of votive deposition, demonstrated firstly by Manning's work in 1972 and then by later authors such as Hingley (2006, 219) and Mattingly (2006, 508-509). The contextual approach allowed the tanks to be placed within broader research and artefact studies in Roman Britain. Petts' and Mattingly's approaches are excellent examples. Mattingly wrote in 2006, the same year as Petts' article on the tank discovered at Perry Oaks during the Heathrow Terminal Five Excavations. Mattingly also assessed the tanks as 'possible baptismal fonts' owing to Christian decoration (2006, 349). However, he also tied them into other examples of activity by the Church, which indicated that it possessed a substantial amount of wealth at this time. For this, his analysis of the tanks compared them with a silver dish from Risley Park in Derbyshire, which displayed evidence of its presentation to a church by Bishop Exuperius. He also focussed on fragments of lead pans from Cheshire used for producing salt. These referenced Bishop Viventius and another clergyman (2006, 349). Mattingly viewed the lead tanks as demonstrating broader access to lead, reflecting Toynbee's and Thomas' earlier works. Here he argued that the distribution patterns of these supposed 'baptismal fonts', alongside those of lead coffins and brine pans, represented a greater proportion of lead making its way to 'civilian' markets. It is unclear whether he meant the decorated or undecorated examples, but he made some similar points to Petts. This allowed

the tanks to be contextualised to allow investigations into their meanings to their respective communities, an approach that authors discussing their later Anglo-Saxon/Early-Medieval counterparts would adopt to a certain degree.

1.6. The Anglo-Saxon/Early Medieval Tanks: The Earliest Arguments

Much like their earlier Roman counterparts, researches have subjected the Anglo-Saxon/Early-Medieval tanks to an intense and continually changing analysis since they were first identified. These were initially smaller articles in journal volumes and excavation reports, like the Roman lead tanks. However, these examples weren't identified as a distinct artefact class until well after the articles discussing the Roman ones. These include Cowgill's analysis in 1994 of the tank discovered at Riby Cross Roads (Lincs) and Steadman's earliest discussion of Flixborough (Lincs.) in 1997. Cowgill referred to the Riby Cross Roads tank as a "**lead vessel**", which the excavators had discovered lying horizontally across a ditch filled with Middle Saxon pottery. She focussed on its deliberate abandonment, demonstrating that the sides were folded to overlap in the centre (1994, 267-8). Her article made the excellent point that owing to the fragility of lead, restoration would have been impractical. Just as the authors who discussed the Roman tanks, she paid close attention to the construction methods. This included creating the main body of the vessel from two sheets of lead alongside a single circular sheet for the base and two wall panels. She also noted the flaws with the casting methods, displaying how the external surfaces were rough and worn and evidence of flow lines on the casting joins where the lead had not been hot enough when cast or was allowed to cool too fast (1994, 267-8).

She also discussed the presence of a repair patch, which she used as evidence of poor casting both here and in 2009 in her article on the tanks uncovered at Bottesford (2009, 84-85). In both articles, Cowgill argued that although vessels of this type might have been expected to hold liquid of some type, the quality of casting and joining on the Riby Cross Roads and Bottesford examples meant that it was unlikely they had ever held fluids (1994, 268-270; 2009). This is in contrast to the Roman examples which probably would have been water tight. Her reports also demonstrated that there were no signs of wear or usage on the Riby Cross Roads find, and that there were no noticeable indicators of its potential function. That led to a comparison with the Romano-British examples discussed by Christopher Guy and Dorothy Watts, providing the first of many comparisons between both sets of artefacts. Cowgill was one of the first to demonstrate the similarity of their construction methods but with a different style of iron rings. These led her to believe that the smaller iron rings on the Riby Cross Roads example were developments or adaptations of this feature. She also noted that all the Roman examples at that time were decorated in some manner, unlike most of the Anglo-Saxon/Early-Medieval examples. However, she did question Guy's interpretation of certain examples as Roman tanks, particularly the examples discovered at Kenilworth, Oxborough and Rochester (Guy 1989; *ibid.* 1991; Cowgill 1994, 270-1; *ibid.* 2009, 84-6). In Cowgill's opinion, Guy had not properly analysed the tanks since she believed that these tanks' construction methods were not like the other Roman examples. Guy wrote that the Oxborough tank "**differs from the other known examples**" since it was formed through bending in the bottom of the sides to form a ledge for the base (1991, 234). These two tanks' extensive decorations make it more likely that they are Roman examples, with Cowgill's interpretations lacking a conclusive reason for why they should be viewed as Anglo-Saxon/Early Medieval examples. Likewise, there has been debate over whether the Rochester tank was a Roman or Anglo-Saxon/Early Medieval tank. It was described as having a similar foliage pattern to the Felixstowe tank, leading Roach-Smith to date them "**to the tenth-**

century or earlier" (1878, 309). If those three tanks were Anglo-Saxon/Early Medieval rather than Roman, this would mean that more examples from this period would be visible in the East of England, South East and West Midlands

She then argued that a significant number of the tanks dated either to the Middle to Late Saxon or later Medieval periods through the contexts they were discovered in, using the artefacts recovered from Flixborough (Lincolnshire) Garton-on-the-Wolds (Yorkshire) and Willingham and Westley Waterless (Cambridgeshire) (1994, 271). As with the Roman tanks, she dated these examples to the Anglo-Saxon/Early-Medieval period using a mixture of stylistic motifs and associated finds. She discussed the substantial burning on the Garton tanks and their discovery in association with "**Scandinavian or Viking**" bone and iron objects (1994, 271). She also demonstrated some important differences amongst the Anglo-Saxon/Early Medieval examples, similar to the variation amongst the Roman examples discussed by Richmond (1945). She demonstrated that the three tanks from Garton were much smaller than the Riby Cross Roads tank since they were cast in one piece of lead sheeting. She used stylistic comparisons to show that the smaller Flixborough tank matched the Garton finds whilst the larger of the Flixborough tanks matched the Riby Cross Roads discovery in terms of their sizes and construction methods (1994, 271). She contextualised these examples like the Roman tanks' discussions, with her approach being integral to later interpretations of the Anglo-Saxon/Early Medieval ones.

Following Cowgill's analysis in 1994, the tanks discovered at Flixborough were briefly discussed as part of their discovery in the 1989-1991 excavations. Once again, the tanks discovered here were reviewed in conjunction with the Middle Saxon period site activity in this area. Loveluck only briefly covered the examples from this site concerning their storing of a vast tool hoard. He focussed on the contexts of the Flixborough tanks, noting that they were discovered in the ditch of a Middle to Late Saxon period settlement similar to the Riby Cross Roads example (1998, 146-7, 148). Loveluck examined these artefacts as residual finds from Middle Saxon period contexts, particularly in what he termed the "**refuse dumps**". As he demonstrated, Flixborough sits on an escarpment overlooking the River Trent in an area eight kilometres south of the Humber Estuary (1998, 146). That created vital connections with the rest of Britain and Continental Europe, with the site's material assemblages including decorated dress accessories, domestic utensils, horse gear and the tool hoard consisting of tools for agriculture and crafting. Furthermore, evidence for textile production and imports from across Continental Europe could be seen with imported pottery and glass work (1998, 154-5). He used this evidence alongside other factors such as a mixture of styli, discovered within the ditches and refuse pits, and other artefacts he termed as "**exceptional**" (1998, 155). These were a lead plaque and an alphabet ring with the first 11 letters of the alphabet, which he used to investigate whether the site was viewable as a monastery (1998, 158). It was an integral approach that Kevin Leahy would apply later in 2007 when he analysed the developments at Flixborough. Loveluck also focused upon the tools contained within the lead tanks discovered at this site, using them to assess the site's agricultural wealth and make apt comparisons to similar sites from this period (1998, 156-7, 158).

He analysed the mixture of the tools in a manner that Leahy would develop further (2003, 2007, 2013), demonstrating that carpentry was the primary focus of the Flixborough tool hoard, although there was also a mixture of agricultural and metalworking tools. Loveluck only briefly described the tanks as "**two large lead tanks**" (1998, 156-7), whilst other authors would focus upon there being a smaller tank contained within a larger one and the hoard set between the two (Cowgill 1994). Loveluck used the tool hoard and other finds at the site in a significant

manner to compare the site to other apparent Middle Saxon “**monastic**” sites such as Wicken Bonhurt in Essex, Saint Peter’s in Northamptonshire and those at Brandon in Suffolk and Riby Cross Roads, which was also in North Lincolnshire (1998, 158). Even though he compared the sites of Flixborough and Riby Cross Roads, he neglected to contrast the tanks in both areas, which Cowgill had done in her article four years earlier. Loveluck’s analysis of Flixborough as part of Europe within a broader context during the Middle to Late Saxon period influenced later authors such as Patrick Ottoway and Max Adams. They would take similar approaches through comparing Flixborough to sites in Scandinavia through similar tool hoards deposited in a manner mimicking those at Flixborough (Ottoway 2009, 259-260; Adams 2017, 198-200, 249).

1.7. More comparisons between both sets and the role of the tanks in Anglo-Saxon/Early-Medieval society

Following these articles, greater focus was paid to the potential role of the Anglo-Saxon/Early Medieval tanks in their respective society. Authors such as Leahy and Ottoway paid attention to the way that at least six of the Anglo-Saxon/Early-Medieval artefacts contained mixed tool hoards (Leahy 2003, Ottoway 2009; Leahy 2013). This is demonstrated many times in Kevin Leahy's work, with his first analysis in 2003. Leahy analysed them in his work on the role of craft working in Anglo-Saxon/Early-Medieval society, aptly investigating the tool hoards. Leahy made the point that evidence for metalworking other than iron during the Anglo-Saxon/Early-Medieval period in Britain is often scarce, especially in comparison to Scandinavia and the “**Celtic West**” as he termed it (2003, 135). Leahy was correct in arguing that lead would have been one of the few non-ferrous metals readily available to Anglo-Saxon/Early Medieval society, especially with its concentrations in the Derbyshire Peak District (2003, 165). Leahy's focus upon the lead sourcing in the Derbyshire Dales would also occur in Cowgill's article in 2009. She made similar points regarding the sourcing of the lead for the tanks discovered at Bottesford in North Lincolnshire (2009, 274). Leahy used textual sources such as Bede's Anglo-Saxon Chronicles to demonstrate the long-standing use of lead with accounts such as Eahbert, the Bishop of Lindisfarne from AD 688-98, covering the entirety of its oak church with lead sheet (EH; Leahy 2003, 165). Besides its ecclesiastical usage, Leahy was correct in noting that lead was just as widely used in the Anglo-Saxon/Early-Medieval period as during the earlier Roman one, demonstrating its numerous functions across Anglo-Saxon/Early-Medieval society, such as jewellery and dress fittings (2003, 165-6).

Leahy analysed the lead tanks as the largest surviving lead artefacts from the Anglo-Saxon/Early-Medieval period, describing them as “**cylindrical tanks**” found in Middle Saxon contexts and occasionally containing tools. Much like Cowgill, he focussed upon the construction methods of their creation in two or more parts for the base and sides. However, Leahy did not make direct comparisons to their earlier Roman counterparts. Despite this, he also indicated that the finish upon the Anglo-Saxon/Early-Medieval artefacts was lacking. He stated that most of the Anglo-Saxon/Early-Medieval ones are poorly made (2003, 165; 2007, 199), a feature that authors such as Blair have frequently used the later ones' deficient finish to distinguish them from the Roman ones (Blair 2010, 165-6). Leahy argued that authors still have not understood these artefacts' function, especially as this an aspect that saw continued debate even in the most recent articles.

He attempted to use the fact that at least three Anglo-Saxon/Early-Medieval tanks have been recovered containing mixed tool hoards: those discovered at Flixborough (Lincolnshire), Stidriggs (Dumfries and Galloway) and Westley Waterless (Cambridgeshire). He used those to discuss their function (2003, 165-6). He argued that most of them would make **“inconvenient toolboxes”**, similarly to Watts’ arguments discussions of the 1971 Icklingham tank in 1989. Leahy carefully analysed the tools in the three Anglo-Saxon/Early-Medieval tanks, noting that the Flixborough hoard appeared as though its occupants used them for ship or house building through the carpentry tools (2003, 165-6). Furthermore, Stidriggs and Westley Waterless tools were a mixture of agricultural and carpentry tools and weapons. Therefore, Leahy and other authors have argued these tools and tanks represent a mixture of Early-Medieval societal classes (Leahy 2007; Ottoway 2009; Naylor 2015). He deemed the discovery of three tool hoards within the tanks **“interesting”** (2003, 171), although he did not pursue this further in 2003. He did in 2013, covering the discovery of further tool hoards and re-analysed the purpose of the lead tanks (2013).

His 2007 and 2013 research focussed a great deal more on the find contexts of the tanks, noting the ditch locations for the Bottesford, Flixborough and Riby Cross Roads examples (2007, 199) as well as discussing the possible **“wet”** environments for the Stidriggs and Westley Waterless discoveries. Leahy argued that whilst Stidriggs tank was discovered 75cm down in peat and the Westley Waterless tank was discovered during drainage operations, this by no means guaranteed these were ‘wet’ environment. He believed that this example could be omitted from tool hoards found in ‘wet’ environments as no water sources were found in the area. He noted that **“these lead tanks/vats appear to have a significance of their own”** since they were sometimes committed to the ground by themselves (2013, 235). Cowgill and Blair would likewise use this contextual approach in 2009 and 2010 and Naylor later in 2015.

1.8. Most recent approaches to the Romano-British and Anglo-Saxon/Early-Medieval lead tanks

This contextualisation and comparative approach were one that Crerar would use in her work years later when she contrasted both the Roman and Anglo-Saxon/Early-Medieval example tanks (2012, 137). Her map emphasized that these objects were mainly clustered in the East Midlands, East Anglia and South East. There was one notable outlier in the North West from both periods with the tanks at Cumwhitton, Ireby, Stidriggs and Whithorn. Crerar tried to contextualise these artefacts by investigating whether the tanks developed from 'earlier examples' in Switzerland and Italy (2012, 138). She argued that these tanks were earlier counterparts to the British ones. This was evidenced through their decoration and their discovery in contexts dating to the first to third centuries A.D. (2012, 138). This argument was at best circumstantial, as she only covered this aspect in a limited manner. Crerar's contextualisation of the decoration, in a very similar style to Petts, was essential to her approach. She also used the Chi-Rho monogram and other symbolic decorations such as the Orantes figures on the Flawborough tank in her analysis (2012, 140). That was particularly visible with her linking of the decorative features on the Walesby tank (Lincolnshire) to a funerary relief from Aquileia in Italy. She used their decorative features and depictions as potential evidence for baptism, making valid points concerning their possible displays of baptism initiations (2012, 142). The baptism analysis has been the commonest interpretation of the tanks due to their design and decorative features. Following Crerar, both Naylor and

Aldhouse-Green would also analyse the tanks as baptism vessels/fonts using the Icklingham example as the best example of this factor (Naylor 2015; Harvey and Speed 2016, 59-72; Aldhouse-Green 2018, 190-191).

Crerar also argued that if the tanks were conclusive evidence of Christian religious practice and worship, then the decoration must be seen to reflect what she termed 'religious zeal'. She made a relevant point since using the Chi-Rho alongside similar decorations can be a highly subjective method of analysing the tanks' identity. Her point about over analysing the motifs on the tanks was a relevant critique of previous works. She stated that such decorations would have been relatively rare at this time and, therefore, should not disproportionately influence our interpretation of our iconography. In this instance, she attempted to build upon and improve upon many of the previous authors' debates. She analysed familiar aspects of the tanks but with new considerations. For example, she assessed the 'death' of the artefacts by investigating the association with rivers, pits or wells in a manner very similar to Petts (2012, 152-3). She made the point that although these were contexts commonly associated with 'pagan' activities, it was all too common to see aspects of Christian worship using such contexts. She had earlier investigated this through her analysis of the Water Newton treasure. She demonstrated that these silver leaves were commonplace in 'pagan' iconography yet still used Christian iconography in the form of the Chi-Rho monogram (2006, 85-86). This is an important feature in both instances and serves as a reminder of these practices' complexity. It also demonstrates how broad these terms for such methods are, mainly when numerous groups use them. Crerar noted the importance of the continued use of such contexts for votive practices, discussing their link with the tanks' fragmentation (deliberate dismemberment) before their deposition. She analysed the distinctive feature that the Chi-Rho monogram was left untouched whenever the tanks were deliberately fragmented (2012,150). Crerar's work was vital for investigating the objects in a new light and showing just how subjective analysis can be. That applied to the tanks and the frameworks of religious practices used to analyse these objects.

Alongside her analysis of the Roman tanks, Naylor's investigation of the Anglo-Saxon/Early-Medieval tanks in 2015 took a far more context-focused approach. He focussed upon the deposition of the artefacts in their environments, comparing them to large-scale burials of weapons during the Anglo-Saxon/Early-Medieval period in a focussed and apt manner (2015, 110). He emphasised Leahy's work in 2013 for their association with iron hoard depositions, calling them **"lead containers or Tanks"** and highlighting their areas of recovery like Cowgill and Blair (2015, 134). Once again, he noted the main concentration was in Lincolnshire and East Anglia, with notable clusters in the Yorkshire and Humber area. Like other authors, he discussed their poor construction and finish, and similar to Leahy, argued that they are not easy to analyse (2015, 135). In comparison to the Roman examples, the poor construction and finish was a constant theme in the literature on the Early-Medieval period tanks. Naylor demonstrated awareness of Blair and Cowgill's debate in 2009 and 2010. Cowgill had attempted to argue that it was **"inappropriate"** to equate both sets of examples over their perceived differing functions (2009a, 270). In contrast, Blair believed that they should be compared through the similar environments used for depositing both sets of tanks (Blair 2010, 160-161). It led Naylor to focus more on the find contexts than previous authors discussing the Early-Medieval artefacts. He analysed the Westley Waterless and Willingham (Cambridgeshire) examples in association with the Fens and possible water-related environments (2015, 135). He focussed upon Willingham's framing by the River Ouse on two sides of the parish and creating the north part from peat fen and alluvium. That led him to consider that the Willingham tanks could have been buried in a

peaty or inundated area (2015, 135). He also argued that the Flixborough tanks and their hoard could be associated with water since the excavators recovered them from an interface of the peat bogs and marshland of the Trent and the Lincolnshire Edge (Loveluck 2009b; Naylor 2015, 135). His reason for this was that these artefacts were found downslope of the main settlement area towards those wetlands, making a case for considering that this situation could be more intimately linked to water than initially believed. He also investigated the location of the three tanks discovered at Bottesford (Lincolnshire) discussing how the artefacts' position in the southern boundary ditch at the site was only 200 metres from the Bottesford Beck. This then flows into the River Trent, framing the suburb around riverine environments. He was correct in stating that it is difficult to associate their deposition with the river except for their location in the riverward part of this settlement. He noted the similarity of the Bottesford and Riby Cross Roads tanks' contexts through their deposition in ditches, discussing that it was possible to view this either in practical or possible votive terms (2015, 135). He used both Boyer's and Cowgill's analysis of the Bottesford tanks, where she argued that they could have easily been re-discovered for recycling or exchange, although Boyer was less sure as he believed these reasons behind their deposition were open to debate (Boyer et al. 2009, 100; Cowgill 2009b, 84).

Naylor was correct in discussing how boundary and enclosure ditches have been continually linked to deliberate ritual deposition by numerous authors. That is particularly visible with the works of authors discussing the later Prehistoric into Early Medieval periods such as Haselgrove and Hingley (Hamerow 2006, 12; Hingley 2006, 230-4; Haselgrove 2015; Naylor 2015, 136). He used Hamerow's work on ditches as a focus for Early Anglo-Saxon/Early-Medieval depositional practice effectively. Naylor demonstrated that this practice continued into the eighth century, as seen with the Bottesford and Riby Cross Roads' tank burials. (2015, 136). That led him to believe that careful attention paid to these burials, with the Bottesford tanks dismembered and carefully placed whilst the Riby Cross Roads tank was deliberately folded. This indicated extreme care and attention in their abandonment. It led him to suggest that these vessels were perceived as powerful or were meaningful to their respective communities. It suggests that they were deposited without the intention of recovery, much like Crerar's earlier arguments concerning the Roman tanks. Those led him to argue that there was strong reason to suggest that at least those that were recovered archaeologically could be viewed as 'placed' deposits in a persuasive manner (2015, 136). He could have made a further comparison with their earlier Roman counterparts regarding their contexts to further this point, but he made some conclusive arguments regarding the Anglo-Saxon/Early-Medieval tanks.

1.9. Conclusion

In conclusion, the treatment of the lead tanks by scholarship has been a complex process. This has seen a narrative develop surrounding the identity and purpose of these objects. As the earliest articles demonstrated, there was a great deal of confusion about these artefacts. However, their authors identified some consistent characteristics. From there, the scholarship surrounding these objects has continuously focussed upon a Christian identity, at least for the Roman ones. This is because of the decoration and form of these items. Authors like Thomas and Watts, followed by later authors such as Petts, used them to establish the presence of Christianity in Britain. Agendas and interpretation clearly changed with current thinking, as seen with Crerar's reanalysis in 2012. The authors' contextualisation approach from the early 2000s onwards was especially essential for the aspects I want to cover. These ranged from depositional practices to contextual analysis and framing these items within Roman and Early-Medieval Britain's religious landscape. These works will be essential for my coming chapters as I attempt to build upon their works and engage with the tanks in a new manner, especially as at least ten new examples have come to light. It will be interesting to see how relevant these theories and analyses will be to my interpretations in the upcoming chapters, particularly as the frameworks developed by these authors have been continually adapted and reused for the last seventy years concerning these objects.



Methods of
Investigation
and Analysis

Chapter Two: Methods of Investigation and Analysis

2.1. Introduction

This chapter provides a detailed explanation of how the research of the Roman and Anglo-Saxon/Early Medieval lead tanks was conducted. Firstly, by providing a brief description of the research area followed by an explanation of the research design including the type of study, the sample size and selection, and the data collection methods. I will then describe how I approached the landscapes of continued deposition followed by a discussion of the challenges in presenting the data.

2.2. A brief description of the research area

This research will focus on Britain during the Late Roman period (AD 250–410) and the Middle to Late Anglo-Saxon (AD 650–1066) periods, the dates commonly assigned to these lead tanks. Authors frequently date the Romano-British lead tanks to the late fourth/early fifth century through stylistic features such as the Chi-Rho monogram (Guy 1981, 271; Thomas 1981, 226; Elliot and Malone 2005, 36; Petts 2006, 227; Crerar 2012, 137–138). Additional evidence, such as pottery and coinage found alongside the lead tanks, provides contextual dating in a similar manner to the decorations (Watts 1991, 168; Elliot and Malone 2005, 34). The tradition of making these lead tanks ceased for at least three centuries before re-emerging during the Middle Anglo-Saxon period. The Anglo-Saxon/Early Medieval artefacts are dated from the eighth to tenth centuries through an analysis of decorative features and associated finds such as mixed tool hoards and ceramics (Steedman 1994, 221–222; Loveluck 1998, 155; Leahy 2007, 197; Boyer et al. 2009, 68–72; Christie et al. 2017, 409). However, isotopic analysis applied to a wooden handle in the hoard accompanying a lead tank discovered at Stidriggs in Scotland produced a date of AD 775–892 at one standard deviation (Leahy 2003; Leahy 2007). This coincides with the rough dates provided for the Anglo-Saxon/Early Medieval tanks of AD 750–1000. The dates for the Roman and Anglo-Saxon/Early Medieval lead tanks suggest two distinctive traditions of creating these artefacts where their dates of use and deposition coincide with wider hoarding practices during those times. Analysing the deposition of the tanks alongside similar acts of deposition from these periods will be the focus of the ‘landscapes of continued deposition’ concept.

2.3. Research Design

My research is framed around certain key questions:

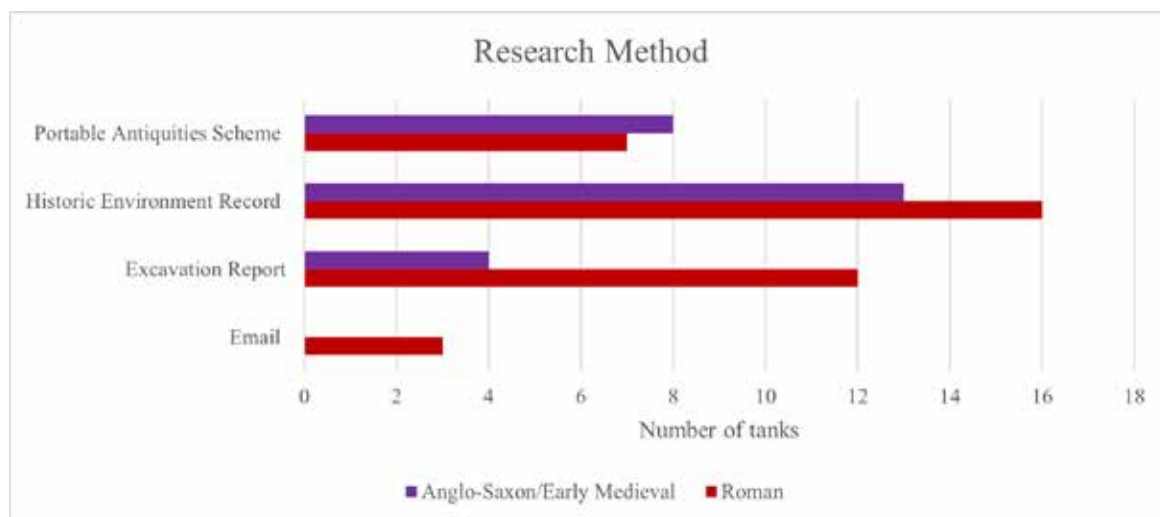
- 1: How has previous research treated the lead tanks in relation to their apparent function, find locations and depositional patterns especially in relation to themes such as ‘votive’ and ‘structured deposition’?**
- 2: Where have the Roman and Anglo-Saxon/Early Medieval lead tanks been found and what environments have these artefacts been buried in?**
- 3: What type of localised/specific contexts have the tanks been discovered in and what depositional patterns are visible? Are they buried in a complete or damaged state?**
- 4: How do the depositional patterns of the lead tanks compare with the previous and contemporary hoarding and depositional practices?**
- 5: Does this analysis of regional and local depositional contexts and associated practices reveal the presence of wider ‘landscapes of continued deposition’?**

My approach to the research was a mixture of quantitative and qualitative methods. I firstly analysed data of where, how, and when the lead tanks were found. This was followed by characteristics of the tanks; period, size, decoration, and state when the tanks were found. This allowed me to build a database in Excel and to investigate patterns visible with both sets of artefacts. I then analysed how far their locations were from a source of lead/lead mine, a Roman road, a source of water and a settlement, plotting this into ArcGIS and creating cumulative frequency graphs to better understand the visible patterns. I then performed a Kolmogorov-Smirnov test (KS test) to determine whether the lead tanks were either randomly or deliberately located near a Roman Road or a source of water.

Following this, I assessed the data by period (Roman and Anglo-Saxon/Early Medieval) and compared the findings to demonstrate any notable similarities and variations in their depositional patterns. I finally investigated any artefacts, settlements and burials/cemeteries found within 3km of the lead tanks over different periods (Prehistoric, Bronze and Iron Ages, Roman, Anglo-Saxon/Early Medieval, Medieval) on the HER and PAS databases. Using certain criteria, which will be discussed in section 2.4, I decided if a location where the lead tanks were found showed a very weak, weak, moderate, strong, or very strong case of being a landscape of continued deposition.

The initial focus was on gathering data about the lead tanks and my starting point was Belinda Crerar’s article from 2012, the most recent discussion of the tanks when I began this thesis. I then used the relevant academic literature, Historic Environment or Portable Antiquities Scheme (PAS) database entries to obtain their grid references and other necessary information. For the Historic Environment Records (HER), I used Heritage Gateway with a mixture of Excavation Indexes and local records for England and Canmore for Scotland. In some cases, the HER or PAS databases provided far more accurate geolocation and relevant find information than the academic literature.

During the thesis several new examples were uncovered by commercial archaeological units (MOLA, ULAS and WYAA) or were brought to museums (Salisbury Museum) by members of the public. This meant I had to contact them for the necessary data, leading to a varied approach in my research method as can be seen below in Figure 2.1. I learned of a number of these through writing to these individuals for the data when there were examples where the Historic Environment entries only provided a general location, for instance Pineham (Northamptonshire). This led to emailing the members of the archaeology units asking for the coordinates to accurately plot the tanks into the maps and for details such as their find context, state upon deposition and associated finds.



(Figure 2.1 A graph showing the research methods for the lead tanks, Author's own)

When this thesis started, there were 52 recorded tanks from the Roman and Anglo-Saxon/Early Medieval periods. Since then, that number had increased to 62 and with a newly recorded tank on the PAS database from Rudston in Yorkshire (NLM-41D6C6) there are currently 63 tanks.

2.3.1. The Lead Tanks Data

Using the sources discussed above, I researched the site reports of each lead tank databasing where the lead tanks were found. I decided to standardise on Easting and Northings for the locations of the lead tanks, any artefact, settlement area or lead mine. This was done to load the data into ArcGIS – the Global Information Service that was used to map and analyse the data.

Another benefit of using Eastings and Northings is to calculate the distance between two points. In a two-dimensional plane, the distance between points (x_1, y_1) and (x_2, y_2) is given by the Pythagorean theorem:

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Where x_2 and x_1 are the Eastings of the artefacts/settlements or lead tanks and y_2 and y_1 the Northings of the artefacts/settlements or lead tanks. As the Eastings and Northings are in metres to calculate the distance in km, I divided the results by 1,000.

Using the grid reference finder (<https://gridreferencefinder.com>) I could convert Grid Reference, Latitude and Longitude and Postcodes to Eastings and Northings. This was necessary as the Heritage Gateway search was based on Postcodes with the results of each record in Grid Reference. The PAS search was also based on Postcodes with the results returned in Eastings and Northings.

In addition to Eastings and Northings to compare the tanks I decided to standardise on the Metric System and to convert any weights and measures in the Imperial System to the Metric System. The first lead tank was found in Icklingham in 1726 almost seventy years before the Metric System was officially adopted in France in 1795. Many of the site reports were recorded in Imperial measurements and to allow comparisons between the tanks it made sense to standardise on the Metric System.

An example of the location data collected for Ashton in Northamptonshire is illustrated in the following table.

Location	R1
Tank Number	1
Period	Roman
Location	Ashton
County	Northamptonshire
Region	East Midlands
Easting	504807
Northing	289036
Grid Reference	TL 04807 89036
Post Code	PE8 5TW
Reference	HER Number: 2409/0/7

(Figure 2.2 A table providing location information for one of the lead tanks, Author's own)

Analysing the county and region data enabled an investigation into the areas where the tanks had and had not been found. I wanted to know if the lead tanks were clustered around a certain area and were there any similarities in the locations of where the tanks had been found. For each site I analysed the Landscape and Human Geography as I was interested in comparing the different sites locations and their evolution. Using Ordnance Survey maps (<https://explore.osmaps.com>), resources such as the Domesday Book online (<https://opendomesday.org>) and local sites (<http://www.ashtonvillage.co.uk>) I could gain insights into the site's history.

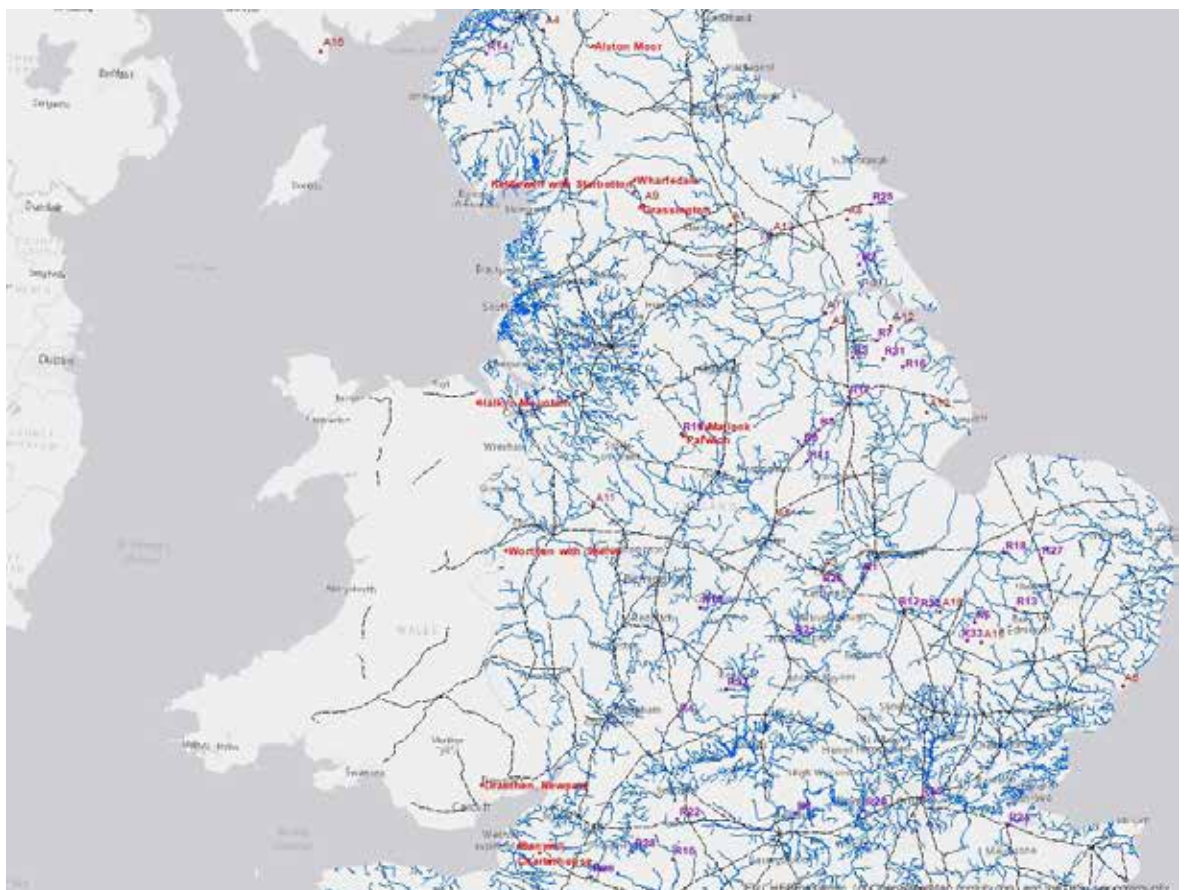
2.3.2. Access to Lead: Mining in First Millennium AD Britain.

Some of the lead tanks are large, decorated constructions that were created from multiple sheets of lead, a resource which was extensively mined in Britain during the Roman period. Following the initial invasion of AD 43, control of lead mining and lead production firstly fell under the state and the Emperor. The earliest concentrations of activity are believed to have occurred in the Mendips (Somerset), with Charterhouse-on-Mendip recognised as one of Britain's earliest industrial archaeological sites (Fradley 2009; Meharg 2012; McFarlane, Lundberg, and Neff 2014, 432; Ponting 2018, 192). Evidence for production is visible through lead ingots, due to an absence of reliable documentary evidence and intact Roman mine workings, with activities dated to as early as AD 49 through inscribed lead pigs found in Somerset (Elkington 1976, Gardener 2001, 11; Hingley 2023). Textual sources such as Pliny describe the use of surface mining called "hushing" to extract the ore which involved diverting streams of water to wash away the soil and reveal the veins of lead ore beneath. (Pliny Natural Histories 23, 66). They then used iron pickaxes and hammers and wedges, mentioned in sources such as Pliny and Diodorus Siculus and visible as archaeological finds (Natural Histories 33, 72; Universal History 3.12-3.13; Elkington 1968; Davies 1978, 32) to extract the ore, which was transported to the surface by bucket or basket. The lead was smelted in small, portable furnaces called cupels, which were fuelled by charcoal. Furthermore, for deeper lead sources the Romans used deep-vein mining where narrow, vertical shafts, as mentioned by Diodorus Siculus (Universal History 5.36-38) that were driven through rock to extract the ore which was most often gold or silver due to its value. Lead pigs (ingots), such as an example found at Tansley Moor in Derbyshire, have also been recovered near 'bole' hearths of large flat stones with evidence of burning (Barnatt 1999; Bradwell 2014; Clarke 2017, 31). The bole method involves a small hearth fired using a natural draught and is characteristic of later periods of mining visible at Medieval sites (Rieuwerts 1983, Barnatt 1999; Bevan and Doonan 2004; Rehren 2010, 86). This method of smelting and lead production has been found in conjunction with Roman lead working sites, such as at Erglodd Farm and its accompanying Flavian period fort on the fringe of Borth Bog in Wales. Excavations at this site uncovered a lead bole smelting furnace discovered alongside lead processing debris (Page 2005, 103-104; Timberlake 2006, 79-86). The bole hearth method, combined with the inscriptions, has been used to suggest local production of ingots. These would then be recast at a central administrative place into more standardized 'company' pigs (Bradwell 2014), indicating that a heavy exploitation of resources and a mixture of local and imperial control. In contrast with the Roman period, not as much is known about lead mining methods in the Anglo-Saxon/Early-Medieval period but it is highly likely that similar methods were used. Alternatively, it is also possible that the lead used during this period was recycled Roman lead.

2.3.3. Access to Lead: The Lead Tanks Locations Compared with Known Lead Sources and Known Lead Mines.

This thesis analysed the tanks' find locations in conjunction with access to lead resources. It investigated whether their findspots reflected direct access to nearby lead resources or production sites or whether there are other factors responsible for their locations such as religious sites or road and river access. Lead was used for a variety of purposes which permeated multiple aspects of daily life, including the making of coffins, windowpanes and roofing, water pipes, weights, and coins, uses which continued into the Anglo-Saxon/Early Medieval period.

Sourcing data from Historic England and two other sources I found the location of 14 Roman and Anglo-Saxon/Early Medieval lead mines in Britain, shown in Figure 2.4. Many of these were based in regions commonly associated with lead mining during those periods: the Mendips, Flintshire, South Wales, the Peak District around Matlock, and Wharfedale in Yorkshire (Mattingly and Jones 1991, 110; Leahy 2003, 165; Cowgill 2009a, 273-4; Naylor 2015). Two of the lead tanks at Parwich (Derbyshire) and Grassington (Yorkshire) had lead mines in their immediate vicinity. This could have been used to provide the necessary materials for creating these tanks. Furthermore, a series of lead pigs (LANCUM-637434) were discovered north of the Grassington tank, suggesting lead production occurred in this area.



(Figure 2.3 A map showing the locations of the lead mines compared to rivers and Roman roads, author's own)

	Easting	Northing	Lead Mine	Nearest Water (Km)	Source	Main River	Nearest Roman Road (Km)
1	321800	187700	Draethen, Newport	0.45	Rhymney River	Severn	4.27
2	375287	542558	Alston Moor, Cumbria	0.10	Garrigall Burn	Tyne	4.96
3	429803	358877	Matlock, Derbyshire	0.29	Derwent	Trent	4.87
4	428385	354943	Middleton, Derbyshire	2.33	Derwent	Trent	0.88
5	426710	360022	South Darley, Derbyshire	1.50	Derwent	Trent	5.92
6	419097	355311	Parwich, Derbyshire	0.70	Bletch Brook	Dove/Trent	3.06
7	319969	371510	Halkyn Mountain, Flintshire	4.58	Dee	Dee	0.84
8	395317	472717	Kettlewell with Starbotton, North Yorkshire	0.78	Wharfe	Ouse	0.97
9	395550	478110	Wharfedale, North Yorkshire	1.65	Wharfe	Ouse	1.70
10	333364	299916	Worthen with Shelve, Shropshire	1.30	Minsterley Brook	Severn	5.53
11	349586	155184	Charterhouse, Somerset	3.80	Cheddar Yeo	Axe	0.80
12	354560	150982	Chewton Mendip, Somerset	3.62	Axe	Axe	0.11
13	339693	158445	Banwell, Somerset	1.14	Lox Yeo	Axe	0.27
14	398000	465000	Grassington, Yorkshire	0.07	Hebden Beck	Ouse	3.62

(Figure 2.4 A table showing lead mine and their locations in Britain, Author's own)

Loading the locations of the lead mines and the ArcGIS Online Roman Road Network (McCormick, M. et al. 2013) into ArcGIS, I used the measure tool in ArcGIS to calculate the distance of the lead mines to the nearest Roman road and the results are shown in Table 2.4.

I then loaded the ArcGIS online OS Open Rivers (a generalised open water network) showing the flow and the locations of rivers, streams, lakes, and canals across Great Britain and this is shown in Figure 2.3 above. I decided to use the Ordnance Survey (OS) online map to calculate the distance of lead mine to the nearest a source of water. Water was often the most convenient use of transport in both the Roman and Anglo-Saxon trade networks (Gardiner 2017, 153-154), with the distribution of finds such as Ipswich and Torksey Ware pottery near rivers and the coast used as indicators of the use of rivers for trade (Blinkhorn 36-46; *ibid.* 2017, 154). Whilst it appears that land transport was important for short distance moving of goods, the use of waterways allowed not just trade within Britain but also with the Continent as evidenced at sites such as Flixborough in Lincolnshire (Leahy 2007; Adams 2017; Gardiner 2017, 155). There is good evidence for river and sea transport on the major waterways in Britain such as the Thames and Trent as well as the Fens and Somerset Levels where canals were constructed and 'hythe' (landing place) place names were common. Using the Ordnance Survey online map meant that I could trace each source of water to a tributary or a river more easily in the OS system than ArcGIS. The results are shown in Table 2.4.

I calculated the straight-line distance to each lead mine for each lead tank. In the following example of the Roman lead tank found at Ashton in Northamptonshire (Easting 504807 and Northing 289036) we can see the distance in km from each of the lead mines in Table 2.5 shown

below. This was to investigate whether direct access to lead was a relevant factor for their find locations and whether rivers or roads or a combination of the two were the mostly likely method for transporting the tanks to these sites, which will be seen in the later chapters of this thesis.

Lead Mine	Distance in km
Lower Machen	209.19
Alston Moor	284.69
Matlock	102.49
Middleton	100.92
Grassington	205.84
South Darley	105.54
Halykn	202.40
Buckden	218.37
Kettlewell	213.84
Worthen with Shelve	171.79
Banwell	251.02
Chewton Mendip	204.04
Priddy	204.96
Parwich	108.34
Nearest lead mine	Middleton
Minimum distance in km	100.92
Maximum distance in km	284.69

(Figure 2.5 A table of the distance in km of the Ashton lead tank to lead mines, Author's own)

I then created a cumulative distance distribution of the distances of the distances of a lead tank from the nearest lead mine for the Roman, Anglo-Saxon/Early Medieval and all lead tanks and calculated the Mean and Median values of these distances. I used the cumulative frequency histogram to plot data as it allowed me to analyse the shape of the distribution and help to identify patterns. They were also useful to compare the distributions of two or more datasets, to identify percentiles and quartiles and to identify potential outliers in the data that fell outside the bulk of the distribution.

Finally, due to the widespread use of lead, I compared the distribution of the tanks to lead coffins. These are similarly large and often decorated constructions which would also have required a considerable amount of material to create. They were also used across both the Roman and Anglo-Saxon/Early-Medieval periods in individual burials and cemeteries (Cowgill 1994; Patrick et al. 2007), A recently discovered example of a lead-lines coffin was found at Leeds at an overlapping Late Roman and Anglo-Saxon cemetery is adding to the burial patterns and transition of sites during these periods (<https://news.leeds.gov.uk/news/historic-leeds-cemetery-discovery-unearths-secrets-of-ancient-britain>). I investigated the distribution of lead coffins from both periods to see if there was an overlap in the distribution patterns of the lead tanks and coffins as well as areas where they are missing. This was done to indicate whether access to the necessary lead resources to create the tanks was a significant factor in where they have been discovered or whether this factor was irrelevant.

2.3.4. Proximity to Roman Roads

The lead tanks could be large constructions, for example a fragment of the Pineham lead tank was 40cm high, had a diameter of 88cm, weighed 140kg and had a capacity of 220litres. If the lead tanks were found a significant distance from a lead mine or production site, then how did they get to where they were found? Given their size it seems they could they have been transported by either road or water and I wanted to know how far the lead mines were from a Roman road and a source of water. I then wanted to know if the locations where they were found were random or if there was bias to their proximity to a Roman road. Many of the more recently discovered lead tanks were discovered in the East Midlands and East Anglia, regions where metal detected finds more commonly occur annually compared to other parts of the country. For instance, the Government's Statistical Release for Reported Treasure Finds for 2020 and 2021 revealed that the East of England, South East and East Midlands reported the largest Number of Treasure Finds per region across England, Wales and Northern Ireland (<https://www.gov.uk/government/statistics/statistical-release-for-reported-treasure-finds-2020-and-2021/reported-treasure-finds-202021-statistical-release>). I wanted to know if their findspots were significant or if their locations coincided with metal detecting and excavation patterns in areas with known archaeological finds. For instance, Norfolk is one of the regions where artefacts are most found by metal detectorists, closely followed by Suffolk, as seen in the Statistical Release and at least five tanks have been recovered from these counties. Furthermore, recent excavations by Highways England from 2014-2017 across the A1 from Leeming to Barton uncovered further Roman remains including the Roman town of Cataractonium (<https://assets.highwaysengland.co.uk/roads/road-projects/a1-leeming-to-barton/A1+Leeming+to+Barton+archaeology+brochure.pdf>). The A1 is on the lines of the Roman Dere Street and as such it is quite common for Roman finds to be discovered in its vicinity, both through excavations and by metal detectorists. It was factors such as these that I considered when asking whether the distances of the tanks from Roman roads or if they were simply displaying common trends in British archaeology.

It does beg the question as to what is a significant distance and how could this be determined? In his paper *'The distribution of distance of certain place-name types to Roman roads'* Keith Briggs used a cumulative distance distribution to show the fraction of places with a particular type of name which are less than that distance to the nearest Roman road (2009). Using data from English Heritage based on Margary's *Roman roads in Britain* (1967) and then augmented this with more modern Roman road data (MX). As reference data Briggs used a million points uniformly distributed with respect to the National Grid. Briggs also generated random points biasing the points towards low-altitude sites as he believed *'this better represents the true settlement distribution.'* The results are shown in Table 2.6 below.

Description	Mean M-KM	Mean MX-	Median M-Km	Median MX-Km
Uniform random points	6.1	5.46	4.42	3.74
Low-altitude random points	5.85	5.09	4.13	3.45

(Figure 2.6 A table providing the mean and median distance of random data points to a Roman road in England, Briggs 2009)

Briggs found that the median distance of any point to a Roman road was 3.74km for a uniform random data point and 3.45km for a low altitude random point. Briggs also found that 'the maximum distance of any point in England to a Roman road was about 42km'. Using this information, we can perform an analysis of the data and for each set of data I created a cumulative distance distribution and calculated the median and mean values and compared these to Briggs results.

Using the ArcGIS Online Source of Roman Roads in Britain (DARMC Scholarly Data Series Citation: McCormick, M. et al. 2013. "Roman Road Network (version 2008),") a digital version based on the Barrington Atlas I plotted the Roman roads and then added a Buffer of 3.5km as shown in Figure 2.7.



(Figure 2.7 Roman roads in Britain with a 3.5km buffer, based on McCormick, M. et al. 2013)

I then used the measure tool in ArcGis to determine the distance of each lead tank to the nearest Roman road. I created a cumulative distance distribution of the distances of a lead tank from a Roman Road for Roman, Anglo-Saxon/Early Medieval and all lead tanks and then calculated the Mean and Median values of these distances.

I then used a Kolmogorov-Smirnov test (KS test) to determine whether the two samples came from the same probability distribution. The test works by comparing the empirical distribution function (ECDF) of the two samples to each other. I first defined the null hypothesis and the

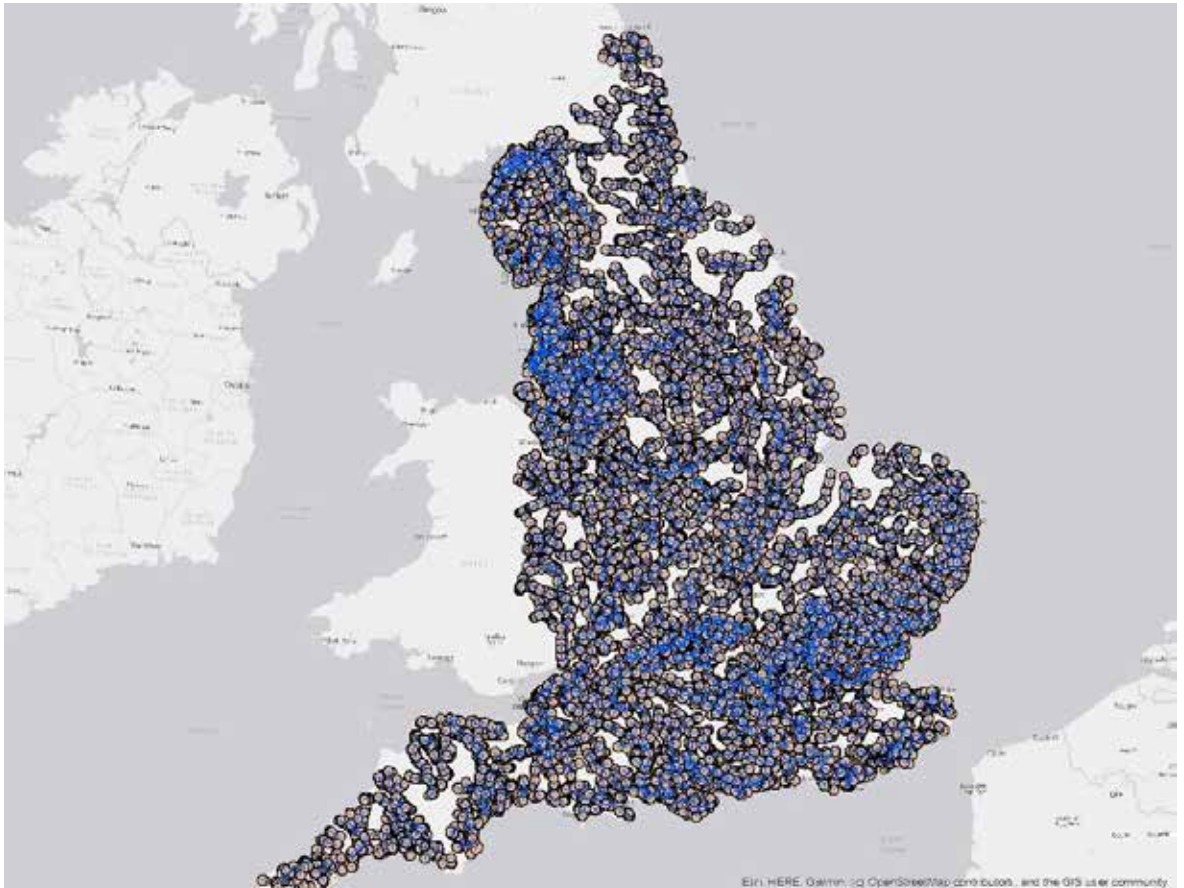
alternative hypothesis. The null hypothesis is that the distance of the lead tanks to a Roman road comes from a specified distribution (e.g. normal distribution), while the alternative hypothesis is that the sample does not come from that distribution.

As the Briggs data was in metres and not kilometres, I converted the distances of the lead tank to a Roman road from kilometres to metres and rounded to the nearest 50m. For each 50m, starting at 0m and continuing in 50m intervals until the maximum distance of the lead tanks to a Roman road, calculated the number of tanks found within these 50m intervals and calculated the percentage of tanks at this distance. I then entered the percentages of Briggs random values of all points 0, 50, 100 metres etc. I then calculated the absolute difference between the lead tanks distance to a Roman road and the Briggs random distribution values and calculated the maximum difference of these values. I downloaded a Kolmogorov-Smirnov table giving the critical values $D_{n,a}$ <https://real-statistics.com/statistics-tables/kolmogorov-smirnov-table/>. The first column contained the number of observations from 1–49 and the >50. The other columns contained the value of α (0.01), α (0.05), α (0.1), α (0.15), α (0.2) for all observations. Using the Excel vlookup function I calculated the p value at 0.05 from the Kolmogorov-Smirnov table. I then compared the test statistic to the critical value. If the maximum difference is greater than the p value at 0.05 then we would reject the Null Hypothesis and conclude that the two distributions are statistically different. If the maximum difference is the same of less than the p value at 0.05 then we would accept the Null Hypothesis and conclude that it is not possible to establish whether the two distributions are different.

This test was carried out for the Roman, Anglo-Saxon/Early Medieval and all lead tanks. However, the tanks found at Stidriggs and Whithorn in Scotland were excluded from the calculations as the Briggs data was only calculated for Roman roads in England.

2.3.8. Proximity to Water

In a similar vein to determining the lead tanks proximity to Roman roads, I analysed the proximity of the lead tanks to a source of water – a tributary, river, or the coast. Loading the statutory rivers of England ArcGIS overlay into ArcGIS I created a buffer 3.5km from the source of water. I used this as a starting point to calculate the distance of the lead tanks to the nearest water source and this is shown in figure 2.8 below.



(Figure 2.8 Rivers in England with a 3.5km buffer, Authors own)

This was useful first pass of the data, but I preferred to use the Ordnance Survey Online Maps as it allowed me to zoom in and trace any possible data source from a stream to a brook, to a tributary and to a main river. An example are the lead tanks found at Bottesford in Lincolnshire. The nearest river is the river Trent which is 6.13km away from the lead tank, yet the lead tank was found 0.2km from Bottesford Beck that flows into the river Trent.

I created a cumulative distance distribution of the distances of each lead tank from the nearest water source for Roman, Anglo-Saxon/Early Medieval and all lead tanks and then calculated the Mean and Median values of these distances.

For the modern waterways, buffers were created around the Ordnance Survey's 'Open Rivers Dataset'. The analysis was restricted to waterways in England as there are no tanks in Wales and just three in lowland Scotland. Buffers were spaced at 100m intervals for distances up to one kilometre, and at 250m between 1km and 3km. Ten thousand points were then distributed

randomly within the boundaries of England. The percentage of points within each of the 18 buffers were then calculated using GIS. The percentages were then plotted to create a cumulative frequency distribution plot. Distances between tanks and waterways in the OS Open Rivers dataset were then calculated using GIS, and similar Kolmogorov-Smirnov test to the distance of the lead tanks to a Roman road.

2.3.9. Proximity to a Settlement

In a similar vein to determining the lead tanks proximity to Roman roads I analysed the proximity of the lead tanks to a settlement – either Roman, Anglo-Saxon/Early Medieval or mixed period settlement.

I downloaded two files of data from The Rural Settlement of Roman Britain: an online resource –

- 1) rrs_site_data – a table for recording details about the settlement morphology, dates of occupation etc
- 2) rrs_core_data a table for recording details about the record, such as coordinates, types of investigation and excavator.

I joined the data using the common ID and vertical lookup (VLOOKUP) function in Excel to add the Eastings and Northings to the rrs_site_data. I then sorted the data and removed the Settlement_Size data that was tagged as 'Uncertain'. I then created three output files – small, medium, and large as defined by the Settlement_Size data and then uploaded these into ArcGIS and this is illustrated in Figure 2.9 below. The size and colour of the symbol indicates the size of the settlement the darker the shade of blue and the larger the size of the symbol equates to a larger settlement site.



(Figure 2.9 Roman Settlements in England, Authors own)

In addition, and as a byproduct of the analysis of structured deposition I had already found details of settlements, with their Eastings and Northings, that were within 3km of the lead tanks for each location where the lead tanks were found. In some instances, there were some locations with no settlement within 3km of the lead tanks I widened the search area within Heritage Gateway. In most cases the settlements were Roman but there were some multi period settlements and Anglo-Saxon/Early Medieval sites.

I then calculated the straight-line distance of the lead tanks to the nearest settlement and created a cumulative distance distribution of the distances of each lead tank from the nearest settlement for Roman, Anglo-Saxon/Early Medieval and all lead tanks and then calculated the Mean and Median values of these distances. Unfortunately, I couldn't perform a Kolmogorov-Smirnov test for the distance of the lead tanks to a source a settlement. Although the Roman Rural Settlement project lists over 2000 settlements, their discovery is heavily biased by the distribution of developer funded research across England, the availability of funds, the tradition of excavation across different counties, and the varied nature of reporting. Given the number of sites and the scale of the recovery bias, I concluded that creating a similar Kolmogorov-Smirnov test would be unrealistic.

2.3.10. Find Contexts and Environments

Lower Machen	209.19
Alston Moor	284.69
Location	R1
Tank Number	1
Find Context	In a well
Other Information	Well located in the backyard of a building used for ironworking.
Wet or Dry	Wet

(Figure 2.10 A table providing context information for one of the lead tanks, Author's own)

I then investigated what contexts and environments the lead tanks were found in. The find contexts included an abbey, churchyard, ditch, field, flood plain, orchard, pit, railway cutting, river, watering hole, well and some unknown contexts, meaning that there is a mixture of primary and secondary contexts. In this instance the primary archaeological context has been removed through construction or erosion and the modern secondary context is the only available one leading to categories such as a field. The environments were either dry, mixed, wet, or unknown. Figure 2.10 illustrates the find context and environment for the lead tank found at Ashton. This was done to further understand the deposition patterns visible with both sets of tanks and to investigate which contexts were chosen for depositing these items and how this was reflected in the landscape. I used this to analyse whether a certain type of context was used more in the Roman or Anglo-Saxon/Early Medieval period and how the tanks from both periods were deposited in these types of environments. I also investigated the types of contexts chosen for deposition to see whether there were similarities or whether there were any significant differences in the contexts used for burying these artefacts as this was a factor which previous authors had scarcely covered.

2.3.11. State of Preservation and Deliberate Damage

Location	R1
Tank Number	1
State of Preservation	Complete and undamaged
Deliberate Damage	No

(Figure 2.11 A table providing context information for one of the lead tanks, Author's own)

I investigated in what state the lead tanks were in when they were found and if they were complete or fragmented and if the tanks had been deliberately rather than accidentally damaged. The deliberate damage is a key component of a landscape of continued deposition. Figure 2.12 illustrates the find state of preservation and any signs of deliberate damage for the lead tank found at Ashton. I was looking for variations in patterns of how many tanks from both periods were buried intact, how many were buried in a complete state but with visible damage and how many were buried deliberately damaged (in this case fragmented). Whilst this aspect had been discussed previously to a certain extent, such as Guy and Watts linking the damage to the so-called Pagan Revival of the late fourth-century AD, I wanted to further this discussion through the types of damage visible. Many of the new examples were found damaged to a certain extent and I wished to assess whether certain types of damage were closely linked to specific contexts chosen for these acts of deposition. I compared this aspect between both sets of tanks to see what patterns were visible and whether there were any distinct variations in the types of damage on these artefacts.

2.3.12. Lead Tanks Dimensions, Capacity and Decoration

Location	R1
Tank Number	1
Dimensions and Capacity	0.84m diameter, 0.38m deep. 220 litres
Decoration	Cable banding, Zigzag.
Chi-Rho	Yes

(Figure 2.12 A table providing dimensions and capacity, decoration, and any evidence of Chi-Rho for one of the lead tanks, Author's Own)

Following analysis of their locations, I then recoded their size, weight, and capacity and if the tanks had been decorated and if Chi-Rho decorations were present and this is illustrated in Figure 2.12 above. I did this to compare both sets of tanks as the size and decorative features have been frequently used by authors to categorise the tanks as either Roman or Anglo-Saxon/ Early Medieval. As mentioned in **section 2.2**, authors frequently date the Romano-British tanks to the late fourth/early fifth century through stylistic features such as the Chi-Rho monogram (Guy 1981, 271; Thomas 1981, 226; Elliot and Malone 2005, 36; Petts 2006, 227; Crerar 2012, 137-138).

2.3.13. Associated Finds

Location	R1
Tank Number	1
Associated Finds	Found with two fragments of at least one other tank.

(Figure 2.13 A table providing details of any associated finds for one of the lead tanks, Author's own)

To further this analysis, I was also looking if other artefacts had been found with the lead tanks. This was done to see if there was any continuation between the Roman and Anglo-Saxon/Early Medieval periods and what was being deposited in them. I also wanted to know how this compares to similar depositions from these periods and other periods such as the Bronze and Iron Age cauldrons with tool hoards. This would allow a contextual and comparative approach with iron tool hoards in particular, especially as they have been found with Roman and Anglo-Saxon/Early Medieval tanks and a widespread find from both periods. Figure 2.13 illustrates any associated finds that were found with the lead tank found at Ashton.

2.3.14. Find Method

Location	R1
Tank Number	1
Year	1976
Find Method	Excavation

(Figure 2.14 A table providing details of the year and the find method for one of the lead tanks, Author's own)

I then investigated how (by clearance, dog walker, drainage, excavation, mechanical digger, metal detector, ploughing or unknown) and when the lead tanks were found, as seen above in Figure 2.14. The Treasure Act of 1996 came into force in 1997 and with it came protection for archaeological finds. The creation of the Portable Antiquities Scheme (PAS) was founded in response to the growth of metal detecting and the lack of provision to record these finds. This rise in metal detecting should be reflected in the number of new lead tanks found and how they were found, especially when some of the tanks were discovered through a combination of metal detecting followed by excavation.

2.3.15. When and Number of Tanks Found

Finally, I wanted to know when the tanks were found and if more than one lead tank had been found at a particular location. The 63 lead tanks were found at 51 sites across England and Scotland (with three from the Dumfries and Galloway region) containing these artefacts. When analysing the lead tanks for Chapter 3,4 and 5 – the Roman, Anglo-Saxon/Early Medieval lead tanks and the comparison of the lead tanks - the analysis used data from each of the lead tanks locations. In contrast when analysing the data for Chapter 6 – the landscape of continued deposition – the analysis used data by location. This is quite an important point as, for example, three lead tanks were found at Icklingham and this could have skewed the analysis in favour of whatever the landscape of continued deposition was for Icklingham i.e., Icklingham could have three times the weight of sites where only one lead tank was found.

2.4. Landscapes of Continued Deposition: Definition

In this instance landscapes of continued deposition applied to patterns of ongoing artefact burial in the landscapes surrounding the lead tanks dating from the Prehistoric (Palaeolithic, Mesolithic, Neolithic), Bronze and Iron Ages, Roman, Anglo-Saxon/Early Medieval, Medieval and Post-Medieval periods. Whilst this was a broad spectrum to investigate, I aimed to explore and analyse how these areas were used over time and whether there were any noticeable similarities across those sites with the activities that occurred there. I wanted to know if the activities at landscapes were not just a singular occurrence but represented continued usage of these areas by their occupants and potentially even demonstrated a revisiting of certain features by later communities. It also investigated whether there were any significant variations in the types of features chosen for acts of deposition, in this instance ditches, pits, rivers and wells, and the artefacts used. This allowed an investigation into and comparison between how these natural and human created features were chosen for deliberate acts of deposition. Rivers were an excellent example as these are often receptacles of artefact abandonment. I assessed these actions against settlement occupation and burial patterns to get a broader sense of how people were using or even re-using certain areas of these landscapes surrounding the lead tanks. Settlement occupation was one of the more diverse categories which included occupation in the form of farmsteads, forts, oppida, villas and small village and towns alongside evidence for practical activities such as pottery kilns and metalworking sites. Concerning burial patterns, barrows and cemeteries (cremation and inhumation) were a particular focus as I aimed to see how different groups used or even re-used certain areas for burials. This was of particular importance as some of the lead tanks have been found in proximity to Roman and Anglo-Saxon/Early Medieval burials and cemeteries. My main aim with the landscapes of continued deposition concept was to investigate how the tanks' depositions and the activities at these sites might be compared on an inter-site level to see if similar acts of deposition were occurring across these locations.

2.4.1. Data collection

When analysing the tanks as part of the landscapes of continued deposition concept, I broke down the data in several ways. I firstly looked at the natural topography and human geography of each of these regions, focussing on the types of landscape visible at these places and how far they were from rivers, Roman roads, and nearby settlements.

I then wanted to get an understanding of the finds by period; Prehistoric, Bronze and Iron Ages, Roman, Anglo-Saxon/Early Medieval and Medieval and Post Medieval. Using the Heritage Gateway more detailed search facility I entered the post code of the find spot of the lead tank. I then searched within 5km of the find spot and the system returned the number of results. The only exception to this was the lead tank found at Walbrook in the City of London. There were so many finds that I restricted the search area to 2km rather than 5km. Even with these restrictions there were 10,000 artefacts that were found from the London and City HER.

I used the local HER (in the case of Ashton I used the Northamptonshire Historic Environment Record and the search returned 2953 results) to give guidance of the number of finds in the area. As the local HER was not available for all lead tanks – Cumwhitton had no results returned from the Northumberland Historic Environment Record – I used the results and links to the Historic England Research Records (with 470 results) and then categorised the finds by period. I used this

feature to allow comparisons between each of the 49 English sites that had a lead tank. If a site was a multi-period site, I would take the first period to avoid double counting, and this slightly skewed the results in the earlier periods favour. Given the number of finds and the number of occasions this happened it didn't have any significant impact on the overall numbers.

I then searched within 5km of the lead tank in the Portable Antiquities Scheme (with 114 results) and downloaded the data into an Excel spreadsheet. I sorted, filtered, and counted the number of results by period to add to my analysis. Finally, I was able to extract data of any hoards and add them to my list of artefacts for possible inclusion in my site analysis.

I was then able to analyse the data by source and by period as illustrated in Figure 2.15 below.

Northamptonshire Historic Environment Record 2953 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	63	1
Bronze and Iron Ages	32	6
Roman	46	48
Anglo-Saxon/Early Medieval	5	6
Medieval/Post Medieval	228	17
Unknown or Other	96	36
Total	470	114

(Figure 2.15 A table providing details of the finds by source and period for Ashton in Northamptonshire, Author's own)

For the lead tanks that were found in Scotland, Stidriggs and Whithorn, I used Canmore that is compiled and managed by Historic Environment Scotland. The number of finds within 5km are shown below in Figure 2.16.

	Canmore
Prehistoric	92
Bronze and Iron Ages	11
Roman	7
Anglo-Saxon/Early Medieval	3
Medieval/Post Medieval	49
Unknown or Other	185
Total	347

(Figure 2.16 A table providing details of the finds by period for Stidriggs in Dumfriesshire, Author's own)

2.4.2. Data categories and criteria for inclusion

I analysed all the finds in the area, with particular focus on specifically structured or deliberate depositions with similar states of the artefacts to the tanks and analysed deposition patterns within an area of 3km surrounding the tanks' find location. I decide to use 3km as some areas had very few finds within 1km of the lead tank and 3km would be a reasonable distance and

I wanted to keep it contained and not have too wide an area to study. The search by location facility in HER only had options of searching 1km, 2km, 5km and 10km from a particular location so for consistency I decided to search both HER and PAS within 5km of the lead tank. I used the same distance search in Canmore for the lead tanks found in Scotland.

For each possible artefact I calculated the straight-line distance to each lead tank. There were 584 artefacts that were found within 5km of the lead tanks at Ashton. This meant selectively working out which features were found within 3km of the lead tank and added to my argument and which features did not contribute. This meant culling a large portion of finds and sites, including rubbish disposal, dispersal patterns (such as pottery maddening), working sites (particularly flint working) or accidental losses. These were mainly single coin finds and personal effects such as brooches and decorative artefacts as well as single tool finds (flint, metal or stone) such as axes and other classes. Many of these were surface finds or were often metal detected finds with no relation to other artefacts in the area, with good examples of this being artefacts at Bishop Norton (Lincolnshire), Burwell (Cambridgeshire) and Flixborough (Lincolnshire). Many of these artefacts/entries used similar geolocation coordinates as well, meaning my initial maps were often clustered with too many finds making it difficult to see what was happening at these sites. Good examples of this were Icklingham, Oxborough and Walbrook, with many overlapping artefact entries which obscured the necessary features I wished to investigate. This was particularly visible at Walbrook, as the tank and Mithraeum were initially obscured by metal detecting finds from the surrounding area. Likewise, I had to cull some of my finds from my maps as they were outside the 5km boundary, meaning they stretched the search area and created significant outliers which distorted the maps and analysis of these sites. Good examples of this aspect were the Knaresborough hoard discovered near Allerton-Mauleverer (Yorkshire) and the villa at Priors Hall near Corby (Northamptonshire). These discoveries were more than 5km from the lead tanks, meaning they could not be included in my analysis of those sites. My focus was on deliberate and exceptional deposits including large coins hoards containing more than 15 coins, metal work hoards, large pottery deposits, cemeteries, uncommon objects from each period such as Iron Age currency bars and unusual forms of deposition including artefacts burials in ditches, pits rivers and wells and foundation deposits under buildings.

The artefact categories consisted of bones/remains (animal and human), metalwork and pottery as well as religious artefacts such as altars. Metalwork was the most divisive category as this consisted of coins, bulk items such as Iron Age currency bars, finely decorated artefacts such as pewter plates, bronze or iron tools, large metal constructions such as cauldrons, votives (either statues or replica weapons) and weaponry. These were closely tied to the environments they were recovered from: buildings, burial mounds (barrows), cemeteries and individual graves, ditches, fields, floodplains, industrial buildings (blacksmiths/metalworking facilities and kilns), pits, rivers, watering holes and wells. This allowed a comparison between the use of natural features and human made environments as receptacles for these acts of artefact abandonment. The period categories consisted of Prehistoric (Palaeolithic-Neolithic), Bronze Age and Iron Ages, Roman (1st-4th centuries AD), Anglo-Saxon/Early-Medieval (5th/6th-11th centuries AD) and Post Saxon (Medieval and Post Medieval). I included the data from the Post Saxon period as there were still acts of coin and metalwork hoarding (such as decorated pewter plates) during these periods. Following the analysis of these site's topography and human geography I then broke down the finds per period at each of these locations.

I chose this approach to investigate the consistency of these acts of deposition and the landscape features they centred around as well as the types of landscapes visible through these acts of deposition. In some instances, areas such as North Lincoln showed evidence of being a landscape of continuous movement due to the number of single coins, brooches, clothing implements and seals found in the fields north of Lincoln. In contrast, other sites such as Garton-on-the-Wolds in Yorkshire display more evidence of being a funerary landscape whilst the Walbrook in London showed evidence of being a ritual landscape with certain zones delineated for specific activities (Hingley 2019). I focussed on the use of these areas with specific acts of artefact burial, particularly large-scale metalwork hoarding and depositing. Whilst the Bronze and Iron Ages, Roman and Anglo-Saxon/Early Medieval periods all featured extensive metalwork depositions, the contexts and artefact types used for deposition (either natural or human made) change over different periods. The Bronze and Iron Ages and the Saxon/Early Medieval periods have an intense focus upon tool and weaponry depositions, usually centred around natural features such as rivers (Fontjin 2002, 9, 15; Gerloff 2010, 95; Joy 2011, 216–217; Fontjin 2012, 61; Haselgrove 2015, 29; Bradley 2017, 46, 187–8). The Iron Age and Early Medieval weaponry depositions focussed on rivers and potential crossing points in environments where retrieval would have been difficult (Henig 1984, 17; Millet 1995, 103; Cunliffe 1997, 194; Everson and Stocker 2003, 281; Booth et al. 2007, 217–30; Rylatt and Bevan 2007, 221; Wells 2007, 469, 472; Hunter 2015, 103, 125). There is also a considerable focus on the use of ditches during the Iron Age and Early Saxon periods, routinely linked to movements of people in connection with settlement occupation and security as well as the placing of boundaries (Parker Pearson and Richards 1994: 53; Hingley 2006, 238–239; Hamerow 2007; Garrow 2012, 97; Haynes 2013, 197). Whilst this phenomenon is not as widely visible in the Roman period, evidence for Roman metalwork depositions consists of large coin hoards, accumulations of large metal vessels or finely decorated metalwork in the form of pewter plates or jewellery. An excellent example of this is the Late Roman Hoxne Hoard discovered in Suffolk (Johns and Bland 1993; Plouviez 2010, 10–11). The environments chosen for deposition also have changed over these periods, with certain environments believed to have a greater connection to ‘votive’/‘ritual’ acts than others as seen in the previous chapter. In particular, wells appear to have a far greater focus in the Roman period than in the previous periods. The use of similar type of iron metalwork in well depositions in the Roman period led Hingley to argue that this represented a new type of context for ‘what are effectively old practices’ (2006, 230) The types of metalwork and the environments chosen for these acts of deposition were a key focus in the data alongside the state of these items as well as comparing how different landscape features, either natural or human made, were used as receptacles of artefact abandonment.

When analysing the metalwork depositions at the sites containing the tanks, evidence of deliberate damage was a key factor alongside whether these artefacts were buried intact. The state of not only the tanks but also other artefacts at these sites, whether intact, complete but damaged, or deliberately damaged, was another important factor in the data analysis. Destruction of metalwork before its burial is often treated as a ‘votive’ act due to the belief these acts were symbolically killing the artefacts/removing it from circulation (Fontjin 2002, 18; Wells 2007, 468–78; Gerloff 2010, 94; Heinemann-Kaufmann 2013, 247–48; Painter 2015, 68; Bradley 2017, 133–4; Fern et al. 2019, 44, 330). Evidence for this type of deliberate damage and burying intact was visible with the tanks. It was also evident on metalwork from the surrounding areas. These approaches allowed an investigation into continuing depositional practices across multiple periods at these sites. This enabled analysis of whether there were extreme variations occurring at different periods. I firstly analysed these on an individual site

level before comparing activities between sites. This allowed an investigation into similar patterns of artefact deposition and activity across these sites centred around the use of the same contexts. I also investigated whether there were any substantial variations in the activities at these locations containing the tanks based during certain periods of occupation, such as the use of rivers for metalwork deposits at Caversham, Huntingdon, Oxborough, Pulborough and Rochester. As will be seen later in Chapter Six, there are noticeable differences in the use of these riverine environments for artefact deposition and other activities in their immediate vicinity. I investigated these in contrast with features such as wells and watering holes to see how water was used for acts of deposition during these periods, especially with rivers and wells holding important social value for Roman and Anglo-Saxon/Early-Medieval communities (Hooke 2017, 110-114; Gerrard 2022, 80-81, 88).

2.4.4. Analysis Approach

Of the 584 artefacts and features found within 5km of the lead tank at Ashton the following 15 artefacts were selected for analysis and mapping using ArcGIS and shown in Figure 2.17 below.

	Easting	Northing	Artefact/Site	Description	Period
1	503330	287980	Settlement	A multi period settlement site and possible Bronze Age cremation cemetery. The site of a Neolithic settlement was indicated by finds of pottery, lithic implements, and a possible pit. An Anglo-Saxon settlement may be indicated by a probable Grubenhuis and Anglo-Saxon pottery of 5th century date was uncovered during building work. A possible Bronze Age cremation cemetery is suggested by finds of cinerary urns.	Bronze Age
2	505700	290100	Mounds	Two circular mounds were partially excavated at Tansor Crossroads in 1995 prior to a road improvement scheme. A third mound lay just outside the affected area and was not excavated. The mounds lie at the northern end of a spur of higher ground overlooking the valley of the Nene. They were first identified as cropmark ring ditches in the late 1970s. Mound 1 proved to be of Neolithic origin, though some possibly Mesolithic flints and some charcoal dated to the late 6th millennium BC (calibrated) hint at earlier activity. The initial phase of the monument seems to belong to the late 4th millennium BC and comprise a rectangular enclosure at least 20 metres across defined by ditches and pit complexes, with an east-facing entrance. The interior featured some pits and postholes and finds included sherds of Mortlake Ware.	Neolithic
3	504387	288459	Axes	Three late Bronze Age socketed axes were found before 1948 somewhere near Oundle. They were said to have been discovered 'with about eighty other arrowheads in an earthenware jar' but this seems unlikely. The axes were examined in Birmingham City Museum in 1972. (1-3)	Bronze Age
4	504700	289250	Mixed finds	Mixed finds	Prehistoric and Roman
5	502900	290170	Villa	Roman Settlement (TL 02909017), E. of the village, on Cornbrash at 37m. above OD. A large quantity of Roman pottery, including Nene Valley and samian wares, and several fragments of hypocaust tiles have been found. Worked flints including scrapers have also been noted in the area.	Roman

	Easting	Northing	Artefact/Site	Description	Period
6	503200	291010	Villa	Site of a large Roman villa discovered in 1736 when a mosaic was uncovered by ploughing, another mosaic was uncovered in 1798. The coin evidence suggests a 4th century AD date. Air photographs taken in the drought of 1976 show the greater part of the villa in considerable detail as parch marks. It appears to have been unusually large, over 200m. long and some 60m. wide, and consisted of buildings arranged round two courtyards with other possible buildings to the north. A geophysical survey was carried out in 1992.	Roman
7	506600	289700	Settlement	Cropmarks of an extensive Romano British settlement with a stone scatter, 4th century coins and pottery found in 1961 and 1964. Part of the 'Tansor Grange Complex'.	Roman
8	504800	289000	Cemetery	Peripheral Cemetery of 114 burials	Roman
9	504807	289036	Blacksmith's	Blacksmith's workshop and well	Roman
10	504807	289036	Lead tank	Lead tank	Roman
11	504713	288897	Cemetery	Cemetery with 64 burials	Roman
12	504600	289200	Possible cemetery	Possible cemetery	Roman
13	504600	289200	Possible burials	Possible burials	Roman
14	504600	289200	Coin hoard	Coin hoard	Roman
15	503300	289000	Cemetery	Early Saxon cemetery partially revealed by excavation in 1999. Nine inhumations were found, aligned north-south and east-west, and a range of grave goods was found, including bone combs, glass beads, several iron knives, and a possible amulet which was made of bone. The rest of the cemetery may extend under the houses and gardens of an earlier development.	Anglo-Saxon

(Figure 2.17 A table showing the features to be plotted into ArcGIS from Ashton Northamptonshire, Author's own)

2.4.5. Evidence of Landscapes of Continued Deposition

I originally divided the activities at these locations into three categories concerning their evidence of landscapes of continued deposition: weak, moderate, and strong alongside evidence of deliberate deposition for the lead tanks. This was dependent on the preservation of the material in those regions and the level of accurate details in the reports. An analysis with only three options can suffer from several problems, including: Lack of granularity: it can be challenging to capture the full range of nuance and complexity in the data and can lead to oversimplification and an incomplete understanding. Limited differentiation: It can be difficult to identify meaningful differences between each of the groups and this can limit the insights gained from the analysis. Upon re-examination I expanded the analysis to include very weak and very strong, providing five categories of analysis. very weak evidence shows no evidence of deliberate deposition besides the tank and no evidence of settlement or burial patterns in the area surrounding the tank. Weak evidence consists of minimal evidence of continued artefact deposition practice in these areas through a distinct lack of material or visible patterns to the activities at these sites, with less than three examples of deliberate deposition. Moderate evidence comprises visible patterns of continued artefact burial or cemetery/settlement re-use on a far greater scale than the sites with weak evidence but with evidence of casual loss/surface finds. There are also less than five examples of deliberate deposition at sites classified as moderate. Sites analysed as strong evidence demonstrated overwhelmingly visible evidence for

continued deposition patterns alongside a focus on the re-use of settlements and cemeteries, with more than five examples of deliberate deposition. Finally, very strong evidence will have more than ten examples of deliberate deposition and will also feature evidence of 'shrines' or potentially 'votive'.

As an example, Ashton was considered to provide moderate evidence for being a landscape of continued deposition as it demonstrated evidence for selective deposition including coin hoards and metalwork depositions matching the tanks. However, there were also plenty of artefacts in the area surrounding the lead tank (such as surface pottery scatters and single coin and metalwork finds such as brooches) which showed more evidence of being acts of casual loss rather than deliberate burial. There were also no shrines or locations explicitly visible as areas of deliberate dedications, meaning it met the criteria for moderate evidence. Whilst these definitions could be applied to the sites at the current moment, later evidence could occur in these regions which could cause a re-evaluation of these sites and lead to a change in their classification.

Finally, assigning a value of one for a weak case through to assigning a value of five for a strong case of evidence of being a landscape for continued deposition we can then multiply the number of sites by each assigned value and compute the total value. If we then divide this total value by the number of sites where the lead tanks were found, we can calculate a mean value for evidence of being a landscape for continued deposition for all sites. The closer the mean value to one would show a weaker case for these sites showing evidence of continued deposition

2.5. Analysis of the sites and challenges in presenting the data

The thesis relies heavily on measuring the distance of the findspots of the lead tanks to lead mines, Roman roads, sources of water and settlements. The landscape of continued deposition analyses the number of finds within 5km of the lead tanks and the artefacts, burial grounds, hoards, settlements etc that have been found within 3km of the lead tanks. Unfortunately, critical information for some of the finds that was missing. Some artefacts on the Historic Environments Records database were finds made in the mid to late eighteenth and nineteenth centuries and there is often a lack of accurate information about their findspots. In Felixstowe, information regarding the discovery method for certain artefacts and their locations is missing. In Willingdon in Sussex, where Blair wrote that the lead tank was discovered in 1848 during a railway cutting on the Pevensey Lines (2010, 166). I had to use an Ordnance Survey tool to work out where this feature was located, meaning that its location is an estimate. In other cases, information on the types of finds and their state upon retrieval is distinctly lacking. For areas such as Burwell, certain artefacts have a lack of spatial information including their find locations and the types of contexts associated with their discovery. In Icklingham, the data displays artefacts in a general position that covers a larger area, creating a similar problem to some of the tanks mentioned above. In some cases, as the data is available to limited degrees this makes displaying depositional patterns in these areas challenging.

Other complications included the discussion of the tank's find contexts, since they were discovered in a mixture of both ancient and modern contexts, providing a mixture of primary and secondary contexts. As some of the tanks discovered by metal detectorists were missing specific contexts, they were contextualised as fields as this was the nearest available context provided to them by PAS. This is particularly evident with the newly discovered tank near

Trowbridge in Wiltshire, which was removed without permission by metal detectorists, meaning it is lacking proper contextual information. Some of tanks found by metal detectorists such as the Flawborough, Ludford, Rudston, and Trudoxhill tank have properly recorded contextual information (in this case pits) because of archaeological excavations following their discovery. In contrast, the others simply note that the tanks were discovered in fields with 16 Roman and 11 Anglo-Saxon/Early Medieval tanks recorded in these contexts. Most of these were recovered either by metal detectorists or by accident following ploughing or similar activities. This makes comparing the contexts difficult to a certain extent, as the original context is not recorded, and the modern context was used. This factor is visible with the Roman tank at Caistor which was discovered in a drain running to the west in Caistor Churchyard (Leahy 2007, 117; Lee 2016). Whilst my graphs in this thesis showed the ancient and modern contexts of these artefacts, there is still a danger when comparing the find locations of the tanks. A pit can be in a field, with the pits containing the Flawborough, Ludford and Trudoxhill tanks all found in potentially remote fields (Elliot and Malone 2005; Worrell 2005; Burnett 2018). Likewise, a churchyard could also be in a floodplain and ditches could easily be in a similar environment, making it easy to juxtapose the ancient and modern find contexts if the relevant information is not available.

Further complications are visible with the calculations of the distances of the lead tanks to lead mines, Roman roads, sources of water, settlements and artefacts, since these were calculated using straight line calculations. These calculations are based on the Pythagorean theorem and measure the distance between two points in a two-dimensional space. However, there are several problems with using straight line calculations of distance in certain situations: Straight line calculations of distance do not consider the terrain or obstacles between two points and the straight-line distance between two points may be shorter than the actual distance due to elevation changes and obstacles. Straight line calculations of distance do not account for curvature: The earth is not flat and the distance between two points on the surface of the earth will be underestimated if calculated using straight line calculations. Overall, while straight line calculations of distance can be useful in many situations, they are not always accurate or appropriate for measuring distance in the real world.

When calculating the distance of the lead tanks to the nearest lead mine this distance was calculated to 14 lead mines located in the main lead mining locations in Roman Britain; the Mendips, North and South Wales, Shropshire, Derbyshire and North Yorkshire. The straight-line distance of each lead tank to each of these lead mines was calculated and the location of the nearest lead mine was used in all the calculations. A preferable way to determine the origin of a sample of lead from the lead tank would have been to use lead isotope analysis which compares the isotopic composition of the lead in the sample to the isotopic composition of lead from known sources. Unfortunately, many of the lead tanks have gone missing, are in private collections or museums and we cannot perform this analysis for all lead tanks. In addition, isotopic analysis is relatively expensive with a typical cost of £250 per sample and should this be possible for all the 63 tanks this would cost £15,750.

When calculating the distances of the lead tanks to Roman roads the main reference source and starting point was 'Roman roads in Britain' first published in 1957 by Ivan Margary and last updated in 1973. The Barrington Atlas (Richard J.A. Talbert, 2000) began in 1988 and was published in 2000. The digital version of the Barrington Atlas was loaded into ArcGIS and was used to calculate the distance of a lead mine to a Roman road and the distance of the lead tanks to the nearest Roman road. Since the release of Margary and Barrington the use of LiDAR

(Light Detection and Ranging) has become more available. LiDAR uses laser pulses and can reveal features that may be obscured or difficult to see from the ground. LIDAR maps can be useful for identifying and mapping Roman roads that may be hidden under vegetation, soil, or other natural features. LIDAR maps can provide a high level of detail and accuracy and can help identify subtle features like embankments, cuttings, and other signs of ancient roadways. A better approach would be to augment the existing sources with the LIDAR maps as they become more prevalent.

When analysing the distance of the lead tanks to a water source I used the modern hydrology of the rivers and their tributaries, a factor which could be problematic. This analysis was based on their modern courses and many of these would be completely different to when these tanks were buried. That provided the challenge of how far the rivers used in the Roman and Anglo-Saxon/Early Medieval periods resemble today's rivers. As archaeology and geomorphology studies have demonstrated, local factors had considerable influence on the conditions of specific lengths of rivers, especially through factors such as sedimentation in river valleys (Gardiner 2017, 156-157). This led to the development of single, deeper river channels which would have affected river transport, especially with branched channels on the middle and lower courses of anastomosing rivers (semi-permanent channels separated by flood-plains). This would have caused difficulties to navigation due to dispersed water flow making individual channels shallower and meant that English rivers in the first Millennium AD varied in suitability for navigation (Brown and Kough 1992, 433-45; Lewin 2010, 298-301; Gardiner. 2017, 156). Further complicating factors include human interference in re-shaping water courses and riverine environments, visible in East Anglia and the Cambridgeshire Fens since changing river channels and human interference on certain riverscapes has drastically affected these landscapes. It also means that the tanks could originally have been much closer or further away from these water sources at the time of their burial.

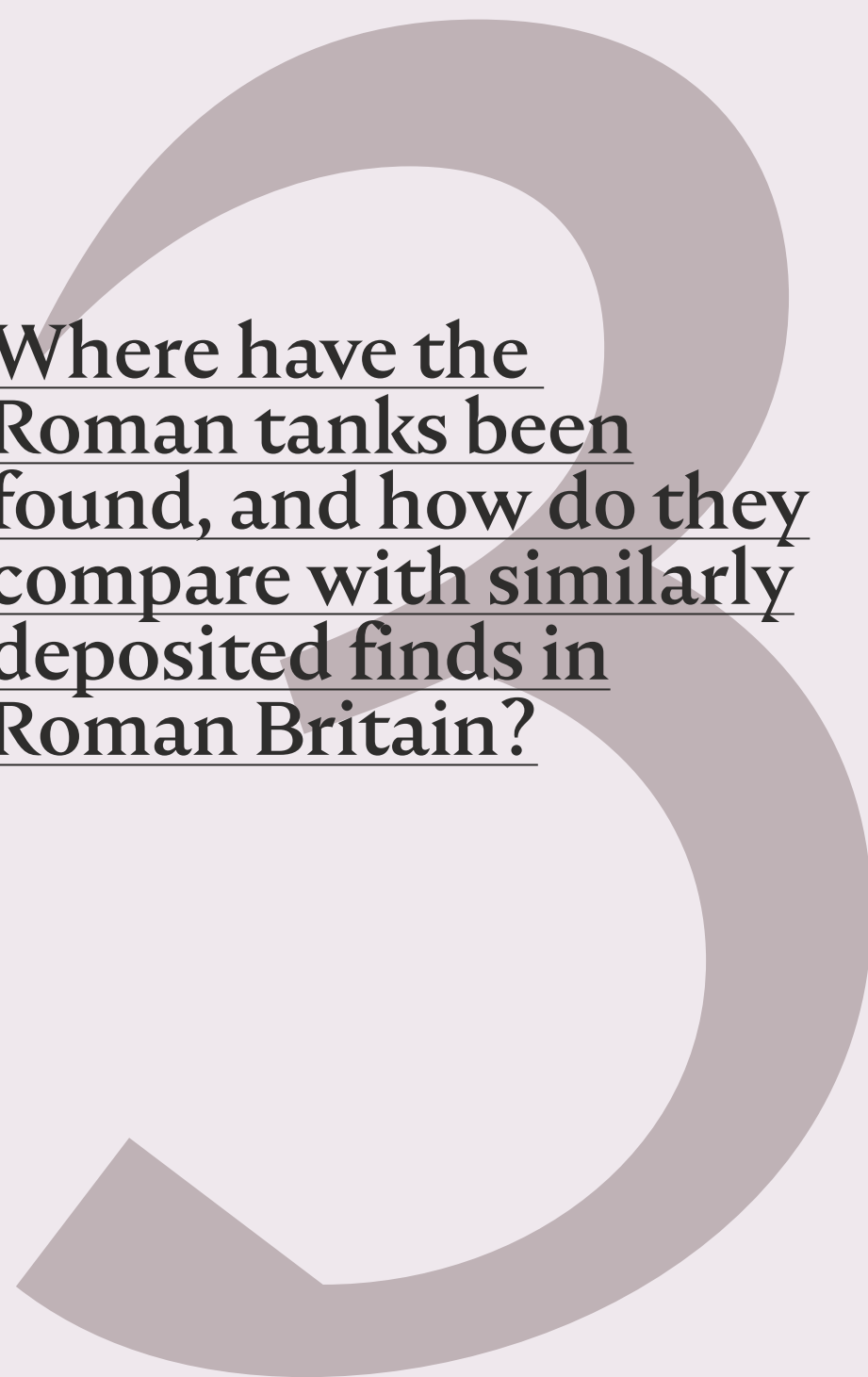
When analysing the distance of a settlement to a Roman road we must recognise that not all Roman and Anglo-Saxon/Early medieval settlements in Britain have been found. Despite extensive archaeological work, much of the country's Roman and Anglo-Saxon/Early medieval archaeology remains unexplored, and many settlements may still be undiscovered. In addition, some settlements were abandoned or destroyed, while others may have been built on top of by later settlements or modern development.

Some of the lead tanks time period, Roman or Anglo-Saxon/Early Medieval, could be incorrect for several reasons. There are several problems that can arise when the finders of an artifact attempt to define the period to which it belongs: The finder of an artifact may not have the necessary knowledge and expertise to accurately date it. Without the proper training and experience, they may misinterpret the artifact and assign it to the wrong time period. To accurately date an artifact, it is important to consider the context in which it was found, including its location, associated materials, and other relevant archaeological evidence. In some instances, the finder of the artifact did not record or preserve this contextual information, making it difficult to accurately date the artifact. The finder of an artifact may have preconceived ideas about the time period in which it was made, based on their own knowledge or beliefs. This can lead to bias and inaccurate dating. An example of the latter is the lead tank that was found at Beverley. The finders assigned the tank a Roman date as no Anglo-Saxon/Early Medieval material had been discovered on the site and they believed it to be Iron Age or Roman instead (Moon per comms).

Finally, when describing each site as being a 'landscape of continued deposition' I initially had three options: strong, moderate, and weak that was suboptimal as discussed above. The addition of the very strong and very weak options was an improvement on the initial work but has similar problems. Overall, an analysis with only five options can be useful in certain contexts, but it should be approached with caution and careful consideration of its limitations.

Summary

Despite the challenges mentioned in this chapter in assembling and presenting the data, enough evidence was collected from the 51 sites containing lead tanks. This allowed a more detailed analysis including regional patterns of possible 'ritual'/votive' deposition at these sites, evidence of structured deposition and changes in activities over multiple periods. The results of this analysis can be seen in the proceeding chapters, with Chapters Three, Four and Five analysing the tanks on an individual and comparative level and take a more in-depth analysis of the types of deposition visible with the tanks. It is also visible in Chapter Six which investigates the activities at these sites in connection with the 'landscapes of continued deposition' concept, demonstrating how the tanks' deposition can be analysed within the broader spectrum of activities occurring on a site level and beyond.



Where have the
Roman tanks been
found, and how do they
compare with similarly
deposited finds in
Roman Britain?

Chapter Three: Where have the Roman tanks been found, and how do they compare with similarly deposited finds in Roman Britain?

The analysis will focus on where the Roman lead tanks were found across Britain and where there are gaps in the distribution of the lead tanks. This will involve regional analysis of the most common findspots, and whether their findspots coincide with access to lead resources and areas of lead mining in Roman Britain. This will be analysed alongside the proximity to a Roman road, accessibility to the nearest source of water, and proximity to the nearest settlement and whether these might relate to the tanks' findspots.

The analysis will then discuss how the lead tanks were found, the find contexts and environments that the lead tanks were found in and their state upon retrieval, including any details of deliberate damage. The dimensions and decorations of the tanks, any evidence of Chi-Rho decorations and any associated finds with the lead tanks will be analysed. The analysis will conclude with details of when the lead tanks were found.

3.1. Where have the tanks been located and what patterns are visible?

38 Roman lead tanks were found in 34 locations as illustrated in Figure 3.1 below. Three lead tanks were found at Icklingham, two lead tanks were found at both Ashton and Bourton-on-the-water, whilst all the other sites had a single lead tank. Willingham was unique in that both a Roman and two Anglo-Saxon/Early Medieval tanks were found at this site, the only site where this occurred.



(Figure 3.1 Map showing the locations of the findspots of the Roman lead tanks, Authors own)

	Location	County	Region	How was the tank discovered?
1,2	Ashton	Northamptonshire	East Midlands	In a well.
3	Beverley	Yorkshire	Yorkshire & The Humber	Recovered from a watering hole.
4	Bishop Norton	Lincolnshire	East Midlands	Found in a field east of Bishop Norton through ploughing.
5,6	Bourton-on-the-Water	Gloucestershire	South West	In a courtyard, associated with a well.
7	Brough	Nottinghamshire	East Midlands	Found in a field near the Roman town of Crococalana.
8	Burwell	Cambridgeshire	East of England	Discovered by metal detector in a field.
9	Caistor	Lincolnshire	East Midlands	Discovered at Caistor Churchyard 'in a drain beneath the road running on the western side of the churchyard.'
10	Caversham	Berkshire	South East	In a well.
11	East Stoke	Nottinghamshire	East Midlands	Found through ploughing.
12	Enford	Wiltshire	South West	Found by mechanical digger in a field 0.46 m below modern ground level.
13	Flawborough	Nottinghamshire	East Midlands	In a pit at the intersection of ditches.
14	Huntingdon	Cambridgeshire	East of England	In the River Ouse.
15, 16, 17	Icklingham	Suffolk	East of England	15 - Found whilst ploughing in a field, 16 - Found in the Northeast side Horselands Field 150 yards from a Roman villa and 17 - Found in Horselands Field close to the site of the apsidal building ('church') and the inhumation cemetery.
18	Ireby	Cumbria	North West	Found in a field 350 metres west of Ireby village through ploughing.
19	Kenilworth	Warwickshire	West Midlands	Unknown.
20	Ludford	Lincolnshire	East Midlands	Buried in an oval pit only just big enough to hold the fragments, found through metal detecting.
21	North Lincoln	Lincolnshire	East Midlands	Found whilst dog walking by the finder on grass north of the Ermine Estate.
22	Oxborough	Norfolk	East of England	Adjacent to the river Wissey (mechanical digger).
23	Parwich	Derbyshire	East Midlands	In a field.
24	Perry Oaks	Middlesex	South East	In a large pit/ waterhole.
25	Pineham	Northamptonshire	East Midlands	Excavated in a a short section of a ditch forming the southern boundary of the enclosure.
26	Preshute	Wiltshire	South West	Discovered in a field by metal detector.
27	Pulborough	West Sussex	South East	In the flood plains of the river Arun by mechanical digger.
28	Rochester	Kent	South East	In the River Medway.
29	Rudston	Yorkshire	Yorkshire & The Humber	The object occupied the base of a circular pit of 750mm diameter cut 400mm into chalk subsoil.
30	Rushton	Northamptonshire	East Midlands	In a ditch near a bath house.
31	Thompson	Norfolk	East of England	Found by metal detector near woods.
32	Trowbridge	Wiltshire	South West	Found by metal detector on farmer's field.
33	Trudoxhill	Somerset	South West	Clay pit on grassland near a small stream on raised a high raised bank and not physically within the water.
34	Walbrook	London	London	Well associated with Walbrook Mithraeum.
35	Walesby	Lincolnshire	East Midlands	Discovered in a field through ploughing.
36	Wigginton	Oxfordshire	South East	In a pit, 0.33 m below modern ground level (metal detector followed by a limited excavation).

	Location	County	Region	How was the tank discovered?
37	Wilbraham	Cambridgeshire	East of England	Located by metal detector and excavated 10cm above a cobbled surface.
38	Willingham	Cambridgeshire	East of England	In a field known as the Stacks.

(Figure 3.2 Table showing the locations of the Roman lead tanks, Authors own)

The Roman lead tanks were scattered around the country from Ireby (Cumbria) in the North West to Pulborough (Sussex) in the South East. The greatest clusters of the Roman period lead tanks were in the East of the country, with the largest number of tanks consisting of five tanks found across Lincolnshire. Recent finds at North Lincoln, Parwich, Pineham, and Thompson have expanded the numbers in this area, adding to patterns discussed by previous authors that most of the tanks were clustered in the apparently 'Romanised' southern lowlands (Thomas 1981, 265; Watts, 1991, 167-8; Petts 2003, 110; Elliot and Malone 2005, 33). This could represent access to lead mined in Derbyshire especially as many of these sites are east of the Peak District. There is an almost continuous distribution of the tanks from the South West up to the Yorkshire and Humber areas of the country, with outliers visible at Cumbria, London/Middlesex and Warwickshire. The tanks at Ireby in Cumbria and Kenilworth in Warwickshire are at a much further distance from the other tanks, representing significant outliers in the clustering of these artefacts.

The tanks discovered at the Walbrook Mithraeum in London, Beverley and Rudston in the Yorkshire and Humber regions also provide important outliers. The tank at the Walbrook Mithraeum, discovered during MOLA's excavations at Bloomberg from 2010-2014 (Mola 2017, 109), is the first example discovered in connection with a Mithraeum. No lead tanks have been discovered in the other Mithraea across Britain at Caernarfon, Carrawburgh and Rudchester or a newly discovered Mithraeum at Inveresk in East Lothian (Webster 1997, 136; Allason-Jones 2004, 1983-4; Hunter et al. 2016, 126). This is an important feature, especially as these artefacts are frequently connected with Christianity and aspects of Christian worship. However, as Clauss has argued Christianity and Mithraism have often been linked together through aspects such as the cult feast and the theme of water miracles. These often include the creation of water, as illustrated with the water myth of St Alban and the depiction of Mithras creating water from a rock face seen on depictions in the Rhine-Danube area (Clauss 2000, 72-73). Furthermore, Clauss discussed the use of water in Mithraic rituals through the Mithraea's locations near water sources and the use of basins/cisterns found at Koneigshoffen/Strasbourg and Carnutum in Pannonia Superior (2000, 72-3). It is possible that the tank at the Walbrook Mithraeum could be one of these cisterns connected to worship of Mithras, potentially representing the first of these artefacts found in Britain. Likewise, the Beverley and Rudston tanks are the first dated to the Roman period from Yorkshire, an area with a noticeable absence of Roman lead tanks until West Yorkshire Archaeology Services uncovered the Beverley tank in 2019 (Moon per comms) and the Rudston tank was uncovered by metal detectorists in 2021.

A pattern also emerges in the South East and South West of Britain with these areas containing a total of 11 tanks between them. The South West was originally an area with fewer tanks than other regions, since at the time of Crerar's article in 2012 there were only three tanks from this region. These were the two tanks at Bourton-on-the-Water in Gloucestershire and a single tank at Enford in Wiltshire. However, recent metal detecting finds at Preshute and Trowbridge in Wiltshire and Trudoxhill in Somerset have expanded this region's numbers. As Figure 3.1 demonstrated, many of the lead tanks findspots are near each other. Only the Pulborough tank is at a significant distance from the others since it is the southernmost Roman lead tank, located

near the coast in West Sussex. Except for the tanks found in North Lincoln and at the Walbrook Mithraeum, (both major Roman settlements) and Caistor which served as a provincial capital, many of these tanks are in small towns or in areas which appear rural by modern standards.

3.2. Where are there gaps in the distributions of the tanks

With the newly discovered examples added to the data, there are regions where to date no lead tanks have been discovered. The North East, Wales, and Scotland are all missing lead tanks. The North East and Wales are both areas with access to lead resources at Wharfedale in Yorkshire, Monmouthshire and Flintshire in Wales and were heavily occupied by the military during the Roman period. In addition, no lead tanks from the Roman period were found near the coasts of Britain.

Only the tank found at the Walbrook Mithraeum site is from a large urban centre: London. The tank discovered at North Lincoln was found on the edge of the modern city, north of the Roman occupation in this area, making it difficult to determine how connected it was with Roman activity at that city. Major urban centres like Bath, Canterbury, Carlisle, Chester, Chichester, Cirencester, Colchester, Exeter, Hereford, Lichfield, Gloucester, Leicester, Manchester, Portsmouth, Salisbury, St Albans, Winchester, Worcester, and York all lack finds of the lead tanks.

Cirencester in Gloucestershire was one of Roman Britain's largest town, serving as an industrial centre and was reportedly the capital of Britannia Prima (Wacher 1995, 87). Several authors have argued that Cirencester could have been a fourth town that sent a bishop to the Council of Arles in AD 314 (Thomas 1981; Jones and Mattingly 1991, 295; Watts 1991, 170; Jones 2002, 119; Elliot and Malone 2005, 35-6; Mattingly 2006). Cirencester's position would have provided access to both the necessary lead resources in the Mendips and Wales.

No lead tanks were found near to the three permanent legionary bases in Roman Britain: Caerleon (Isca Silurium), Chester (Deva), York (Eboracum) and at the most northerly legionary fortress known in the Roman Empire west of Dundee (Inchtuthill). Chester and Manchester were both near the Welsh border, with possible access to the lead industry in this area. Lead ingots, dated to AD 79 and the town's initial founding by Agricola, have been discovered at Chester, suggesting that it was connected to lead mining or production in the area (Mason 2002, 74). Evidence of industrial activity is visible in the vicus area at Manchester, with a concentration of furnaces identified as an 'industrial estate' (Shotter 2004, 117). Cirencester, Chester, and Manchester were all strategic sites based around control of either major rivers such as the Dee and the Mersey or control of the Welsh border. This makes it surprising that no tanks have been discovered in these areas, especially given their access to lead resources. Likewise, Wales is noticeably missing lead tanks. This part of the province was divided between a civitas in the south and noticeable military occupation in the north of the country (Jones 1990, 156; Mattingly 2006). Anything resembling what might be identified as a 'town' or more urbanised areas in Wales is clustered in the South East of the country at Caerwent and Monmouth on the Rive Monnow and Carmarthen on the River Tywi in the south-west of the country (Jones 1990, 154; Wlatters 1992, 78-79). Whilst there was evidence of industrial activity in these areas, particularly at Monmouth with hearths and iron smelting refuse (Marvell 2001), there is considerable variation in the evidence for Roman occupation in this region. Whilst the North and West of Wales was an area originally believed to contain no evidence of villas,

excavations in 2010 uncovered a late fourth-century villa near Absterwyth at Abermagwr a kilometre and a half north of Trowscoed Roman fort. This villa was identified in 2006 through cropmarks on aerial photography, with a series of excavations from 2010 to 2015 discovering a stone-based building comprised of three main rooms, a veranda and two adjoining wings (Davies and Driver 2011, 320-1; Davies and Driver 2018, 153-4). Evidence including a slate roof from locally imported stones, like roofs on the villas at Carmarthen, and Cymbran glazed windows along with third to mid-fourth century pottery and early third and mid fourth century coins (Gwyn 2015, 30-35, Davies and Drives 2018, 172, 179-180, 192). Similarly, a villa has been recently discovered in North-East Wales near Wrexham at Rosset, with a magnetometry survey and excavations revealing a large building resembling a winged corridor-type villa artefacts indicating occupation from the first to fourth-centuries AD (<https://archaeology.co.uk/articles/news/roman-villa-revealed-near-wrexham.htm>). Whilst these examples were a long way from the previously recorded villas in the South and East of Wales, typically known as the 'villa belt' (Davies and Driver 2018, 200), it changed the evaluation of Roman occupation in Wales. Wales, like the North East, was an area heavily mined for its large lead and silver contents, with the villa at Abermagwr and the nearby Trowscoed containing a series of lead artefacts (Davies and Drives 2018, 199-200). However, despite this evidence of long-term occupation and lead mining no lead tanks have been discovered in this region, much like the North East.

Sites on the Dere Street and Stanegate roads as well as the Hadrian's Wall area, with notable examples being Binchester, Carlisle, Corbridge, Newcastle, York and Vindolanda, are missing any lead tanks. Many of these areas originated as forts before developing into towns or had vici (civilian settlements) in proximity, creating areas with the necessary resources and populations who could have afforded them. This appears to reflect Richmond's arguments that so far, no lead tanks have been found in connection with 'military' sites and could be indicative of the purchasing power of the civilian provinces in the south, as argued by both Mattingly and Richmond (1945, 169; 2006). However, some major cities in the south are also missing lead tanks and Colchester and St Albans are good examples. Colchester was a well-connected industrial centre, producing pottery, oil lamps and figurines besides glass, worked bone, jewellery, and mixed metalwork into the late fourth century (Crummy 1997, 15). Excavators discovered evidence of highly developed industrial and commercial zones at Colchester's Sheepen site, containing workshops alongside ovens and hearths, brass and bronze ingots, crucibles, and associated specialist tools for iron-working such as tongs (Crummy 1997, 15-16). Lead sheets were discovered at Colchester in a pit near a church at Butt Road, with Crummy interpreting these as part of the church's roof. The deliberate fragmentation of the sheets led to Crummy analysing their burial as "The last recorded act by an inhabitant of the City of Victory" alongside photos of the sheets deposited in-situ (1997, 131). Crummy had questioned if it was a fragment of lead tank, comparing it to the decorated Roman examples such as the fragment from Brough in Nottinghamshire and the undecorated Anglo-Saxon/Early Medieval example found at Riby Cross Roads (1993, 178). He linked its burial with the eventual dis-use of a church through lead missing from its roof and the removal of posts. Using a series of coins dating from AD 320-340 as the date for its construction and arguing that it was used until the end of the fourth century (Crummy 1993, 178). This removal provided the space for the pit containing the lead sheet and associated utensils. Millet would challenge the interpretation of the building as a church and Crummy's identification of the building and its associated cemetery as Christian (1995, 451-4). He argued that a pagan context was more likely and believed that the building served as a funerary banqueting hall in use after AD 294 and without any Christian

associations (1995, 453). The sheets' size and deliberate fragmentation parallel the tank at Perry Oaks, visible in Figures 3.3 and 3.4 below, showing that the communities at these sites dedicated extensive effort to disposing of these artefacts.



(Figure 3.3 The Fragments of lead discovered at Butt Road in Colchester, Crummy 1997 pg.131)



(Figure 3.4 A fragment of lead tank discovered at Perry Oaks, Crease 2015)

Most of the lead tanks were found in rural areas (by modern standards), possibly indicating that they were connected to rural Christian communities. Previous works investigating evidence for Christianity in the Roman Empire routinely focussed on major cities and urban environments rather than rural areas. This was to create a chronological understanding of the importance of the church and bishops in the West from the time of the Roman Empire (Cleary 2013, 181). In contrast to the wider Empire, there is far more potential evidence for rural Christian practices from Roman Britain (Watts 1995, 322; Dark 2000, 106–111; Petts 2003, Jarett 2010, 284, 320). However, when analysing the locations of the Roman lead tanks many were discovered less than one kilometre from a nearby Roman settlement, as will be seen in Section 3.4, suggesting these artefacts were not as remote as originally believed. Where the tanks have and have not been discovered in Roman Britain is important when considering this aspect of whether they show evidence for possible ‘Christian’ communities in these locations.

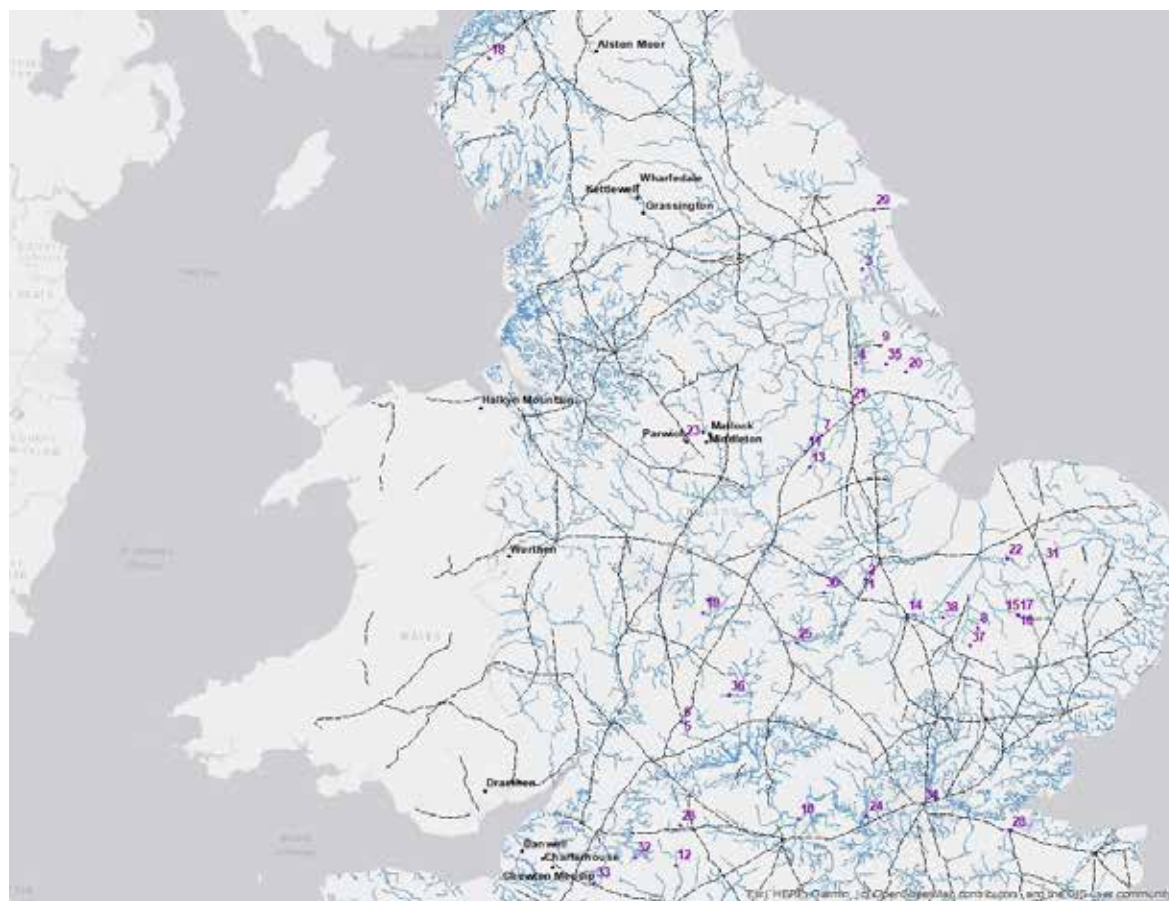
There are also large regions in Britain where only single examples were found. The North West, West Midlands and Yorkshire and Humber areas only had a single example each. Despite access to lead resources, both the North West and North East are noticeably missing examples, with only one example found in the North West at Ireby. This makes it surprising that more tanks have not been recovered from these regions and that more have been found in the East Midlands and East of England, areas without direct access to lead resources as will be seen in Section 3.3.

3.3. How do the locations reflect access to lead resources?

The lead tanks are large artefacts, requiring a lot of lead to create them, with authors agreeing that some lead tanks require as much as two sheets for the sides and a further sheet for the base and complete examples have been found weighing as much as 140 kilograms (Herdman 1933, 377–8; Guy 1981; Elliot and Malone 2005; Petts 2006, 227; Booth et al 2011., 267–8; Crerar 2012; Burnett 2018, 174–5; Worell 2018, 423–4). Following the conquest and expansion into Britain following AD 43, ore fields at Flintshire (North Wales), Shropshire and Derbyshire and Yorkshire began to be exploited, with the earliest of the Yorkshire lead pigs dated to AD 81 (Dearne 1990, 363–4; Hirt 2010; Clarke 2017, 28). The inscriptions on these ores have indicated four phases of activity for Romano-British lead mines, with the military and economic climates of the time causing control of these mines to shift. Evidence for the first phase of control, the Military phase, is visible through lead pigs inscribed with the names of British legions (Elkington 1976) and forts contemporary with the mine workings at least several mining sites including Prestatyn in Flintshire (Cleere 1981, 40–41, Fry 1984; Gardiner 2001, 11). Following the Military phase, the Early Commercial phase during the later first and early second century AD saw the use private companies (societates) and individuals (conductares) being granted rights for mining. Lead pigs inscribed with the names of conductors such as G NIP[IVS] ASCAN[IVS] have been uncovered in areas previously controlled by the military, showing this privatization of resources. This was quickly followed by a period of intense construction known as the Hadrianic Construction, where the names of societates and conductares are conspicuously absent from lead pigs which instead bear Imperial markings.

Later examples contain few inscriptions or markings but still demonstrate continued exploitation and mining of these resources (Gardner 2001,11). The methods of production are not entirely understood, especially as there is limited knowledge for how and where lead pigs were being smelted during the Roman period. Lead smelting and production between 600 BC and AD 300 caused extensive environmental pollution due to the large quantities of lead

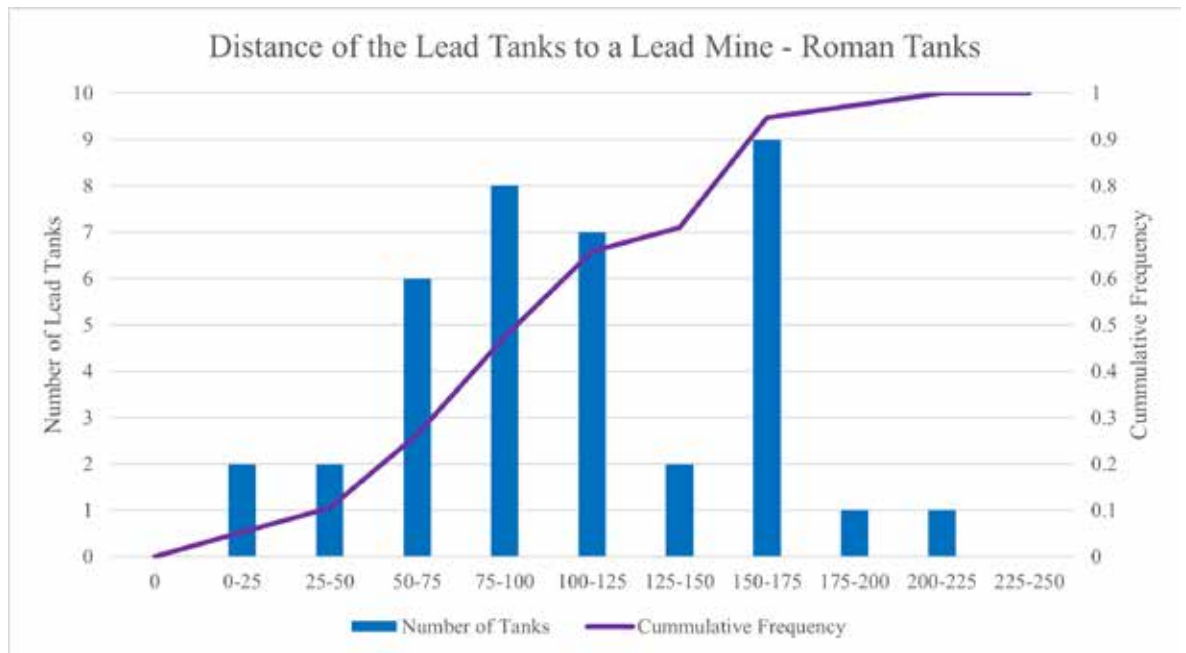
production during this period, leaving a record in the Greenland ice caps as well as in bog cores from Borth Bog and Llancynfelin in Central Wales, Lindow peat bog near Manchester and Tor Royal in Dartmouth (Foster et al. 1997; Roseman et al 1997, 3413; Le Roux et al. 2004, 502; Mighall et al. 2009, 1505; Merhag et al 2012, 722–723, 725; Fleming 2021, 120). The bog cores indicate that the highest period of lead production occurred during the Roman occupation from AD 133–341 (Le Roux et al Mighall et al 2009, 1513), a factor replicated by a speleothem record from a cave at Charterhouse-on-Mendip. The cave sample revealed the first peak of production occurred during AD 50–150, the period of activity to which the ingots are commonly dated (Tylectote 1986, 61; Todd 1996; McFarlane et al. 2014, 438). The production then declines during the late second century AD, a period which saw the Antonine Plague, a factor believed to have caused dips in lead pollution in ice cores recovered from Greenland (Loveluck 2018). This was closely followed by a period of instability following the death of the Emperor Commodus and a civil war for control of the Empire. Following that, a steady increase in production was visible, with a peak at AD 400. This coincides with a decline in the metal economy of Roman Britain in the middle of the fourth century AD, the period normally associated with the Roman lead tanks,



(Figure 3.5 A map showing the locations of the Roman tanks in relation to lead mines, rivers and Roman roads, author's own)

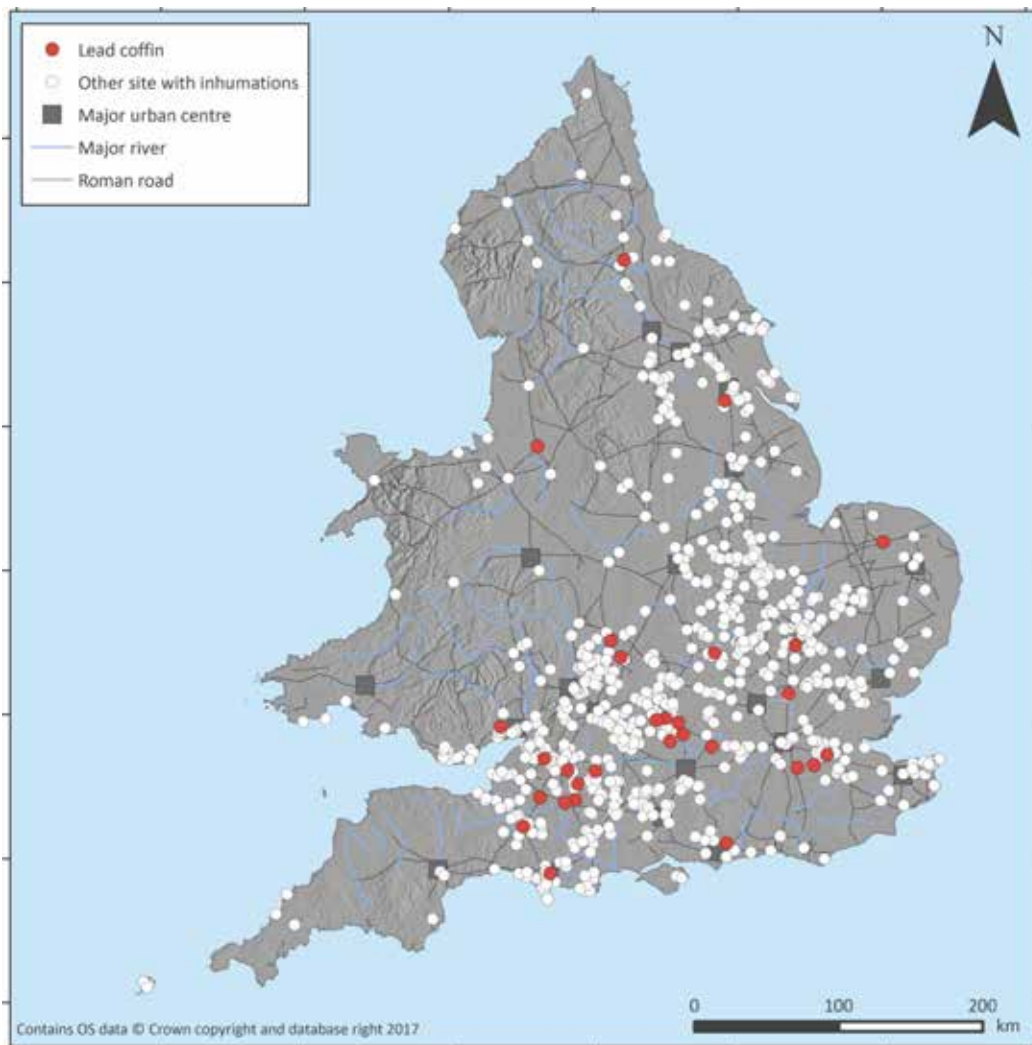
When compared to the available evidence for the lead mining industry, most of the Roman tanks were discovered in areas without direct access to the lead required to produce these artefacts as seen in Figure 3.5 above. Given the large size and heaviness of the lead tanks, there are two possibilities for how they ended up in these areas. Either they were found near lead mining and production areas, or the finished products or necessary resources were delivered to these sites.

This seems more logical, especially as the majority of the Roman lead tanks were discovered between 50 and 125 kilometres from the nearest lead mine whilst the largest group was 150–175 kilometres, as the graph (Figure 3.6) below demonstrates.



(Figure 3.6 A graph showing the distance of the Roman tanks from the nearest lead mine, author's own)

The median distance of the Roman lead tanks from a lead mine was 100.92km, the mean distance was 107.36km, the minimum distance was 1.43km at Parwich in Derbyshire, and the maximum distance was 220.56km at Rochester in Kent. In contrast, many of the lead mines in this thesis were less than 5km from major rivers or their tributaries which could have aided in transportation via river. This indicates that direct access to lead was not an important factor when analysing the Roman lead tanks' locations, especially as many of the sites were in parts of the country without direct access to these resources (mainly the East Midlands and East of England).



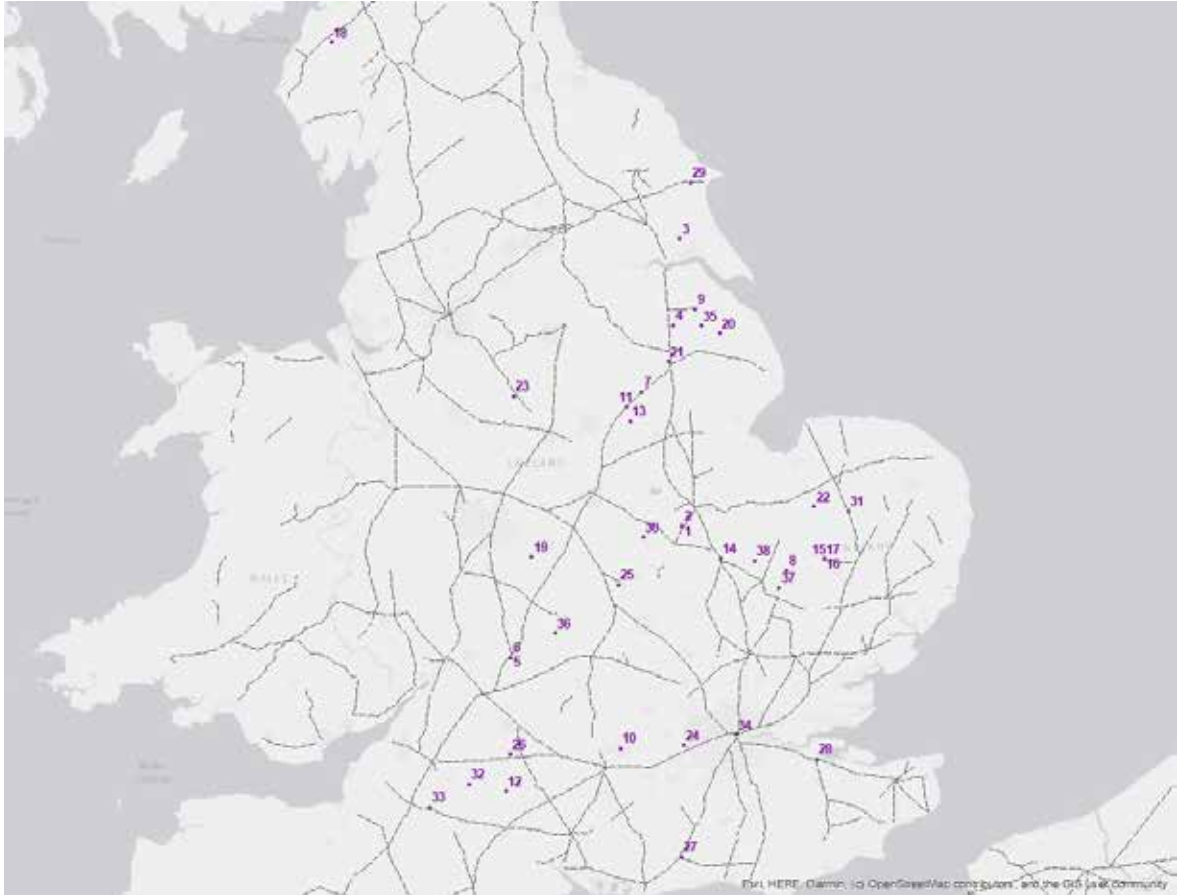
(Figure 3.7 A map showing the distribution of coffins in Roman Britain, Russell 2009, 6)

This is in contrast with the distribution of lead coffins in Roman Britain which have much wider distribution patterns than the tanks as seen in Figure 3.7 above with the larger the red circle equates to the number of lead coffins (0-5, 5-10, 10-20, >20) with more details of the locations in Appendix 3. As demonstrated, the distribution of lead coffins is much wider than those of the lead tanks and of stone coffins, seen in the map above. There is a notable concentration in the Oxfordshire Upper Thames Valley near Dorchester-on-Thames and Abingdon as well as near the Mendips in Somerset (Smith et al 2017, 256-257). Furthermore, many lead coffins have been found in areas such as Bath, Cambridge, Cirencester, Newcastle, York, and Wales, many of which were missing lead tanks. However, many of the lead tanks were found in regions near major rivers or their tributaries, meaning it is possible that the use of rivers or over land transportation was a more important feature. As only the tank at Parwich was found at a site related to lead production, this suggests the lead tanks were originally produced in these areas with access to lead and then shipped out to the sites in question.

3.4. Proximity to a Roman Road, Water, and a Settlement

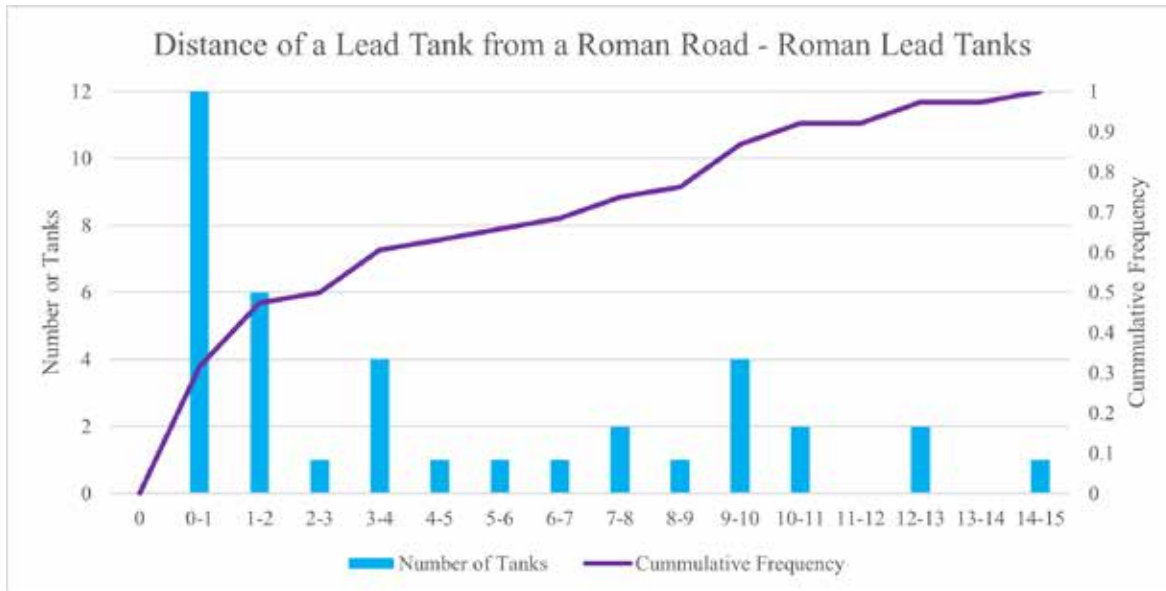
This section will analyse the locations of the lead tanks and their proximity to a Roman road, source of water or a settlement.

3.4.1. Proximity to a Roman Road



(Figure 3.8 A map showing the Roman lead tanks and their proximity to Roman Roads in Britain, Author's Own)

Figure 3.8 illustrates the proximity of the lead tanks to the known Roman road network in England. Using straight line calculations of the distance of each lead tank to the nearest Roman road shown in Figure 3.1, 32% (12) of the Roman tanks were discovered less than 1km from a Roman road whilst 16% (6) were found 1-2km from a Roman road. The remaining groups were much smaller, with many of the tanks found less than 10km from a nearby Roman road. The median distance was 3.23km, the mean distance was 4.49km, the minimum distance was 0.10km at Rochester in Kent and the maximum distance of a lead tank from a Roman road was 14.6km at Enford in Wilshire.



(Figure 3.9 A graph showing the Roman lead tanks and their proximity to Roman Roads in Britain, Author's Own)

At first glance the median distance of 3.23km to the nearest Roman road appears to agree with Briggs findings ‘half of all points in England are within 3.5km of a Roman road, and so being 3.5km or less from a Roman road should not be considered unusual’ (Briggs, 2009). However, the results of an analysis of the distance of the lead tanks from a Roman road and a set of random data points and their distance to a Roman road is illustrated in Figure 3.10 below.

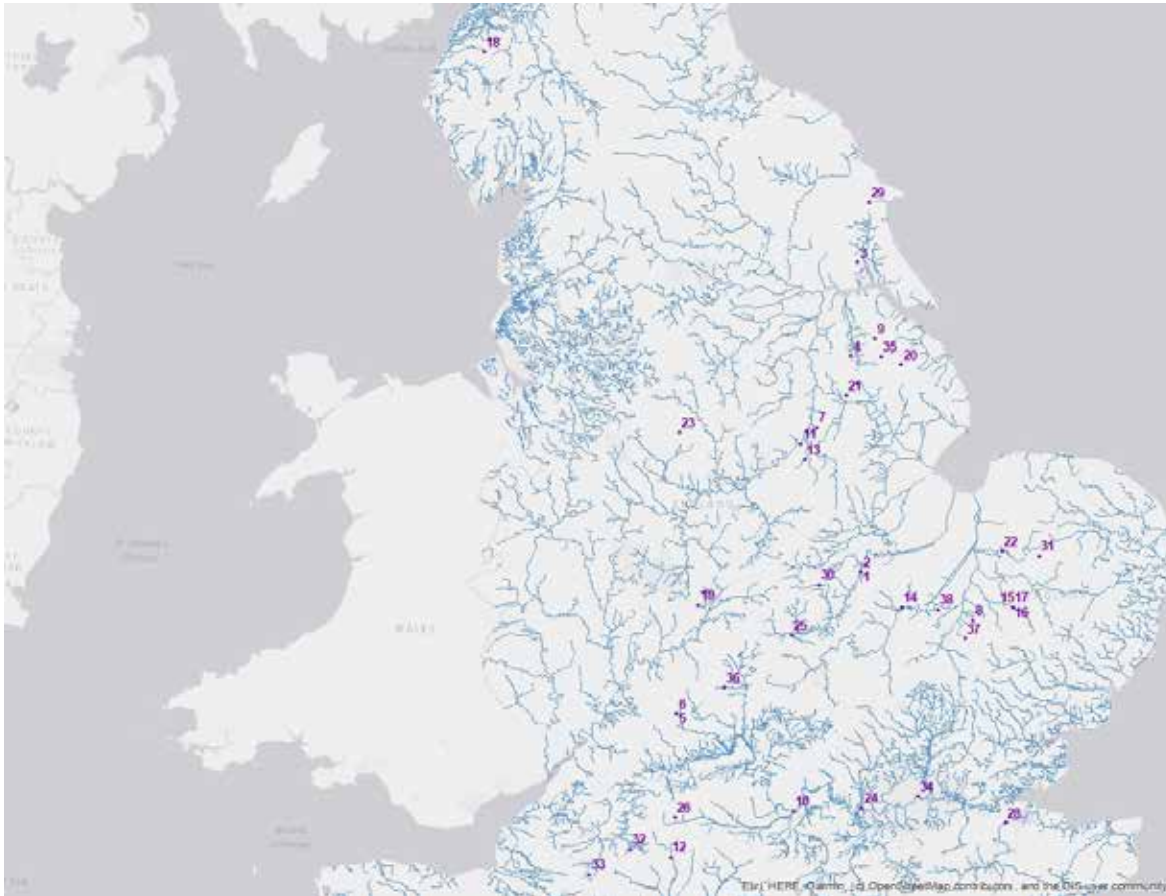
The p value, or probability value, at 0.05 that tells us how likely it is that the data could have occurred under the null hypothesis and in this case was 0.23. The maximum difference of the two distributions from each other was 0.38. the p-value of 0.23 indicates that there is not enough evidence to reject the null hypothesis that the sample comes from the specified distribution at a significance level of 0.05. In other words, the observed differences between the empirical distribution and the theoretical distribution could be due to chance.

The maximum difference of 0.38 indicates the largest discrepancy between the empirical distribution and the theoretical distribution. This value is useful for understanding the magnitude of the differences between the two distributions, but it is not used to determine the statistical significance of the test.



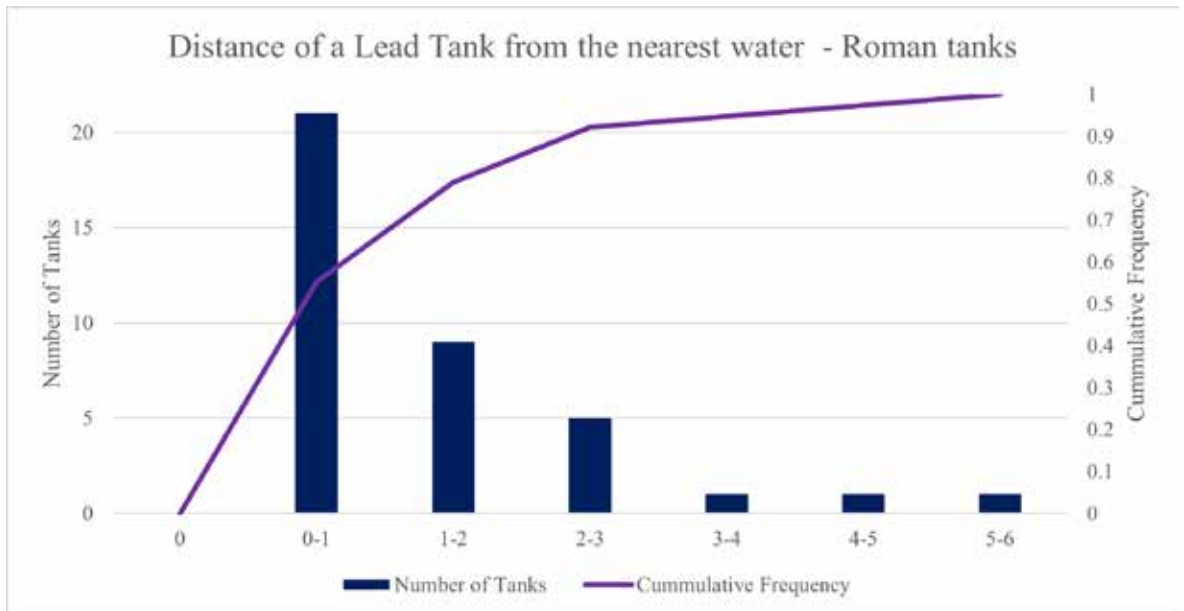
(Figure 3.10 A graph showing a comparison of the Roman lead tanks and random data points and their proximity to Roman Roads in Britain, Author's Own)

3.4.2. Proximity to a Source of Water



(Figure 3.11 A map showing the Roman lead tanks and their proximity to a source of water in Britain, Author's Own)

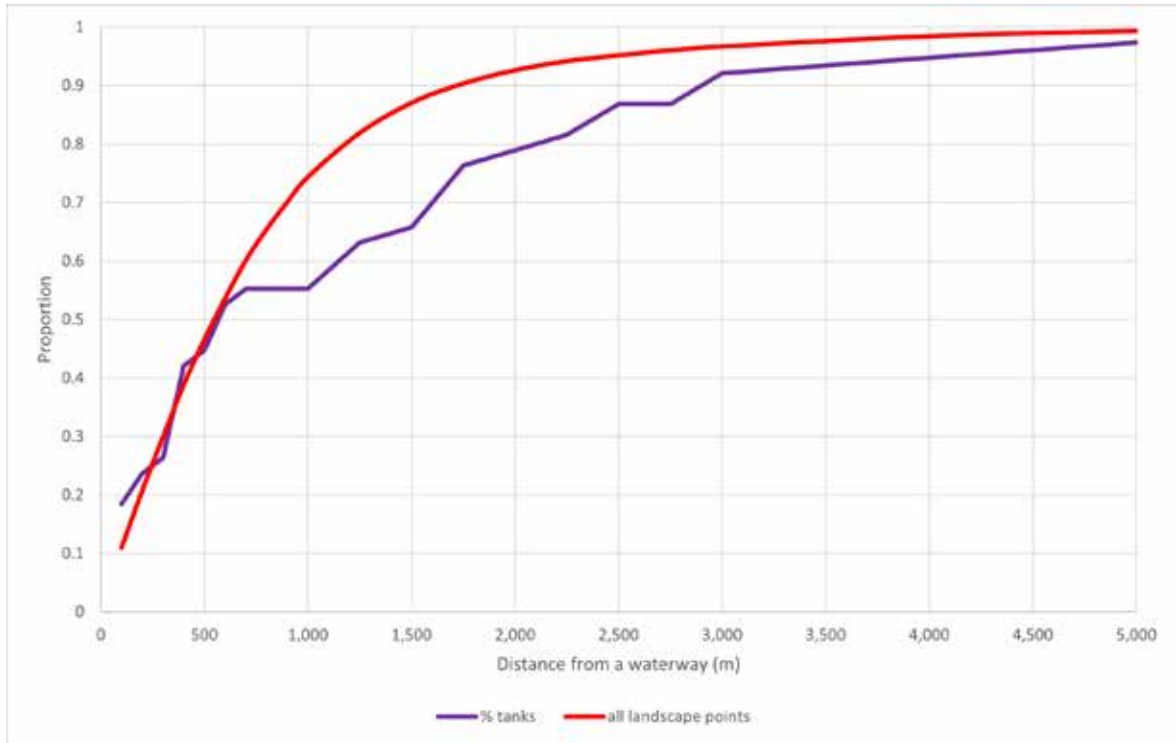
Figure 3.11 illustrates the proximity of the lead tanks to a source of water (either a river, tributary or the coast) in Britain. Using straight line calculations of the distance of each lead tank to the nearest source of water shown in Figure 3.12 below illustrates that 55% (21) of the Roman lead tanks were found within one kilometre of the nearest water source. A further 24% (9) were discovered between one-two kilometres from a water source, whilst 13% (5) were within three-four kilometres from the nearest water source. The median distance was 0.54km, the mean distance was 1.13km, the lead tank in Huntingdon was found in the Great River Ouse and the lead tank at Rochester was found in the River Medway. Furthermore, Ashton, Bourton-on-the-Water, Caversham, East Stoke, Huntingdon, Pulborough and Walbrook are all located on crossings of major rivers or their tributaries. The maximum distance of a lead tank from a source of water was 5.1km at Caistor in Lincolnshire.



(Figure 3.12 A graph showing the Roman lead tanks and their proximity to a Source of Water in Britain, Author's Own)

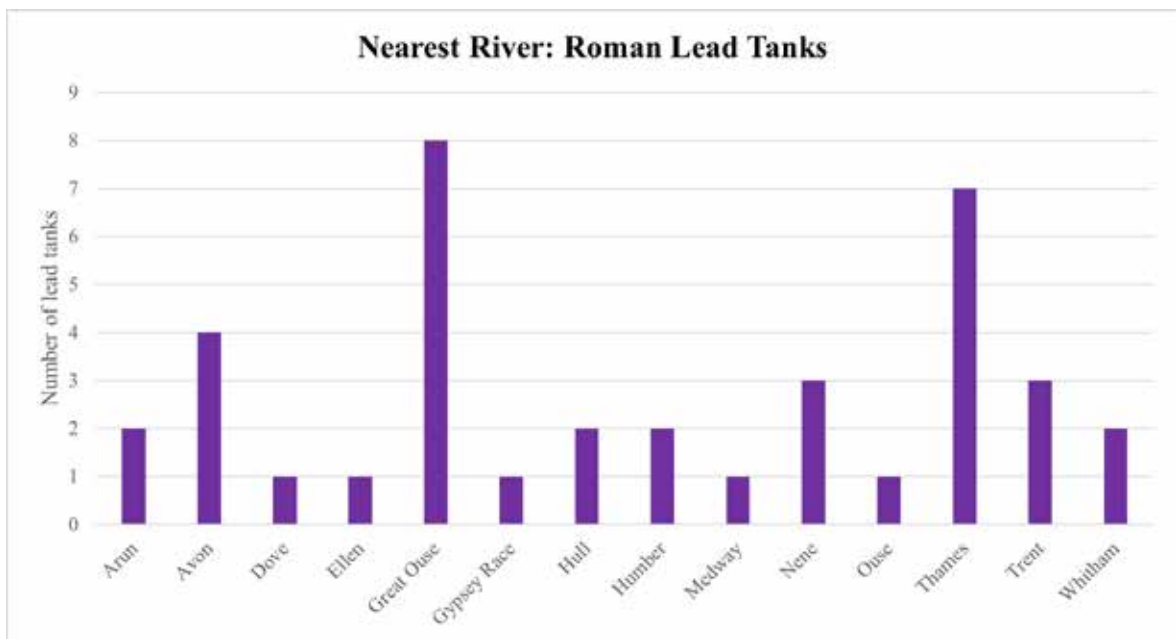
The results of an analysis of the distance of the lead tanks from a source of water and a set of random data points and their distance to a Roman road is illustrated in Figure 3.13 below. The *p value*, or probability value, at 0.05 that tells us how likely it is that the data could have occurred under the null hypothesis and in this case was 0.23. The maximum difference of the two distributions from each other was 0.21. A p-value of 0.23 indicates that there is no strong evidence to reject the null hypothesis, i.e., there is no significant difference between the two samples at the 0.05 level of significance. This means that the two samples are likely to come from the same distribution.

The maximum difference of 0.21 indicates the largest vertical distance between the CDFs of the two samples. This value is used to calculate the test statistic in the KS test. The smaller the maximum difference, the more likely the two samples come from the same distribution. In this case, the maximum difference is relatively small, which supports the conclusion that the two samples are likely to come from the same distribution.



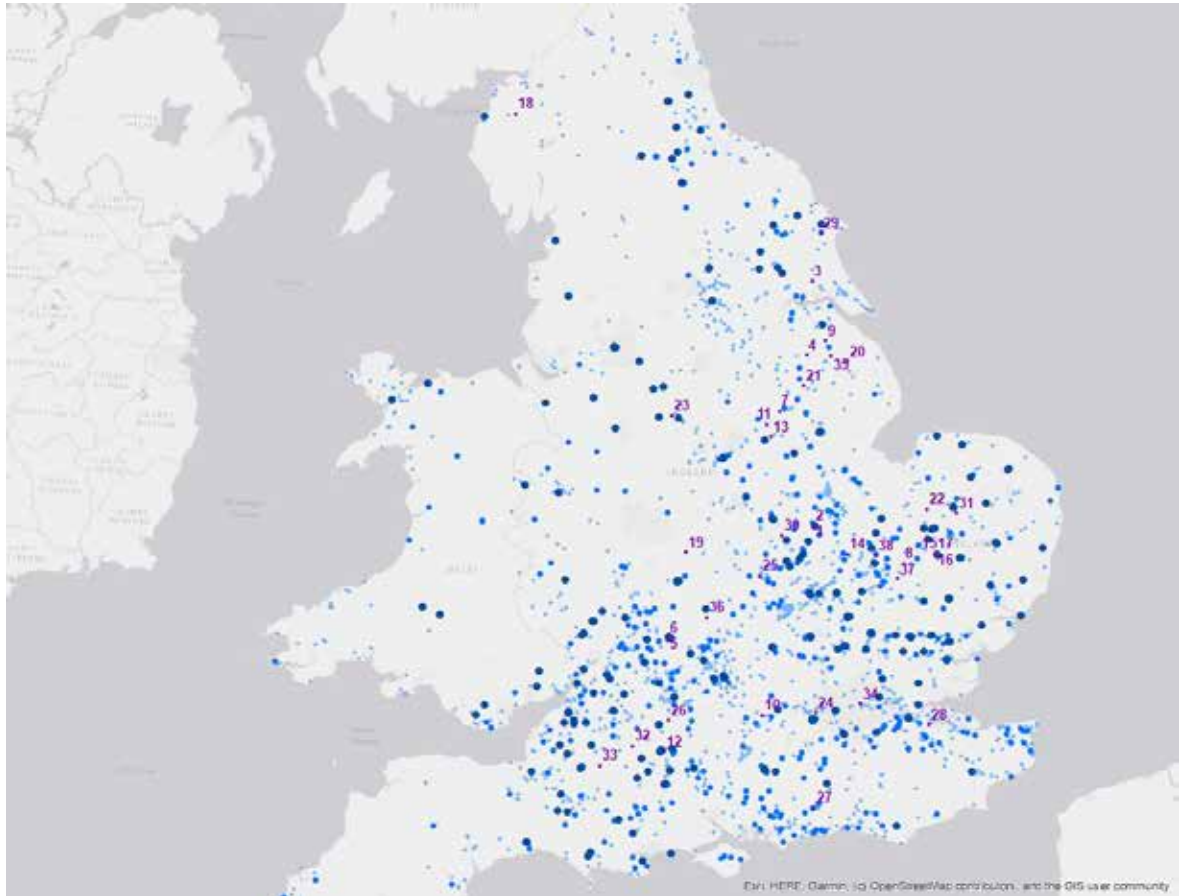
(Figure 3.13 A graph showing a comparison of the Roman lead tanks and random data points and their proximity to a waterway in Britain, Author's Own)

When assessing the nearest water source (Figure 3.14), 20% (8) of the Roman tanks were found near the River Great Ouse, whilst 18.4% (7) were discovered near the River Thames. The numbers for the remaining rivers are much smaller with 10.5% (4) found near the Avon and 7.9% (3) found near the Trent. This data is based on the current locations of these rivers, which could have changed course over time due to natural occurrences such as silting or human interference through damming, draining, or creating new courses for these rivers such as in the Cambridgeshire Fens (Philips 1970).



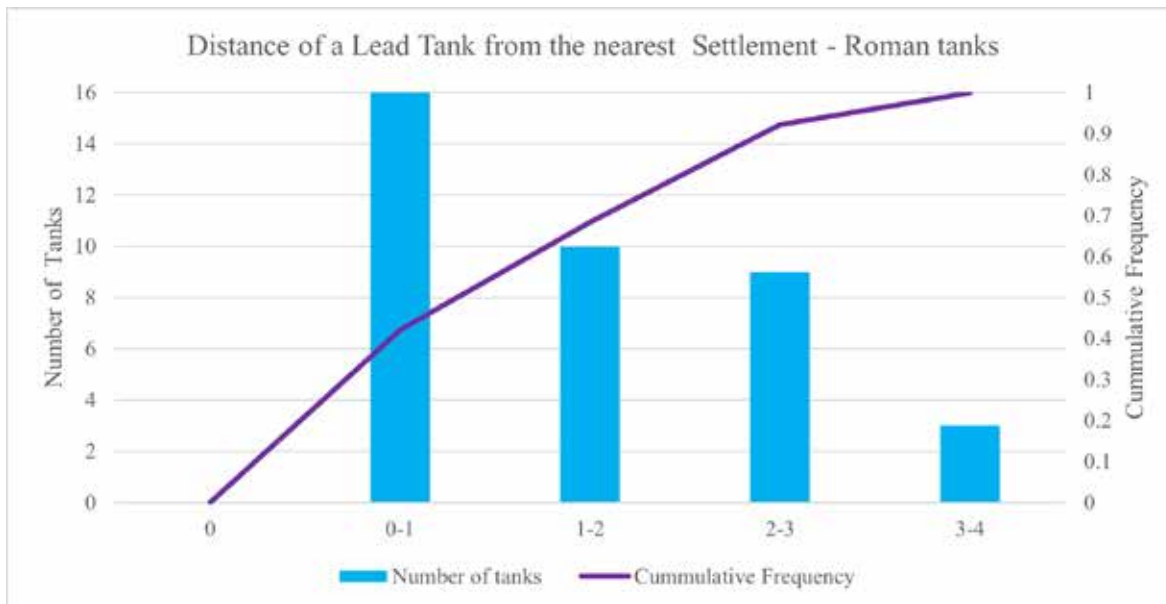
(Figure 3.14 A graph showing the nearest river to the Roman lead tanks, author's own)

3.4.3. Proximity to a Settlement



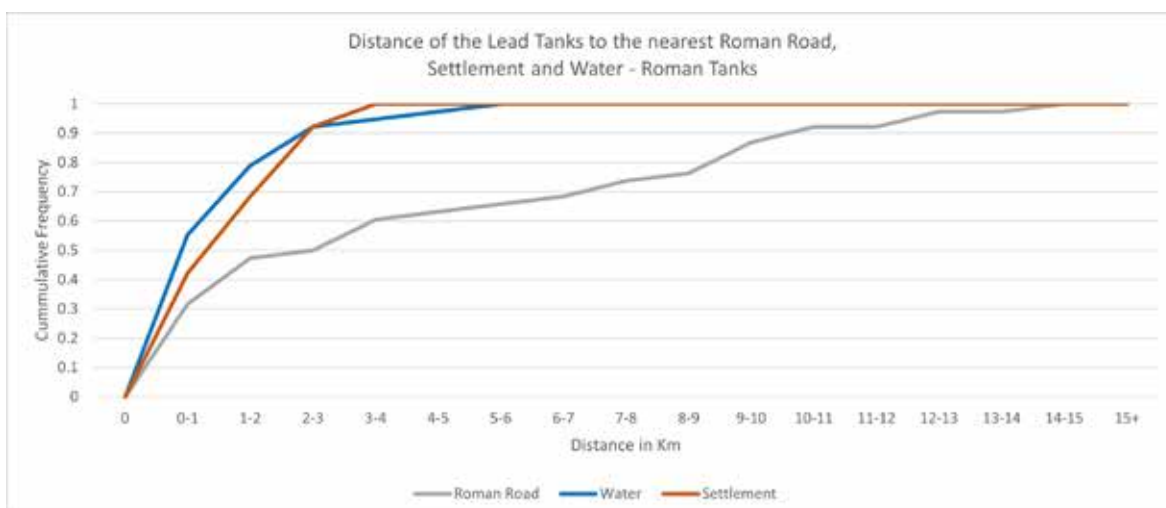
(Figure 3.15 A map showing the Roman lead tanks and their proximity to a Settlement, Author's Own)

Figure 3.15 illustrates the proximity of the lead tanks to a settlement (Roman, Anglo-Saxon/ Early Medieval or Multiperiod) in Britain. Using straight line calculations of the distance of each lead tank to the nearest settlement shown in Figure 3.16 below illustrates that 42% (16) of the Roman lead tanks were found within a kilometre a settlement. A further 26% (10) were discovered between one-two kilometres from a settlement, whilst 24% (9) were within two-three kilometres from the nearest settlement. The median distance was 1.73km, the mean distance was 1.45km, many of the lead tanks were found in settlements and the maximum distance of a lead tank from a settlement was 3.44km at Trudoxhill in Somerset.



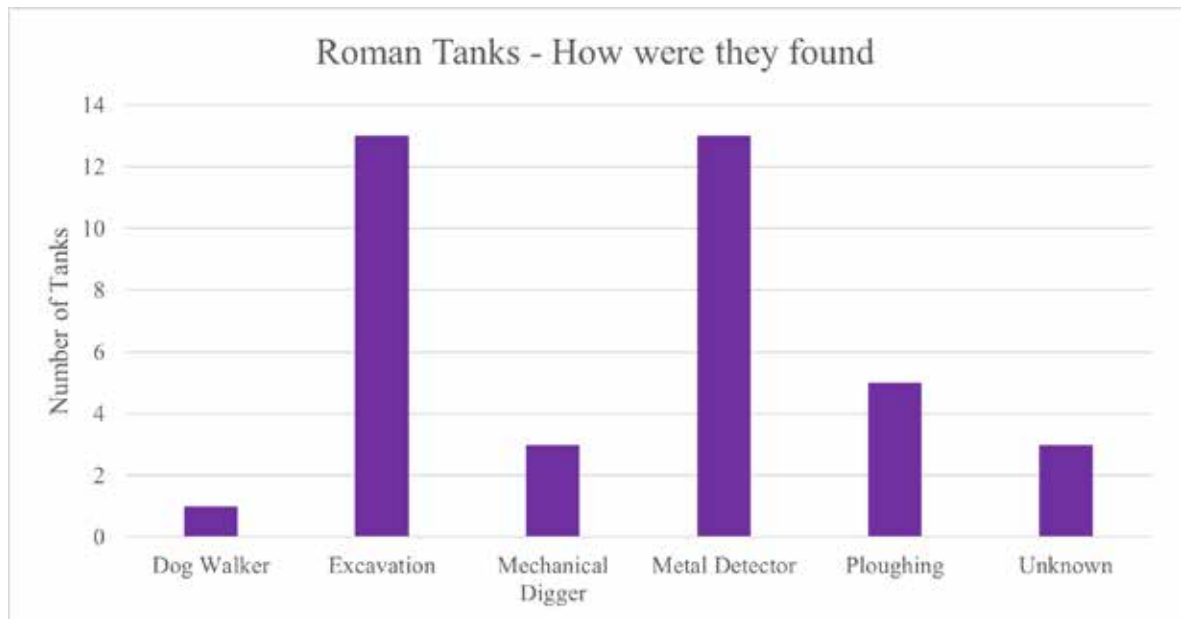
(Figure 3.16 A graph showing the Roman lead tanks and their proximity to a Settlement in Britain, Author's Own)

When comparing the distances of the Roman lead tanks to the nearest Roman road, source of water or a settlement some patterns emerge. As Figure 3.17 illustrates the lead tanks were found closer to a source of water than a settlement and closer to a settlement than a Roman road. This could reflect the use of rivers in metalwork trade which was often a cheaper and faster option than delivery by road, as discussed in Section 3.3. Furthermore, many of these settlements were located near rivers this factor could reflect accessibility to the tanks and the ability to deliver them to these locations. Many of the tanks in the East Midlands and East of England were near the Ouse and Trent, which could have been used to ship either the completed tanks or necessary materials from the Derbyshire Peak District or Wharfedale in Yorkshire. This could explain why more the tanks were found closer to rivers and settlements than to a Roman road.



(Figure 3.17 A graph showing the Roman lead tanks and their proximity to a Roman road, a source of water and a settlement in Britain, Author's Own)

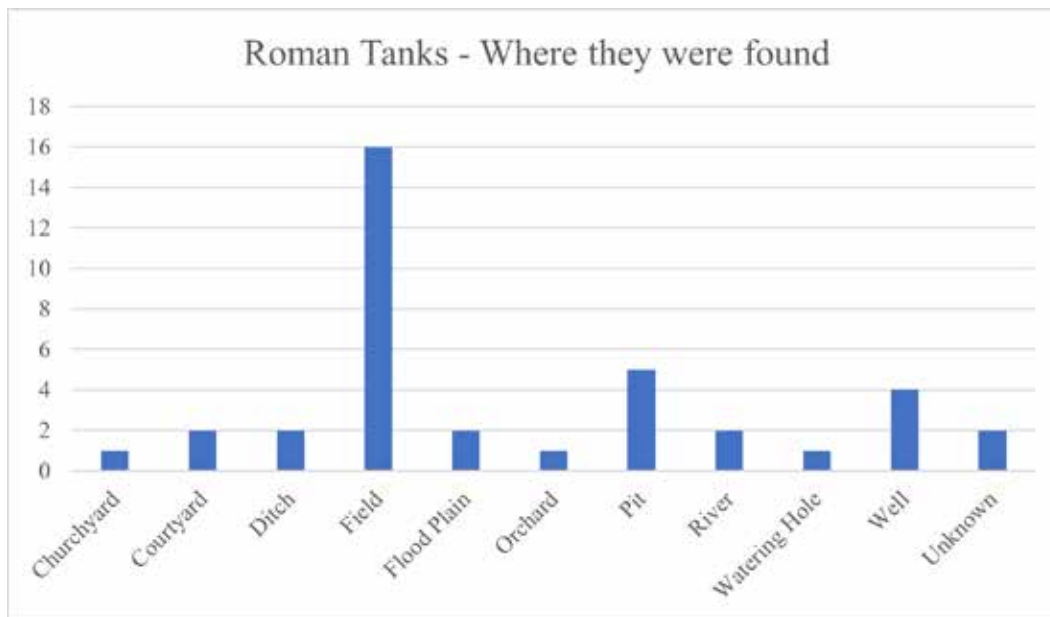
3.5. How were the lead tanks discovered and what contexts were they found in?



(Figure 3.18 A graph showing the find methods of the Roman lead tanks, author's own)

As seen in Figure 3.18, most (68%) of the tanks were discovered through excavations (13) or metal detecting (13), particularly from 1950–2020. Other methods included ploughing (13%), which recovered five of the tanks (Bishop Norton, East Stoke, Icklingham, Ireby and Walesby). Three of the tanks (8%) were recovered by a mechanical digger (Enford, Oxborough and Pulborough). The three tanks found at Icklingham had the most diverse find methods out of any site. The first tank, which was discovered in 1726, was found after a plough struck it (Salmon 1726, 161; Mawer 1994, 232) whilst the other two tanks were found through excavations. The tanks with unknown find methods came from Huntingdon and Rochester since both were recovered from rivers, with the Huntingdon tank discovered in the Ouse and the Rochester tank retrieved from the Medway. The only information on these tanks is that they were ‘found in the River Ouse’ and ‘found in the River Medway’ before 1878 (Smith 1878, 117; Dunning 1934, 116–117; Crerar 2012, 159–160).

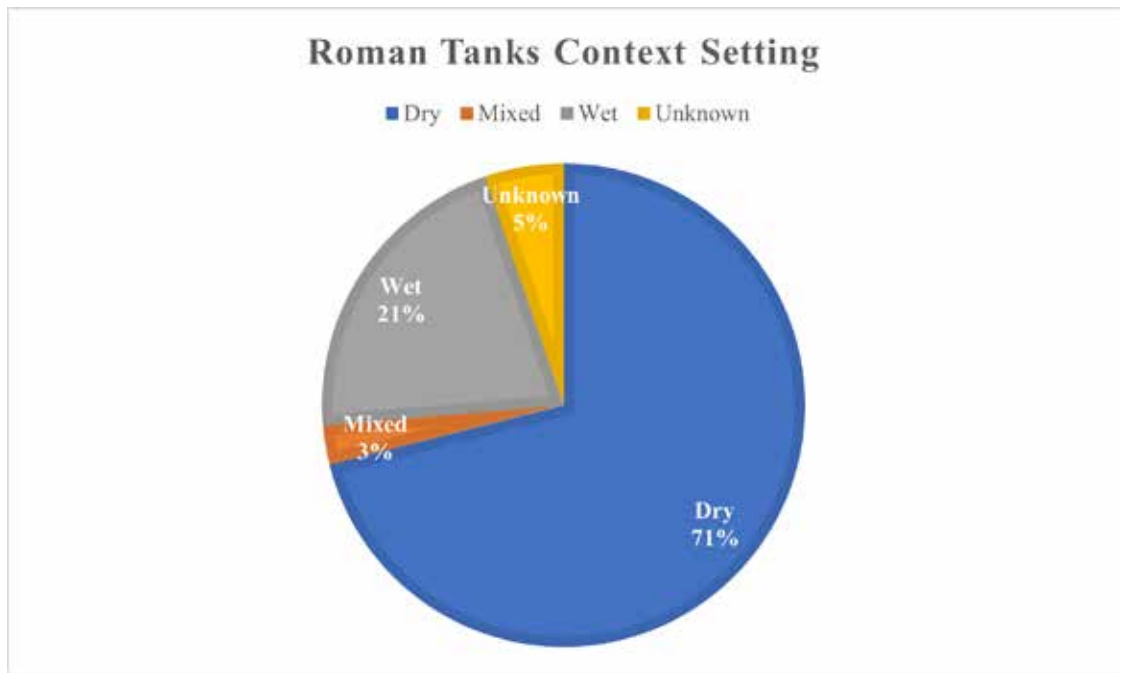
3.5.1: 'Wet' and 'Dry' contexts



(Figure 3.19 A graph showing the find contexts of the Roman lead tanks, author's own)

The Roman period lead tanks were found in a mixture of both ancient and modern contexts in 'wet' and 'dry' environments as can be seen in Figure 3.19 above. Most of the tanks were discovered in fields, with 16 tanks recovered from these locations, which are again modern contexts. These were mainly discovered by metal detectorists, meaning that they often lacked contextual information, leading to their locations being broadly classified as 'fields'/'unknown'. The pits containing the tanks at Ludford and Trudoxhill were in remote fields far from any currently known occupation. Furthermore, many of the tanks in 'fields' were found in isolated areas far from any nearby occupation, a feature visible with the tanks found at Preshute (Wiltshire) and Thompson (Norfolk).

Four tanks (Ashton, Caversham and the Walbrook) were discovered in wells, two from rivers (Huntingdon and Rochester), another from a flood plain (Pulborough) and a watering hole (Beverley). The findspots for the tanks from 'dry' environments were just as varied as the 'wet' environments. Two tanks were found in ditches (Pineham and Rushton in Northamptonshire) whilst six were found in pits (Flawborough, Ludford, Perry Oaks, Rudston, Trudoxhill and Wigginton). Based upon the environmental evidence these pits can be classified as 'dry' although the Trudoxhill pit will be identified as 'mixed'. This is because whilst the pit consisted of purely clay subsoil, the pit was on a raised bank near a small stream and the base of the pit was waterlogged (Burnett 2018, 176). Other outliers are visible with the tank fragments found in the churchyard (Caistor) and the two tanks in the courtyard (Bourton-on-the-Water). These are modern contexts, especially the Caistor tank which was found in a drain beneath the church. The development of the church at Caistor had removed all evidence of its original archaeological context.

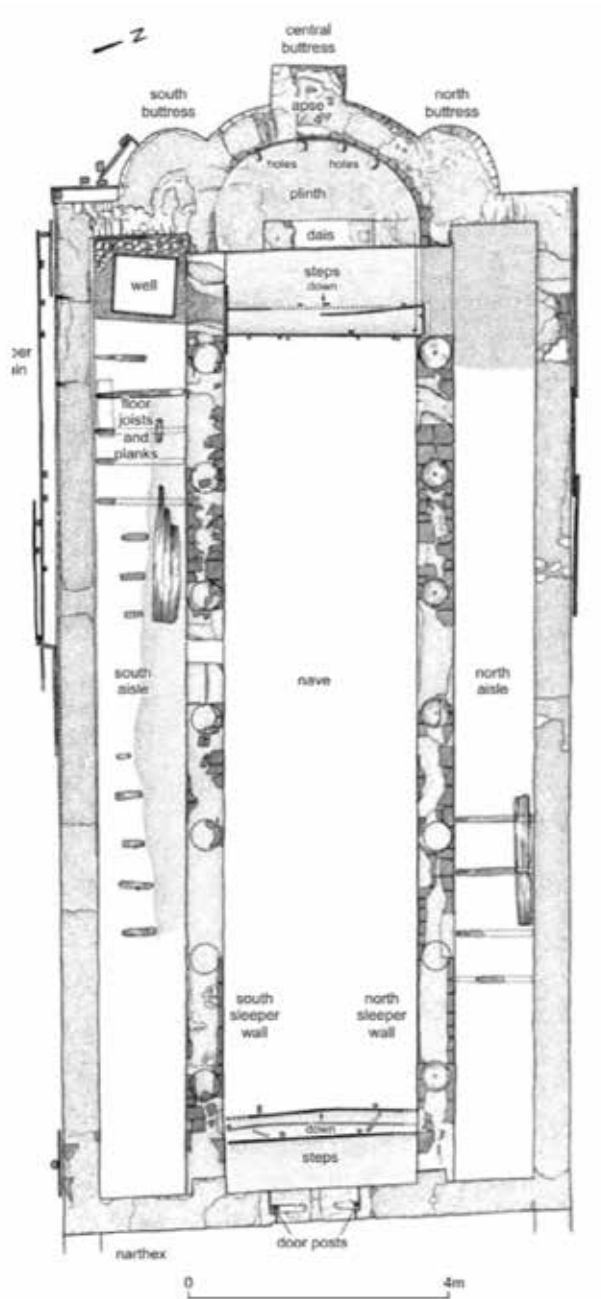


(Figure 3.20 A chart showing the find environments for the lead tanks, author's own)

As seen in the Figure 3.20 above, most Roman tanks were discovered in 'dry' as opposed to 'wet' contexts. Those found in 'dry' contexts comprised 71% of the total Roman tanks, 21% were found in 'wet' environments and only 3% (1) of the tanks came from a 'mixed' environment- the tank from Trudoxhill in Somerset. Likewise, 5% were recovered from 'unknown' contexts where contextual information was not available.

3.5.2: The 'Wet' contexts for the tanks: Wells and Watering Holes

The tanks found in wells and watering holes are a good place to consider acts of 'votive'/'structured' deposition. Ashton's tanks came from a stone-lined well in a courtyard associated with a blacksmith's yard slightly northwest of the River Nene. The Caversham example was recovered from a timber-lined well in an area near the village's marina on the River Thames bank (Frere 1989, 319). Meanwhile, MOLA retrieved the Walbrook example from a well located near the Mithraeum's south buttress Walbrook Mithraeum (Figure 3.21 below). Whilst these sites are a significant distance from each other, some interesting parallels between the depositions of the tanks are visible, not just with each other but with other tanks such as the tank found at Perry Oaks during the London Heathrow Airport excavations.

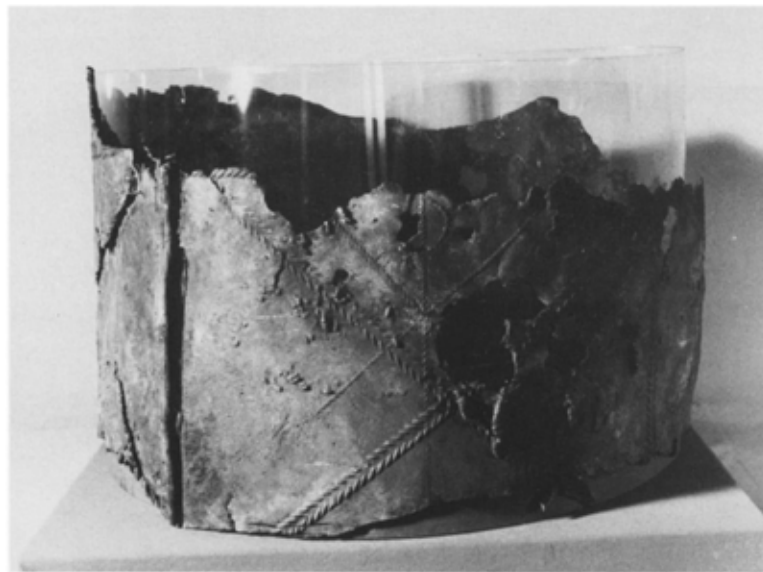


(Figure 3.21 A map of the Walbrook Mithraeum, MOLA 2017 pg.107)

Whilst one of the two Ashton lead tanks was intact (Figure 3.22), the other consisted of fragmented pieces placed beneath the complete tank halfway down the well shaft (Wilson et al. 1975, 253; Frere et al. 1977, 449). The Caversham and Walbrook examples (Figure 3.23 and 3.24) showed deliberate damage and fragmentation, with one side deliberately cut from the base and another side damaged by fire on the Caversham find (Frere 1989, 319). The Mithraeum well contained twelve dismembered tank fragments in a layer of clay silt and debris (Marshall per comms).



(Figure 3.22 Lead tank with Chi-Rho recovered from Ashton Northamptonshire, photo by N.H.Hawley)



(Figure 3.23 Lead tank with Chi-Rho from the well in Caversham Berkshire, photo by Leslie Cram Reading Museum)



(Figure 3.24 Fragments of Lead Tank discovered in the well to the north of the Walbrook Mithraeum, used with permission of MOLA and Michael Marshall)

Artefacts in the well at Ashton included iron slag, two leather shoes, various leather fragments, fourth-century pottery, animal bones, a wooden bucket and lathe core and a nail just below the tanks (Wilson et al. 1975, 253; Frere et al. 1978, 443–444; Frere 1982, 185). The Caversham example was discovered at the base of the well alongside fourth-century pottery, a hanger and harness, a ladle, at least two wooden buckets, an iron spear, a dagger, and a scythe (Frere 1989, 319). Wooden buckets are frequent finds in well depositions, with similar wooden and iron buckets remains in wells at Rothwell Haigh and Dalton Parlours villa in Leeds (Sumpter 1990, 243–6; Cool and Richardson 2013, 201). Whilst wells would be the most likely place to find buckets, the well at the Walbrook Mithraeum did not contain any of these in its layers. The Walbrook site well had the most diverse assemblage, with the materials indicating a possible ‘termination ritual’ and showing a high degree of structure to the material deposited. It contained ten surviving fills in layers surviving to a depth of 2.48 metres (Marshall per comms). The sixth fill from the top, comprised of varying earth and debris dumps, contained the lead tank fragments alongside melted lead sheet fragments.

The other fills contained numerous silver and copper coins, with the latest issues from AD 380. There were also copper artefacts with a belt loop, brooch, bracelet and jewellery alongside strap-ends, studs, tweezers, and copper waste in the form of sheet metal. There were also many worked bone pins alongside numerous glass objects, including vessels, beads, cups and a beaker, a gem, and a bowl. An unidentified lead object (Figure 3.25) was found alongside lead waste, lead bowls, a lead seal, and the tank pieces. The well also contained numerous iron pieces with sheets, strips, a ballista bolt, and window grills (Marshall per comms). Towards the bottom of the well were cattle skulls alongside a stone quern and millstone. These all showed similar deposition, structure, and a mixture of earlier and later artefacts to the nearby Draper’s Garden well (Gerrard 2009). Many of the items from this list appear to be residual finds from earlier periods, with numerous first century finds alongside a late chip-carved belt set dated to the late fourth or early fifth century AD and the coinage evidence.



(Figure 3.25 Unidentified lead artefact found in the Walbrook Well, used with permission of MOLA and Michael Marshall)



(Figure 3.26 The pewter bowls found in the Walbrook Well, MOLA 2017 109)

These wells' backfilling has been dated to the late fourth century through datable evidence, including pottery, coinage and metalwork or bone material (Hadman and Upex 1976, 8; Guy 1976, 10; Guy 1981, 275; Frere 1989, 319). The pewter set discovered in the Mithraeum well has parallels with the associated pewter discovered within the tank at Trowbridge in Wiltshire. The cups with the Walbrook (Figure 3.26) and Trowbridge (Figure 3.27 and 3.28) examples show similar designs through their shape. However, the Walbrook cup appears to be more highly decorated than the Trowbridge ones. Extensive pewter collections have been found near the lead tanks at Burwell, Icklingham and Preshute. Whilst they were only found in those tanks' vicinity, pewter finds were discovered in direct association with the Trowbridge and Walbrook tanks. Pewter is frequently visible in wells during the Roman period, such as at Brislington Villa, with archaeologists frequently analysing its deposition as a 'votive' action (Poulton and Scott 1993).



(Figure 3.27 A pewter cup found with the Trowbridge tank, used with permission of Sophie Hawke and the Salisbury Museum)



(Figure 3.28 A pewter cup found with the Trowbridge tank, used with permission of Sophie Hawke and the Salisbury Museum)

In contrast with the Walbrook well, those from Ashton and Caversham lacked skulls in their deposited layers. Likewise, Ashton's well was the only one containing a shoe and leather fragments. This could be due to environmental issues leading to a lack of preservation of the organic materials. Authors like Merrifield frequently connected skulls in Roman period wells with 'termination rituals' and 'votive offerings' (Merrifield 1987, 40; Poulton and Scott 1993, 119-121; Fulford 2001, 203; Hingley 2006, 230; Lee 2009, 80, 230). Similarly, archaeologists identified shoes in wells as part of these 'termination rituals' through their nature as deposited items (van Driel Murray 1999; Chadwick 2015, 41). Notable examples include Shiptonthorpe in East Yorkshire, where excavations located leather shoes in a waterhole alongside partially articulated animal remains and skulls, quern fragments, decorated Samian ware, metal objects and holly and mistletoe (Millett and Taylor 2006, 56-57, 314-316). Excavations also discovered shoes within a Romano-British well besides a human skull, a wooden spade, a

bucket and bowls, beehive and flat quernstones and complete ceramic vessels at Rothwell-Haigh in Leeds (Richardson 2001; van Driel Murray 2011; Cool and Richardson 2013, 201–205; Chadwick 2015, 41). These wells displayed similar artefacts and depositional practices to the wells containing the tanks. The similarity of the finds provides evidence of broader artefact deposition patterns in wells in Late Roman Britain. It also demonstrates a potential selective approach to the deposition of these artefacts by their communities. These acts likely coincided with the abandonment of these areas. The Ashton tank was wedged halfway down the well below at least three metres of limestone blocks (Hadman and Upex 1976, 8), indicating substantial effort had gone into abandoning the artefact. Furthermore, both the Caversham and Walbrook wells contained masonry amongst their debris. The Caversham well contained broken tiles which appeared to indicate that a possible villa had been on the site where Dean's Well stood (Frere 1989, 319). The Mithraeum well also contained stone artefacts including a lava quern and a stone millstone in the fourth and third fills of the well alongside the materials mentioned above. These materials, combined with the cow skulls at the base of the Mithraeum well, suggest that these artefacts could have been placed on the wells following the disuses of these features in the later fourth century.

Whilst many authors agree that the tanks were an insular development (Guy 1981; Thomas 1981; Watts 1991; Petts 2003), the composition of the artefacts in these wells has parallels to examples seen in Europe. Depositing shoes in wells in Roman Britain has some similarities to practices in Continental Europe, such as leather shoes discovered in wells at the villa at Waiblingen and vicus at Wallham in Germany (Van Driel Murray 1989, 342). She argued that these were part of the rubbish used to block the well at the end of its life rather than during its active use, although she did not discuss the artefacts in the wells and their stratigraphy (1989, 341). Recent articles online have focussed on the nineteenth-century excavations in Germany at the site of Saalburg and the recovery of a highly decorated shoe (Archaeology World Team 2020). The shoe was discovered in a well located within the fort, with the decoration and design implying it was a highly personal choice for the dedicator. It is unknown if the excavators treated it as rubbish or believed it was a 'votive' action or a 'structured' deposition. All the articles mention is that the shoe was found in a 'local' well near the site of the Saalburg. As seen in Figure 3.29 below, the shoe was designated as a woman's shoe due to its highly decorated manner. The Saalburg shoe also provides parallels with the deposition of the artefacts in Britain, demonstrated through artefact choice and their burial in similar contexts, in this case, wells.



(Figure 3.29 A decorated shoe found in the well at Saalburg)

(<https://www.openculture.com/2018/08/stylish-2000-year-old-roman-shoe-found-well.html>)

3.5.2. The 'Wet' contexts for the tanks: Rivers

Five of the tanks were discovered either in rivers or their floodplains. These were the tank at Huntingdon (Cambridgeshire) in the River Ouse, the Oxborough (Norfolk) tank, which was reportedly found in the River Wissey and the tanks from Pulborough (Sussex) in the River Arun's flood plain and Rochester (Kent) in the River Medway. Another tank from Willingham (Cambridgeshire) had clear links with Fens as it was framed by the River Ouse (Petts 2003, 124; Thomas 2008, 135; Naylor 2015, 135). Deposition in 'wet' contexts is a much more common occurrence with the Roman tanks than their later Anglo-Saxon/Early Medieval counterparts, as will be seen in Chapter Four. Like the well finds, there is a pattern of 'complete' compared to 'fragmentary' states for those retrieved from riverine contexts. The tanks discovered at Huntingdon and Oxborough were both recovered in a complete and intact state (Dunning 1934, 116-17 Guy 1989, 234). In contrast, the Pulborough tank in the River Arun's flood plains consisted of a single fragmentary piece that displayed evidence of a deliberate and yet careful cut (Curwen 1943, 155). Furthermore, archaeologists retrieved the tank discovered at Willingham near the River Great Ouse as four deliberately cut fragments (Philips 1970, 208). Finally, the Rochester example reportedly uncovered in the River Medway, with Crerar describing the state of the tank as unknown. However, she noted apparent evidence that strengthening had occurred on the tank at the location of its handles (2012, 161).

Compared to the well finds, the Huntingdon, Oxborough, Pulborough and Rochester examples have no associated artefacts. However, the deposition of the tanks in these environments would have taken extensive preparation and these are large objects which likely held great value to their communities. It would have taken a lot of time and effort to ready the tanks and these areas for those depositions. This suggested a high degree of effort went into their abandonment in these environments, as well as showing the continued use of landscape features for artefact burials. It is something that the 'dry' contexts also demonstrate, and which will now be investigated below.

3.5.3. The 'Dry' contexts for the tanks: Pits

Alongside the wells, other contexts containing the tanks show apparent deliberate deposition and the pits, ditches, and features near known settlements demonstrate this. This was a factor considered for the Flawborough, Ludford, Perry Oaks, Rudston, Trudoxhill, and Wigginton tanks. The pits used for these objects' burial also provide a focus on possible 'ritual' practice in the late Roman period, especially as these pits were specifically dug to contain the tanks and their associated finds. The Flawborough tank was in a pit central to a series of interconnecting ditches containing first to fifth-century pottery (Elliott and Malone 2005, 27-28). The pit itself also had bone and fourth-century grey ware pottery alongside the tank. Besides the Chi-Rho monogram and the use of 'VETRERE FELIX' (luck to the user), these features were used to date the artefact to the fourth century AD (Elliott and Malone 2005, 28-29).

The pit containing the Ludford example was a shallow oval pit specifically dug for concealing the tank pieces (Worrell 2006, 454). This context contained no additional finds, and the tank pieces appeared to 'specifically fit' the pit. Similarly, the excavators who uncovered the Perry Oaks tank discovered it within a pit created from a disused waterhole near a small settlement, with a hazel chord rope found alongside the tank. Excavations retrieved the Trudoxhill example from a clay-

lined pit, with a possible spout alongside the tank fragments. This pit was waterlogged when the excavation team found the tank. The pit appeared to have been explicitly created for the tank's deposition (Burnett 2017, 178), like the Ludford example.



(Figure 3.30 The lead tank discovered at Rudston, North Lincolnshire Museum)

The Rudston tank shown in Figure 3.30 (PAS: NLM-41D6C6) was discovered by a pair of metal detectorists in the base of a circular pit cut 0.4m deep into chalk subsoil. The pit itself had been dug at the end of an ash-filled channel 0.65m wide and faced alongside the tumbled rubble of a wall footing. This footing contained a mixture of chalk rubble and sandstone quern fragments, part of which had collapsed over the South-West edge of the tank itself following the disuse of this area. The ashy nature of the soils both surrounding and within the tank, alongside possibly burnt friable yellow-brown clay observed in or over the tank in the ash matrix, lead to debates over what feature the tank was connected to. In this instance, they concluded it could have been an oven or corn drier or a possible pottery kiln since both mixed pottery and burnt animal bone were recovered both above and below the lead tank. The tank itself was slightly damaged, with the wall footing on the South-West edge of the vessel collapsed which led to a distorting of the tanks' walls. The tank was found in the same area as an extensive third-fourth-century courtyard villa (HER: 79473) with mosaic floors in its east range and a small bath house. The villa overlay Middle Iron Age ditches and circular huts as well as first to second-century AD ditched and stockade rectangular enclosure, with the Roman features beneath the bath house (Scott 1993, 100). Other metal detected finds from this area, such as brooches, coins dating from the first to fourth-centuries AD, demonstrating extensive activity in this area.

A mixture of metal detecting and excavation discovered the Wigginton tank in a pit 0.33 metres below ground level at a villa at Wigginton (Oxfordshire). Although the pit contained evidence that stones under and around the tank had been burnt, it had no evidence of associated finds. Only two tanks have any direct evidence of burning, the tank from Enford (Wiltshire) and the Wigginton tank, although the Parwich tank (WMID-7FF438) was found with patches of dark brown to black deposit on the sides of the tank believed to represent burning. Such burning led

Crerar to suggest that the tanks may have served an industrial purpose (2012, 154). Whilst this theory is possible, considering the associated metal tools found at Ashton and Icklingham and in the vicinity of the Preshute tank, it is difficult to be sure how likely this was.

The state of the tanks and their context also provides potential evidence of 'votive deposition' or 'ritual termination'. The 'fragmented' nature of the pit finds, much like those from the wells, clearly demonstrates this. In this case, only the Wigginton tank showed evidence of being damaged by excavation and did not display evidence of damage before being interred. It is one of only seven of the Roman tanks found in 'dry' environments that was discovered intact alongside those from Burwell (Cambridgeshire), Icklingham (Suffolk) and the Parwich (Derbyshire) and Trowbridge (Wiltshire) tanks. The Wigginton tank has clear similarities to two of the Icklingham finds, as these were decorated with the Chi-Rho. The Wigginton example is the only intact pit example to be decorated with the Chi-Rho monogram (Figure 3.31). The creation of its pit was only large enough to contain the tank, with the Chi-Rho monogram facing east.



(Figure 3.31 The lead tank from Wigginton, Booth et al.2011)

Whilst the Flawborough example was also decorated with the Chi-Rho monogram, both it and the Ludford tank showed deliberate 'fragmentation' before burial. The Flawborough tank was complete but cut into two halves with many punch marks, and both sides bent and folded (Elliott and Malone 2005, 31-33). Like the Caversham tank, the Chi-Rho monogram was left undamaged. The Ludford example consisted of two deliberately cut fragments containing some chisel marks (Figure 3.32), with evidence of deliberate cutting and destruction as shown by a series of linear chisel marks on the upper half parts of the pieces (Worrell 2005, 454).



(Figure 3.32 The lead tank fragments from Ludford, The Portable Antiquities Scheme)

The Perry Oaks tank was in a fragmentary state, with the base hacked into pieces by an axe like other examples found from the pits. The sides were also twisted until they tore (Petts 2006, 227), matching instances of fragmentation on some of the tanks discovered by metal detecting or ploughing. This is visible with the Bishop Norton's fragments (Lincolnshire), where ploughing brought up the first piece in 1946 and the second in 1955, one and half kilometres east from Bishop Norton (Wright 1947, 1801; Petch 1957, 8-10). The right edge of the side fragment found in 1946, 'roughly hacked' in a manner like many of the pit fragments, suggests deliberate destruction. The same is visible with the example from Brough in Nottinghamshire, located in the vicinity of the eastern sector of the Roman site of Crococalana (Watts 1995, 318). This fragment also displayed evidence of deliberate and careful cutting, like many of the pit examples. Those circumstances, once again, imply deliberate care and attention to detail. That is seen not only in the fragmentation but in the deposition of such an object.

The tank fragments from Kenilworth (Warwickshire), North Lincoln, Preshute (Wiltshire) and Thompson (Norfolk) all present evidence of deliberate and systematic fragmentation. These were all found through metal-detecting, making it hard to provide a context for them. The Kenilworth example consisted of a single fragment, deliberately cut, and torn (Guy 1977). The North Lincoln example consisted of a single inscribed fragment decorated with floral scrollwork and inscription alongside visible damage (Figure 3.33).



(Figure 3.33 The lead tank fragment from North Lincoln, Lincolnshire County Council)

Much like the Lincoln example, the Preshute showed conspicuous damage. The damage suggesting dismembering with a heavily bladed axe, but with most of the decoration left intact. Worrell pointed out that it is difficult to distinguish between mundane and religious motives of destruction. However, she focused on the damage located close to the phallic symbol (Worrell 2018, 425), suggesting a systematic way of destruction.

Similarly, the Thompson example (Figure 3.34) displays features like the two other heavily fragmented examples discussed here. For instance, the decoration is, for the most part, left intact but rather noticeable damage in the form of a heavy bladed weapon. Scouring by a lighter weapon or a tool, like a knife or a chisel, provided multiple visible cut marks on the fragment's edges.



(Figure 3.34 The lead tank fragment from Thompson, Norfolk County Council)

This fragmentation and decoration level provides more evidence of concentrated effort to remove these artefacts from circulation by their depositors. It provides a potentially broader framework of analysis for these new examples. Their similarity in design and manner of destruction enables an analysis within the broader frameworks seen throughout this chapter. Like the other tanks in pits and the examples without contexts, excavators discovered the Trudoxhill example deliberately bent and squashed into the pit. Its deposition mirrored the Perry Oaks example's burial, as can be seen in Figure 3.35 below. There was evidence of at least several 'original' cuts, as Burnett termed them (Burnett 2018, 177-178), meaning that there were at least five pieces of varying sizes. The largest was a quarter of the tank's full size, and the others being much smaller.



(Figure 3.35 The lead tank from Trudoxhill, Burnett 2018)

It appeared that its destroyers initially used a knife, as indicated by the shape of the cuts on its surface. A much heavier bladed item, such as an axe, was then used to fragment it. As the accompanying spout was also damaged, Burnett argued that it would have had to have been a bladed weapon rather than shears (Burnett 2018, 177-178). These indicated time and dedication towards the tank's breaking up. Combined with its folding and placement within the pit, it implies a rather deliberate deposition. This can be seen in contrast with the occupants simply burying and waiting to retrieve this item, commonly attributed to hoards in the late fourth century. The type of context also provides an interesting counter to Bradley's arguments from 1990 and 1998 about the 'wet' versus 'dry' type of deposition. It is a mixture of the two as whilst the pit might technically be classified as a 'dry' context through its clay construction, it was near a river. As seen in Figure 3.35, the clay had become moist with water collecting at the bottom and transforming the clay's state. The combination demonstrated through this context could suggest a 'transformative' effect for the tank to reflect this type of environment.

3.5.4. The 'dry' contexts: The ditches

The tanks' ditch contexts provide an insight into the 'votive' and seemingly 'structured deposition' of these objects. Only two Roman tanks have been discovered in ditches. These are the tank discovered at Pineham (Northamptonshire) and the tank retrieved from Rushton (also in Northamptonshire). The tank at Pineham was found in a narrow ditch forming the southern boundary of a rural Roman settlement's enclosure complex (Speed per comms). The site contained a possible ring ditch, Iron Age ditches and a roundhouse alongside Roman period material. The Roman period material consisted of a late Roman farmstead that later became an early Anglo-Saxon settlement (Worrell 2014, 351-352). In this case, the excavators discovered the tank divided into four fragments. These were all laid out individually along the ditch's length, Figure 3.36 below.



(Figure 3.36 The lead tank fragments at Pineham, ULAS)

These fragments included the base divided into two pieces and two side pieces. Those constituted potentially two-thirds of the side of the vessel, flattened out to fit into the ditch. The depositors had split the portions into two groups consisting of a base piece and a side piece with a two-metre gap between both groups. There was also fourth-century pottery and a fourth-century bronze nummus coin used to date the ditch's backfilling (Speed per comms). Like the Flawborough example, these provide a challenge for interpretation. The ditch had been re-cut, and whilst the fill contained fourth-century material, this subsequent deposition could have occurred later. It also raises the question of could this be a 'ritual' or 'structured' action as opposed to more 'mundane' purposes. The tank's dismantling and the mixture of material into the redeposited fill of the cut could mean it was either rubbish or 'structured'. The treatment of this object and its subsequent destruction appears to suggest this since the excavators uncovered two lead ingots near the tank fragments at this site. These could also be suggestive of recycling, with the pieces placed in this context for re-use later. A series of burials surrounded

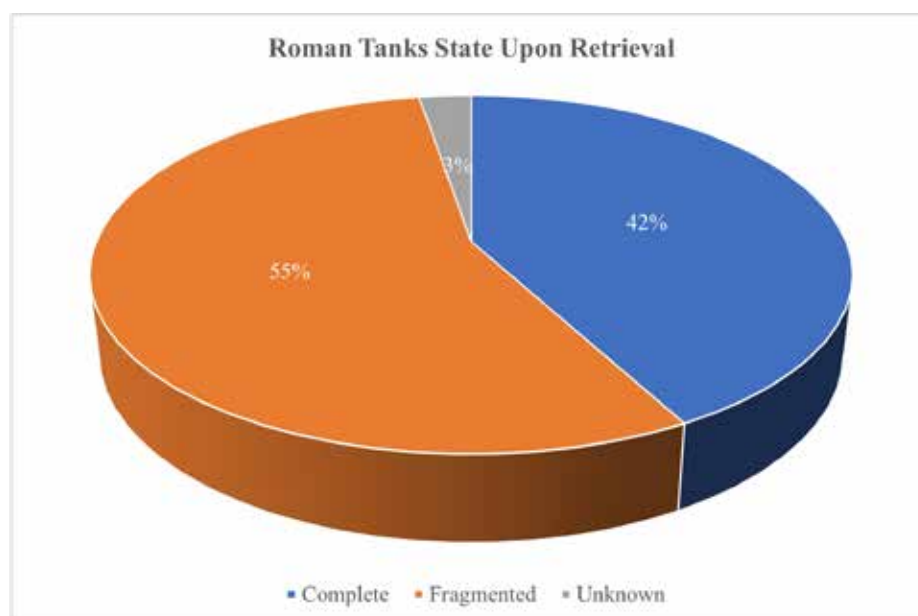
this ditch with a burial 30 metres east of the tank fragments which was dated to the fourth century. Three further burials lay adjacent to the ditch (Speed per comms). suggesting the tank's destruction was linked with the settlement's abandoning.

The Rushton tank was in a ditch in the vicinity of a bathhouse, sealed in by rubble. The tank was also in a highly damaged state and whilst the sides of this object were complete, they had been cut vertically and folded. Furthermore, its base was missing, implying it had been deliberately hacked off like the Perry Oaks tank. It also had randomly placed holes that could have been made by a 'heated instrument' (Looker 1998-9, 163-4). Unlike the Pineham example, it did not have any associated finds. Both were found in a highly fragmented state and deposited in a potentially highly structured manner. This raises the question of whether these depositions were 'votive' or a 'termination' ritual. Their fragmentation and burial are like examples in both 'wet' and 'dry' contexts. This provides a broader pattern of artefact deposition and selective choosing of artefacts in such practices.

That is something that Haselgrove attempted to investigate with depositional practice in the first millennium BC. He noted the selective choosing of certain weapons and tools. He focussed on how they might be lacking in 'watery' contexts in France, for instance, but were much more common in Britain (2015, 28-29). This idea of selective choosing and identity might even be visible through items retrieved from ditches, frequently analysed within the context of a 'terminus/boundary' function (Merrifield 1987, 52-53; Lee 2009, 81). So far, there are only two known instances in ditch contexts from Roman Britain. These are a complete dish from Baldock (Steady and Rigby 1986) and two other dishes found in a ditch near a villa at Stretham that Lee analysed as a possible 'ritual function' (2009, 81). As Lee stated, it can be difficult to tell whether items deposited in such contexts have a 'ritual' or 'secular' function. Since many were found in a fragmented state or buried in a highly 'structured' manner, it is certainly possible that some degree of ritual is visible with these finds and their deposition.

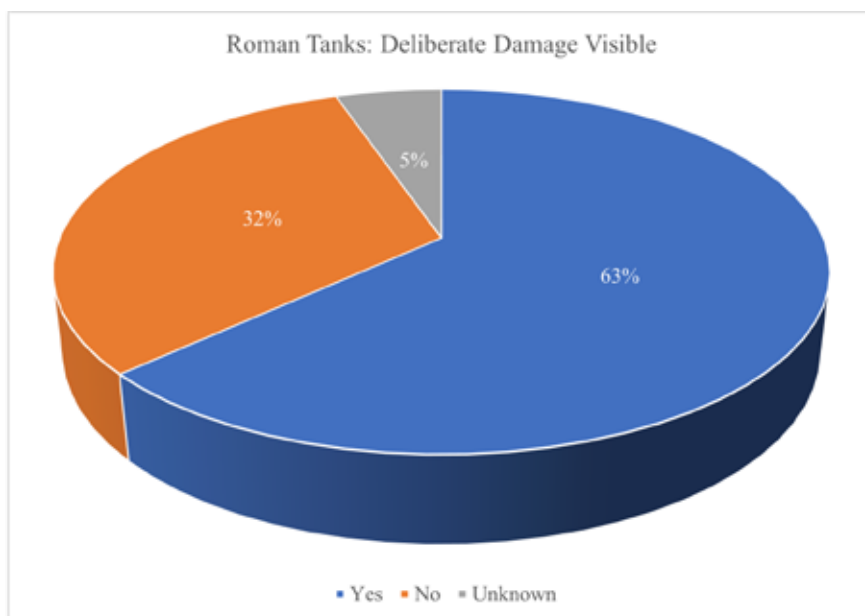
3.6. Evidence of Deliberate Fragmentation

Although these contexts might contain instances of what archaeologists' term as 'everyday' refuse, there is a possibility these depositions were more than that. The deliberate damage or 'fragmentation' of at least three examples in wells potentially shows that these were objects with value to their respective communities. Archaeologists have analysed deliberate fragmentation as a 'votive' action, with authors recognising it as a method dating from the Bronze Age (Bradley 1990; Chapman 2000; Crerar 2012). As Figure 3.37 demonstrates below, 55% of the Roman artefacts were in a fragmented state upon their retrieval, whilst 42% of the current examples were in a complete state.



(Figure 3.37 A graph showing the state of the Roman tanks upon retrieval, author's own)

That is an important factor to consider, especially concerning the effort taken to destroy them as these objects are solid lead and reportedly take at least four people to move those objects (Watts 1991). This was the reason why Watts disagreed with Charles Thomas's beliefs about their portability and usage in affusion baptism rites. Evidence for deliberate damage and fragmentation is visible on tanks in 'wet' and 'dry' environments. With the tanks found in wells, evidence for deliberate damage is visible on both the Caversham and Walbrook Mithraeum examples. Both tanks showed evidence of burning whilst the side of the Caversham tank had been cut from the base (Frere 1989, 315). Meanwhile, the fragments of the Mithraeum tank had marks of surface stabbing from a knife before an axe dismembered the tank into fragments (Marshall per comms). Many of the Roman examples displayed evidence of deliberate damage and can be seen in Figure 3.38, 63% of the Romano-British dataset showed deliberate damage through fragmentation or crushing and burning. In some instances, the damage was accidental, as seen with the tanks discovered at Enford (Wiltshire) and Pulborough (Sussex). These tanks were damaged upon retrieval by a mechanical digger. For the rest, the damage is deliberate and likely occurred before deposition.



(Figure 3.38 A graph showing evidence for deliberate damage, author's own)

This also provides some noticeable comparisons to the recently discovered tank at Beverley in Yorkshire (Figure 3.39). The excavations recovered this tank from a watering hole measuring 0.8m x7.50m and 1.80m deep on a multiperiod site south of Beverley (Moon per comms). Upon initial investigation, the Beverley tank is undecorated and shows deliberate crushing. Except for the timbers in the lowest fill, there were no other finds besides the tank in this watering hole, and the tank itself did not contain any associated artefacts (Moon per comms). This shows apparent similarity to the wells, as the tanks in these contexts were also deliberately damaged and showed similar deliberate abandonment.

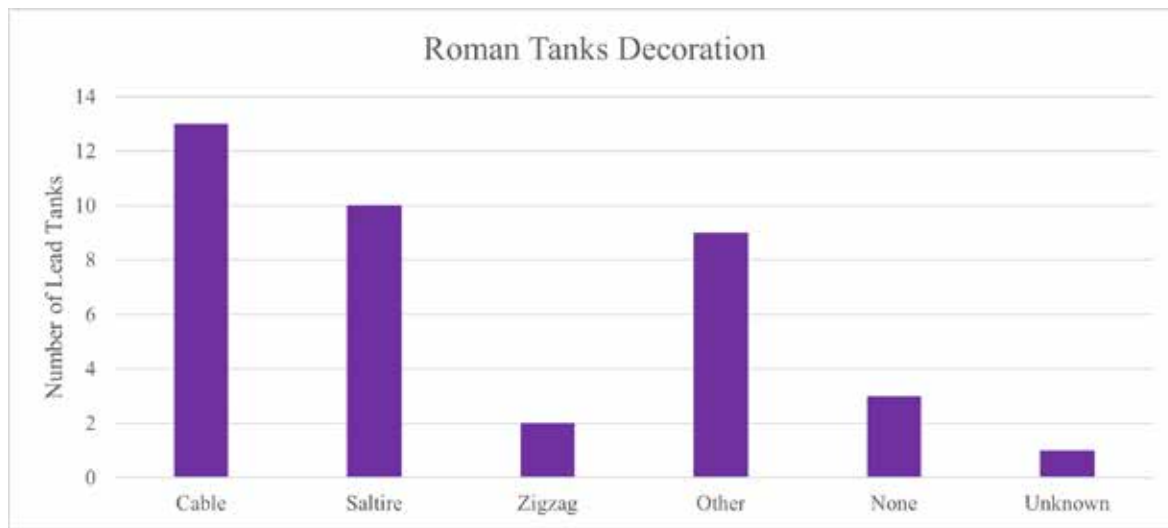


(Figure 3.39 The lead tank from Beverley, used with permission of Kevin Moon and WYAS)

The Beverley tank's crushing has parallels with the two examples from Bourton-on-the-Water in Gloucestershire. Archaeologists discovered the lead tanks deliberately crushed in a courtyard building associated with a well. It also has some clear similarities with the Perry Oaks tank as this was found in a reported pit/watering hole and showed deliberate fragmentation, with an axe used to hack the base into two pieces. Twisting on the sides tore them off before folding the base and sides together. The similarity of the tank's deposition method and state reveals some parallels to the Beverley tank. These areas are significant distance from each other, yet their similar destruction indicated possible links with these settlements' deliberate abandonment.

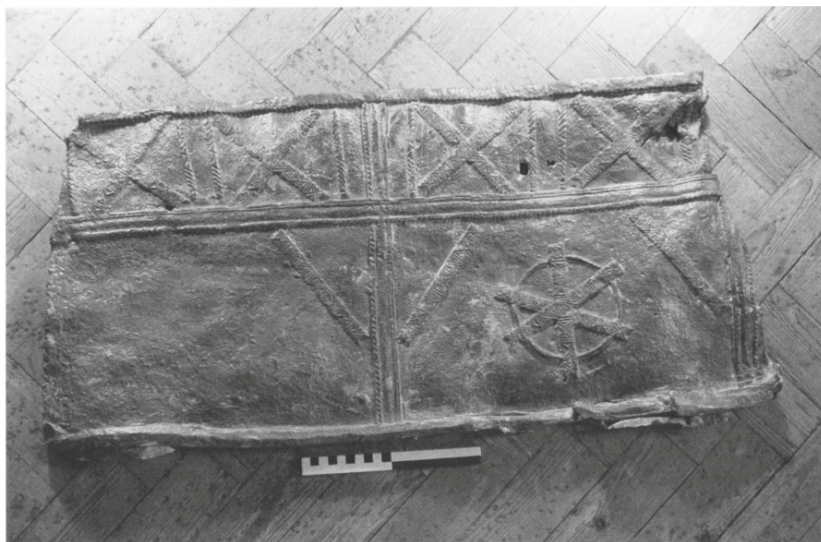
3.7. Descriptions of the tanks: Dimensions and Decorations

As seen in the Figure 3.40 below the Roman tanks were highly decorated artefacts with varied motifs and decorative features.



(Figure 3.40 A graph showing the decorations on the Roman tanks, author's own)

Cable banding was the most typical design across the tanks, with thirteen tanks decorated in this manner. Saltire (St Andrew's Cross) decorations were also a frequent occurrence, with ten tanks showing this feature (Figure 3.41 below).



A lead tank fragment from Brough, Notts (*Crococalana*). (p. 318)

(Photo: D. Watt, Lincoln Archaeology Unit)

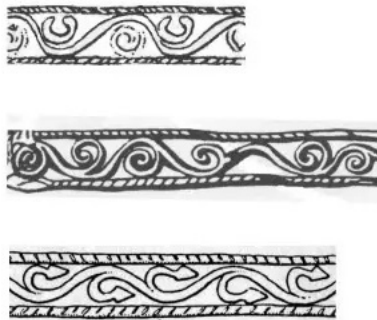
(Figure 3.41 The Lead Tank fragment found at Brough in Nottinghamshire decorated with cable banding and Saltire crosses, Watts 1995,318)

The other types of decoration, nine in total, consisted of frieze work, inscriptions (Brough, East Stoke, Flawborough and North Lincoln), geometric patterns, circles and raised oval sections forming a phallus (Preshute) as seen in Figure 3.42. As can be seen in Figure 3.43 and 3.44,

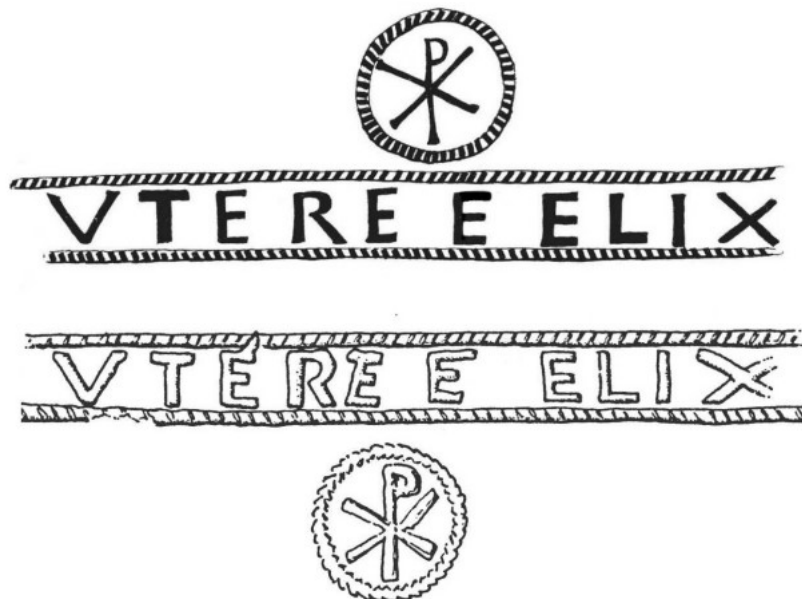
certain tanks showed similar decorative elements. For instance, the Caistor tank was decorated with floral scroll work which matched other examples from Bishop Norton, Flawborough and North Lincoln. Likewise, the East Stoke and Flawborough examples had the inscriptions UTERE EELIX, a misspelling of the widely used phrase UTERE FELIX (luck to the user). Furthermore, the Bishop Norton and North Lincoln tanks were inscribed with DO FECIT VIVAS (Maledo made this use it well). The similarity of these decorations and inscriptions led Malone to suggest that these examples were produced from a single workshop either in Lincolnshire or Nottinghamshire (2005).



(Figure 3.42 The highly decorated fragment from Preshute, Salisbury and South Wiltshire Museum)

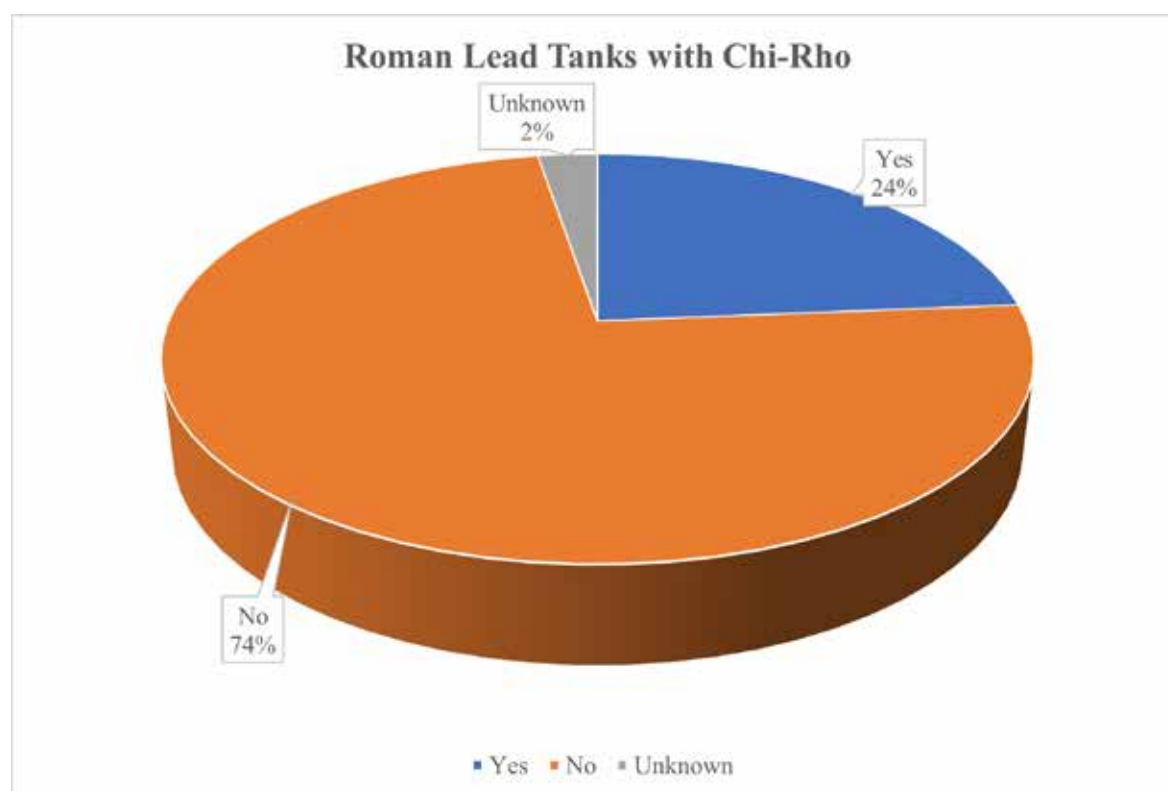


(Figure 3.43 Scroll work on the Caistor tank and other examples, Malone 2005)



(Figure 3.44 Decorative Chi-Rho monogram and inscriptions on the East Stoke and Flawborough tanks, Malone 2005)

As seen in Figure 3.45, only 24% (9) of the current 38 tanks were decorated with a Chi-Rho monogram. These were the tanks at Ashton, Caversham, East Stoke, Flawborough, Icklingham, Pulborough, Walesby and Wigginton, with these sites were spread at a significant distance from each other as seen in Figure 3.1. As seen in Chapter One, the Chi-Rho monograms on the lead tanks were often used by authors as evidence of a ‘Christian’ identity or a use in ‘Christian’ practices (Toynbee 1964; Guy 1981; Thomas 1981; Watts 1991). As less than a quarter were decorated with this feature, it hard to be certain whether they were used for such purposes. As Figure 3.1 showed, many of these tanks were in rural locations, leading authors like Petts, Thomas, and Watts to argue that they possibly provided evidence of rural Christian communities (Thomas 1981; Watts 1995; Petts 2003). It is more likely that the monograms could represent official connections with the Imperial household. The Chi-Rho monogram and decorations such as the Crux Descussata often appeared on official artefacts such as coins, seals, stamps, and lead ingots (Mawer 1995).



(Figure 3.45 A graph showing the number of tanks with Chi-Rho monograms, author's own)

The size of the tanks was just as varied as the decorations and can be seen in Figure 3.46 below. The largest tanks at Ashton, Bourton-on-the-Water, Icklingham, Pineham and Pulborough have volumes of between 182 and 240 litres whilst the Walesby tank has a volume of 360 litres. In contrast, the smaller tanks at Ireby, Kenilworth and Oxborough have volumes of between 27 and 68 litres, meaning there is extreme variation in their sizes. This variation in size led to disputes about their function, since some are clearly much larger than others (Richmond 1945; Thomas 1981; Watts 1991). Based upon fragments from the Caistor, Pineham and Rushton tanks, it has been estimated that these artefacts often weighed between 20 and 25 kilograms with weights up to 140 kilograms.

	Fragment/ Tank	Length	Height/ Depth	Cm			Kg	Litre
				Width	Sides	Diameter	Weight	Volume
1	Ashton		38			84		220
2	Ashton							
3	Beverley							
4	Bishop Norton		33	46	0.6			
5	Bourton-on-the-Water		35		0.95	81		182
6	Bourton-on-the-Water		41		1.25	97		
7	Brough		39					
8	Burwell		45			75		205
9	Caistor			69.6				22.68
10	Caversham		55			70		
11	East Stoke							
12	Enford					91		
13	Flawborough		41			82		
14	Huntingdon		40			71		182
15	Icklingham		57			69		73
16	Icklingham		33			81		173
17	Icklingham		37			87		220
18	Ireby		17		0.6	46		27.12
19	Kenilworth		24			50		47
20	Ludford		4	2.8				
20	Ludford		3.8	2.7				
21	North Lincoln	6.1	3.3		2			
22	Oxborough		36			49		68
23	Parwich		16			31.5		
24	Perry Oaks				0.6			
25	Pineham		40			88	140	240
26	Preshute	100.5	30					
27	Pulborough		48			78		209
28	Rochester		14			29		
29	Rudston	100	10		1			
30	Rushton		27			28	25	
31	Thompson	15		9.5	0.7			
32	Trowbridge							
33	Trudoxhill				1.7	90		
34	Walbrook Mithraeum		36		0.8			
35	Walesby		55			92		360
36	Wigginton					50		
37	Wilbraham							
38	Willingham		40					

(Figure 3.46 A table showing the dimensions of the Roman lead tanks, author's own)

These were large and highly decorated lead artefacts, which likely held a great deal of value to these communities. This is an important feature to consider when analysing their find contexts and state upon deposition as seen in **Sections 3.5 and 3.6** of this chapter.

3.8. Inconvenient Toolboxes? What finds have been discovered with the lead tanks?

The finds discovered with the tanks were just as varied as the find contexts. Authors frequently dated the tanks to either the early to mid-fourth century or mid to late fourth century, with numerous discussions surrounding how they should be dated (Herdman 1933, 380-1; Thomas 1981, 227; Watts 1991, 169; Elliot and Malone 1999, 89; Petts 2003, 115). Archaeologists date them to this period either through their decorations, discussed in section 3.7, similar construction methods or through associated finds (Richmond 1945, 168; Guy 1981, 274; Watts 1988, 215-6; *ibid.* 1991, 158; Elliot and Malone 2005, 25). These consist of coins or pottery, discovered with the tanks at Bourton-on-the-Water, Burwell, the second Icklingham tank, Pineham and Willingham as seen in Figure 3.47 below.

Location	Other artefacts found with the tanks
1 Ashton	Found with two fragments of at least one other tank.
2 Beverley	None
3 Bishop Norton	None
4 Bourton-on- the-Water	Both tanks found together with associated with third- and fourth-century coins and pottery.
5 Brough	None
6 Burwell	Discovered in a field which produced large amounts of fourth-century pottery.
7 Caistor	None
8 Caversham	Well also contained fourth-century pottery, two iron-bound wooden buckets, an iron spear, and a scythe.
9 East Stoke	None
10 Enford	Tank contained Roman glass, nails with charred wood, Samian and New Forest ware pottery sherds.
11 Flawborough	Latest ditch contained pottery of the fourth century.
12 Huntingdon	None
13 Icklingham	None
13 Icklingham	No contents except one coin of Valentinian
13 Icklingham	Contained a hoard of iron and lead fittings, including a lug, possibly from another tank.
14 Ireby	None
15 Kenilworth	None
16 Ludford	None
17 North Lincoln	None
18 Oxborough	None
19 Parwich	None
20 Perry Oaks	Hazel cords wrapped around tank, presumably used to transport it to the hole.
21 Pineham	Two lead ingots, animal bone, 4th century pottery and coin.
22 Preshute	Tools in close proximity.
23 Pulborough	None
24 Rochester	Unknown
25 Rudston	Roman pottery and burnt animal bone was recovered from above and below it.
26 Rushton	None
27 Thompson	None
28 Trowbridge	A series of pewter plates and cups contained within the tank.
29 Trudoxhill	A lead spout.
30 Walbrook	At least five other fragments of lead sheet plus other finds in well including pewter cups and cow skulls at the base.
31 Walesby	None
32 Wigginton	None
33 Wilbraham	None

Location	Other artefacts found with the tanks
34 Willingham	Found with fourth-century pottery and smaller quantities of Hadrianic and Antonine pottery.

(Figure 3.47 A table showing the associated finds with the Roman lead tanks, author's own)

As the table shows, three of the tanks have been found containing artefacts. These are the tanks from Enford (Wiltshire), the third tank at Icklingham (Suffolk) and the tank discovered near Trowbridge (Wiltshire) in 2019. The Enford and Icklingham tanks were found in association with buildings, with the Enford tank discovered near a possible villa site consisting of a third-century building (Vatcher 1967, 126). Meanwhile, the Icklingham tank was found near a villa in Horselands Fields and an apsidal building and fourth-century cemetery (West and Plouviez 63, 74). In contrast, the Trowbridge tank was discovered on a farm in a remote area far from any nearby occupation or settlement evidence as far as we know.

The artefacts in these three tanks were just as varied as their find locations. Most of the items contained in these tanks appear to relate to occupation in these areas. The Enford tank contained a mixture of pottery and glass alongside nails with charred wood, with the area surrounding the tank containing more New Forest and Samian Ware (Vatcher 1967, 126). The Icklingham tank's finds consisted of mixed tools and fixtures possibly related to the nearby villa in Horselands Field. This tank contained a mixture of hinges, hinges pins, a mixture of dome-headed, large-headed, and triangular headed nails, two blades from light saws, a fitting/possible handle attachment and thirteen thin metal strips with nails that were interpreted as furniture fittings or possible box fittings (West and Plouviez 1976, 74-8). The Trowbridge tank contained possibly the most interesting finds, since these were a mixture of pewter artefacts that were placed within the tank. As seen below (Figure 3.48), these consisted of four plates, three dishes and two cups. Aside from some minor damage on one of the plates and one of the cups, the tank and its associated finds were intact.



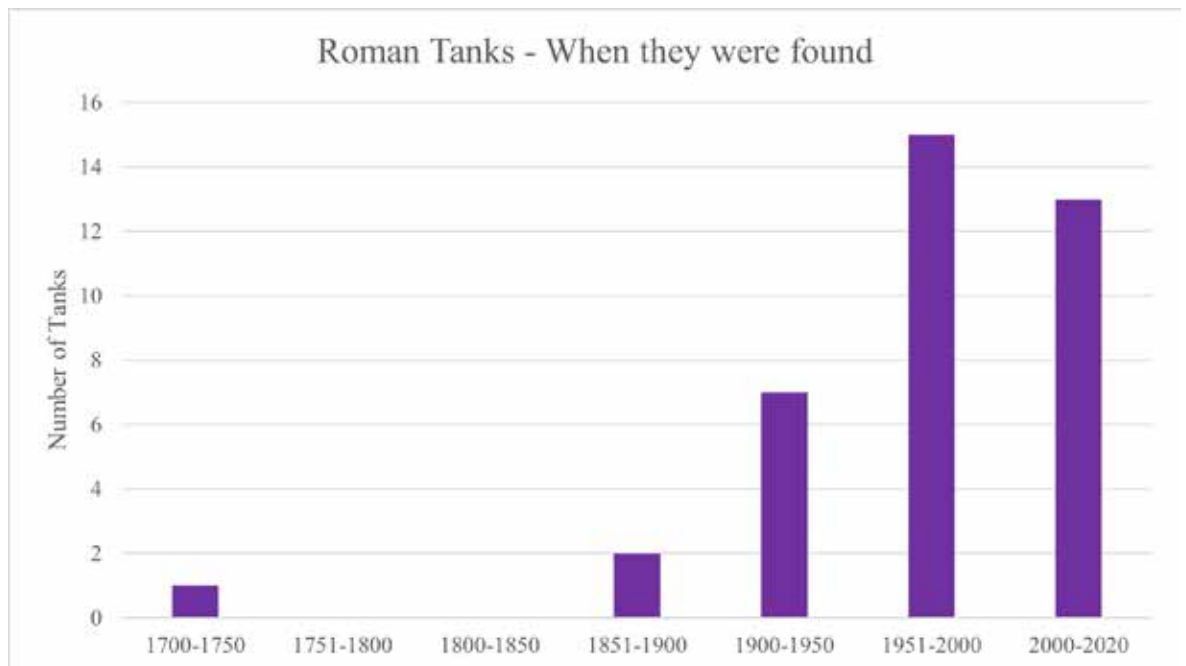
(Figure 3.48 The lead tank and pewter finds from Trowbridge, author's own)

Whilst this is the first example of a lead tank containing associated pewter finds, pewter artefacts were found in the surrounding areas of the tanks at Burwell, Icklingham and Preshute. For instance, a pewter dish and jug found near “the Broads” in Burwell Fen in 1930 whilst the tank was discovered in 1977 by a metal detectorist (Lethbridge and O'Reilly 1933, 164-7; Wilkes and Elrington 1978, 83). Pewter hoards were also found in Icklingham in areas surrounding the tank. Petts made the point that the artefacts in the tank discovered at Icklingham in 1971 have visible similarities to iron tools found with pewter hoards found in Icklingham and other areas of Suffolk (2003, 112-113). At least four pewter hoards have been discovered across Icklingham. The third hoard, recovered in 1958 to the north of the site containing the lead tank, had a mixture of pewter vessels alongside a similar saw blade to those found in the lead tank (Petts 2003, 114). Petts attempted to use these hoard and tools to contextualise the tank's burial, arguing that it showed possible 'votive' deposition. He believed that the tools at Icklingham matched those found with pewter hoards in Suffolk. Another example of this was the Appleford hoard (Oxon), where a series of pewter bowls and plates and iron artefacts (a chain, a steelyard, and a scythe blade) were recovered from a gravel pit (Brown 1973, 168; Hinchliff and Thomas 1980, 9). In Petts' opinion, this showed they were part of the broader patterns of Late Roman religious practice, with features that applied to both 'Christian' and 'Pagan' acts of deposition (2003, 115-116).

The finds at Icklingham parallel those discovered near the tank fragments at Preshute (Wiltshire). The tank fragments were found in 2016 near the site of a pair of burials which had been discovered during ground levelling at Manton in 1883. These were accompanied by grave goods, including pottery and fourth-century coins dating from Julian III to Honorius. There were also twelve pewter dishes, seven of which had engraved designs in the centre whilst the rest had decorated borders and one had both a decorated centre and borders, alongside other pewter vessels including saucers (Grinsell 1957, 97; Robertson 2000). A tool hoard was found in the same field as the lead tank fragments, containing 18 iron tools. These consisted of two awls, a knife, a barb sprung padlock and key, a padlock cover, five chisels, shears, a mower's anvil, a linch pin and two unidentified artefacts that could be a hammer and a latch lifter (Manning 1987, 88-9; *ibid* 1989, 59, 73). The anvil was dated to the fourth century through similarities to anvils in the Sandy Hoard as well as other fourth century hoards, including the Great Chesterfield and Silchester Hoards (Manning 1989, 59). The tool hoard in the Icklingham tank and the pewter hoard in the Trowbridge tank provide important context for these artefacts' burials within wider patterns in Roman Britain. The placement of these items in tanks shows a great deal of effort went into their abandonment as well as potential curation of these artefacts. Many of them could be linked to domestic occupation in these areas, especially as the Enford and Icklingham tanks and associated finds were near potential villas and a possible church. The diversity of the additional finds and contexts of these tanks are important. These diverse features are visible for tanks discovered across both 'wet' and 'dry' environments, as will be seen below.

3.8. When were the lead tanks found?

When investigating the find periods for the lead tanks, there are some clear patterns concerning when they were found.



(Figure 3.49 A graph showing the find periods for the Roman lead tanks, author's own)

As seen in the Figure 3.49 above, only a single tank was found in the eighteenth century, and this was the first tank discovered at Icklingham in 1726. There is a significant gap where no tanks were found for almost a century until 1851-1900, with the tanks at Huntingdon and Rochester reportedly discovered before 1878. Following this, the numbers rose briefly from 1900-1950 with six tanks from this period. As the graph shows, the greatest number were discovered in 1951-2000, with fourteen tanks found during this era. The numbers from 2000-2020 are relatively close to this, with twelve tanks discovered during this period. This is likely due to post Second World War reconstruction, rebuilding, and the rise of metal detecting activities. Since its inception in 1997, more and more archaeological discoveries have been reported on the Portable Antiquities Scheme many of these due to the popularity of metal detecting, with eight of the 2000-2020 Roman tanks (80% of those finds and 21% of the total Roman tanks) discovered by metal detectorists, more than in 1950-2000 range (the Brough and Flawborough tanks).

Conclusions

Some distinctive patterns are visible with the Roman tanks' burial. This is evident with their location in the country, with most clustered in the East Midlands and East of England to the East of the Peak District. This is in contrast with areas that are clearly missing the tanks, especially the North East and Wales which were mainly military zones. As seen in Section 3.3, these are large and highly decorated objects yet many of them were found in rural locations far from lead resources or major urban centres. However, as Section 3.4 demonstrated many of the tanks were found close to water sources, roads or settlements, with many of the tanks less than 1km from these natural and human-made features. This suggested that economic accessibility to the tanks or resources to complete them was a more significant factor than direct access to lead mines or lead resources. The choice of context alongside the manner of their deposition and their associated finds are also important features. Far more were found in 'dry' than 'wet' contexts, with many of the tanks discovered in fields or modern contexts due to metal detecting activities or excavations (especially the more recent examples) or through accidental discoveries. However, many of them were placed in ditches, pits, rivers, watering holes and wells which should deliberate abandonment. This allowed them to be categorised alongside similar acts both in Roman Britain and across the Empire, particularly in Europe.

More of the tanks were found in a fragmented or deliberately damaged state than a complete and intact one, although the tanks at Enford and Pulborough were damaged due to human error with machinery. The types of damage ranged from using bladed artefacts such as axes or shears to hack into pieces, burning, crushing and folding, surface scouring with a knife and tearing panels from the sides of the tanks. A further important factor is that for many of the damaged examples, the discovered fragments do not make a complete tank when reassembled and there are pieces were missing. In some cases, there was only a single panel of the tank, as seen at North Lincoln and Thompson. Combined with the contexts chosen for deposition, it indicated extensive time and effort undertaken by those disposing of these artefacts. These aspects provided an opportunity to contextualise them within the broader frame of depositional patterns during Britain's Late Roman period. This was further indicated by the artefacts placed within the tanks, especially the recent example from Trowbridge which was found with a small pewter hoard. Alongside the mixed assemblages contained in the tanks at Enford and Icklingham, these also indicated intentional abandonment of the tanks. This was further emphasised by the large scale and decoration of the tanks, with at least nine decorated with the Chi-Rho monogram and the others featuring rather extensive decorative motifs. These included Herringbone bordering, Saltire crosses and at least three with inscriptions including *UTERE FELIX* and *DO FECIT VIVAS*. These all indicated that the tanks were items with a large degree of value to their communities. The factors analysed in this chapter will be important for Chapter Four with the Anglo-Saxon/Early Medieval Tanks, where I take a similar approach and for Chapter Five, where I compare both sets of tanks.



Where have the Anglo-Saxon/Early Medieval tanks been found, and how do they compare with similarly deposited finds in Anglo-Saxon/Early Medieval Britain?

Chapter Four: Where have the Anglo-Saxon/Early Medieval tanks been found, and how do they compare with similarly deposited finds in Anglo-Saxon/Early Medieval Britain?

Introduction:

With the previous chapter covering the Roman lead tanks, the focus of this chapter is the deposition patterns of the Anglo-Saxon/Early Medieval tanks. The analysis will firstly assess where the tanks were found and where they were not found. These tanks have been dated to the Middle Saxon-Late Saxon period (8th-10th centuries) through a mixture of stylistic decorations, associated finds such as pottery and radiocarbon dating on associated finds (Blair 2010; Leahy 2013). I will be comparing the locations of the tanks with the burghal hidage, laid out in the late ninth to tenth centuries by Alfred the Great and his successors to see whether the tanks' locations centre around urban environments. Much like the previous chapter, assessing their findspots will be centred around access to available lead resources and production facilities. Following these, the chapter will then be investigating the proximity of find spots to a Roman Road, access to nearby water sources, a settlement and whether this impacted their locations.

The next stage of the chapter will analyse the types of contexts from which they were recovered and their retrieval method, assessing whether there are clear links between these two factors. Like the previous chapter, this will be followed by an investigation into investigate the tanks' state upon deposition and what patterns are visible for the tanks discovered in 'wet' and 'dry' environments. Clear patterns are visible concerning their find context and state, with tanks in both types of locations showing similar burial patterns. Assessing the tanks' burial through their context and state will demonstrate the effort that went into these artefacts' disposal.

The next part of the chapter will analyse their decorations and size before investigating any artefacts associated with the tanks. At least five of the current Anglo-Saxon/Early Medieval tanks contained tool hoards (Leahy 2013, 231-3; Naylor 2015, 133). These materials are like hoards from Anglo-Saxon/Early Medieval Britain across both 'wet' and 'dry' environments, particularly in the Thames and Witham Valleys. Assessing the find contexts and their associated materials allows comparisons with these hoards and earlier hoards from the Bronze Age. Like the tanks with their mixed hoards, the Bronze Age hoards contain a mixture of large bronze cauldrons and mixed tools and weapons (Gerloff 2010; Joy 2014). Mixed excavations discovered these across a range of 'dry' and 'wet' contexts, much like the tanks. It will also show whether similar patterns of artefact deposition are visible across multiple periods. I will be comparing the associated finds with the Roman tanks in the next chapter to see if there is a continuation in the types of artefacts deposited with the tanks. Investigating these aspects will also provide an investigation into whether the Anglo-Saxon/Early Medieval tanks display evidence of 'landscapes of continued deposition'.

The final part of the chapter will analyse when the tanks were found. This will involve looking at the dates of their recovery and correlating it to factors like increased metal detecting and excavations in connection with recent archaeological developments.

4.1. Where have the tanks been found and what patterns are visible?

25 Anglo-Saxon/Early Medieval lead tanks were found in 18 locations as illustrated in Figure 4.1 below. Three lead tanks were found at Bottesford, three lead tanks were found at Garton on the Wolds and three lead tanks were found at Willingham. Two lead tanks were found at both Flixborough and Whithorn, whilst all the other sites had a single lead tank. Willingham was unique in that both a Roman and two Anglo-Saxon/Early Medieval tanks were found at this site, the only site where this occurred.



(Figure 4.1 A map detailing the locations of the Anglo-Saxon/Early Medieval lead tanks, Author's own)

The Anglo-Saxon/Early Medieval lead tanks are as below.

	Location	County	Region	How was the tank discovered?
A	Allerton-Mauleverer	Yorkshire	Yorkshire & The Humber	Found on a cobbled stream bed.
B,C,D	Bottesford	Lincolnshire	East Midlands	Two tanks found and both were in the primary fill at the base of a settlement ditch with vessel above. Another tank was found one metre west of the two bases.
E	Corby	Northamptonshire	East Midlands	Found by a metal detector.
F	Cumwhitton	Cumbria	North West	Found across the river from where the Cumwhitton Viking Burials were found in 2004.
G	East Goscote	Leicestershire	East Midlands	Found on 'island' between River Wreake and a smaller stream just southwest of the Ratcliffe watermill site.
H	Felixstowe	Suffolk	East of England	Unknown
I,J	Flixborough	Lincolnshire	East Midlands	Two tanks and both found in the ditch of an Anglo-Saxon/Early Medieval settlement at Flixborough.
K,L,M	Garton on the Wolds	Yorkshire	Yorkshire & The Humber	Three tanks found close to the main road at Garton on the Wolds.
N	Grassington	Yorkshire	Yorkshire & The Humber	Found by metal detector near a settlement at Lea Green.
O	Mavis Enderby	Lincolnshire	East Midlands	Found by metal detector on cultivated land.
P	Newport	Shropshire	West Midlands	Found by metal detector near Forton by the A519.
Q	Riby Cross Roads	Lincolnshire	East Midlands	Found lying horizontally in the fill of a ditch at Riby Cross Roads Anglo-Saxon/Early Medieval settlement.
R	St Saviourgate York	Yorkshire	Yorkshire & The Humber	Found during excavations at 9 St Saviourgate in a "rubbish pit".
S	Stidriggs	Dumfries Shire	Scotland	Found by an Army Ordnance Clearance Team 750 mm deep in peat.
T	Westley Waterless	Cambridgeshire	East of England	Found draining the field behind the School and Post-Office at Westley Waterless.
U,V	Whithorn	Dumfries Shire	Scotland	Two tanks found within a twelfth century deposit.
W	Willingdon	East Sussex	South East	Found near Willingdon while cutting a branch railway through the Pevensy Levels.
XY	Willingham	Cambridgeshire	East of England	Two tanks found by metal detector near Half Moon Bridge.

(Figure 4.2 A table detailing the locations of the Anglo-Saxon/Early Medieval lead tanks, Author's own)

As seen in the map in Figure 4.1 and the table in Figure 4.2, clear patterns emerge with the finds' locations for the Anglo-Saxon/Early Medieval period lead tanks. Most of the lead tanks were found in rural environments clustered in the East of the country, with a noticeable spread from Yorkshire down into Lincolnshire and across into Cambridgeshire. Noticeable outliers are visible in the North West, Scotland, the South East and the West Midlands, varying between 4% (1) and 12% (3) of the total finds. This provides a contrast with the South West where no Anglo-Saxon/Early Medieval lead tanks have yet been discovered.

The St Saviourgate lead tank was found in the city of York, to date the only Anglo-Saxon/Early Medieval tank connected to a major town or city. Only two tanks were found in connection with an ecclesiastical site, the tanks at Whithorn Priory. There has been debate over whether

Flixborough served as a monastery (Loveluck 1998, 158; Leahy 2007; Evans and Loveluck 2009, 138-140). Another important feature is that five sites, Bottesford, Flixborough, Garton on the Wolds, Whithorn and Willingham, had more than one tank. There were the remains of at least three tanks at Bottesford and Garton on the Wolds whilst Flixborough, Whithorn and Willingham all had two tanks.

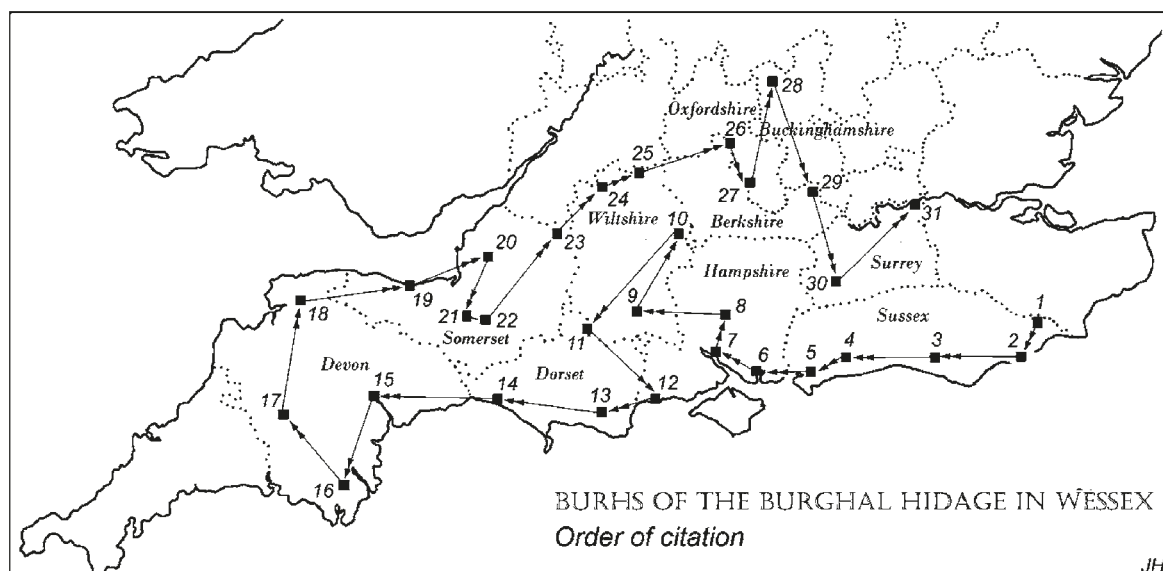
4.2. Where is there a noticeable lack of the Anglo-Saxon/Early Medieval tanks in Britain?

As figure 4.1 demonstrated, there are some areas where the tanks are clearly missing. London is the most obvious example, which is surprising as it was a major Anglo-Saxon/Early Medieval urban centre. Likewise, none are visible in the North East of England and there are no examples between the Tees and Tweed, with particular absences in the Tyne and Wear areas. Corbridge and Hexham, occupied by the Romans and later re-occupied during the Anglo-Saxon/Early Medieval periods, show a distinct absence of these lead tanks. Chester-Le-Street is another town where no lead tanks have been found. This was a town that was initially occupied by the Romans before being reoccupied in the ninth century by the group of monks that had been driven from Lindisfarne (Selkirk 2000, 45; 337-40; Goode and Proctor 2006, 9). As with the Roman period, the Anglo-Saxon/Early Medieval lead tanks do not appear to be explicitly connected with military or religious sites, except for those at Whithorn Priory and possibly Flixborough. Other patterns are likewise visible with a clear lack in the South West and Wales. Whilst these were areas with large access to the necessary lead resources for creating these tanks, both regions were outside the zone of Anglo-Saxon/Early Medieval occupation in Britain at certain points. During the time of the author Gildas in AD 540 the South West of Britain lay outside of Saxon occupation. However, it appears that the Saxons were in Somerset by the end of the sixth century and in Devon by the end of the seventh century (Lloyd 1991, 49). It is possible that there were tanks in these regions, but they could have been recycled or destroyed by later occupants. Alternatively, these lead tanks could have been destroyed during later building works or excavations by mechanical diggers. The Roman tanks at Enford and Pulborough were almost destroyed through these excavation methods, and it is possible that Anglo-Saxon/Early Medieval examples were broken during excavation. Certain areas of occupation in the South East, like Kent, are noticeably lacking tanks. If their locations were analysed concerning their placements in Anglo-Saxon/Early Medieval kingdoms, the majority of the lead tanks were in the Mercia and East Anglia (*Figure 4.3*). Only five examples were visible in the Deiran region of Northumbria, as Figure 4.1 demonstrated. The kingdoms of Essex, Kent and Wessex are all lacking Anglo-Saxon/Early Medieval examples, since the South East only has one example at Willingdon in Sussex whilst the South West has no examples at all.



(Figure 4.3 A map of the Anglo-Saxon/Early Medieval kingdoms, The Map Archive)

Another important feature is that no tanks have been found in connection with the towns mentioned in the tenth century Burghal Hidage (Figure 4.4). This was a document relating to a series of burhs established by Alfred the Great and his successors. They served both as a defensive structure as well as providing areas to launch the attacks which supposedly reclaimed England from the Vikings. Although this document was published later than the accepted date for the lead tanks, many of which were found at Mid-Saxon sites, there are lead tanks that have been tentatively dated to the Late-Saxon period such as the lead tank from Felixstowe. When comparing Figure 4.1 to Figure 4.4, no tanks have been found in connection with any of the towns mentioned in this document. As discussed above, far more of the Anglo-Saxon/Early Medieval tanks were found in potentially rural areas rather than large urban environments.



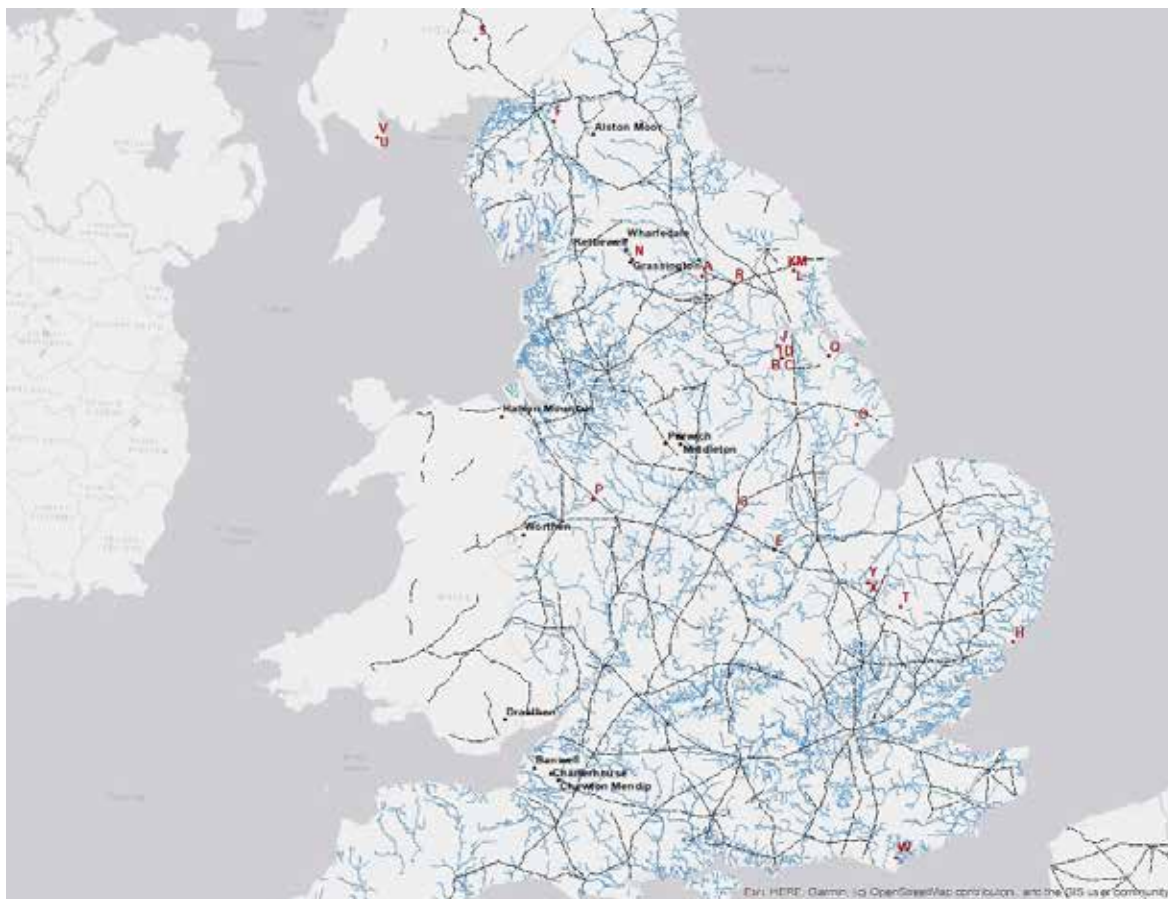
(Figure 4.4 A map and key of the Burghal Hidage system, Halsam 2017, 144)

1 – Eorpeburnan 2 – Hastings, 3 – Lewes, 4 – Burpham, 5 – Chichester, 6 – Portchester, 7 – Southampton, 8 – Winchester, 9 – Wilton, 10 – Chisbury, 11 – Shaftesbury, 12 – Christchurch, 13 – Wareham, 14 – Bridport, 15 – Exeter, 16 – Halwell, 17 – Lydford 18 – Pilton, 19 – Watchet, 20 – Axbridge, 21 – Lyng, 22 – Langport, 23 – Bath 24 – Malmesbury, 25 – Cricklade, 26 – Oxford, 27 – Wallingford, 28 – Buckingham, 29 – Sashes, 30 – Eashing, 31 – Southwark.

Another important feature is that authors like Cowgill have argued that some of the lead tanks interpreted as Roman lead tanks should instead be viewed as Anglo-Saxon/Early Medieval lead tanks. Cowgill discussed Christopher Guy's interpretations of the Kenilworth tank, Oxborough, and Rochester lead tanks (Guy 1989; *ibid.* 1991; Cowgill 1994, 270-1; *ibid.* 2009, 84-6). In Cowgill's opinion, Guy had not properly analysed the tanks since she believed that these lead tanks construction methods were not like the other Roman lead tanks. Guy wrote that the Oxborough tank "**differs from the other known examples**" since it was formed through bending in the bottom of the sides to form a ledge for the base (1991, 234). These two tanks' extensive decorations make it more likely that they are Roman examples, with Cowgill's interpretations lacking a conclusive reason for why they should be viewed as Anglo-Saxon/Early Medieval examples. Likewise, there has been debate over whether the Rochester tank was a Roman or Anglo-Saxon/Early Medieval tank. It was described as having a similar foliage pattern to the Felixstowe tank, leading Roach-Smith to date them "**to the tenth-century or earlier**" (1878, 309). If those three tanks were Anglo-Saxon/Early Medieval rather than Roman, this would mean that more examples from this period would be visible in the East of England, South East and West Midlands. Whilst it is difficult to determine whether these should be considered Roman or Anglo-Saxon/Early Medieval based upon the stylistic features, based on the interpretations, it appears that these three examples were Roman than Anglo-Saxon/Early Medieval. Not only are they more finely decorated but they are much larger and more finely built than the standard examples from the Anglo-Saxon/Early Medieval period. This means that there is still a conclusive lack of examples in the South East, particularly in the Kent area, and a limited number in the East of England and West Midlands.

4.3. How do the locations reflect access to lead resources?

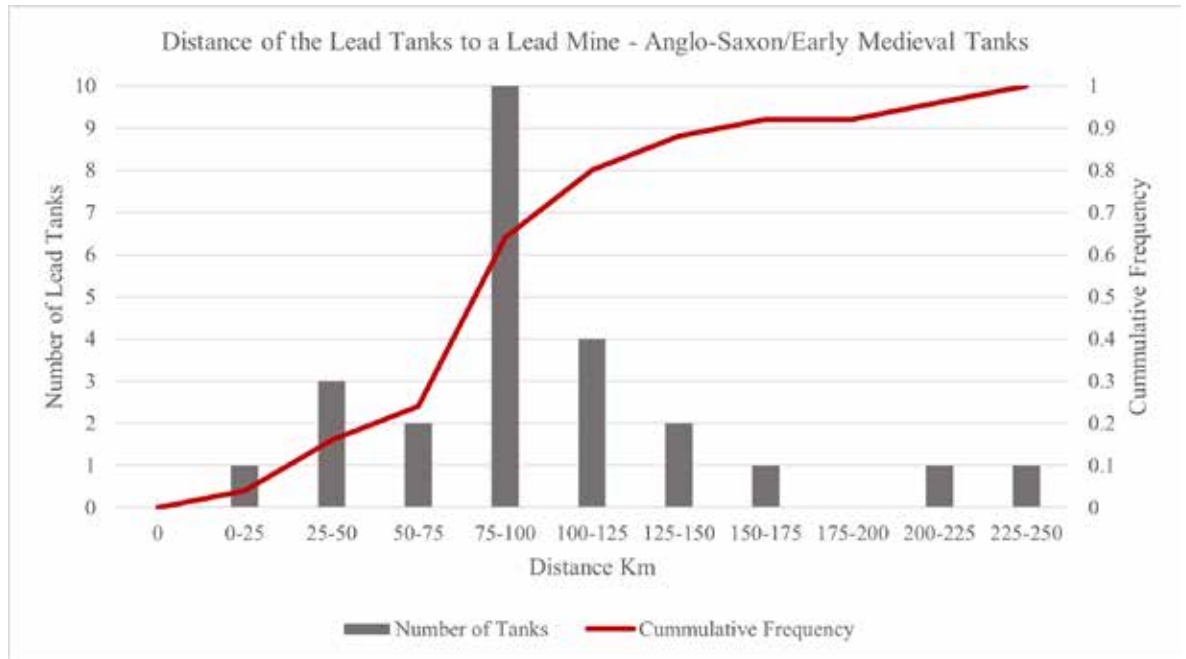
Many authors like Cowgill, Leahy, and Naylor focus upon the well-known concentrations in the Derbyshire Peak District as the main source of lead distribution for the Anglo-Saxon/Early Medieval period (Leahy 2003; Cowgill 2009, 237-4; Naylor 2015, 13; Wright 2017). This is likely due to textual sources like the Domesday Book, where it mentions several lead mines in Derbyshire, with six of these connected to royal estates. As mentioned in textual sources like Bede's Ecclesiastical History and Eddius' Life of St Wilfred, lead was connected to the church through its use in roofing churches and in windowpanes (Ecclesiastical History of the English Peoples 25; Life of St Wilfred 27). When considering access to lead resources, only the tanks in Cumbria and in Yorkshire are in areas with direct access to lead resources as seen below in Figure 4.5. The tanks at Allerton-Mauleverer, Cumwhitton, Garton on the Wolds, Grassington and St Saviourgate were in regions with access to lead resources at Alston Moor in Cumbria and the Wharf Valley in Yorkshire. The Wharf Valley had links to the rest of Yorkshire through the River Ouse, meaning that the either the necessary lead or tanks themselves could have been transported to the other sites through this manner. The tank at Newport was in Shropshire, another area with access to lead deposits necessary to create the tank.



(Figure 4.5 A map showing the distance of the lead mines from the Anglo-Saxon/Early Medieval tanks, rivers and Roman roads, author's own)

When analysing the distance to the nearest lead mine for the Anglo-Saxon/Early Medieval tanks, seen above in Figure 4.6 interesting patterns once again emerge. Only 4% (1) of the tanks, that at Grassington in Yorkshire, were found less than 25km from the nearest lead mine

whilst 12% (3) were discovered 25-50km from the nearest lead mine and a further 8% (2) were found 50-75km from those lead mines. The largest groups were the 75-100km with 40% of (10) and 100-125km groups with 28% (4) of the tanks at this distance from the nearest lead mine. The other groups are much smaller with 8% (2) found at 125-150km and 4% (1) at 150-175 kilometres from the nearest lead mine. Finally, the 200-225km and 225-250km groups represented 4% (1) each with the tanks at Felixstowe and Willingdon. The median distance from a lead mine was 91.46km, the mean distance was 97.23km, the minimum distance was 2.1km at Grassington in Yorkshire and the maximum distance was 235km at Felixstowe in Suffolk.



(Figure 4.6 A graph showing the distance of the Anglo-Saxon/Early Medieval lead tanks to the nearest lead mine, author's own)

As the data shows, the majority of the tanks were located at a significant distance from the nearest available lead mines, which were mainly those in the East Midlands, East of England and South East, all areas without direct access to lead resources. However, much like the Roman tanks most of the Anglo-Saxon/Early Medieval tanks were found near water sources of some kind (either rivers, tributaries, or the coast). Another important feature is that many of these tanks were also found less than 1km from the nearest Roman road, as will be discussed in the next section, meaning that these could also have been used to transport the tanks or necessary resources to these sites. In contrast with the Roman period, little is known about transportation methods of lead during the Anglo-Saxon period although water transport was the most likely method of obtaining resources (Hooke 2014, 38, 42). A logboat discovered at Welham in East Yorkshire was provided with a C14 date of AD 350-560 was discovered near a section of trackway which led to a wharf on the River Foulness with a C14 date of AD 530-690. The wharf was likely connected to the nearby settlement at Bursea 2km away (Ottoway 2004), with the Foulness having played an important role in the Iron Age and Roman period occupation in the area (Millett and Halkon 1988, 43). It is highly likely that transporting the metal by boat was the most efficient and probable method of delivering either the completed lead tanks or necessary resources to construct the lead tank at these sites. Another important factor is that many of the lead tanks were found far from sites of known coffins. Although lead coffins were not as common during the Roman period, with some authors even arguing that examples from the Anglo-Saxon/

Early-Medieval period were simply recycled Roman coffins (Cowgill 2009, 85), lead was still widely used in church roofs, window panes, jewellery and occasionally in coffins. In AD 714, the monks of the royal Mercian abbey of Wirksworth sent a lead coffin for St Guthlac of Crowland (Felix Life of St Guthlac XLVIII; Williams 2005, 205-206; Cowgill 2009, 85), meaning they were still used in burial practices. However, many of the tanks are in areas without coffins.

4.4. Proximity to a Roman Road, Water, and a Settlement

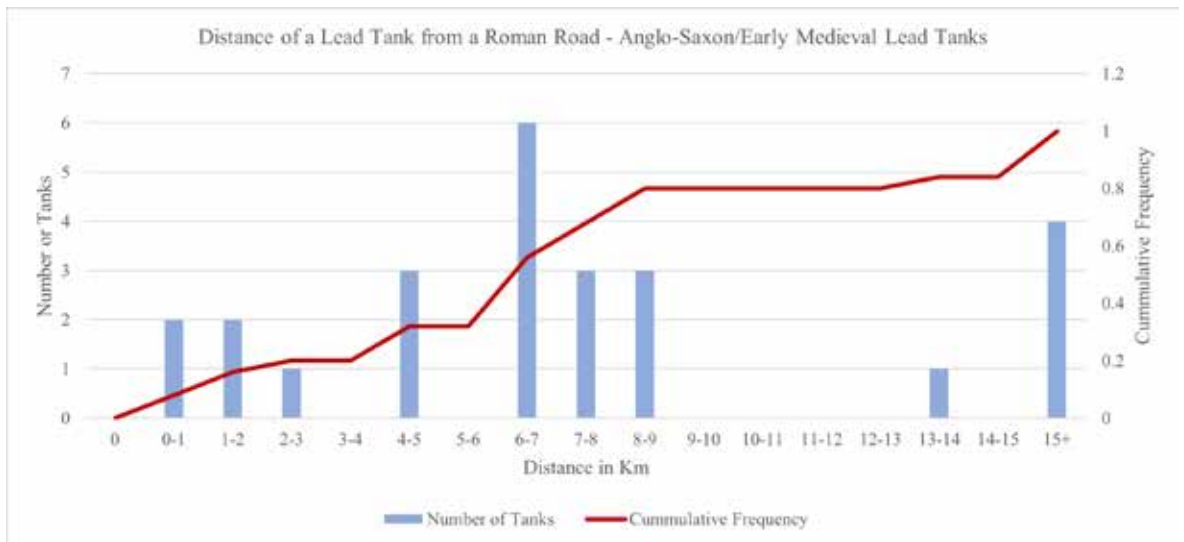
This section will analyse the locations of the lead tanks and their proximity to a Roman road, source of water or a settlement.

4.4.1. Proximity to a Roman Road



(Figure 4.7 A map showing the Anglo-Saxon/Early Medieval lead tanks and their proximity to Roman Roads in Britain, Author's Own)

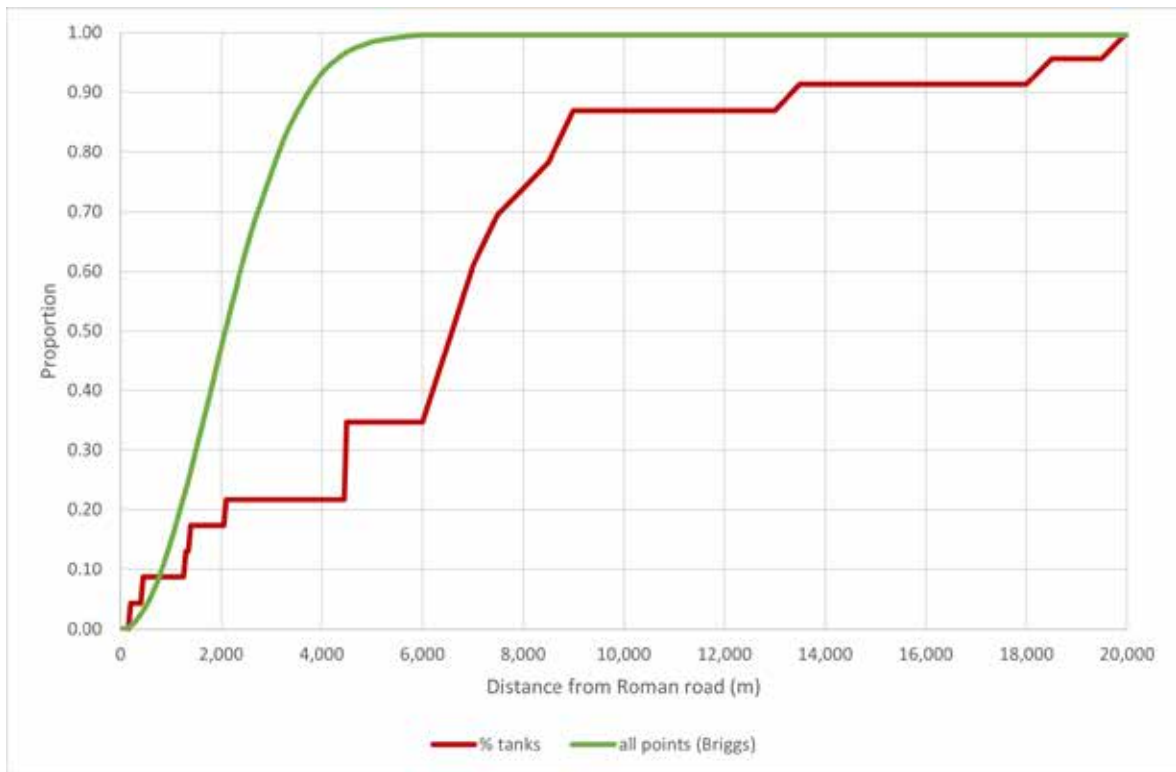
Figure 4.7 illustrates the proximity of the lead tanks to the known Roman road network in Britain. Using straight line calculations of the distance of each lead tank to the nearest Roman road shown in Figure 4.8 below illustrates, 8% (2) of the Roman tanks were discovered less than 1km from a Roman road and a further whilst 16% (6) were found 1-2km from a Roman road. The largest group 24% (6) were recovered 6-7km from a Roman road whilst 16% (4) were found 15+km from a Roman road. The median distance was 6.57km, the mean distance was 11.57km, the minimum distance was 0.14km at St. Saviourgate in York and the maximum distance of a lead tank from a Roman road was 66.34km at Whithorn in Dumfries Shire.



(Figure 4.8 A graph showing the Roman lead tanks and their proximity to Roman Roads in Britain, Author's Own)

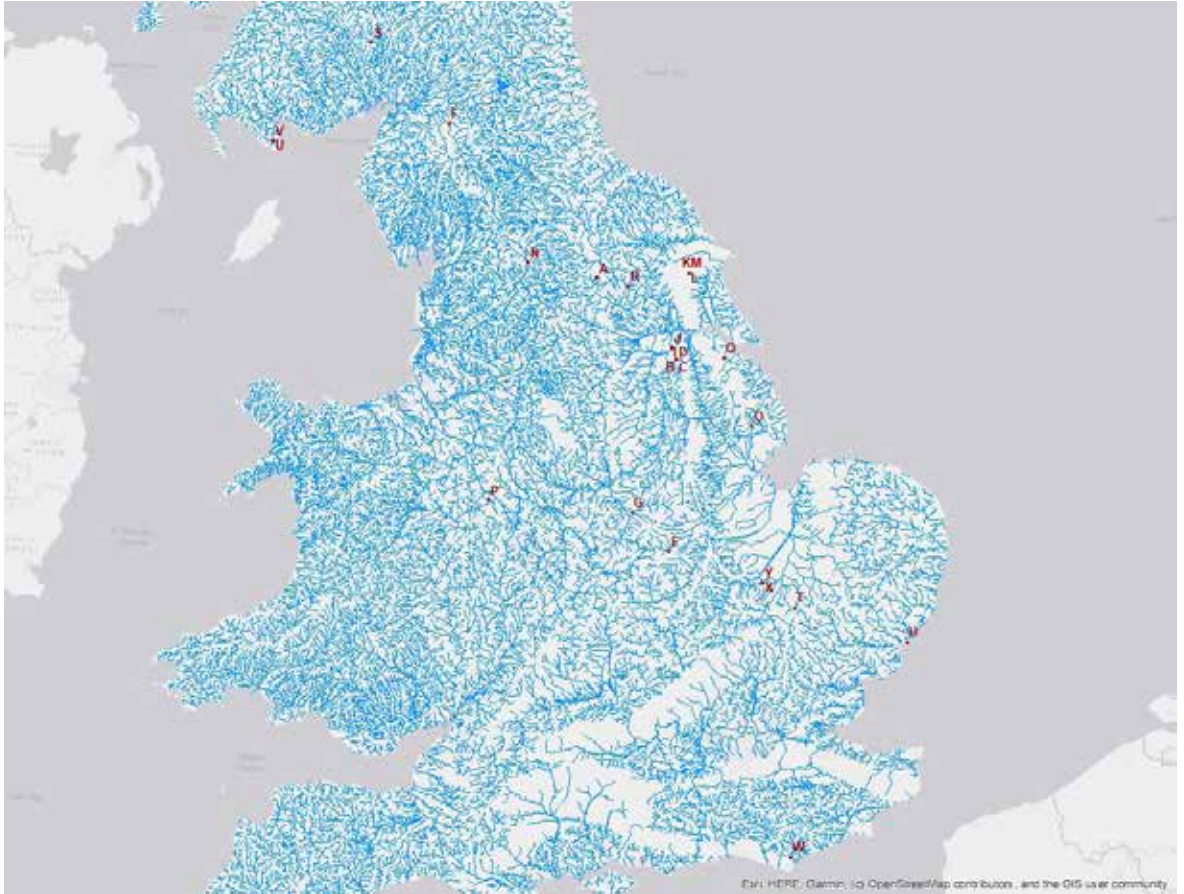
At first glance the median distance of 6.57km to the nearest Roman road appears counter to Briggs findings 'half of all points in England are within 3.5km of a Roman road, and so being 3.5km or less from a Roman road should not be considered unusual' (Briggs, 2009). However, the initial calculations of the median included the lead tanks found at Stidriggs and Whithorn in Scotland. If we excluded these tanks from the calculations the median distance of an Anglo-Saxon/Early Medieval lead tank from a Roman road is 6.41km. This is still greater than Briggs findings and this could be because the lead tanks were deliberately placed away from a Roman road. Alternatively, the Anglo-Saxon roads could be an extension of the Roman road network and the lead tanks could have been located near the Anglo-Saxon road network.

The results of an analysis of the distance of the lead tanks from a Roman road and a set of random data points and their distance to a Roman road is illustrated in Figure 4.9 below. The p value, or probability value, at 0.05 that tells us how likely it is that the data could have occurred under the null hypothesis and in this case was 0.29. The maximum difference of the two distributions from each other was 0.75. The p-value is 0.29, which is greater than 0.05. This means that there is not enough evidence to reject the null hypothesis that the two samples are drawn from the same distribution at the 0.05 significance level. However, the maximum difference between the two samples is 0.75, which is a relatively large difference. This suggests that there may be some differences between the two samples, but the statistical test is not able to confirm that these differences are significant.



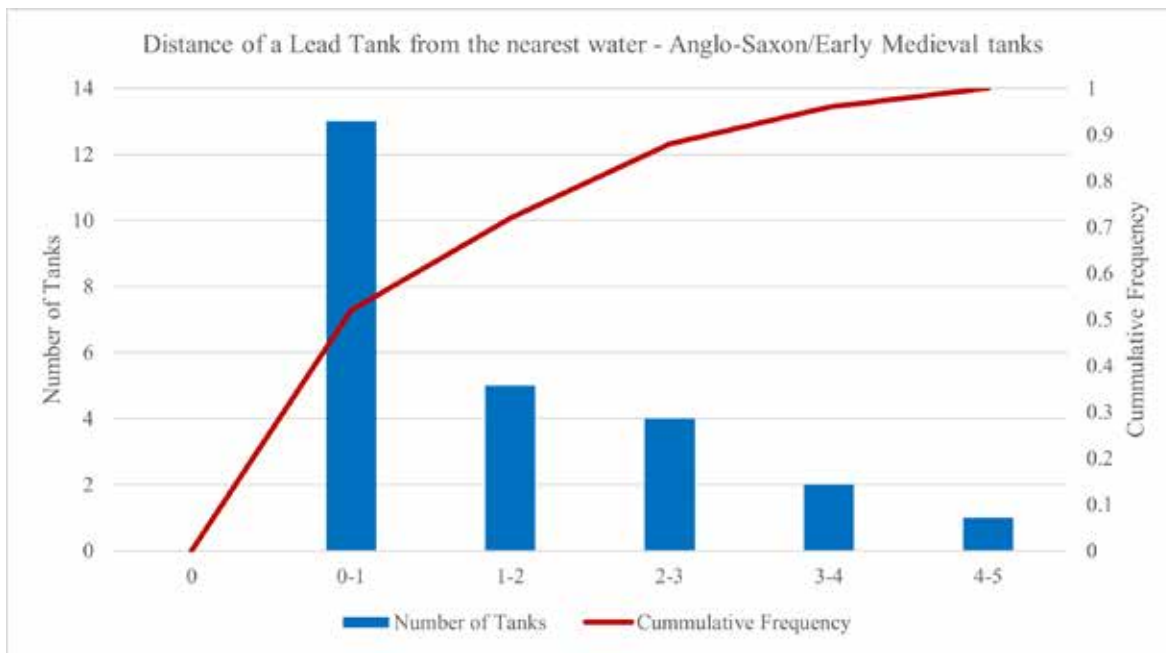
(Figure 4.9 A graph showing a comparison of the Anglo-Saxon/Early Medieval lead tanks and random data points and their proximity to Roman Roads in Britain, Author's Own)

4.4.2. Access to Water



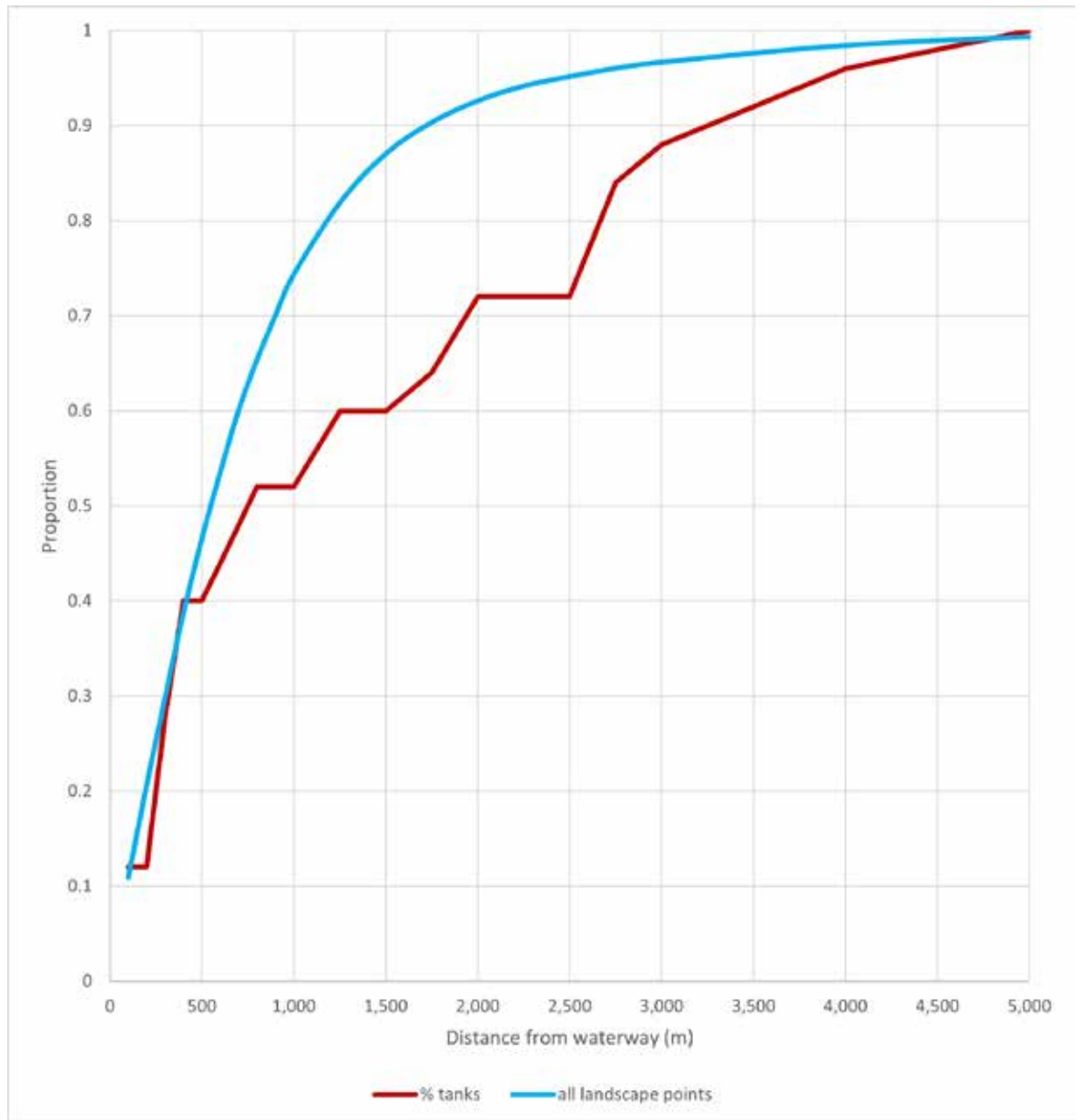
(Figure 4.10 A map showing the Anglo-Saxon/Early Medieval lead tanks and their proximity to a source of water in Britain, Author's Own)

Figure 4.10 illustrates the proximity of the lead tanks to a source of water (either a river, tributary or the coast) in Britain. Using straight line calculations of the distance of each lead tank to the nearest source of water shown in Figure 4.11 below illustrates that 52% (13) of the Anglo-Saxon/Early Medieval lead tanks were found within a kilometre of the nearest water source. A further 20% (5) were discovered between one-two kilometres from a water source, whilst 16% (4) were within three-four kilometres from the nearest water source. The median distance was 0.72km, the mean distance was 1.32km, whilst the maximum distance of a lead tank from a source of water was 4.5km at Corby. At least two tanks were found either in rivers or proximity to them, with the Allerton-Mauleverer tank in Yorkshire found on a cobbled stream bed. Meanwhile the lead tank in East Goscote in Leicestershire was found on 'island' between river Wreake and a smaller stream just south-west of the Ratcliffe watermill site.



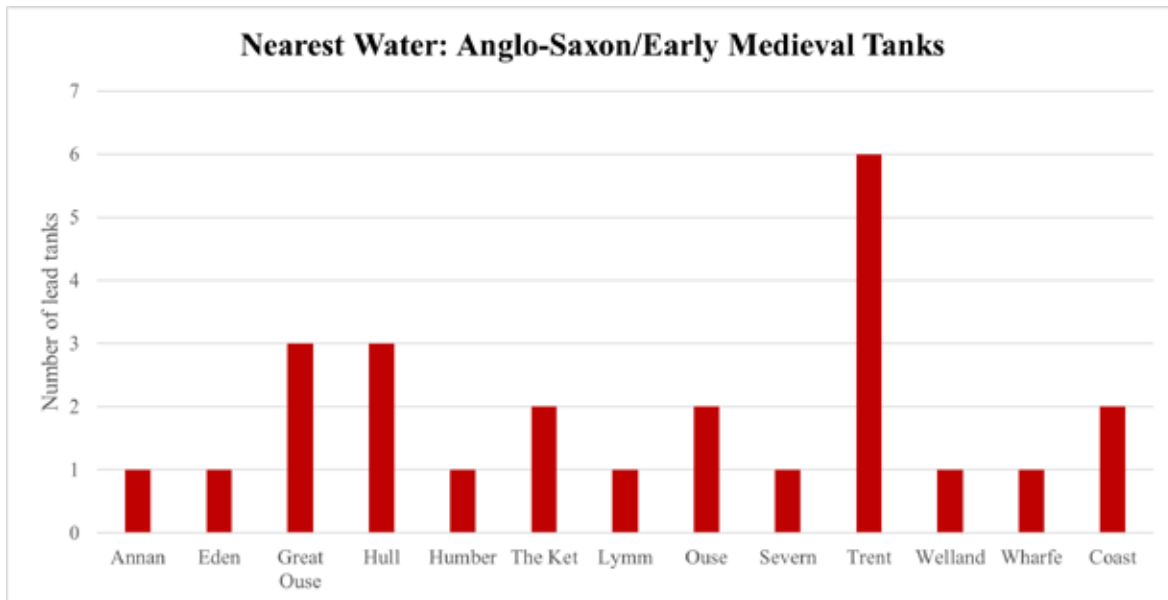
(Figure 4.11 A graph showing the distance of the Anglo-Saxon/Early Medieval lead tanks to the nearest source of water, Author's own)

The results of an analysis of the distance of the lead tanks from a source of water and a set of random data points is illustrated in Figure 4.12 below. The p value, or probability value, at 0.05 that tells us how likely it is that the data could have occurred under the null hypothesis and in this case was 0.27. The maximum difference of the two distributions from each other was 0.27. In this case, with a p-value of 0.27, it means that there is a 27% chance of observing a difference as large or larger than the one observed if the two samples were drawn from the same distribution. Since the p-value is greater than the significance level of 0.05, we do not have sufficient evidence to reject the null hypothesis. The maximum difference refers to the largest absolute difference between the cumulative distribution functions of the two samples. In this case, the maximum difference is 0.27, which indicates that the two samples are quite similar in terms of their distribution. In summary, based on these results, we cannot conclude that the two samples are drawn from different distributions, and it appears that they are quite similar.



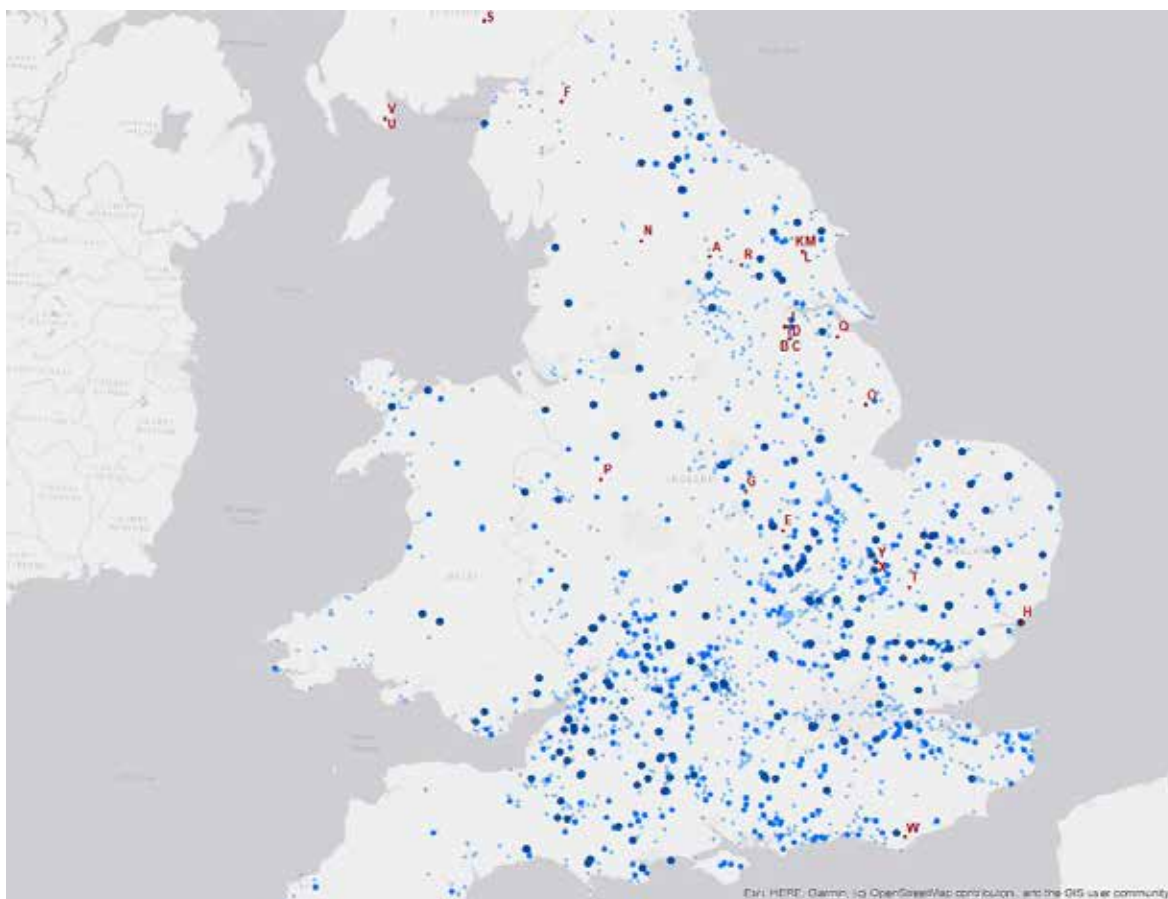
(Figure 4.12 A graph showing a comparison of the Anglo-Saxon/Early Medieval lead tanks and random data points and their proximity to a waterway in Britain, Author's Own)

As can be seen in Figure 4.13 below, the rivers with the most tanks in their vicinity were the Trent (6) and Great Ouse (5), representing 24% and 20% of the Anglo-Saxon/Early Medieval lead tanks. This was closely followed by the River Hull (3) which represented 12% of the total number. Many of the rivers which had Roman tanks in their vicinity are missing Anglo-Saxon/Early Medieval tanks, with the River Thames being one of the most notable examples. This is an important feature, especially when considering which areas are missing the Anglo-Saxon/Early Medieval tanks which will be examined below. This data is based upon the modern locations of these rivers, much like the rivers used in Chapter Three for the Roman tanks. As mentioned in the Methodology, the hydrology for certain regions has changed drastically over time. The Cambridgeshire Fens are an excellent example of this, with radical changes in the twentieth century such as damming and affecting the course of the River Great Ouse.



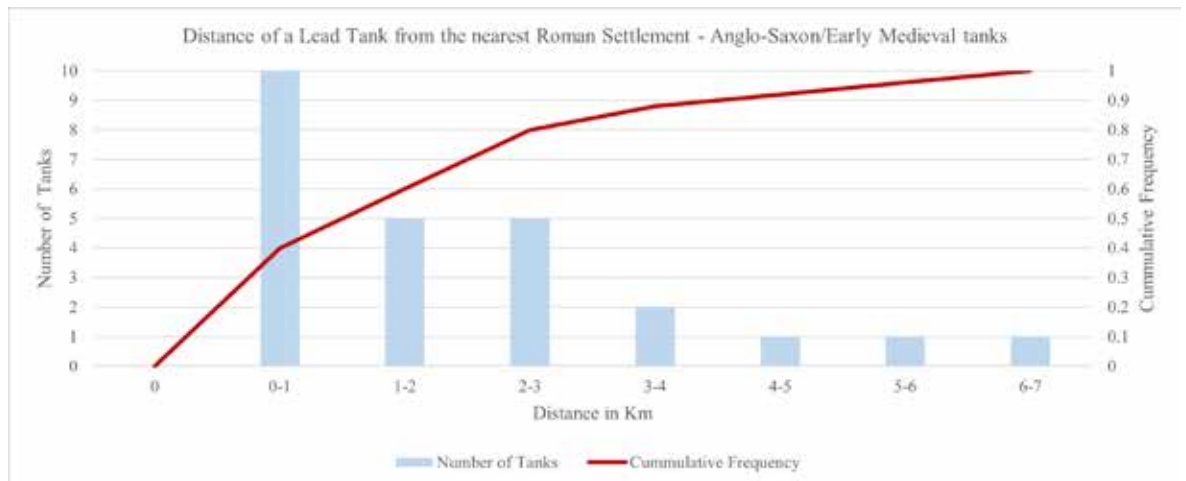
(Figure 4.13 A graph showing the nearest rivers to the Anglo-Saxon/Early Medieval lead tanks, Author's own)

4.4.3. Proximity to a Settlement



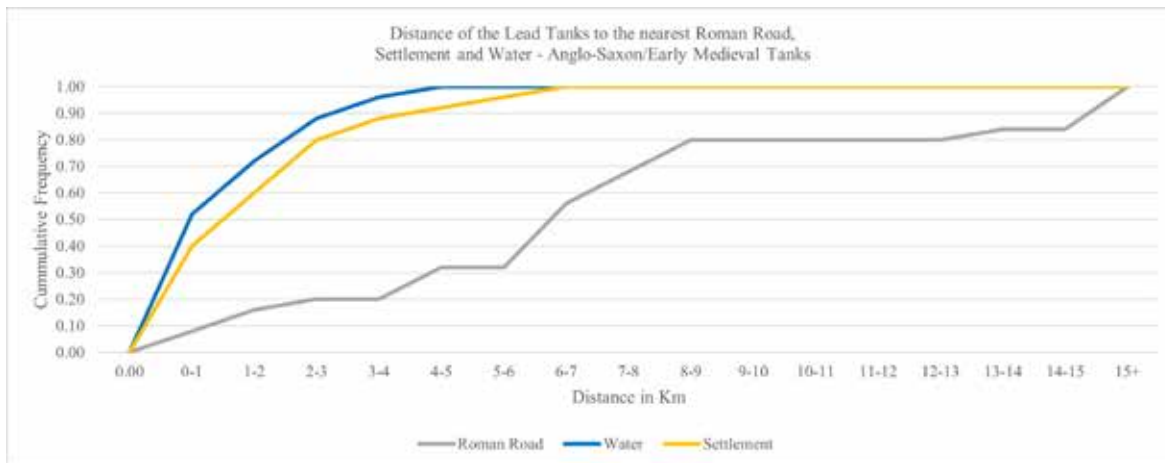
(Figure 4.14 A map showing the Anglo-Saxon/Early Medieval lead tanks and their proximity to a Settlement, Author's Own)

Figure 4.14 illustrates the proximity of the lead tanks to a settlement (Roman, Anglo-Saxon/ Early Medieval or Multiperiod) in Britain. Using straight line calculations of the distance of each lead tank to the nearest settlement shown in Figure 4.15 below illustrates that 40% (10) of the Roman lead tanks were found within a kilometre a settlement. A further 20% (5) were discovered between one–two kilometres from a settlement, whilst 20% (5) were within two–three kilometres from the nearest settlement. The median distance was 1.2km, the mean distance was 1.69km, many of the lead tanks were found in settlements and the maximum distance of a lead tank from a settlement was 6.41km at Cumwhitton in Cumbria.



(Figure 4.15 A graph showing the Anglo-Saxon/Early Medieval lead tanks and their proximity to a Settlement in Britain, Author's Own)

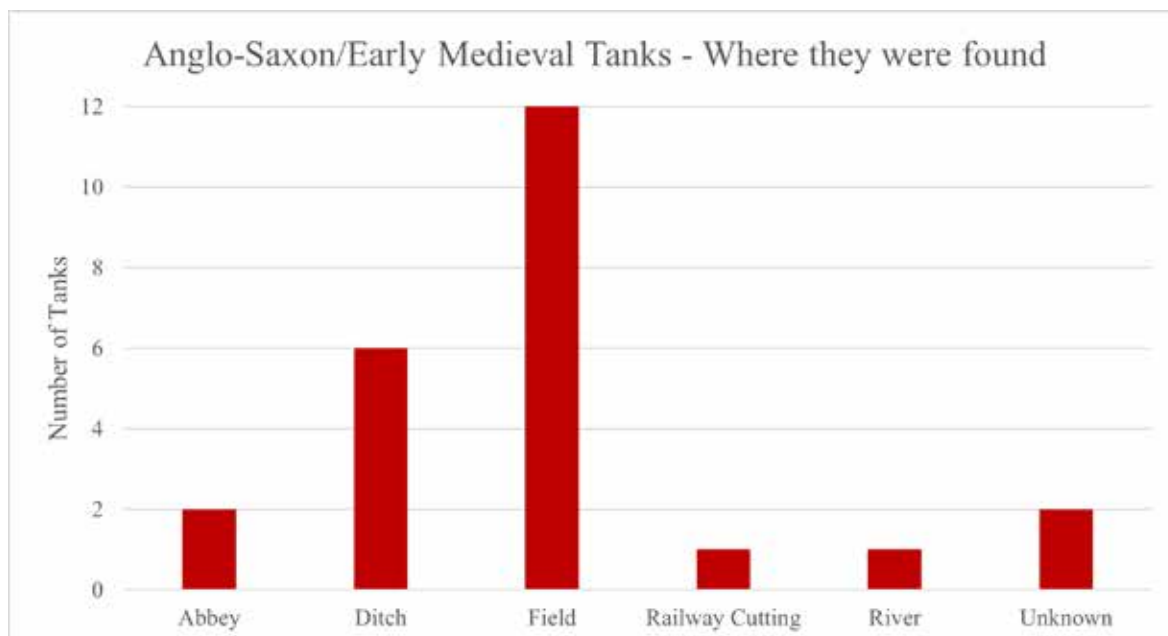
When we compare the distances of the Roman lead tanks to the nearest Roman road, source of water or a settlement some patterns emerge. As Figure 4.16 illustrates the lead tanks were found closer to a source of water than a settlement and closer to a settlement than a Roman road. This could once again reflect transport patterns and access to resources, as like the Roman period transport by boat was often the quickest and more economically cheaper way to move goods (Gardiner 2017). Furthermore, many successful markets were on or near rivers and as seen at Flixborough, England had access to goods from Continental Europe through the Humber and Trent (Leahy 2007; Loveluck and Adams 2009; Adams 2017; Hooke and Hyer 2017, 1). Therefore, the tanks' locations could reflect this access to trade of either the necessary resources or the completed artefacts.



(Figure 4.16 A graph showing the Anglo-Saxon/Early Medieval lead tanks and their proximity to a Roman road, a source of water and a settlement in Britain, Author's Own)

4.5. How were the lead tanks discovered and what contexts were they found in?

Analysing the lead tanks' find contexts will take a similar approach to the previous chapter. This will focus on the contexts from which they were recovered from, either 'wet' or 'dry'. Whilst Blair and Naylor assessed the contexts of the tanks; this aspect has been distinctly lacking with other authors (Cowgill 1994, 270-1; Loveluck 1998, 156-7; Cowgill 2009, Blair 2010, 160-1; Naylor 2015, 135; Christie et al. 2017, 409). The deposition of these tanks in both 'wet' and 'dry' environments has clear parallels to large-scale weapons, tools, and fine metal depositions in both types of environments. Varying patterns emerge from the sixth to ninth centuries concerning hoarding in Anglo-Saxon/Early Medieval Britain, the dates that the Anglo-Saxon/Early medieval tanks have been routinely dated to. Like the tanks, the choice of artefacts and deposition environments showed a highly selective process alongside the state of these artefacts upon burial, which will be shown in Section 4.6.

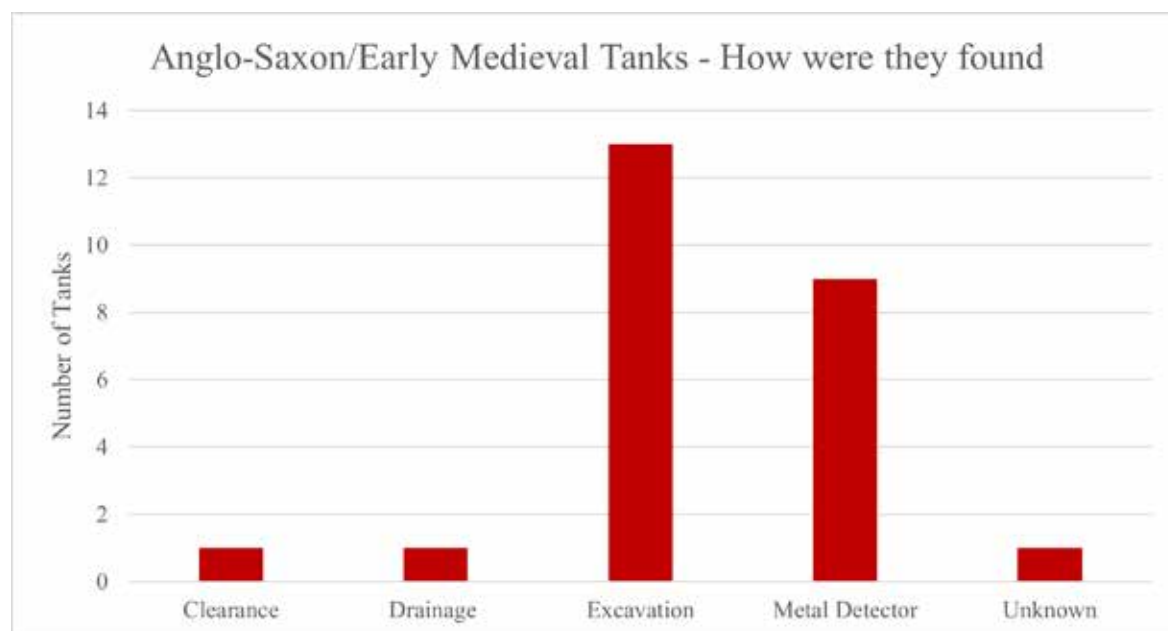


(Figure 4.17 A graph showing where the Anglo-Saxon/Early Medieval lead tanks were found, Author's own)

As seen in Figures 4.17 above, some clear patterns are visible concerning the find contexts of the Anglo-Saxon/Early Medieval tanks. Only two Anglo-Saxon/Early Medieval period tanks were found in rivers, those at Allerton-Mauleverer and East Goscote, both of which were discovered by a metal detectorist. The East Goscote tank was discovered in the River Wreake, a tributary of the Soar which is linked to the Trent. In contrast, the description for the find of the Allerton-Mauleverer lead tank only records that the metal detectorist discovered this fragment on a cobbled stream bed, the nearest of which appears to be the Sike Dike. Six Anglo-Saxon/Early Medieval examples were retrieved from ditches with three fragments at Bottesford, two complete examples at Flixborough and a folded example at Riby Cross Roads. Like the Roman tanks in ditches, these were all found by excavation found in association with Middle-Late Saxon period settlements, dated to the eighth to tenth centuries through associated pottery finds. In contrast with the Roman tanks, only a single example was discovered in a pit. This was the St Saviourgate tank, with excavations by MAP in 1995 discovering the tank within a 'rubbish' pit in Late Anglian levels on a multi-period site (Ottoway 2009, 259). This tank at St Saviourgate sat within a complex and extensive early urban cityscape, with the tank near the nearby Coppergate region of York and other Anglian sites such as Aldwark and Hungate. Clear similarities are visible between the burial of the tank and the Coppergate Helmet, which excavations discovered buried in a pit on this site (Tweedle 1982, 894).

Fields were once again a common findspot for the tank, with 12 examples (48%) discovered in these locations. These included the Cumwhitton, Garton on the Wolds, Grassington, Mavis Enderby, Newport, Stidriggs, Westley Waterless and Willingham tanks. These were also found through a mixture of metal detecting or excavation, with the Westley Waterless tank discovered during drainage of the area behind the village post office. It is important to note that the use of 'fields' as their context is referring to their modern contexts, since for many of these their contemporary contexts are missing. More of the metal detected examples were found in potentially 'remote' areas far from any recorded Anglo-Saxon/Early Medieval/Early Medieval occupation, with Cumwhitton (despite its proximity to the famed Viking burials) and Mavis Enderby providing the clearest examples of this: However, the tank at Grassington was

discovered in an area known as Lea Green, with settlement evidence dating from the Neolithic to the Roman period. The Anglo-Saxon/Early Medieval occupation was hinted at with a series of tools and cauldrons found in the same area as the tank. Meanwhile, the Stidriggs tank was found in a remote region on the moors west of Beattock. Despite being a remote area, a series of forts and burial cairns surrounded the tanks' findspot although the dates of these features are uncertain due to a lack of dateable finds. Most of these have been given a Neolithic or Iron Age date although at least one fort has been provided with a Medieval/Post-Medieval date (RCAHMS 1997,316). The two tanks at Whithorn were discovered during the excavations of Whithorn Priory whilst the tank at Willingdon was in an area surrounded by mixed occupation, including a series of Early Saxon fifth and sixth-century burials at Ocklynge Hill and Late Saxon spearheads were discovered at Willingdon Hill (Budgen 1922, 241-2; Meaney 1964, 252-3). The Corby and Felixstowe tanks both lack contextual information, leading to unknown find spots. Whilst the Corby tank was discovered by a metal detectorist in the Cottingham area of Corby, its finder was reluctant to provide information concerning its location with the Portable Antiquities Scheme. Meanwhile, the Felixstowe tank is also missing contextual information. The report from the Journal of the British Archaeological Association only describes its appearance, mentioning its similar decorations to the Rochester tank (Cuming and Morgan 1878, 259)

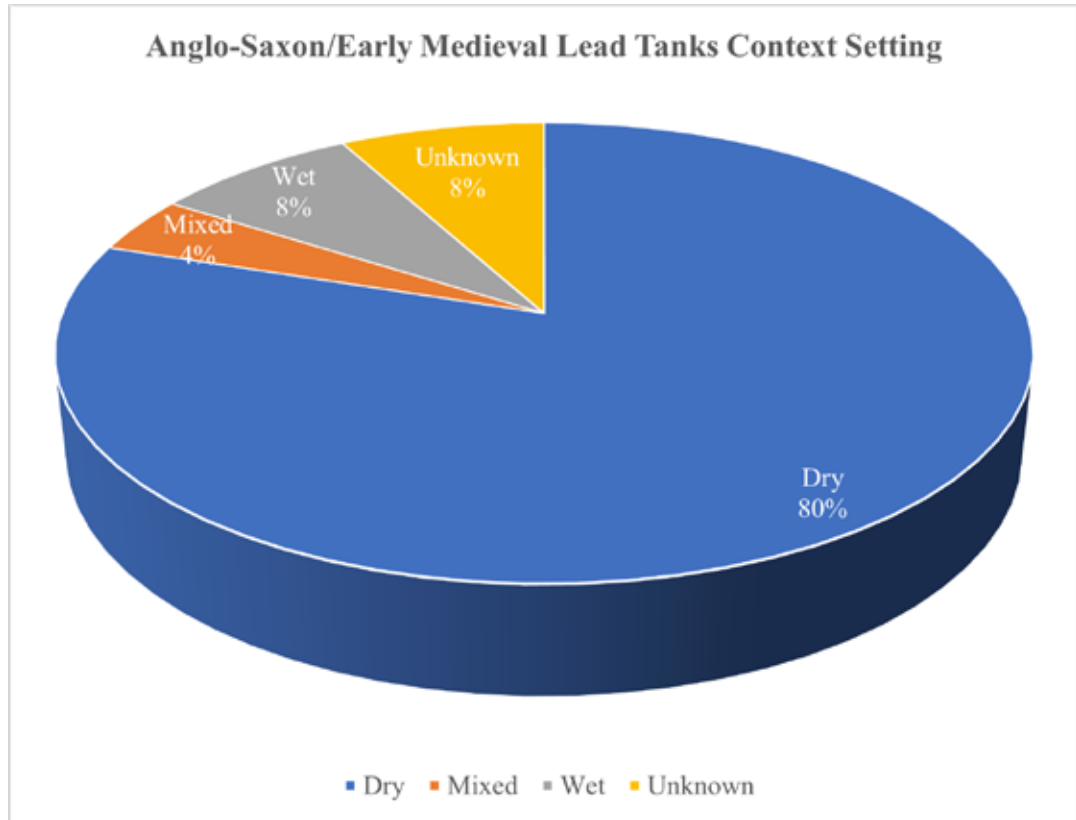


(Figure 4.18 A graph showing how the Anglo-Saxon/Early Medieval lead tanks were found, Authors own)

As can be seen in Figure 4.18 above, more of the tanks with actual find contexts were discovered through excavations, except for the Garton on the Wolds tanks which were discovered in a field west of Garton Station. The tanks recovered by metal detectorists had no information regarding their find context, either because the finders did not provide it or because they were discovered in fields. This provides similar circumstances to the Roman tanks discussed in the previous chapter.

4.5.1. The 'Wet' contexts for the tanks: Rivers

As seen in the Figure 4.19 below only two of the Anglo-Saxon/Early Medieval examples were discovered in 'wet' contexts. These were the Allerton-Mauleverer lead tank and the East Goscote lead tank. This means that only 8% of the current twenty-five examples were discovered in these types of environments. This contrasts with the Roman period tanks, 21% (8) of which were found in 'wet' environments.



(Figure 4.19 A graph showing the context setting of the Anglo-Saxon/Early Medieval tanks, author's own)

Both the Allerton-Mauleverer and East Goscote tanks were recovered by metal detectorists in areas with connections to 'wet' environments. The Allerton Mauleverer tank was found on a cobbled stream bed, creating a rippled effect on its surface, shown in Figure 4.20 below. Only half of this tank is available, consisting of its base and incomplete sides. It has an incomplete base with several holes and repair-marks, whilst the rim was folded inwards and separated from the rest of the tank.



(Figure 4.20 Anglo-Saxon/Early Medieval vat or tank from Allerton-Mauleverer in Yorkshire, Birmingham Museum Trust)

Meanwhile, the East Goscote tank was discovered in an area reported as an 'island' between the River Wreake and a smaller stream southwest of the Ratcliffe Watermill site. As seen in Figure 4.21 below, the East Goscote tank was very worn and patched and pitted on its external surface. A split ran along the vessel's length near the flat triangular terminal whilst a series of hack marks were visible on the opposite side near the handle projection. This suggested a deliberate attempt to dismantle this item. The vessel was also battered, with several small holes suggesting it was very worn and was about to be recycled.



(Figure 4.21 The lead tank discovered at East Goscote in Leicestershire, Birmingham Museum Trusts)

These two examples display tremendous effort to dismantle and bury them. This feature is visible with some of these artefacts discovered in 'dry' contexts such as the three tanks at Bottesford. Clear contrasts can be made with the Roman tanks, since far more were Roman tanks discovered in rivers. These were all intact, unlike their later Anglo-Saxon/Early Medieval counterparts. Other comparisons are visible since far more of the Anglo-Saxon/Early Medieval examples were discovered in potentially 'dry' contexts than the Roman ones. However, authors such as Naylor attempted to argue that some of these examples discovered in 'dry' environments had potentially greater connections to 'wet' environments (Naylor 2015, 135). This was through their associations with rivers such as the Trent and Humber (seen in Section 3.1.1), with Flixborough being one of Naylor's prime cases alongside Willingham.

Naylor's arguments were based upon Thomas' earlier works, where he believed that the deposition of the tank and associated tool hoard at Westley Waterless in Cambridge occurred in a 'wet' environment. This was through the town's position on the Cambridgeshire Fens (Thomas 2008, 386). Field drainage behind the town's school and post office recovered these artefacts. However, Leahy instead argued that it was difficult to be certain that the site was marshland and argued that there were no visible water sources in the area (Leahy 2013). Similar circumstances are visible with the Stidriggs tank and its associated tool hoard. Whilst the military found this lead tank in peat on a moor, Leahy argued that there was no evidence of visible water sources in this area. This is surprising, as Stidriggs is located near the confluence of a series of rivers to the west of Beattock, including the Eye Burn. These likely created the peat beds containing the lead tank. In contrast to Leahy, Naylor believed it was possible to see other depositions as potentially related to water. He used the Bottesford and Flixborough lead tanks from Lincolnshire and the

Willingham tanks from Cambridgeshire to develop this idea (2015, 135). He focused upon their discovery locations, arguing that their placement in areas near bodies of water provided them with indirect associations with these environments.

The tanks at the Middle Saxon period site at Bottesford were only 200m from the Bottesford Beck, a river that runs into the River Trent. Meanwhile, Naylor also believed that the Flixborough tanks had links to water through Flixborough's location at the interface of the peat bogs and marshland of the Trent and Lincolnshire. The site itself is on the south bank of the Humber Estuary and on the east bank of the River Trent. Excavations from 1989-1991 revealed a Middle to Late Anglo-Saxon/Early Medieval settlement with over 30 buildings and other structural features (Loveluck 1998, 146; Loveluck and Atkinson 2007). The central area of occupation at Flixborough was on the summit of a windblown sand spur overlooking the River Trent. This saw multiple periods of activity alongside major phases of dumping associated with the refuse accumulation and deliberate raising of the ground level. Quarrying for sand in 1994 discovered the Flixborough tool hoard contained between two lead tanks, in the vicinity of the 1988-91 excavations along with Middle Saxon features discovered in 1994. As seen in Section 5.7, these tools were predominantly related to agriculture and carpentry/woodworking. The hoard's location downslope of the main settlement towards the wetlands led to Naylor concluding that this burial had greater water connections than initially believed (2015, 135). The hoard's position and its mixture of artefacts suggested deliberate abandonment without the intention of retrieval. These were probably associated with the settlement's disuse and abandonment, like the Bottesford examples. Naylor also focussed upon the Willingham tanks' location on the edge of the Fens. This parish is framed on two sides by the River Ouse and before draining in the 17th century, the fen would likely have flooded every year. That would potentially lead to the burial of the lead tank in a peaty or inundated area, like the Stidriggs tank. The deliberate abandonment of the 'wet' examples has clear parallels with those found in 'dry' contexts, particularly those in the ditches.

4.5.2. The 'Dry' Contexts for the tanks: Ditches

As shown in Figure 4.19 above, 80% of the Anglo-Saxon/Early Medieval examples were recovered from 'dry' contexts ranging from a mixture of field, ditches, a pit for the St Saviourgate tank and a railway cutting for the Willingdon tank. In the case of the ditches and pits, the paleoenvironmental evidence indicated that these features were 'dry'. In contrast, 'wet' and 'mixed' contexts represented a much smaller percentage for the Anglo-Saxon/Early Medieval period tanks than the Roman examples. At least six examples (24%) came from settlement ditches, with excavations discovering these at Bottesford, Flixborough and Riby Cross Roads. Deliberate, 'ritual' deposition of artefacts within boundary enclosure ditches has seen a continual focus in academic literature (Hamerow 2006, 12; Hingley 2006, 230-4; Chadwick 2012, 285; Haselgrove 2015). Hamerow focussed on ditches at Anglo-Saxon/Early Medieval settlements as a focus for 'special' depositions during the Early Anglo-Saxon/Early Medieval period at sites like Cheddar, West Stow, and Wharram Percy in North Yorkshire (2006, 2, 9, 12). She identified 42 'special' deposits from 16 sites across England, many of which consisted of articulated or disarticulated burials of both animals and people (2006, 4-7). Like the tanks, many of these special deposits were found in settlement ditches or pits, as seen with the burial of an infant and a partly butchered sheep in a settlement ditch at Wharram Percy in North Yorkshire (Hamerow 2006, 9). She took a similar approach in arguing for 'ritual' treatment of the deposits at Catholme in Staffordshire and the royal villa at Cheddar, discussing the placement

of the animal and human remains near the entrances of ditched enclosures (2006, 9-10). Later authors like Morris and Jervis approved of Hamerow's approach, although they worried that she created a dichotomy between ritual and functional deposition through this identification of 'special deposits' in Anglo-Saxon/Early Medieval settlements (Morris and Jervis 2011, 66). The use of ditches concerning these apparent 'special' deposits appears to have continued with the deposition of tanks in ditches, as seen with those recovered from the Middle to Late Saxon period settlements at Bottesford and Riby Cross Roads.

There were three examples at Bottesford, with a pair of bases folded and orientated together in a ditch terminal, whilst another lead tank's walls were found one metre west of these (Cowgill 2009, 67-68). These were discovered in the fill of a substantial east-west aligned boundary ditch with two distinct phases. The first phase, based upon accumulated pottery and animal bone, was of a Middle to Late Saxon date to a depth of 1.40 metres (Boyer et al 2009). This traversed the site's central part in Trenches 3, 4 and 5 of the excavation, with finds from this phase consisting of small quantities of animal pottery and very limited pottery or other artefacts. In this period, the silt and sand layers indicated that this ditch had naturally silted up rather than being backfilled. The second phase, with a Late Saxon date also based upon pottery finds, showed re-cutting in Trench 3 and 4 along its southern side by a shallower but substantial feature. Trench 3 demonstrated a u-shaped profile and squarish terminal to its east. Another re-cut another terminal, continuing into Trench 4, was just south of this. Both ditches were of a similar size and depth, with Trench 3 being 2.60 metres wide and 0.80 metres deep. In contrast, Trench 4 was 2.50 metres wide but deeper at 0.90 metres deep.

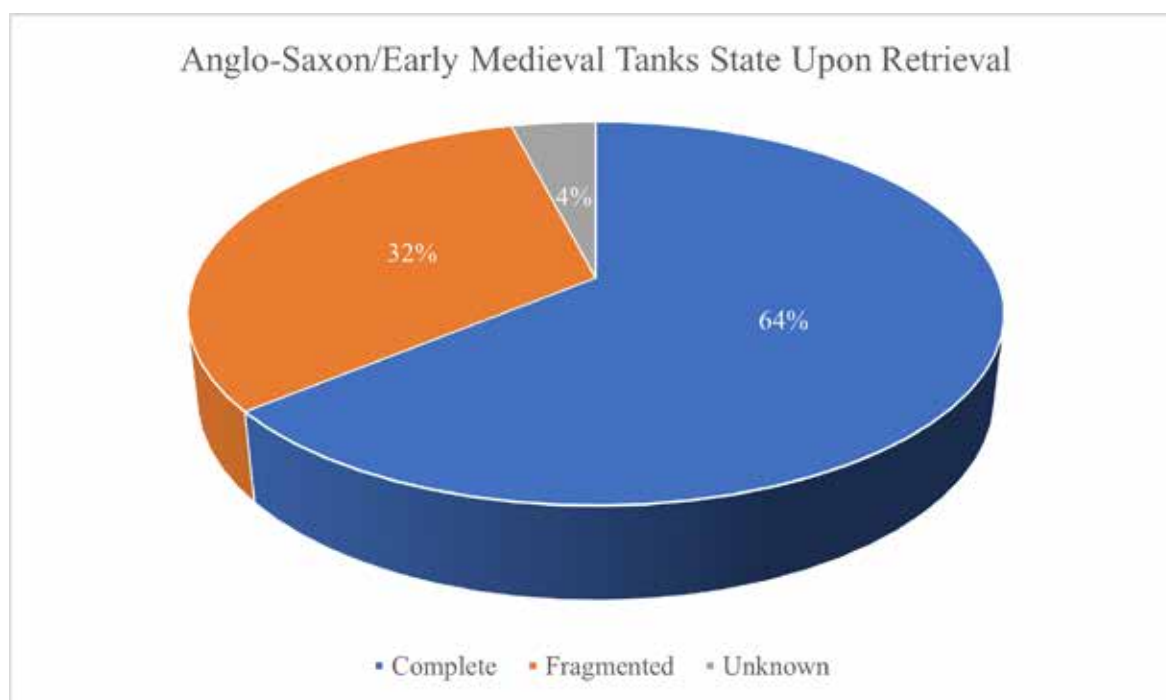
Excavators discovered the folded bases from two lead tanks in the primary fill towards the bottom of Trench 3's western ditch terminal, with the tanks appearing to be deposited in-situ. The remains of another lead tank, consisting of the flattened and folded side pieces, were discovered in the upper fill of this ditch. These were roughly one metre west of the two bases (Boyer et al 2009, 68). These vessels' missing portions were partially cut and torn off from the surviving pieces before being neatly folded and flattened. Combined with their position in the ditches, it demonstrated great efforts to dismantle and bury these artefacts. All three fragments display deep cuts and gashes created by knives or chisels during the tanks' creation and destruction, showing difficulty in carrying out these processes. Besides the tanks, other finds included an iron staple, iron nail and a potential iron link along with two possible fittings for the lead tanks. The fill of the ditch terminal's recut contained an iron sheet fragment and a complete iron needle with a flattened head. Industrial debris in the form of iron slag and hammerscale, found with bulk samples of the ditch fills, suggested that ironworking activities occurred in the general vicinity. Whilst a smithing hearth base was found in the ditch; there was not enough evidence for metalworking or smelting occurring on site.

Similar circumstances are visible with the tank found at Riby Cross Roads, which was also folded and laid out horizontally within the fill of an enclosure ditch filled with Middle Saxon pottery (Cowgill 1999, 267). The sides had been deliberately folded to overlap in the vessel's centre, with one end folded on top of the other (Cowgill 1994, 267-8). Like the Bottesford tanks, small holes had occurred during the casting, requiring repairs in the form of patching on the base and smaller patches across the rest of this tank whilst excavations discovered several lead or lead alloy artefacts within sealing layers and pieces of lead melt. Like the Pineham tank, it creates a debate over whether these actions represent a termination ritual or merely a more 'mundane' action connected to these sites' abandonment. These types of dichotomies

are a recurring theme with actions like deposition in ditches particularly concerning themes like 'termination rituals' and possible 'ritual actions', as Hamerow and Morris and Jervis both pointed out (Hamerow 2006, 2; Morris and Jervis 2011, 69-70). The damage and deliberate abandoning of these examples have clear parallels to other tanks discovered in similar 'dry' environments, as will be seen below.

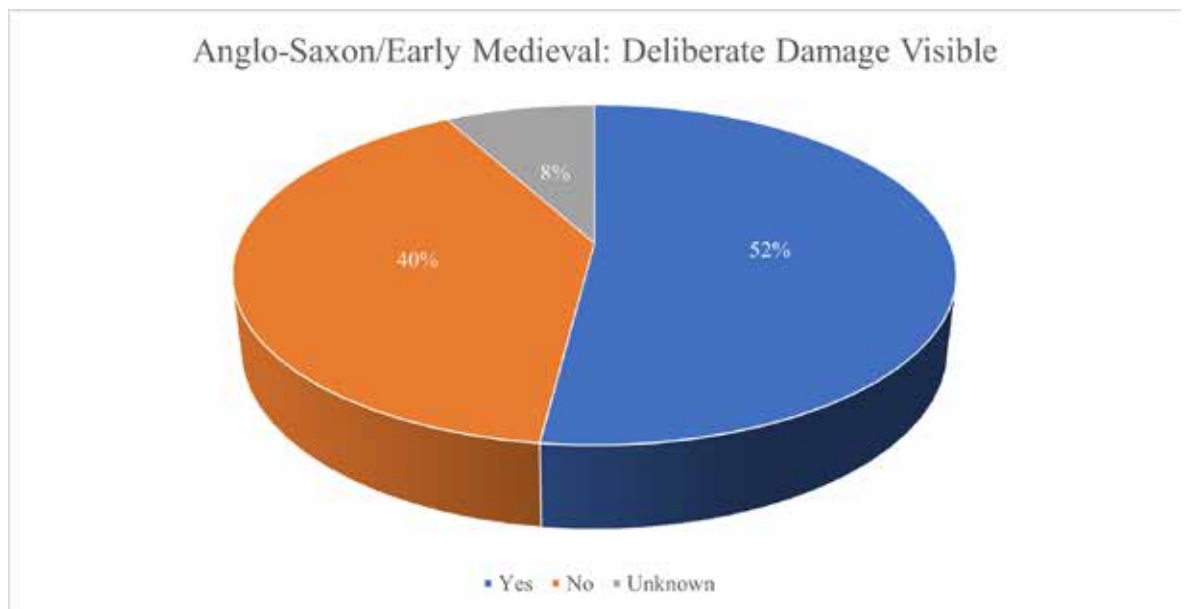
4.6 Evidence of Deliberate Fragmentation

Like the find contexts, the state of these tanks is just as varied although far more of the Anglo-Saxon/Early Medieval tanks were discovered in a complete and undamaged state than their Roman counterparts. As Figure 4.22 shows, 64% (16) of the Anglo-Saxon/Early Medieval tanks were in a complete state as opposed to 32% (8) in a fragmented state. Many of these were single finds, although the Flixborough and Willingham tanks were found intact and with the smaller tank inverted and placed in the larger one.



(Figure 4.22 A graph showing the state of the tanks upon their retrieval, author's own)

In contrast, the numbers were closer with evidence for deliberate damage as seen in Figure 4.23. As the graph shows, 52% (12) of the Anglo-Saxon/Early Medieval tanks had evidence for deliberate damage as opposed to 40% (10) which did not. There were examples that were found intact but with evidence of damage as seen on the Cumwhitton, Garton on the Wolds, Grassington, Newport, Riby Cross Roads, Westley Waterless, Whithorn, Willingdon and Willingham. The types of damage were just as varied as those seen on the Roman tanks ranging from deliberate fragmentation to burning, crushing, and tearing, suggesting that a great deal of time and effort had been placed into the deposition of these artefacts.



(Figure 4.23 A graph showing deliberate damage on the Anglo-Saxon/Early Medieval lead tanks, author's own)

The fragmented Anglo-Saxon/Early Medieval examples included the Allerton-Mauleverer tank, three fragments from Bottesford, East Goscote, Newport and the Stidriggs lead tank with its associated finds. The damage on the tanks has clear parallels finds in both 'dry' and 'wet' contexts discovered by metal detectorists. The deliberate crushing of the tanks is visible on the tanks at Mavis Enderby, Newport and Whithorn, with these sites all at a significant distance from each other. The clearest evidence of deliberate damage through fragmentation is on the tank discovered at Corby, the most decorated Anglo-Saxon/Early Medieval period example. It was in several fragments (Figure 4.24 and 4.25 below), with most of the base and a little under half the wall surviving together in a single large fragment. These were found alongside numerous pieces with varying sizes, meaning that two-thirds of this artefact survive in an incomplete and slightly crumpled state. The Corby tank's decorations consisted of eight triangular panels decorated with relief, with the panels being in excellent condition and little wear.

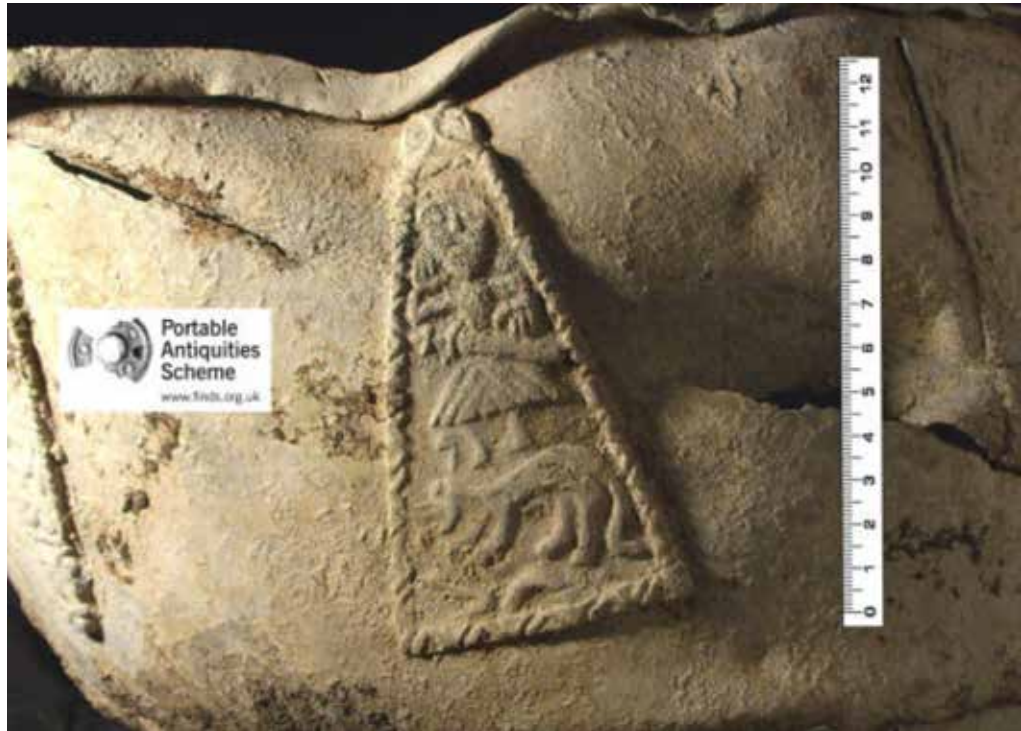


(Figure 4.24 The lead tank from Corby, Birmingham Museums Trust)



(Figure 4.25 The lead tank fragments from the Corby tank, Birmingham Museums Trust)

Many of the sides depict stylised animals along with cable banding, moulded chevrons, and human figures (Figure 4.26 below). The most distinctive feature is Panel 2 where the upper portion depicts a full-length human with arms bent at the elbow, with one hand approaching the figure's right ear and the other bent downwards to the weapon lying obliquely at its waist. It also has a short triangular skirt with ribbed decoration perhaps indicating kilt-like folds. It is important to note that even though the Corby tank was highly fragmented its decoration remains intact, providing comparisons with some of the other single find tanks in 'dry' contexts mentioned above.



(Figure 4.26 Decorative features on the Corby Tank, Birmingham Museums Trust)

The tanks with deliberate crushing are just as varied as the complete and fragmented examples. Evidence for deliberate crushing is visible on the Mavis Enderby, Newport and Whithorn tanks. The Mavis Enderby tanks showed clear evidence of deliberate damage since the tank was incomplete through its compression and had a series of holes on the base as seen below in Figure 4.27.



(Figure 4.27 An Early Medieval Lead Tank from Mavis Enderby in Lincolnshire, Lincolnshire County Council)

Meanwhile, the Newport example was complete but crushed/flattened in a manner which opened the seams and created irregular tears in the base and side walls. The deliberate compression of both these tanks has visible similarities to the two lead tanks discovered at Whithorn Priory. Both were complete but squashed, with the large of the two vessels squashed with its sides then folded inwards as seen in Figure 4.28 below. This has parallels to the tank found in the ditch at Riby Cross Roads, a site at a significant distance from Whithorn Priory. Likewise, the Mavis Enderby and Newport examples were found in areas at a considerable distance from those discovered at Whithorn. Despite this, they show similar destruction methods through their crushing before deposition. The crushing of these tanks also has clear parallels to some of their earlier Roman counterparts, with the tanks found at Beverley and Bourton-on-the-Water displaying similar crushing/flattening before their burial.



(Figure 4.28 One of the lead tanks from Whithorn Priory, Future Museum of Scotland)

There are also instances where some of the Anglo-Saxon/Early Medieval lead tanks are almost intact but with pieces missing. The Cumwhitton tank in Figure 4.29 below, was discovered on the opposite side of the River Eden to the Cumwhitton Viking burials discovered in 2004. This tank was bent and ripped in many places but is for the most part intact, showing similar methods of damage to the Allerton-Mauleverer and East Goscote tanks discovered in 'wet' environments. This, combined with its location on the opposite bank of the River Eden, indicates considerable effort in its disposal as the lead tank was not simply deposited in the river itself.



(Figure 4.29 The lead tank dating from the later Saxon period discovered at Cumwhitton in Cumbria, The Portable Antiquities Scheme)

Meanwhile, the Grassington tank shown in Figure 4.30 below, was almost complete but with one of its handles missing. This tank was discovered as part of an assemblage containing tools and three iron cauldrons, leading to its description in the PAS database suggesting these artefacts were part of a settlement and grave good collection. It is possible that the burial of these tanks occurred following the deaths of the area's inhabitants, although the tools and tank could simply have been left following disuse of the settlement.



(Figure 4.30 Cast lead-alloy tank dating from the later Saxon period discovered at Grassington in Yorkshire, The Portable Antiquities Scheme)

Other Anglo-Saxon/Early Medieval lead tanks discovered in the vicinity of graves were those discovered at Garton on the Wolds. These tanks were complete but had evidence for sooting on the third tank, just like the tank from Westley Waterless. Excavations discovered the Garton on the Wolds tanks in 1954 in East Yorkshire, an area notable for numerous Neolithic, Bronze, and Iron Age barrows (Mortimer 1905, 396; Brewster 1971, 289-90; Manby 1980, 19; Kinnes et al. 1983, 83-4; Manby 2014, 111). The excavations which discovered the lead tanks found them near a series of Anglo-Saxon/Early Medieval cemeteries and burials to the West of Garton Station, many of which were placed in earlier Iron Age barrows (Williams 1998, 91, 93). Many of these were found in the nineteenth century during expansions for the Malton and Driffild railway 250 metres west of Garton Station. The descriptions by Mortimer and Meaney only refer to these as Anglo-Saxon/Early Medieval based upon the grave goods, noting that the burials at Garton I and II and Garton Slack I and II contained fragments of 'Anglo-Saxon/Early Medieval' pottery alongside mixed metalwork and personal effects like combs and jewellery (Mortimer 1906, 245-6; Meaney 1964, 290-1;). Meaney did note that one of the cemeteries at Garton II contained relics that 'late in date' suggesting that they dated to the Late Saxon period (1964, 290), providing a possible contemporary date with the tanks and their associated material.

As Figure 4.1 demonstrated, many of these sites are a significant distance apart, yet similar burial circumstances are visible across a range of 'wet' and 'dry' environments. Similar deposition patterns are particularly visible with the tanks associated with tool hoards, with the tool hoards showing parallels to other large-scale metalwork depositions in Anglo-Saxon/Early Medieval Britain (Leahy 2013; Naylor 2015). The effort that went into burying these artefacts once again demonstrates that they potentially held a large degree of value to these communities.

4.7: What are the decorations and dimensions of the Anglo-Saxon/Early Medieval lead tanks?

As seen in the tables below, some interesting features are visible when investigating the decorations and dimensions of the Anglo-Saxon/Early Medieval lead tanks. Compared to their earlier Roman counterparts, the Anglo-Saxon/Early Medieval lead tanks are much smaller than their earlier Roman counterparts. Authors like Blair, Cowgill and Leahy agree that the Anglo-Saxon/Early Medieval lead tanks required either two lead sheets or only a single sheet, in contrast with the Roman ones which required at least three to construct (Cowgill 1994; Leahy 2003; Blair 2010).

Location	Length	Height	Cm		Kg	Litre	
			Width	Side Diameter	Weight	Volume	
1 Allerton-Mauleverer, Yorkshire		20		0.19	110		
2 Bottesford, Lincolnshire					56-60	22.23	
2 Bottesford, Lincolnshire			0.29-0.38		44	6.8	
2 Bottesford, Lincolnshire		30-49			0.28-0.30	12	30-49
3 Corby, Northamptonshire		40.4	36.5	19			
4 Cumwhitton, Cumbria							
5 East Goscote, Leicestershire		13			31		
6 Felixstowe, Suffolk							
7 Flixborough, Lincolnshire							
7 Flixborough, Lincolnshire							
8 Garton on the Wolds, Yorkshire							
9 Grassington, Yorkshire	36		30	18			
10 Mavis Enderby, Lincolnshire					34	6	
11 Newport, Shropshire, West Midlands	51.4	12.1	50.9			25	
12 Riby Cross Roads, Lincolnshire		28.5			51.5		
13 St Saviourgate York, Yorkshire							
14 Stidriggs, Dumfries Shire							
15 Westley Waterless, Cambridgeshire		28			45		
16 Whithorn, Dumfries Shire							
17 Willingdon, East Sussex		16					
18 Willingham, Cambridgeshire							

(Figure 4.31 A table showing the dimensions and capacity of the Anglo-Saxon/Early Medieval lead tanks, Authors own)

Only five Anglo-Saxon/Early Medieval lead tanks from this period are highly decorated as seen in the table below (Figure 4.32). Authors have routinely used the lack of decoration and the smaller size to differentiate between the Roman and Anglo-Saxon/Early Medieval lead tanks. Whilst the Anglo-Saxon/Early Medieval tanks are not as finely decorated or as large as the earlier Roman ones, these are still reasonably large lead constructions. As discussed in Chapter One, lead was one of the few locally sourced non-ferrous metals available to the Anglo-Saxon/Early Medieval. Its production was often tied to lead mines on royal estates as seen in sources like the Domesday Book, whilst textual sources such as Bede's Ecclesiastical Histories

and Ettius' Life of St Wilfred have connected its use to the church (Ecclesiastical History of the English Peoples 25; Life of St Wilfred 27). This has added to its perceived value by authors discussing the Anglo-Saxon/Early Medieval period.

Location	Decoration
3 Corby, Northamptonshire	Highly decorated
7 Flixborough, Lincolnshire	Larger vessel has a cast design of vertical ribs and a six-armed star.
15 Westley Waterless, Cambridgeshire	16 figures in relief, like inverted Runic crosses, on the outside.
17 Willingdon, East Sussex	Panels on each face with a small equal-armed cross and vertical roped lines.
18 Willingham, Cambridgeshire	Key-hole motif running around outer side of larger vessel (Both tanks).

(Figure 4.32 A table showing the decoration on the Anglo-Saxon/Early Medieval lead tanks, Authors own)

4.8: What patterns are visible with hoarding during the Anglo-Saxon/Early Medieval period and how do the tanks reflect this?

The burial of the Anglo-Saxon/Early Medieval tanks shows similarity to hoarding patterns from this period, just like the Roman tanks in the previous chapter.



(Figure 4.33 A map showing the location of the tool hoards and the Anglo-Saxon/Early Medieval tanks, author's own)

As seen in the map above (Figure 4.33), five of the Anglo-Saxon/Early Medieval tanks (20%) were buried with associated tool hoards. These were visible alongside other mixed tool hoards from this period, which were just as spread across the country. The hoards at Flixborough (Figure 4.34), Garton on the Wolds, Grassington, St Saviourgate, Stidriggs and Westley Waterless were found either contained in tanks or in association with them. The Flixborough and Garton hoards were found with more than one tank. Excavators discovered the Flixborough tool hoard contained between two lead tanks with the smaller tank inverted and placed inside the larger one.



(Figure 4.34 The lead tanks and tool hoard from Flixborough, Leahy 1995, 392)

The tool hoard at Garton on the Wolds consisted of a series of assorted pieces of ironwork found alongside the three “lead buckets”. Those from St Saviourgate, Stidriggs and Westley Waterless were all contained within a singular tank. An important distinction is visible with these tanks containing hoards, or with associated hoards, all but the tank at Stidriggs were found intact. As seen in Figure 4.35 below, this tank was fragmented.



(Figure 4.35 The tank from Stidriggs and its associated tool hoard, Future Museum Project Partners 2012, available at: [http://www.futuremuseum.co.uk/collections/people/lives-in-key-periods/archaeology/early-medieval-\(400ad-1099ad\)/stidriggs-hoard/the-stidriggs-hoard](http://www.futuremuseum.co.uk/collections/people/lives-in-key-periods/archaeology/early-medieval-(400ad-1099ad)/stidriggs-hoard/the-stidriggs-hoard))

As seen in the table below (Figure 4.36), the hoards in the tanks and those without tanks were found in a variety of contexts. These were found by a mixture of metal detecting and excavations, with almost all the sites near major rivers or minor tributaries. The tanks containing these items were all intact, with the Flixborough tanks being good examples of this as seen in Figure 4.34. The Garton tanks showed heavy signs of repair and had sooting on the base, suggesting a possible industrial function. The Stidriggs tanks showed deliberate fragmentation, as seen above. The Westley Waterless tank was complete but showed internal and external sooting like the Garton tanks. Just like the find contexts and states, the composition of these tool hoards was just as varied. As the table reveals, these hoards present a mixture of tools ranging from agriculture (Nazeing) to woodworking (Flixborough). Whilst over half of these hoards (particularly Crayke and Hurbuck) contained swords, there were far less of them than other items. As the table shows, adzes, axes, chisels, gouges, and scythes were the most common artefacts in these hoards alongside items like hammers. When assessing the make-up of these hoards, artefacts related to agriculture were the largest group closely followed by cultivation and harvesting tools. Metalworking tools and weapons are visible to a limited degree, but only a lesser extent than these other groups. However, some distinctive inclusions also occurred including a copper-alloy cup and ring with the Nazeing hoard and other rings visible in the other hoards.

Findspot	Contents	Context
Asby Winderwathe, Cumbria	115 items, ten copper alloy, rest iron. An important decorated plaque (Youngs, 1989, 281–95), six strap ends, four pins and a brooch. Iron finds: arrowhead, 18 bars and strips, four bells, five semi-tubular binding strips, four buckles, a chain link, two ferrules, a handle (?) flesh hook, two looped hinges, two keys, 12 knife blades, 21 'nails', four rivets, five rings, five scythe blades, spoon bit, three staples, wall hook, nine fragments.	Scatter found by a metal detector user before 1993, associated with building remains. No water in the area.
Bishopstone, East Sussex	115 items, ten copper alloy, rest iron. An important decorated plaque (Youngs, 1989, 281–95), six strap ends, four pins and a brooch. Iron finds: arrowhead, 18 bars and strips, four bells, five semi-tubular binding strips, four buckles, a chain link, two ferrules, a handle (?) flesh hook, two looped hinges, two keys, 12 knife blades, 21 'nails', four rivets, five rings, five scythe blades, spoon bit, three staples, wall hook, nine fragments.	Archaeological excavation found within an abandoned cellar on a site overlooking a reclaimed tidal inlet of the River Ouse.
Crayke, East Yorkshire	Long seax and fragments of a sword, horse bit, a T shaped axe (broken), iron plate, a socketed gouge, a chisel, six iron spikes, four (?) knives, a wall hook, iron hoop fragments, six bars, and three scraps of iron. Possible intrusive horseshoe is part of this assemblage.	Found as block during earth moving. Site near church on a ridge overlooking a tributary of the River Foss, 700 m to the north. Possible Monastic site?
Flixborough, Lincolnshire	Five axes (four T shaped), two adzes, two spoke-shaves, three spoon bits, a bill/slasher, a two-leaf iron shoe from a tool, two hooked iron suspension rings, and an iron bell.	Found within two nested lead tanks during sand extraction on the edge of excavated settlement. 1.4 km from the River Trent
Garton on the Wolds	Iron work pieces.	Found with three lead 'buckets'
Hurbuck, Co. Durham	Two swords, four scythes, two rings, gouge, spoon-bit, an iron bar, two adzes, six axes (three T shaped), a ferrule and a pick.	Found 1870 by a fisherman in the Smallhope Burn.

Findspot	Contents	Context
Lea Green (Grassington), North Yorkshire	40 items, an adze, T shaped axe, three iron bells, bill-hook, hoe, cauldron chain (four pieces), horse shoe, four knives, five latch-lifters, a lock-plate, lead vessel/tank, four scythes, two carpenter's shaves, two pairs of shears, a sickle, three socketed spikes (?), two spearheads, pair of tongs, three complete copper alloy vessels, four 'handles'.	Scattered metal detecting finds from the early 1970s, believed to have been associated with the traces of buildings. 3.2 km from River Wharf.
Nazeing, Essex	Four axes, plough share, four spearheads, small, fine hammer, knife, chisel, gouge, fish trident, copper alloy cup and a riveted copper alloy ring. Some of the objects had been deliberately crushed prior to burial.	Found in 1972 in alluvial gravels by the River Lea, in an area known as 'Nazeing Marsh'
Scraptoft, Leicestershire	Long seax, coultter, scythe, T shaped axe, scythe fitting.	Found in a badger sett in 1998, signs of settlement in the area, 160 m from a stream?
Stidriggs, Dumfries	Three axes, an adze, two coultters, three iron staples, iron ring, three spoon bits, socketed gouge, tanged awl, four scythes, fish trident and an iron (steel?) block measuring 158×137×52 mm and weighing 4.5 kg, iron fragments.	Inside a lead vat, found in an area of moor containing settlement evidence. Found 750 mm deep in peat near a burn.
St Saviourgate, Yorkshire	Spoon auger bit, two drawknives, four leatherworker's awls and a knife, 20 structural fittings, an iron bar and iron cauldron all found within a lead tank	Excavations by MAP at 5 St Saviourgate in 1995 found it in the base of a 1960s office building. Found in Late Saxon occupation layers alongside Roman and Medieval layers.
Torksey, Lincolnshire	Adze, five T-shaped axes, blade (broad), socket (from preceding item?), coultter, large iron vessel (fragments), tripod stand, two iron bowls.	Metal detecting find in 2002, found around 1 km from the River Trent.
Westley Waterless, Cambridgeshire	Bill or slasher, two spearheads, steelyard weight, 'holdfasts', a spoon-bit, plough share, staples, iron strap, two scythe blades, 'portions of what might have been a lock'.	Found within a lead tank. No water source in area. While the hoard was found during drainage operations it cannot be assumed that the site was marshland.

(Figure 4.36 A table detailing the find context and contents of the tool hoards, author's own)

Other items found in these Anglo-Saxon/Early Medieval tool hoards included fishing tridents in the Nazeing and Stidriggs (Figure 4.37) collections.



(Figure 4.37 The metalwork collection with the Stidriggs lead tank, 2012 Future Museum Project Partners, accessed at: [http://www.futuremuseum.co.uk/collections/people/lives-in-key-periods/archaeology/early-medieval-\(400ad-1099ad\)/stidriggs-ward/the-stidriggs-ward](http://www.futuremuseum.co.uk/collections/people/lives-in-key-periods/archaeology/early-medieval-(400ad-1099ad)/stidriggs-ward/the-stidriggs-ward))

The most interesting finds included copper-coated iron bells with the Flixborough (Figure 4.38), Grassington and Tatershall Thorpe collections.



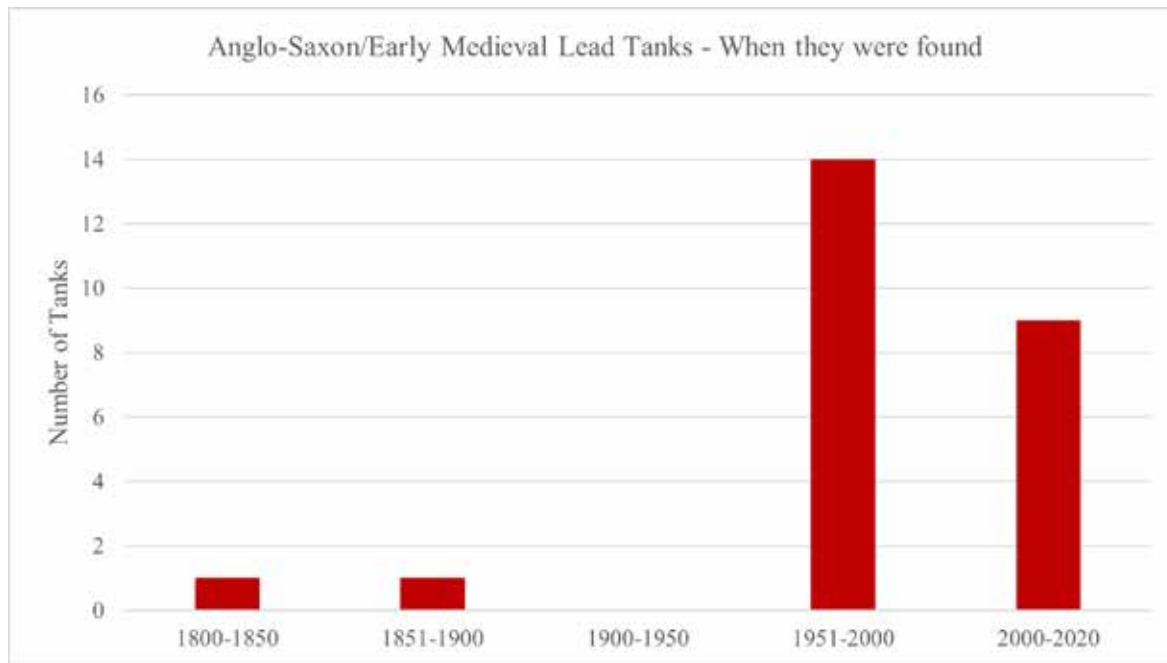
(Figure 4.38 The tool hoard from the lead tanks at Flixborough, Leahy 1995, 392)

Similar bells were found in the Mastermyr chest metalwork collection at Gotland in Sweden (Leahy 2003, 171). The variation in contexts is also important, as the Flixborough and Grassington bells were found as part of hoards whilst the Tatershall Thorpe bell was part of a grave assemblage (Leahy 2013, 171). Other distinctive inclusions were fragments of a large iron vessel along with a tripod and two large iron bowls in the Torksey hoard (Leahy 2013, 232). These show clear similarities with the Grassington and St Saviourgate hoards, with three iron cauldrons discovered in the Grassington metalwork collection alongside the tank. Furthermore, the tank at St Saviourgate in York contained an iron cauldron along with a hoard of iron tools consisting of a spoon auger bit, drawknives, and leatherworker's awls alongside twenty structural fittings. (Ottoway 2009, 259). These structural fittings included a stapled hasp and iron bars, with a similar mixture of 'fragments' in the Westley Waterless material. Whilst many of these hoards were a significant distance from each other many of them showed clear similarities in the materials chosen.

The tool hoards contained in the tanks provide parallels to the materials found in the Thames and Witham Valleys, discussed in Chapter One. They show similar selective accumulations of material focussed on certain landscape features, in this case mainly settlements near major rivers or their tributaries. They also provide parallels to supposed 'founder's hoards' from the Bronze Age. These are visible with the types of materials assembled, their state upon retrieval and the contexts they were found in. Many of the Bronze Age hoards were discovered alongside bronze cauldrons, large constructions similar in scale to the lead tanks. These mixtures contain diverse ranges of tools, weaponry, and personal effects like the tool hoards from the Anglo-Saxon/Early Medieval period. Good examples of this are visible with the Hurbuck Hoard and Bronze Age metalwork collections at Gilmonby and Heatherby Burn near Stanthorpe in County Durham (Gerloff 2010, 265-6, 273-4). The Hurbuck Hoard contained ninth-tenth century swords and mixed tools, rings, and an iron bar. The Gilmonby hoard contained sword fragments, complete and fragmented rings, complete and fragmented socketed and faceted axes, plain spearheads, and fragmentary decorated spearheads (Gerloff 2010, 275-6). The Heatherby Burn hoard also has some notable similarities and differences to the later Anglo-Saxon/Early Medieval hoard at Hurbuck. The metalwork included a fragmented sword, socketed axes alongside a bronze finger ring, and 22 further rings. Some features in this hoard include two socketed knives and a socketed chisel along with nine spearheads, all in a mixture of complete and fragmented states.

Like the Anglo-Saxon/Early Medieval period ironwork hoards, the Bronze Age metalwork collections contained a mixture of complete and fragmented artefacts alongside a mixture of unused and worn materials. Furthermore, those containing the tool hoards were found primarily in dry environments, like the tanks. Both sets of materials have been evaluated within the dichotomies of 'ritual' vs 'mundane' deposition through these mixtures of finds (Gerloff 2010, 196-7; Leahy 2013, 235; Naylor 2015, 135). Although scrap metal was present in some of the Anglo-Saxon/Early Medieval hoards, Naylor made the point that this does not necessarily mean this was for recycling (2015, 133). He used metalwork from Tatershall Thorpe alongside metalwork from Barton-on-Humber (Lincolnshire) to argue that this material could possess meaning and symbolism (2015, 134). Authors like Leahy and Wright have re-evaluated these hoards with a possible ritual dimension for these types of hoards (Wright 2010, 132; Leahy 2013, 235). These hoards' contexts provide a strong focus for understanding the importance behind the burial of these artefacts and their associated tool hoards. Many of them were in areas where retrieval was not easy, with the lead tanks containing these hoards left intact. This provides important parallels to the Bronze Age material, many of which saw cauldrons deliberately deposited with their associated tool hoards. The assemblages from both periods show continued depositional patterns based around large metalwork constructions and mixed associated hoards. This feature is also visible with the contexts chosen for the lead tanks, both wet and dry, which was analysed earlier in the chapter.

4.8 When were the Anglo-Saxon/Early Medieval tanks found?



(Figure 4.39 A graph showing the dates when the Anglo-Saxon/Early Medieval tanks were found, author's own)

As seen in Figure 4.39 above, a greater percentage of the Anglo-Saxon/Early Medieval tanks were discovered from 1951-2000 and 2000-2020. Only two tanks (8%) were discovered in the nineteenth century, the Felixstowe tank pre-1878 and the Willingdon tank in 1847. There is a large gap, with no recorded tanks from 1900-1950 which contrasts with the Roman period tanks, several of which were found in this period. From 1950, there is a steep climb in numbers with fourteen examples (56%) discovered during this period. The numbers from 2000-2020 are not as high for this period, with nine tanks (36%) discovered in this period. These were mainly recovered through excavations and metal detecting or a mixture of the two. There is a similar gap between the numbers for the discovery method, with thirteen examples found by excavations (more of which were found from 1951-2000 than 2000-2020) whilst nine were discovered by metal detectorists. Seven of the examples from 2000-2020 (28%) were discovered by metal detectorists whilst only two examples from 1951-2000 (8%), those at Willingham, were found by in this manner. This reflects recent patterns in Britain as seen on the Portable Antiquities Scheme, where the increased use in metal detectors in discovering archaeological materials has risen sharply in the last twenty years. An important point to mention is that the Anglo-Saxon/Early Medieval tanks were only recognised as a specific artefact class following the discovery of the tanks at Flixborough and Riby Cross Roads (Cowgill 1994; Loveluck 1997). As seen earlier in the chapter, there have been debates as to whether certain Roman examples should be reclassified as Anglo-Saxon/Early medieval tanks and there is still debate about the more recent finds. Many of the recent tanks have been classified as Roman due to the decorations, with the undecorated tanks at Allerton-Mauleverer, East Goscote, Grassington Mavis Enderby and Newport on the PAS database classified as Anglo-Saxon/Early medieval.

Conclusions:

Analysing the Anglo-Saxon/Early Medieval tanks' burial patterns revealed important features concerning their location in Britain, their contexts, and state upon deposition. Most of them were found in the East Midlands and the East of England, most of which were in rural locations. Only the St Saviourgate tank was discovered in a major urban centre, in this case, York. There were regions that were missing the tanks, particularly the North East and South West. These locations have extensive access to lead resources, yet no examples have been recovered from these areas. Only the tanks in the North West, the Yorkshire and Humber area, and the West Midlands are in regions with access to the necessary lead for creating these tanks. In contrast, more of the tanks were in parts of Britain without direct access to lead, particularly the East Midlands and East of England. However, as this chapter revealed, many of the Anglo-Saxon/Early Medieval tanks were also near Roman roads, a source of water, and settlements. This could easily have provided the means for the tanks or the necessary resources to arrive at these areas, with the lead potentially being supplied from mines at Derbyshire.

The tanks were mostly found in the last fifty years through excavations and metal detecting, in varied contexts and with varying states upon deposition. More Anglo-Saxon/Early Medieval tanks were discovered in 'dry' rather than 'wet' environments, with 80% found in 'dry' contexts, 8% in 'wet' and 8% in unknown and 4% in mixed. Those discovered at settlements (Bottesford, Flixborough, Riby Cross Roads, St Saviourgate, and Whithorn) were buried in features which indicated deliberate abandonment, in this instance ditches or pits. Interestingly, a far greater percentage was found intact rather than fragmented, although many of the complete examples showed deliberate damage. Both lead tanks found in 'wet' environments showed deliberate damaged, in contrast with the Roman lead tanks found in rivers. These provided useful comparisons with lead tanks in 'dry' environments, many of which showed similar types of deliberate damage. Variation in types of damage can be linked to the types of contexts, with distinctive varieties seen on the examples found in ditches for instance. The Bottesford and Riby Cross Roads tanks were either deliberately fragmented or folded before their burial. In contrast, the Flixborough tanks were discovered intact with a tool hoard placed between them.

Many of the tanks in 'wet' and 'dry' environments showed similar features through their treatment upon burial. The Allerton-Mauleverer, Cumwhitton and East Goscote tanks display comparable types of damage, despite the Allerton-Mauleverer and East Goscote tanks being discovered in 'wet' environments, whilst the Cumwhitton tank was retrieved from a 'dry' environment. The state of certain Anglo-Saxon/Early Medieval lead tanks had similarities to the Roman examples discussed in the previous chapter. Actions like deliberate crushing, seen with the Mavis Enderby, Newport and Whithorn tanks, or burying tanks in pairs, as seen with Flixborough and Willingham tanks, are good examples of this.

The tool hoards in these tanks were also heavily varied, containing artefacts from across different levels of Anglo-Saxon/Early Medieval society. These had similarities to Anglo-Saxon/Early Medieval tool hoards that were discovered without tanks. Comparisons are also visible with earlier hoarding patterns from the Bronze Age through tool hoards discovered with cauldrons. The similarity of both sets of artefacts clearly shows continuing depositional patterns across multiple periods through the material chosen and the environments they were deposited in. The find context, state upon deposition and additional finds indicate that extensive effort went into the burying of these tanks. Furthermore, although the Anglo-Saxon/Early Medieval

tanks are smaller and not as finely decorated, these artefacts were likely important to their respective communities. The features seen here will be crucial for the next chapter. This will compare both sets of tanks concerning the features discussed in the previous chapter and this one. Doing this will allow a discussion of whether similar patterns are visible with both sets of tanks. This approach allows investigations into evidence of 'landscapes of continued deposition', which will then be the focus of Chapter Six.



How do patterns
visible with the Roman
and Early Medieval
tanks demonstrate
'landscapes of
continued deposition'?

Chapter Five: How do patterns visible with the Roman and Early Medieval tanks demonstrate ‘landscapes of continued deposition’?

Introduction

The aim of this chapter is to compare the Roman and Anglo-Saxon/Early Medieval lead tanks and build on features discussed in Chapters Three and Four. The analysis will focus on where the lead tanks were found across Britain and where there are gaps in the distribution of the lead tanks. This will involve regional analysis of the most common findspots, and whether their findspots coincide with access to lead resources and areas of lead mining in Roman Britain. This will be analysed alongside the proximity to a Roman road, accessibility to the nearest source of water, and proximity to the nearest settlement and whether these might relate to the tanks’ findspots.

The analysis will then focus on how the lead tanks were found, the find contexts and environments that the lead tanks were found in and their state upon retrieval, including any details of deliberate damage. The dimensions and decorations of the tanks and any associated finds with the lead tanks will be analysed. The analysis will conclude with details of the date the tanks were found.

5.1. Where have both sets of tanks been located and what patterns are visible?



(Figure 5.1 A map showing the locations of both sets of tanks, author's own)

As Figure 5.1 illustrates, the greatest number of the tanks were clustered in the east of the country with over 56% of the tanks found in the East Midlands and East of England. A clear pattern is visible where the densest concentration of these artefacts is in Lincolnshire. From there, the spread of tanks heads north into Yorkshire and south into Northamptonshire and Nottinghamshire before moving east into Cambridgeshire, Norfolk, and Suffolk. When viewed on the map, an almost continuous distribution of these artefacts is visible from the South West round along the South and East of the country into the Yorkshire and Humber area. In contrast, there is little spread of the tanks in the North West and West Midlands. Both regions only contained two tanks (a single Roman and Anglo-Saxon/Early Medieval tank) each, with the tanks in these regions being much further from the others, even those in the Dumfries and Galloway region of Scotland. These, along with the London (Walbrook) tank, serve as significant outliers in the distribution patterns for these artefacts, accounting for only 1% of the total number of tanks.

Furthermore, it is noticeable that only two Roman tanks (North Lincoln and Walbrook in London) and one Anglo-Saxon/Early Medieval tank (St Saviourgate in York) were discovered in central urban locations. However, the tank from North Lincoln appears to have been discovered

on the fringes of modern Lincoln, north of the Roman settlement at this city. Whilst many of the tanks appear to be in remote areas far from any nearby occupation (by modern standards), this is not the case.

5.2. Where is there a noticeable lack of tanks in Britain from both periods?

As shown in Chapters Three and Four and as the map and graphs demonstrated, there are areas in Britain where no tanks have been found to date. The North East is one such area and this is surprising as there is evidence of Roman and Anglo-Saxon/Early Medieval occupation discovered during excavations at sites such as Binchester in County Durham (Ferris 2000). No tanks from either period were found in both County Durham and the Hadrian's Wall area in Northumberland and Cumbria, as Figure 5.1 demonstrated. The forts in these regions demonstrate considerable occupation in this area by the Roman military on both Dere Street and the Stanegate from Yorkshire to Northumberland through forts and vici. This provided an overlapping 'civilian' and 'military' population with the means to create these artefacts. Likewise, the River Tyne and River Wear would have provided excellent opportunities for shipping the tanks to these regions, with both rivers connected to the North Sea. The tanks could have been shipped to these regions by boat and then brought overland on the military roads between these sites.

Furthermore, no tanks have been found in connection with military sites in the Hadrian's Wall area or towns that originated as forts such as Carlisle or Corbridge (Bishop and Dore 1988; Dore 1989; Burnham and Wachter 1990). Meanwhile, recent excavations at Vindolanda, an area with evidence for both 'military' and 'civilian' occupation, recovered fragments of a highly decorated 'Christian' lead cup or chalice as seen in recent news articles featured in the Guardian and the Vindolanda Charitable Trust (A Unique Christian Artefact 2020: <https://www.vindolanda.com/news/unique-christian-artefact-uncovered-at-vindolanda>). However, no evidence of a lead tank was found at this site. Likewise, other areas with Roman occupation and later Anglo-Saxon/Early Medieval occupation such as Chester-Le-Street, Hexham and Newcastle are also missing tanks from either period. All these areas saw initial occupation during the late first or early second century AD which lasted into the later fourth century (Goode and Proctor 2006, 6, 8). There then appear to be gaps in occupation until at least the fifth or sixth centuries, with Chester Le Street occupied in the late ninth century when a community of monks from Lindisfarne built a shrine to St Cuthbert. The town became a major ecclesiastical centre for at least 100 years until the community moved to Durham (Selkirk 2000, 337-40; Goode and Proctor 2006, 9; Adams 2017). Whilst these areas have received varying levels of excavation and analysis, it emphasises Richmond's point in 1945 that more tanks have been found in the 'civilian' zone in the south of Britain than the 'military' zone in the north (1945, 169). Whilst tanks have been found in the North West, only two examples (one from each period) have been discovered in this region, both were found in small, rural areas south of Carlisle at Cumwhitton and Ireby in Cumbria. Whilst Richmond believed that the Ireby tank was found in connection with a small 'civilian' settlement (1945, 169), excavations have not discovered any evidence of this type of occupation at Ireby. Similarly, whilst the Cumwhitton tank was discovered on the opposite side of the River Eden with a series of six well-furnished late ninth to tenth century graves (Paterson et al. 2014), there was also no visible evidence of occupation in the area, demonstrating (so far) these tanks have very limited connections to the military in Roman Britain.

Similar features are also visible in Wales and the West Midlands, with Wales lacking tanks from either period whilst the West Midlands only has two tanks (one from each period). Evidence for occupation in Wales during these periods varies greatly. Whilst this was occupied during the Roman period it was outside the zone of Anglo-Saxon/Early Medieval occupation. However there certainly would have been inroads into areas of the Welsh borders for Mercia as well as for the Hwicce and Magonsaete. During the Roman period, the country was divided between a civitas in the south and noticeable military occupation in the north of the country (Jones 1990, 156; Mattingly 2006). Anything resembling what might be identified as a 'town' or more urbanised areas in Wales is clustered in the South East of the country at Caerwent and Monmouth on the Rive Monnow and Carmarthen on the River Tywi in the south-west of the country (Jones 1990, 154; Wlaters 1992, 78-79). Whilst there was evidence of industrial activity in these areas, particularly at Monmouth with hearths and iron smelting refuse (Marvell 2001), there is considerable variation in the evidence for Roman occupation in this region. South West Wales had evidence of potential 'villas' but on excavation this theory was discounted. Jones determined that these 'villas' were pre-Roman 'farmsteads' that mixed Roman masonry with a 'native' character like those found in Oxfordshire (Jones 1992, 251,254). More recent archaeological excavations in Wales have revealed new features concerning its occupation during the Roman period. Whilst the North and West of Wales was an area originally believed to contain no evidence of villas, excavations in 2010 uncovered a late fourth-century villa near Aberystwyth at Abermagwr a kilometre and a half north of Trowscoed Roman fort. This villa was identified in 2006 through cropmarks on aerial photography, with a series of excavations from 2010 to 2015 discovering a stone-based building comprised of three main rooms, a veranda and two adjoining wings (Davies and Driver 2011, 320-1; Davies and Driver 2018, 153-4). Evidence including a slate roof from locally imported stones, like roofs on the villas at Carmarthen, and Cymbran glazed windows along with third to mid-fourth century pottery and early third and mid fourth century coins (Gwyn 2015, 30-35, Davies and Drives 2018, 172, 179-180, 192). Similarly, a villa has been recently discovered in North-East Wales near Wrexham at Rosset, with a magnetometry survey and excavations revealing a large building resembling a winged corridor-type villa artefacts indicating occupation from the first to fourth-centuries AD (<https://archaeology.co.uk/articles/news/roman-villa-revealed-near-wrexham.htm>). Whilst these examples were a long way from the previously recorded villas in the South and East of Wales, typically known as the 'villa belt' (Davies and Driver 2018, 200), it changed the evaluation of Roman occupation in Wales. Wales, like the North East, was an area heavily mined for its large lead and silver contents, with the villa at Abermagwr and the nearby Trawscoed Roman fort containing a series of lead artefacts (Davies and Drives 2018, 199-200). However, despite this evidence of long-term occupation and lead mining no lead tanks have been discovered in this region, much like the North East.

The tanks in the West Midlands were also found in small, potentially rural areas like those in the North West. Only two tanks, a single Roman and Anglo-Saxon/Early Medieval example, were found in this region at Kenilworth in Warwickshire and Newport in Shropshire. Not only did the West Midlands have access to lead resources from Derbyshire in the East Midlands, the Mendips in the South West and Wales but there is also evidence of mining operations in areas such as Shropshire through mines at Pennerly and Snailbeach (Burgess 2008). Cities and towns such as Chepstow, Chester, Cirencester, Gloucester, and Manchester all are missing Roman and Anglo-Saxon/Early Medieval lead tanks. These towns and cities were in areas with both access to lead and rivers such as the Dee, Churn, Irwell, Severn, and Wye. Interesting patterns concerning which regions are missing lead tanks are also visible in the South West and South

East of England. Whilst there were six Roman tanks found in the South West, no Anglo-Saxon/Early Medieval tanks were found in this region. Although the kingdom of Wessex occupied much of the Upper Thames valley and into Cornwall at the time of the later tanks, much of the South West of England was outside the Anglo-Saxon zone of control for most of this period (Blair 2003). The South West and South East are also areas with a noticeable lack of Anglo-Saxon/Early Medieval tanks as, except for a single example at Willingdon in East Sussex, there are no tanks from that period across this region. This is equally surprising, especially as no Anglo-Saxon/Early Medieval examples have been discovered at Winchester, a major city, and the capital of the Anglo-Saxon kingdom of Wessex. Likewise, except for the example at Felixstowe on the coast in Suffolk, Anglo-Saxon/Early Medieval period tanks are noticeably missing in East Anglia in Norfolk and Suffolk.

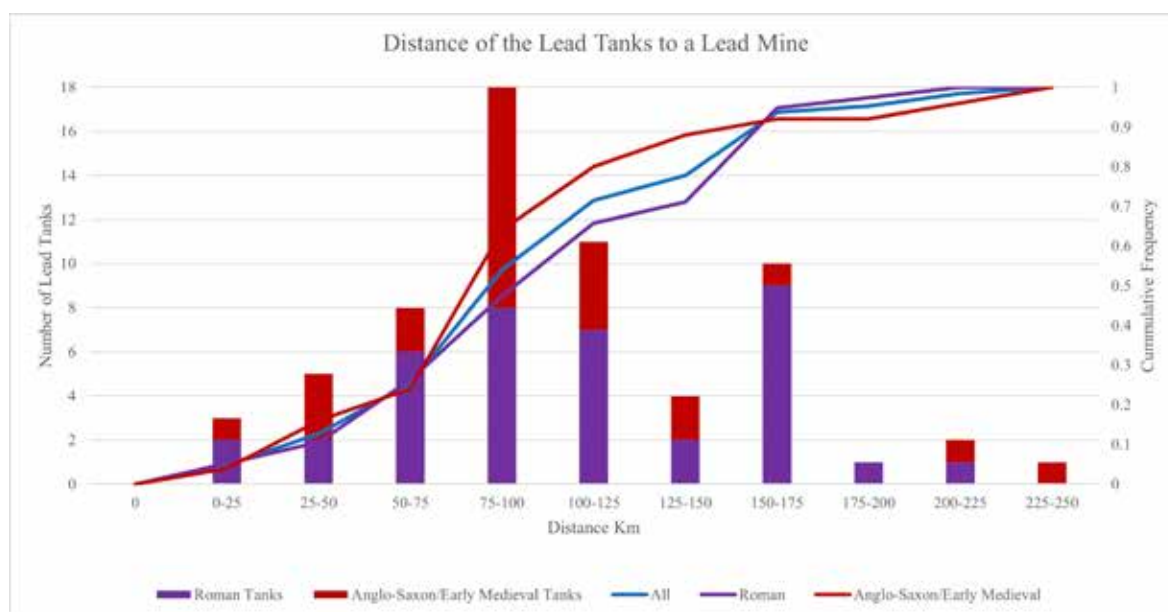
Another important feature is that, to date, only three tanks from either period have been found in connection with religious sites of any kind, the tanks found at Whithorn Priory in the Dumfries and Galloway area of Scotland and the tank from the Walbrook Mithraeum in London. However, there has been debate over whether Icklingham was a church site with Christian connections. Excavations discovered a small, tile built 'apse' building (Building C) and two small buildings found in association with the cemetery near the tank, one of which (Building B) was interpreted as a small church (West and Plouviez 1976, 63; Thomas 1981, 218; Watts 1991, 116; Dark 1994, 36; Petts 2003a, 113; *ibid.* 2003b, 128). The authors mentioned here use the lead tanks, cemetery and apse building to argue whether Icklingham was a 'Christian' site. There have also been arguments as to whether the site of Flixborough had possible religious connection. Authors such as Leahy and Loveluck used the discovery of an alphabet ring, an inscribed lead plaque and numerous lead styli alongside similarities of the material at Flixborough to Middle Saxon monastic sites to argue of the site's religious nature and connections (Whitwell 1991: 247; Yorke 1993: 146; Blair 1996a: 9; Loveluck 1998, 158; Leahy 2007; Evans and Loveluck 2009, 138). A further important point is that no tanks have been found in connection with sanctuary or temples sites, noticeably Bath, or sites that were readopted for religious practices like Chedworth Roman villa and the temple at St Albans (Henig 1984, 126, 226). Whilst five tanks, Rudston, Rushton, Walesby, Wigginton, and Wilbraham, have either been found at villa sites or their immediate vicinity, it is difficult to determine whether they were used for religious activity such as baptism at these sites (Petts 2003, 26-27; Crerar 2012, 150).

When considering why the tanks have been found in certain regions and missing from others, there are several reasons why this could have happened. The most obvious one is that there could be tanks in these regions mentioned but that they haven't been discovered yet. Since 2012, more tanks have been found by metal detectorists than any other method, as will be seen in Section 5.5, meaning it is certainly possible that tanks could be discovered through metal detecting in the regions that are missing them. Whilst most of the metal detected finds have simply consolidated existing patterns such as the tanks in East Anglia and the East Midlands, the new Roman discoveries at Beverley and Rudston in Yorkshire have changed the pattern slightly since this was an area previously lacking Roman examples. The pattern has also grown in the South West with the discovery of three new tanks since 2012. Projects such as the Viking and Anglo-Saxon Landscape and Economy project used metal detected finds from the Portable Antiquities Scheme (PAS) and the Corpus of Early Medieval Coin Finds (EMC) to create a national mapping of artefact and coinage distribution to create the Viking and Anglo-Saxon Landscape and Economy (VASLE). The project discovered that the largest concentration of finds mapped in the project was particularly visible in East Anglia

(<https://www.york.ac.uk/archaeology/vasle/vasleinterpretation.html>), a region with a longer history of metal detecting than others. The VASLE data, much like the PAS data, showed a greater concentration of finds in the South and East of the country and noticeably fewer finds in North and South-West England and in Wales, much like the lead tanks. The factors that influenced this included the recording systems of the PAS and EMC, a factor that has also influenced this PhD. Alternatively, they could have been recycled with the lead repurposed and used for other features. As Chapters Three and Four showed, lead was a widely used material due to its wide availability and versatility, with its functions ranging across all aspects of life from these periods. Only the Bottesford tanks have been isotopically analysed, merely proving that they were not created from re-used Roman lead (Boyer et al 2009). Furthermore, as shown in Chapter Three, many of the areas missing lead tanks have been shown to contain lead coffins. Whilst these could have been re-cycled, it could also mean that there could have been tanks at the regions and sites mentioned but they were destroyed by later occupants. Many of the tanks showed deliberate fragmentation or damage, as seen in the previous two chapters, and will be seen in Chapter Six, making it highly probable that they could have been destroyed either by a new group of inhabitants or when the occupants left the site. Alternatively, there might have been tanks at these locations, but they could have been accidentally destroyed during building and redevelopment activities. This is certainly a contributing factor, with several tanks damaged in this way, particularly the Roman tanks from Enford in Wiltshire and Pulborough in Sussex (Curwen 1933; Vatcher 1967) as will be seen later in the chapter.

5.3 How do the find locations of the lead tanks relate to lead mines and access to lead during those periods?

Chapters Three and Four analysed the proximity of the Roman and Anglo-Saxon/Early Medieval tanks to lead mines in Britain. Lead was mined in Roman and Anglo-Saxon/Early Medieval Britain from Alston Moor and Wharfedale in the North West, Matlock in Derbyshire, Halkyn and Ffridd in North Wales, Shropshire in the West Midlands and the Mendips in the South West (Mattingly and Jones 1990, 110; Cowgill 2009, 85; Naylor 2015). The following graph and table show the number of tanks found within 25km segments of the nearest lead mine and cumulative frequency of this distribution from the available data. Whilst the lead mines used here were probably those mined in the Roman and Anglo-Saxon/Early Medieval period, it is possible others could have been used. These distances are the straight-line distance between the lead tanks and the lead mines and not the distance by either road or river.



(Figure 5.2 A graph showing the distribution of the location of the Roman and Anglo-Saxon/Early Medieval lead tanks and their proximity to lead mines, Authors' Own)

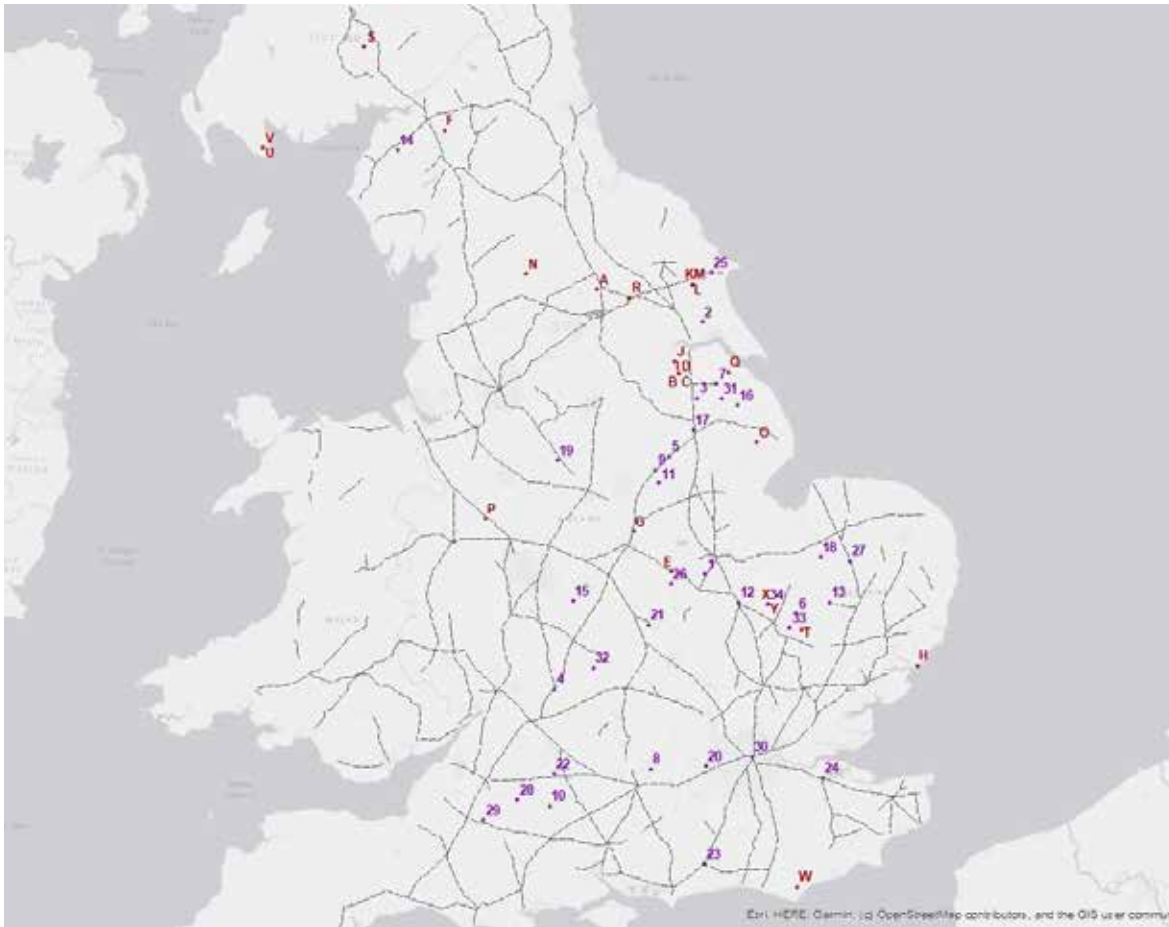
It is quite noticeable that the summary statistics for the Roman and Anglo-Saxon/Early Medieval tanks are similar. The median distance of the lead tanks from the nearest lead mine was 100.03 Km for all lead tanks, 100.92km for the Roman lead tanks and 91.46km for the Anglo-Saxon/Early Medieval lead tanks. The mean distance of the lead tanks from the nearest lead mine was 99.67 Km for all lead tanks, 107.36km for the Roman lead tanks and 97.32km for the Anglo-Saxon/Early Medieval lead tanks. The maximum distance of the Roman lead tanks to a lead mine was 220.56km and 234.73km for the Anglo-Saxon/Early Medieval tanks. When comparing the distances seen in the graph with the locations shown on the map 95% of the lead tanks were within 200 km of nearby lead mines. This long distance suggests that an intricate supply network was needed to ship these artefacts to these sites, with the distance from these lead minds suggesting that they were either delivered overland on the roads or by boat on rivers or the sea. This is especially convincing when comparing the proximity of the tanks to lead

mines against their proximity to water and the nearest Roman road. It is certainly possible that the lead provided for the tanks was not from the nearest lead mine near these sites, but it is hard to be certain.

The distance from lead mines also raises certain issues concerning where the tanks have been found, suggesting that direct access and proximity to lead mines was not a key factor and that access to nearby rivers and roads was a more prominent factor. This is further emphasised when assessing the distance of these lead mines from the nearest river and Roman road as can be seen in the map in Figure 5.6. The median distance of the lead mines from a river was 0.60km and the mean distance was 1.59km, whilst the maximum distance was 4.58km and the minimum distance was 0.07km. In contrast, the median distance of a lead mine from a Roman road was 4.76km with the mean at 7.30 km, whilst the maximum distance as 5.92km and the minimum distance was 0.11km. This suggests that rivers and roads were most probably used to transport the lead or completed tanks, with rivers being the more likely method. Alternatively, the patterns visible with the later Anglo-Saxon/Early Medieval tanks could suggest possible recycling of earlier Roman examples. Only the Bottesford tank was sampled for isotopic analysis, and it revealed that it was not recycled Roman lead. However, it is possible that the other examples from this period could be recycled from earlier Roman tanks. As seen in Chapters Three and Four, many of the tanks are also in areas where there are no lead coffins, with Chapter Three showing a completely different distribution patterns of the tanks to the coffins. This indicates that that direct access to lead was not necessarily an important factor for both sets of lead tanks.

5.4 Proximity to a Roman Road, Water, and a Settlement

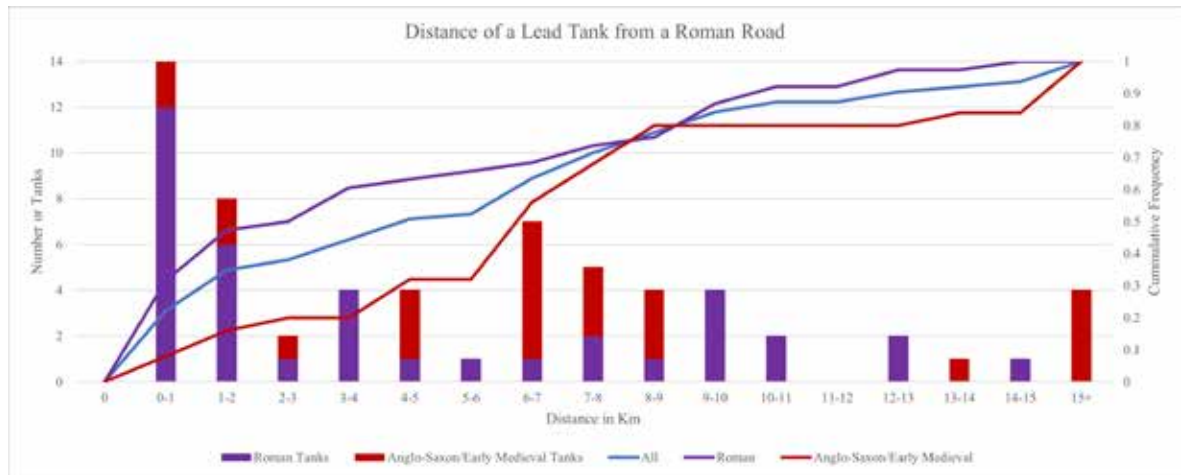
5.4.1 Proximity to a Roman Road



(Figure 5.3 A graph showing the distribution of the location of the Roman and Anglo-Saxon/Early Medieval lead tanks and their proximity to lead mines, Authors' Own)

Figure 5.3 illustrates the proximity of the lead tanks to the known Roman road network in Britain. Some of the tanks were found near established Roman road networks. Parwich is near the Street, the Medieval name of the Roman road that ran across the high limestone plateau of central Derbyshire from the spa town of Buxton (Aquae Arnemetiae) Southeast towards modern Derby. Brough and East Stoke are on the Fosse Way, Bourton-on-the-Water is located on Icknield Street/Ryknild Street and Willingham is situated on the Via Devana.

Using straight line calculations of the distance of each lead tank to the nearest Roman road shown in Figure 5.4 below, 22% (14) of the Roman tanks were discovered less than 1km from a Roman road whilst 13% (8) were found 1-2km from a Roman road. The remaining groups were much smaller, with many of the tanks found less than 10km from a nearby Roman road. The median distance was 4.76km, the mean distance was 7.3km, the minimum distance was 0.10km, the Roman lead tank found at Rochester in Kent, and the maximum distance of a lead tank from a Roman road was 66.34km, the Anglo-Saxon/Early Medieval lead tank found Whithorn in Dumfries Shire.

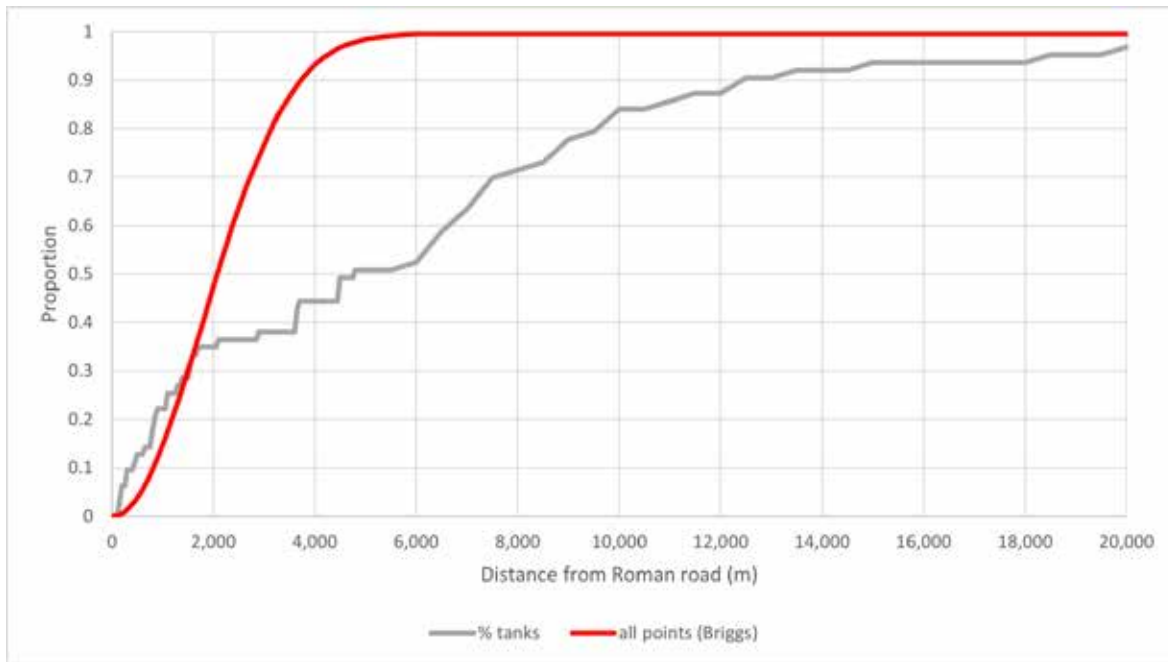


(Figure 5.4 A graph showing the distribution of the location of the Roman and Anglo-Saxon/Early Medieval lead tanks and their proximity to a Roman road, author's own)

Keith Briggs (2020) found the median distance of all points to a Roman road in England ‘was about 3.5km’, whereas the lead tanks median distance from a Roman road was 4.76km. Some of this difference can be explained by outliers such as Whithorn but 39 of the 63 lead tanks were found over 3.5km from a Roman road.

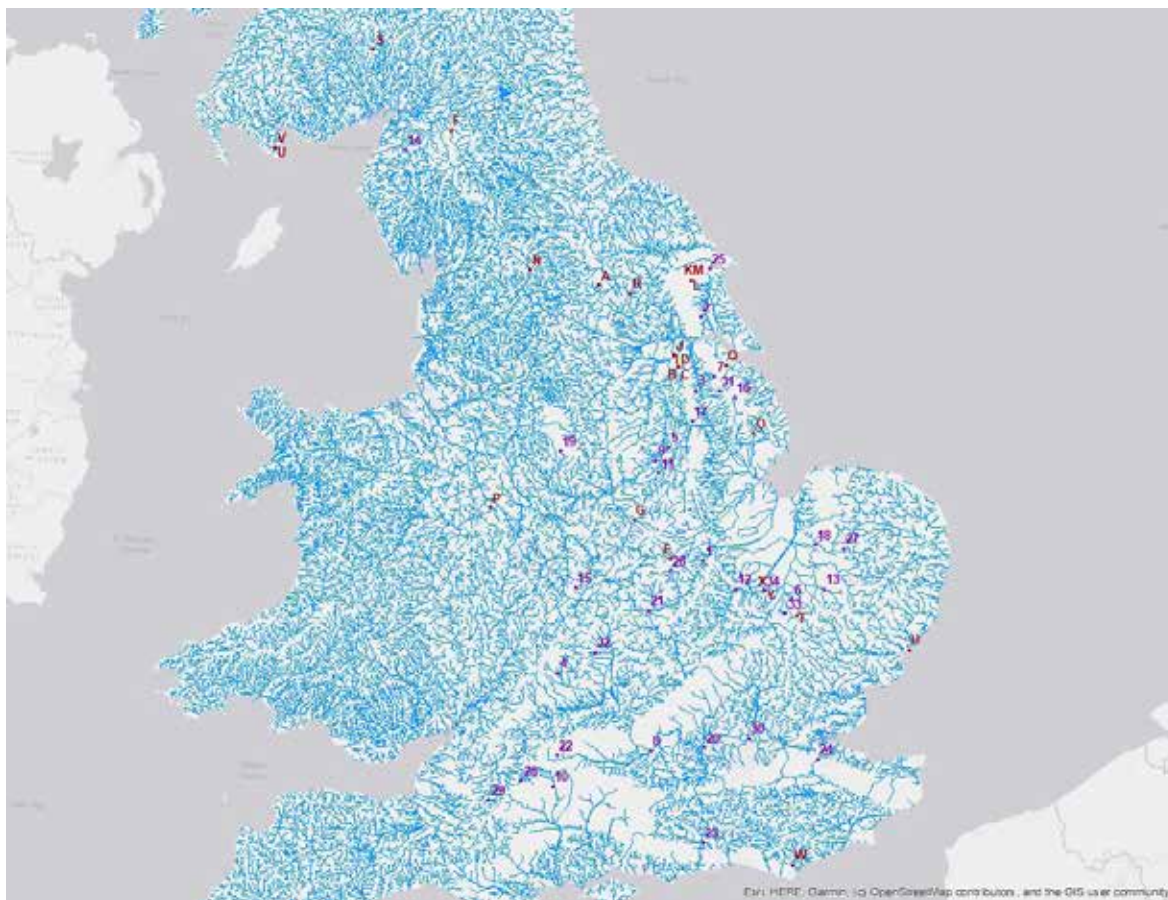
The results of Kolmogorov-Smirnov (KS) test of an analysis of the distance of the lead tanks from a Roman road and a set of random data points is illustrated in Figure 5.5 below. The p value, or probability value, at 0.05 that tells us how likely it is that the data could have occurred under the null hypothesis and in this case was 0.17. The maximum difference of the two distributions from each other was 0.52. The p-value obtained from the KS test is 0.17, which is greater than the commonly used significance level of 0.05. This means that there is insufficient evidence to reject the null hypothesis that the two distributions are identical at the 0.05 level of significance. The maximum difference between the two distributions is 0.52, which is a measure of the distance between the two distributions. The KS test statistic is the maximum distance between the empirical distribution functions of the two samples being compared. The larger the value of the test statistic, the greater the difference between the two distributions.

In summary, based on the results of the KS test, there is no significant evidence to suggest that the two distributions are different at the 0.05 level of significance, and the maximum difference between the two distributions is 0.52.



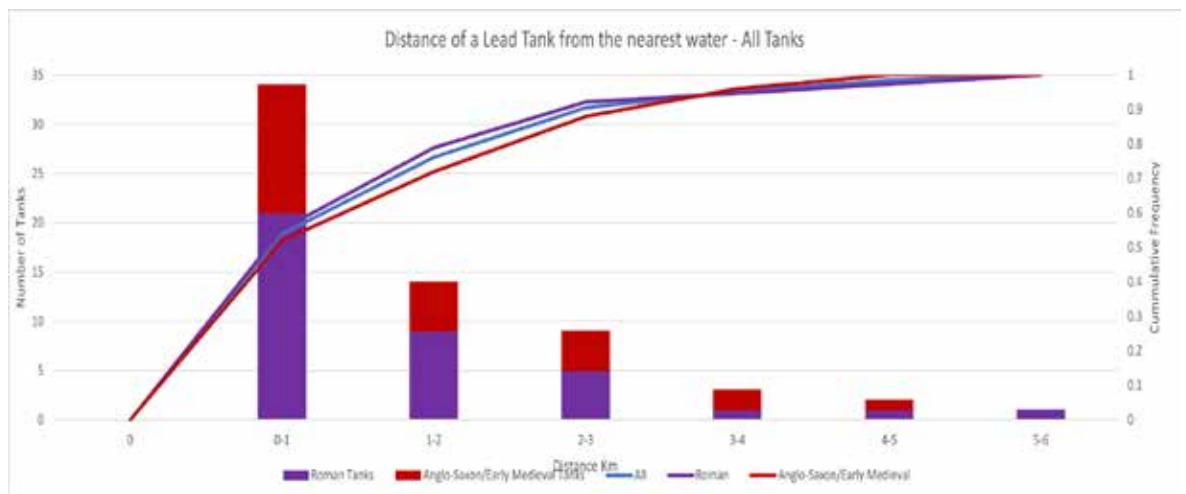
(Figure 5.5 A graph showing a comparison of the lead tanks and random data points and their proximity to Roman Roads in Britain, Author's Own)

5.4.2. Proximity to a Source of Water



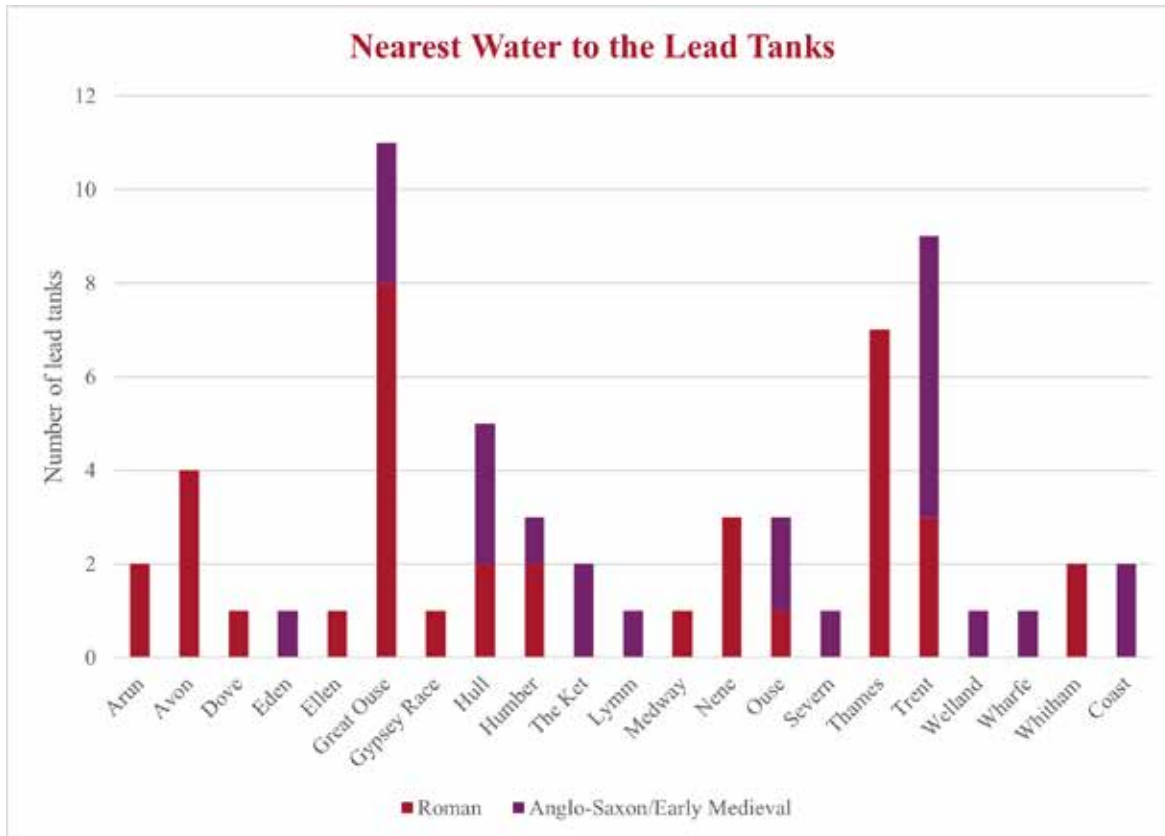
(Figure 5.6 A map showing the lead tanks and their proximity to a source of water in Britain, Author's Own)

Figure 5.6 illustrates the proximity of the lead tanks to a source of water (either a river, tributary or the coast) in Britain. Using straight line calculations of the distance of each lead tank to the nearest source of water shown in Figure 5.7 below illustrates that 54% (34) of the lead tanks were found within a kilometre of the nearest water source. A further 22% (14) were discovered between one–two kilometres from a water source, whilst 14% (9) were within three–four kilometres from the nearest water source. The median distance was 0.6km, the mean distance was 1.22km, the lead tank in Huntingdon was found in the Great River Ouse and the lead tank at Rochester was found in the River Medway. The maximum distance of a lead tank from a source of water was 5.1km at Caistor in Lincolnshire.



(Figure 5.7 A graph showing the distribution of the location of the Roman and Anglo-Saxon/Early Medieval lead tanks and their proximity to a waterway, author's own)

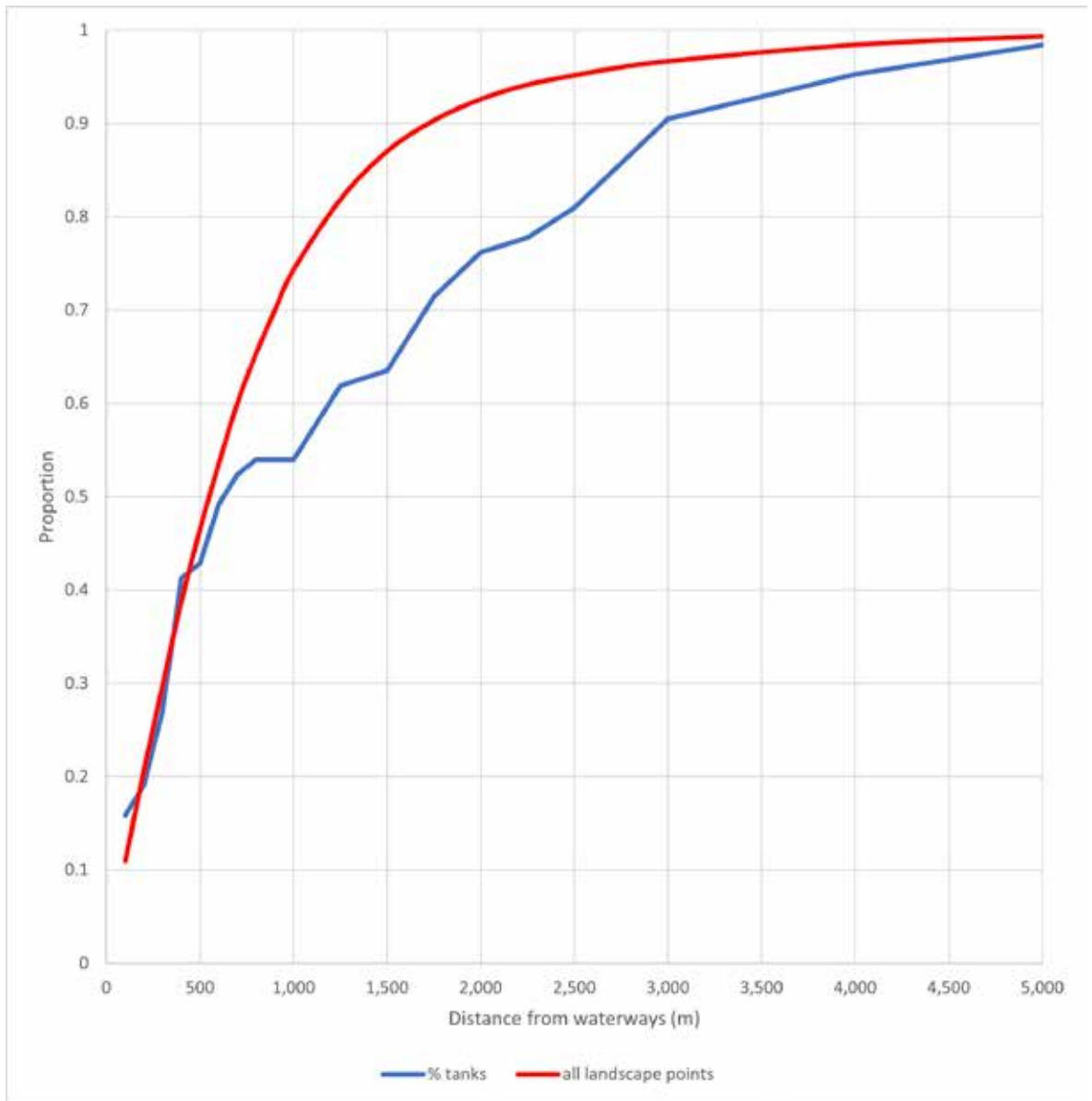
As Figure 5.8 demonstrates, 25 (43%) of the tanks were found near the Great Ouse, the Thames and the Trent or their tributaries. Important variations are also visible, with more Roman examples found near the Humber whilst more Anglo-Saxon/Early Medieval tanks were found near the Hull. Both the Great Ouse (Huntingdon) and Medway (Rochester) contained tanks whilst the Pulborough tank was found in the Arun's floodplains. Although the Oxborough tank was originally believed to have been discovered in the Wissey (Frere 1986, Guy 1988), there has been debate over its findspot since it was reportedly purchased as part of a scrap metal collection. Interestingly, the rivers with both Roman and Anglo-Saxon/Early Medieval tanks in their vicinity were the Great Ouse, Hull, Humber, Ouse, and the Trent since the others either had only Roman or only Anglo-Saxon/Early Medieval tanks in their vicinity.



(Figure 5.8 A graph showing the nearest river to the tanks' find spots, author's own)

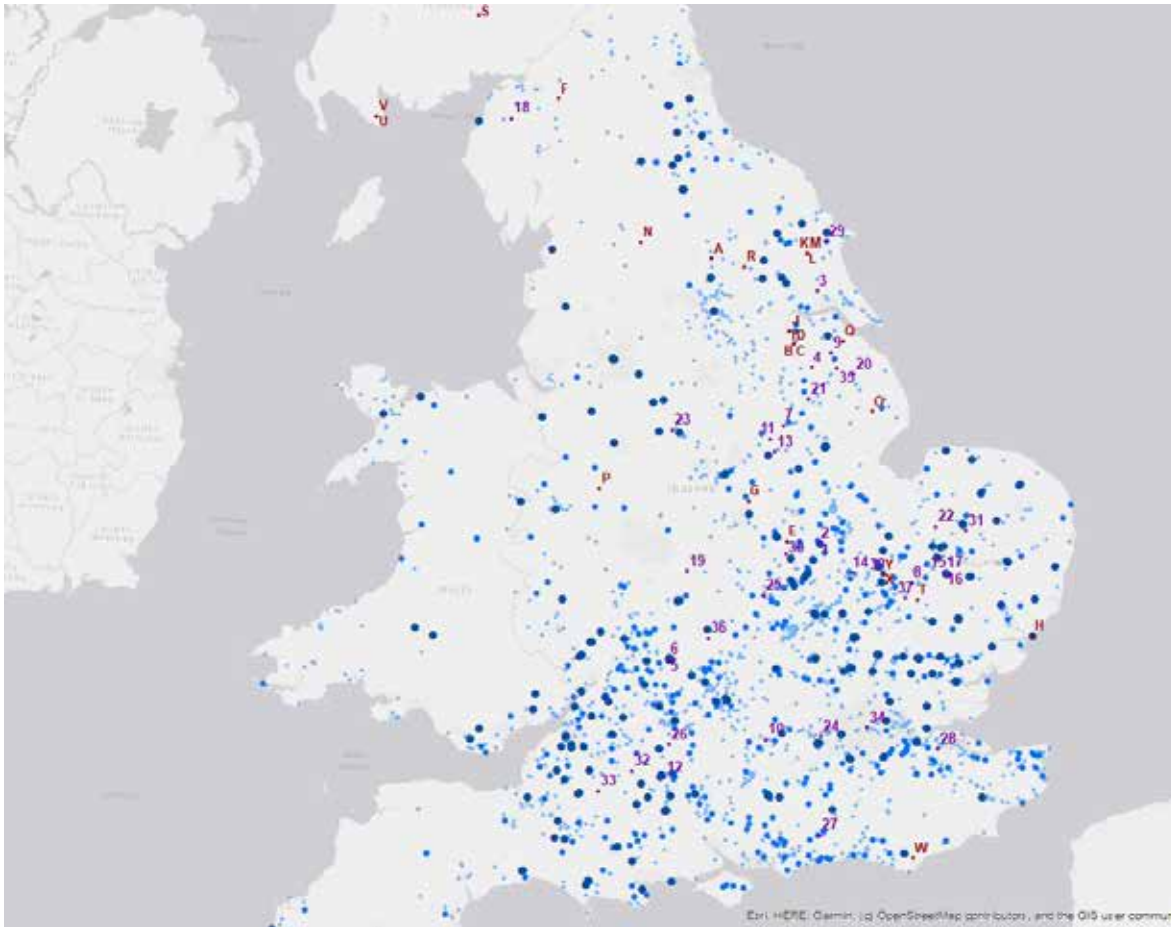
However, there is a caveat as this analysis is based upon the current location of these rivers, tributaries, and coasts. Processes such as silting or human interference such as damming, drainage and the construction of new canals and sluice gates has led to changes in pre-existing river courses. This is particularly evident with the Cambridgeshire Fens, an area that would routinely flood which led to the creation of lakes and meres as well as isolating certain regions (Naylor 2015). The Romans had constructed the Fen Causeway to link the north and west of England and East Anglia and attempted some level of drainage, including the Car Dyke on the western edge of the Fenland (Philips 1970). However artificial drainage and flood protection were only introduced in the 17th, 18th, and 19th centuries. Due to the changing nature of these environments, the tanks could have been closer or further away from these rivers than indicated by the data.

The results of Kolmogorov-Smirnov (KS) test of the distance of the lead tanks from a waterway and a set of random data points is illustrated in Figure 5.9 below. The p-value of 0.17 indicates that there is no significant difference between the two data sets at the 0.05 significance level. This means that we cannot reject the null hypothesis that the two data sets are drawn from the same population. The maximum difference of 0.24 represents the largest absolute difference between the CDFs of the two data sets. It is a measure of the distance between the empirical distribution functions of the two data sets. In general, the larger the maximum difference, the more likely it is that the two data sets are not drawn from the same population. However, the interpretation of the maximum difference depends on the sample size and the distribution of the data. Overall, based on the p-value and maximum difference, it seems that there is no strong evidence to suggest that the two data sets are drawn from different populations.



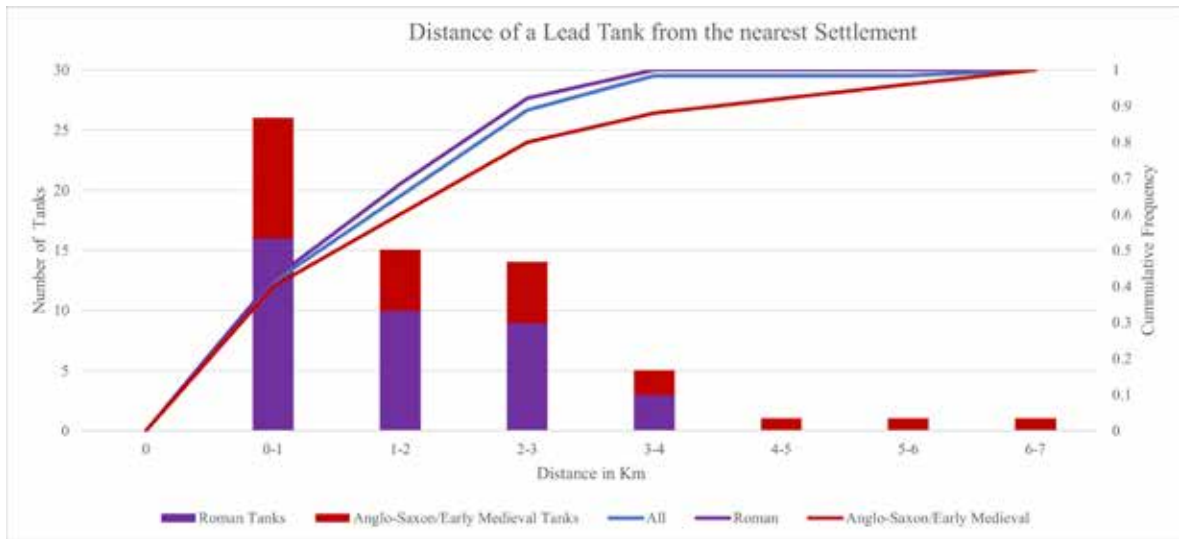
(Figure 5.9 A graph showing a comparison of the lead tanks and random data points and their proximity to a waterway in Britain, Author's Own)

5.4.3. Proximity to Settlement

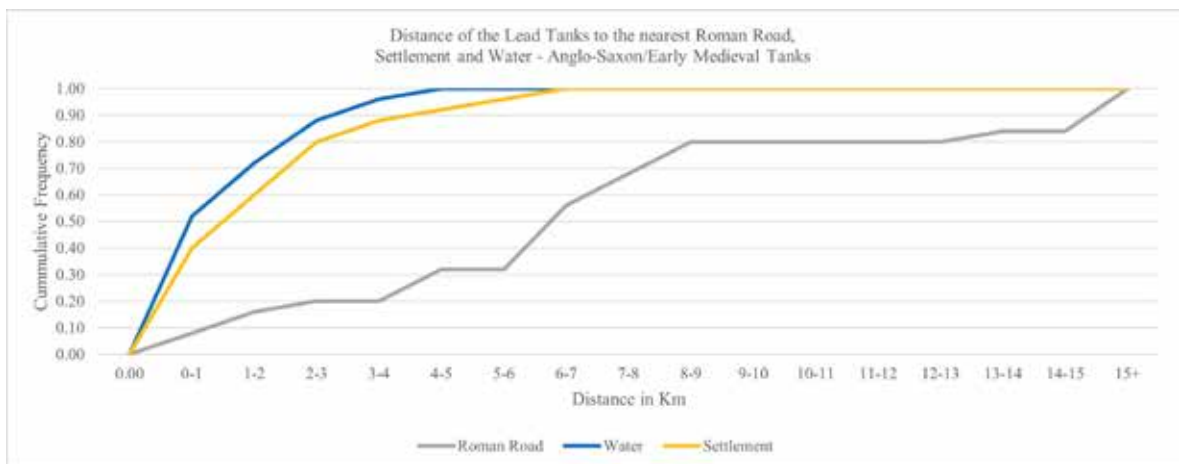


(Figure 5.10 A map showing the lead tanks and their proximity to a Settlement, Author's Own)

Figure 5.10 illustrates the proximity of the lead tanks to a settlement (Roman, Anglo-Saxon/ Early Medieval or Multiperiod) in Britain. Using straight line calculations of the distance of each lead tank to the nearest settlement shown in Figure 5.11 below illustrates that 41% (26) of the lead tanks were found within a kilometre a settlement. A further 24% (15) were discovered between one-two kilometres from a settlement, whilst 24% (15) were within two-three kilometres from the nearest settlement. The median distance was 1.54km, the mean distance was 1.53km, many of the lead tanks were found in settlements and the maximum distance of a lead tank from a settlement was 6.41km at Cumwhitton in Cumbria. This is particularly clear with the tanks at Bottesford, Bourton-on-the Water, Brough, East Stoke, Flixborough, Icklingham, Perry Oaks and Pineham, all of which were connected to varying levels of occupation at these sites. This is important, especially when comparing the locations of these tanks at their respective sites with the environments of these areas.



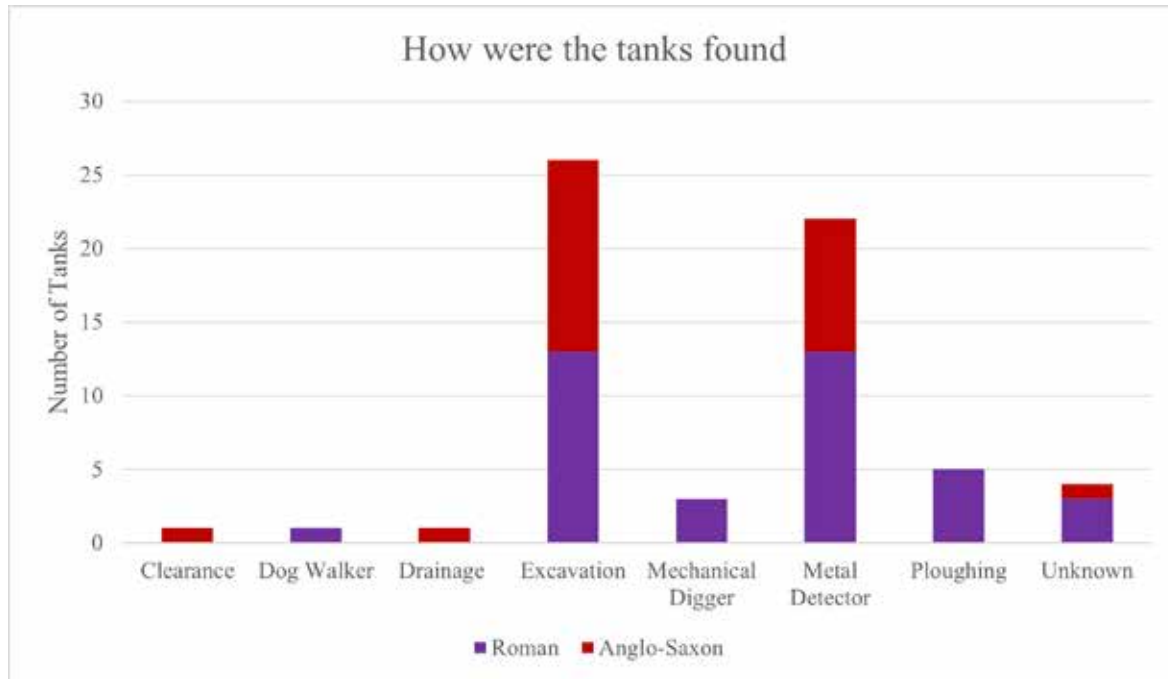
(Figure 5.11 A graph showing the lead tanks and their proximity to a Settlement in Britain, Author's Own)



(Figure 5.12 A graph showing the lead tanks and their proximity to a Roman road, waterway, and a settlement in Britain, Author's Own)

As Chapters Three and Four demonstrated, more of the lead tanks were found in closer proximity to rivers and settlements than a road. As mentioned in those chapters, transportation by water was a much more economical and faster method than transport overland by road. Furthermore, many of these rivers were near settlements, which had access to markets which would have the necessary economic capability to purchase the lead tanks or resources to complete them. As mentioned in Chapter Four, Flixborough had pottery, glass, and other finds such as volcanic stone from Continental Europe which indicated extensive trade networks likely accessed through the Humber and the Trent (Leahy 2007; Adams 2017). This could be the reason why more tanks were found closer to waterways and settlements than to roads, since this gave them access to the necessary resources required to create the tanks and the economic power to purchase them.

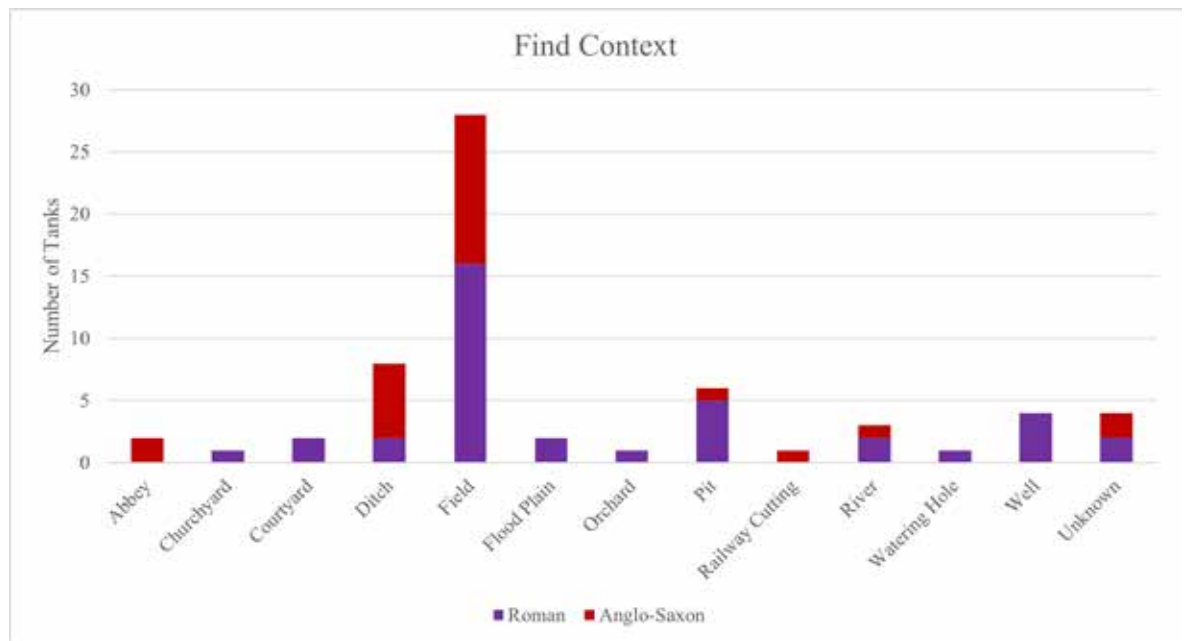
5.5. How were the lead tanks discovered and what contexts were they found in?



(Figure 5.13 A graph showing the find methods of the lead tanks, author's own)

Alongside their locations, size and decorations, clear patterns are visible with their discovery methods and the years of their discovery. As seen in Figure 5.13, excavation and metal detection were the most frequent discovery methods for both sets of lead tanks. Whilst the number of lead tanks discovered by excavation were equal in both sets (13 or 41%), more Roman tanks were found by metal detectorists (13 Roman and 9 Anglo-Saxon/Early Medieval). There were some outlying methods, including clearance drainage, mechanical excavator and ploughing providing other methods for discovering the tanks. There were some instances where the discovery method is unknown, in this instance the lead tanks found at East Stoke, Huntingdon, Oxborough and Rochester.

5.5.1. 'Wet' and 'Dry' contexts

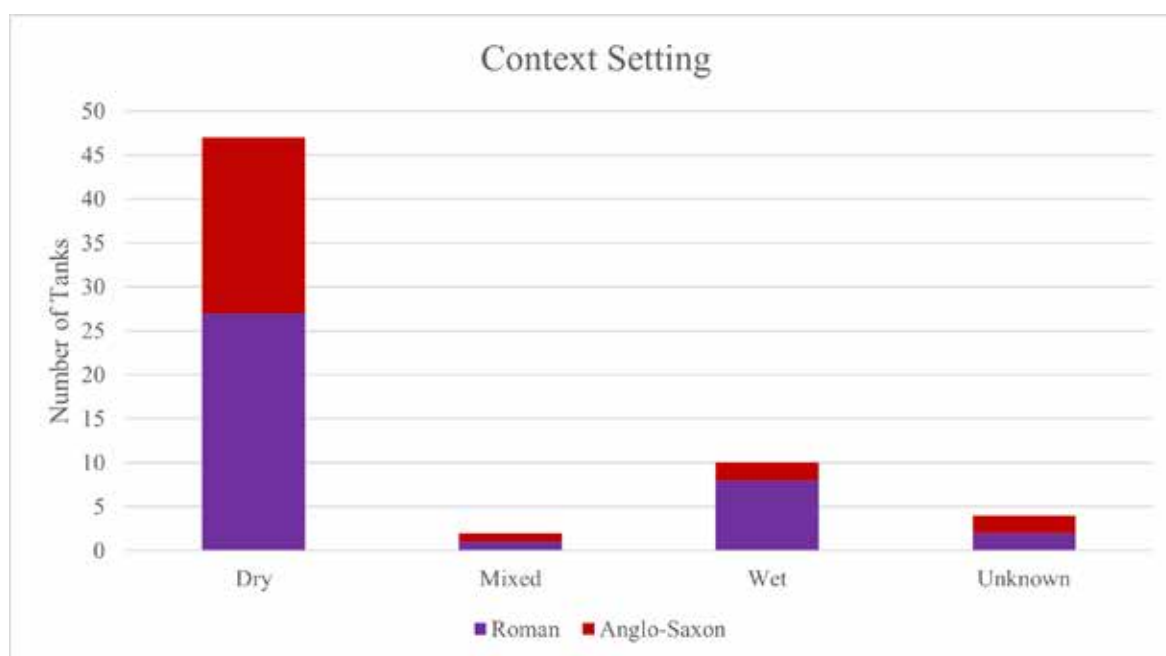


(Figure 5.14 A graph showing the find contexts of the Roman lead tanks, Authors' Own)

When comparing the lead tanks' find contexts, there are some issues and problems in terms of their geolocation data. As seen in Chapters Three and Four, many of the metal detected finds, particularly those on the PAS database, often lack contextual information. Likewise, those discovered accidentally (such as the tanks at Bishop Norton, Brough and East Stoke), are often missing detailed geolocation data. This is particularly evident with the newly discovered tank near Trowbridge in Wiltshire, which was removed without permission by metal detectorists, meaning it is lacking proper contextual information. Whilst some of tanks found by metal detectorists such as the Flawborough, Ludford and Trudoxhill tank have properly recorded contextual information (in this case pits) because of archaeological excavations following their discovery. In contrast, there are 17 Roman and 11 Anglo-Saxon/Early Medieval tanks recorded in as placed in fields. Most of these were recovered either by metal detectorists or by accident following ploughing, coinciding with the fact that a large portion of both sets of tanks were discovered in rural locations. Whilst it is entirely clear that these sites were not urban, it is difficult to distinguish between findspots in sites that were isolated areas and those that were in 'rural' settlements. Another issue is whether their locations are 'remote' since many were found away from major cities during the Roman and Anglo-Saxon/Early Medieval period this does not always make them 'remote'.

5.5.2. The 'Wet' contexts for the tanks: Wells and Watering Holes

Four tanks (Ashton, Caversham and the Walbrook) were discovered in wells, three from rivers (Allerton-Mauleverer, Huntingdon, and Rochester), another from a flood plain (Pulborough) and a watering hole (Beverley). The findspots for the tanks from 'dry' environments were just as varied as the 'wet' environments. Two tanks were found in ditches (Pineham and Rushton in Northamptonshire) whilst six were found in pits (Flawborough, Ludford, Perry Oaks, Rudston, Trudoxhill and Wigginton). Based upon the environmental evidence these pits can be classified as 'dry' although the Trudoxhill pit will be identified as 'mixed'. This is because whilst the pit consisted of purely clay subsoil, the pit was on a raised bank near a small stream and the base of the pit was waterlogged (Burnett 2018, 176). Other outliers are visible with the tank fragments found in the churchyard (Caistor) and the two tanks in the courtyard (Bourton-on-the-Water). These are modern contexts, especially the Caistor tank which was found in a drain beneath the church. The development of the church at Caistor had removed all evidence of its original archaeological context.



(Figure 5.15 A chart showing the find environments for the lead tanks, Authors' Own)

As can be seen in Figure 5.15 above, although ten (16%) of the tanks were found in 'wet' environments, when the data is investigated closely some important features become visible. Eight Roman tanks (21% of the total Roman tanks and 12% of the total number of tanks) were discovered in 'wet' contexts as opposed to two Anglo-Saxon/Early Medieval tanks (8% of those artefacts and 3% of the total number of tanks). In this instance, the 'wet' contexts were flood plains, rivers, watering holes and wells.

As will be seen in the next chapter, only two Roman tanks were found in rivers (Huntingdon and Rochester) whilst the Anglo-Saxon/Early Medieval tanks at Allerton-Mauleverer and East Goscote were discovered in the Hew Beck and in the River Wreake. The tanks found in rivers were all found in areas with Roman and Anglo-Saxon/Early Medieval occupation nearby, with Huntingdon and Rochester being good examples of this. These sites are believed to have served

as crossing points for the River Ouse and the River Medway (Brooks 1994, 3-4), with crossing places/bridges often displaying large clusters of deliberately abandoned finds due to the belief that rivers often relate to social boundaries of some description (Derks 1998, 185; Fontjin 2002; Mullin 2012, 53; Crease 2015, 153; Naylor 2015, 125; Bradley 2017). Placing the tanks in these rivers likely meant their retrieval was almost impossible, indicating a great deal of time and effort went into abandoning these artefacts, a factor visible with artefacts depositions in rivers across multiple periods as will be seen in the next chapter.

The remaining wet examples consisted of four tanks found in wells (Ashton, Caversham and Walbrook Mithraeum) along with two found in flood plains (Oxborough and Pulborough) and another found in a watering hole (Beverley). As will be seen in Chapter Six, these were all found near settlements of varying sizes, all of which were near rivers (a factor that ties in with the distance to water discussed in Section 5.4.2). Their placement in these environments indicates rather deliberate abandonment, especially as these are features where retrieval would have been rather difficult. As seen in Chapter Three, the wells and watering hole all appeared to be deliberately backfilled, with the Ashton, Caversham and Walbrook tanks found either halfway down the wells or near their base whilst the Beverley tank was found just above timber pieces in the lowermost fill of the watering hole (Hadman and Upex 1976; Frere 1988; Marshall per comms; Moon per comms). This further suggested that they had been buried without intention of recovery and that a great deal of time and effort was invested in burying these artefacts, like those found in the rivers. Given the state of the tanks and their placement in these environments it is possible that this was a ritual deposition, like the tanks discovered in rivers, especially as these types of contexts are frequently tied to votive deposition (Fincham 2004, 59-60; Barrowclough 2013, 29). Alternatively, the deposition of these artefacts could also have occurred when these settlements were abandoned by their inhabitants, given the location of these artefacts in environments where retrieval would have been especially difficult.

5.5.3. The 'Dry' contexts for the tanks: ditches, fields, pits

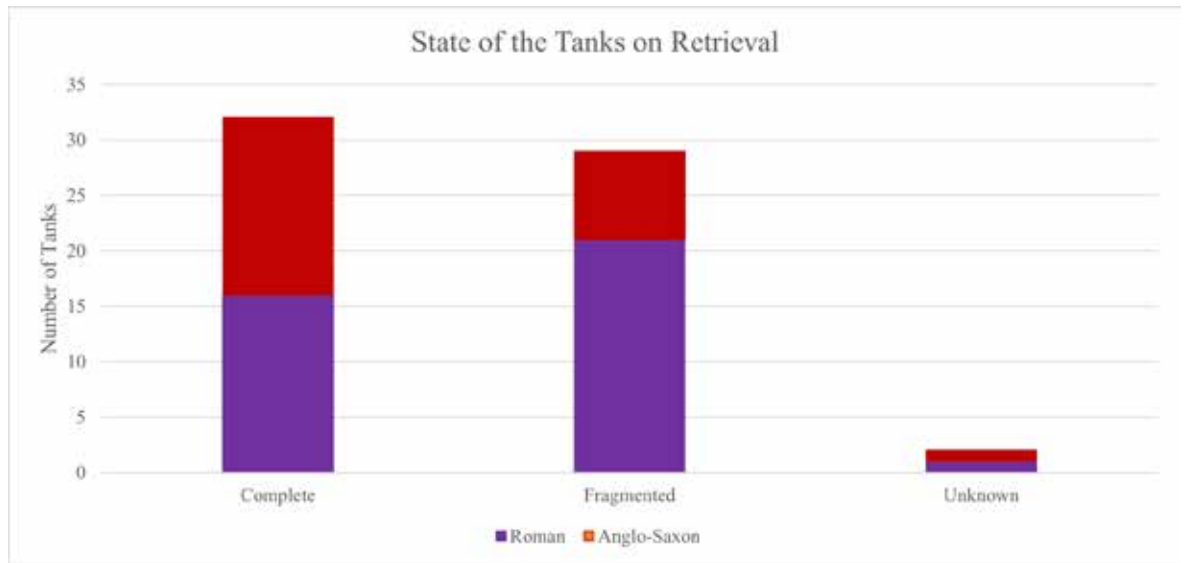
As Section 5.5.1 showed, more of the Roman and Anglo-Saxon/Early Medieval tanks were discovered in 'dry' environments than 'wet' environments. As Chapter Six will demonstrate, whilst a good percentage of these were found in connection with settlements in ditches and pits, many were also found in fields with no connection to any settlement features. Only four tanks in fields have been found in relation to settlement features. These were the lead tank fragments at Brough and East Stoke in Nottinghamshire and two of the tanks at Icklingham. The tank at Brough was found in connection with the Roman settlement of Crococolana whilst the East Stoke tank was discovered at the site of Ad Pontem (Wright 1955, 147; Toynbee 1964, 355; Watts 1995, 318). Meanwhile, two of the Icklingham tanks were found in connection with Horselands Villa and the supposed baptistery mentioned in Section 5.2.

When comparing the contexts used for deposition, some important contrasts are visible. So far, only two Roman tanks, Pineham and Rushton, were found in ditches, representing only 5.4% of the Roman tanks and 3.22% of the total tanks. In contrast, six Anglo-Saxon/Early Medieval tanks (24% of those tanks and 9.67% of the total number) were found in ditches at Bottesford, Flixborough and Riby Cross Roads. All of these were found in connection with varying degrees of activity, with the Bottesford, Flixborough, Pineham and Riby Cross Roads tanks found in enclosure or boundary ditches on settlements whilst the Rushton tank was found in a ditch near in a bathhouse (Cowgill 1994, 267-8; Leahy 2007; Cowgill 2009, 69; Crerar 2012, 161; Speed

per comms). The contexts used for the burial of the artefacts (much like the rivers, watering holes, and wells) would also have required a great deal of time and effort, since the Bottesford, Pineham and Rushton tanks were found deliberately fragmented and placed along the base of these ditches. The Riby Cross Roads tank was found lying horizontally in the fill of that ditch (Cowgill 1994; *ibid* 2009; Crerar 2012; Speed *per comms*). All these features had been backfilled, with the pottery evidence (late fourth century for Pineham and mid-seventh to eight-century pottery for Bottesford and Riby Cross Roads) suggesting this had occurred after the lead tanks had been placed within these features. Furthermore, the ditches at Bottesford and Pineham also showed evidence of recutting (Boyer et al 2009, 69; Speed *per comms*), suggesting this could have happened later. Whilst the Rushton ditch did not contain any additional finds besides the tank pieces, the context was sealed with building rubble from the adjacent bathhouse (Looker 1998; Crerar 2012). The placement of the tanks in these features likely occurred during the abandonment of these sites since they were placed in contexts where retrieval would have been difficult, indicated through the placement of the tanks at the bottom of the ditches before deliberate backfilling or sealing. The deliberate damage to the tanks occurs on both the Roman and Anglo-Saxon/Early Medieval tanks, showing similar depositional practices across both periods through the choice of context and treatment of the artefacts.

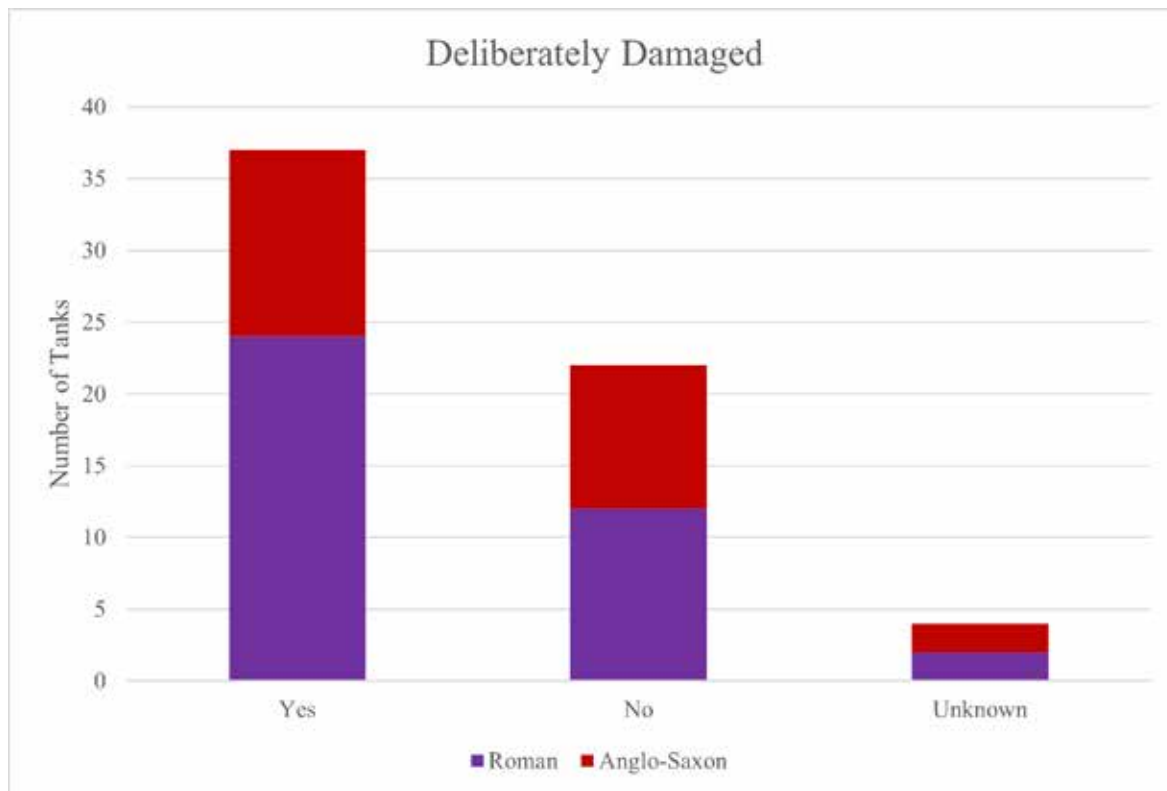
Similar features are also visible the tanks found in pits. In contrast with the ditches, five Roman tanks (13.16% of the Roman tanks and 9.5% of the total number) were found in pits and in contrast only a single Anglo-Saxon/Early Medieval tank (4% of the Anglo-Saxon /Early Medieval tanks and 1.59% of the total number). Like the ditches, these were mostly connected with varying levels of occupation in these locations except for the Ludford and Trudoxhill lead tanks, as will be seen in the next chapter. In addition, the tanks in the pits all appeared to have been deliberately buried in a manner which made retrieval difficult. The pits were either specifically dug to contain these tanks, since they were often only just large enough to hold the artefacts, or in potentially important places in these landscapes near rivers (Worrell 2005; Petts 2006, 229; Booth et al 2011, 267; Burnett 2018, 178). Following the placement of the artefacts in these features they were then hastily backfilled, adding to the analysis that these were intentionally buried (either for later retrieval or as some form of potential 'ritual' disuse). The finds in these pits, mentioned in Chapters Three and Four, indicated deliberate abandonment in a similar manner to the lead tanks seen within the ditches. The placement of these artefacts with the lead tanks in pits, combined with their location, indicated that a large amount of effort had gone into burying these artefacts. In particularly the Ludford and Trudoxhill lead tanks were found in pits far from any known occupation in these areas, as will be seen in Chapter Six. The effort that went into burying these examples was like the lead tanks found in the ditches, especially considering that many of the pits were specifically dug to hold these tanks. The find contexts used for the tanks show an important engagement with landscape features at this location, a factor that is even more visible when the deposition of the tanks is compared to similar actions. This was visible not only in Chapters Three and Four when comparing the depositions of these artefacts in their specific contexts to similar acts of deposition from the Roman and Anglo-Saxon/Early Medieval period but is also visible in the next chapter when similar artefact burials in the surrounding landscapes are assessed. This pattern of rather selective deposition is also visible with the associated finds contained within the lead tanks, which will be analysed below.

5.6 Evidence of Deliberate Fragmentation



(Figure 5.16 A graph showing the state of the lead tanks upon retrieval, Authors' Own)

Some surprising variations are visible in the state of both the Roman and Anglo-Saxon/Early Medieval tanks upon retrieval, demonstrated in the graph above (Figure 5.16). More of the Anglo-Saxon/Early Medieval tanks were in a complete state than their Roman counterparts upon their discovery although the numbers are relatively close. Fifteen Roman and sixteen Anglo-Saxon/Early Medieval tanks were discovered in a complete state. In contrast, there are far more Roman examples (21) showing evidence of deliberate fragmentation than their later counterparts (8). In some instances, there was post depositional damage, either through human error with the Enford and Pulborough excavations or through environmental factors as seen with the Trudoxhill tank (Burnett 2018). However, most of the damage was pre-depositional. Whilst it shows that there are continued patterns visible with the burials of the Roman and Anglo-Saxon/Early Medieval lead tanks, almost three times as many Roman tanks were found fragmented as their later counterparts. These were found across a range of 'wet' and 'dry' contexts, with specific features containing more examples of deliberately fragmented tanks than others. Far more of the tanks from 'dry' contexts were discovered in a fragmented state, particularly those in ditches and pits. Both the Roman tanks in ditches at Pineham and Rushton showed deliberate fragmentation, with the pieces laid out in groups along the bases of their respective ditches. Likewise, the Anglo-Saxon/Early Medieval tank fragments at Bottesford showed evidence of deliberate fragmentation, with two of the fragments placed together with a third near them at the base of the ditch. In contrast, the tanks from Flixborough were intact whilst the tank at Riby Cross Roads was complete, but with the sides folded into the centre (Cowgill 2009). The tanks in pits showed just as many varieties in their states, with those at Flawborough, Ludford, Perry Oaks and Trudoxhill tanks all deliberately fragmented before their placement in the pits. In contrast, the Rudston, St Saviourgate and Wigginton tanks were found intact during the excavations of those sites. There are some important distinctions to make concerning the types of damage visible on the tanks. There are tanks that were complete but damaged, where the components of the tank all survived but damage was clearly visible on the artefact, such as the deliberately crushed tanks from Bourton-on-the Water, Mavis Enderby, Newport and Whithorn.



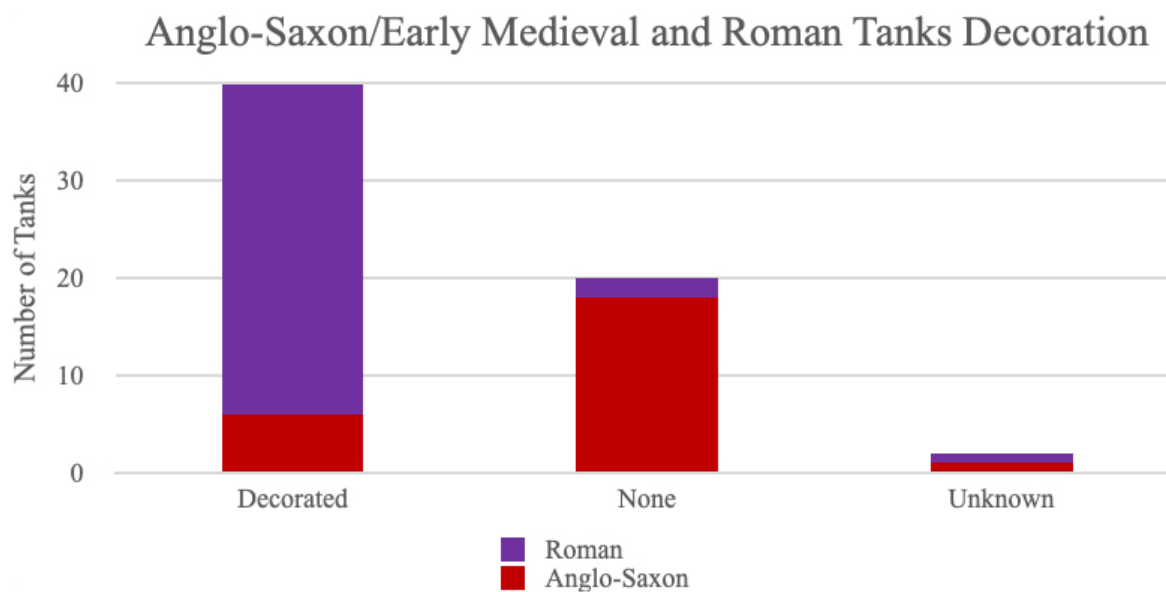
(Figure 5.17 A graph showing evidence for deliberate damage on the lead tanks, Authors' Own)

Similar variations are also visible with the evidence for deliberate damage on the Roman and Anglo-Saxon/Early Medieval lead tanks. As seen in Figure 5.17 above, 63% (24) of the Roman examples and 52% (13) of the Anglo-Saxon/Early Medieval tanks display forms of intentional damage, with almost twice as many Roman tanks show evidence for deliberate damage once again. In this instance, deliberate damage consisted of fragmentation and cutting alongside evidence for destruction through heated instruments or burning and flattening/crushing. It contrasts with accidental damage, which occurred during the discoveries of the Roman tanks from Enford, Pulborough and Wigginton. Accidental damage happened either by retrieval through mechanical diggers, as seen with those at Enford and Pulborough, or through ploughing activities with the Wigginton find. More of the tanks in 'dry' environments displayed evidence for deliberate damage than those in 'wet' environments. Certain features with evidence for deliberate damage are visible with the tanks found in 'wet' environments. The Roman tanks discovered in rivers were found complete and undamaged, whilst both Anglo-Saxon/Early Medieval tanks in rivers were heavily damaged. In contrast, the Roman tanks in wells were in a mixture of complete and fragmented states, much like the tanks in 'dry' environments. . The tank from the watering hole at Beverley was deliberately crushed before its placement in this context, creating parallels to other examples from both periods found complete but with evidence of deliberate damage. Intentional flattening is also visible with the Bourton-on-the-Water examples discovered in 1934, where both tanks were found flattened but complete in the courtyard at Lansdown ('Leadenwell Villa'). The larger of these tanks contained the smaller example, like the Anglo-Saxon/Early Medieval examples discovered at Flixborough and Willingham. Intentional crushing is also visible on the Anglo-Saxon/Early Medieval tanks at Cumwhitton, Mavis Enderby, Newport, and Whithorn. All these examples were found

deliberately crushed, which lead to the distorting/splitting of the tanks. Whilst lead is a soft material, the lead tanks are made from large sheets of the metal, meaning these acts would have required a large amount of time and effort to destroy those artefacts.

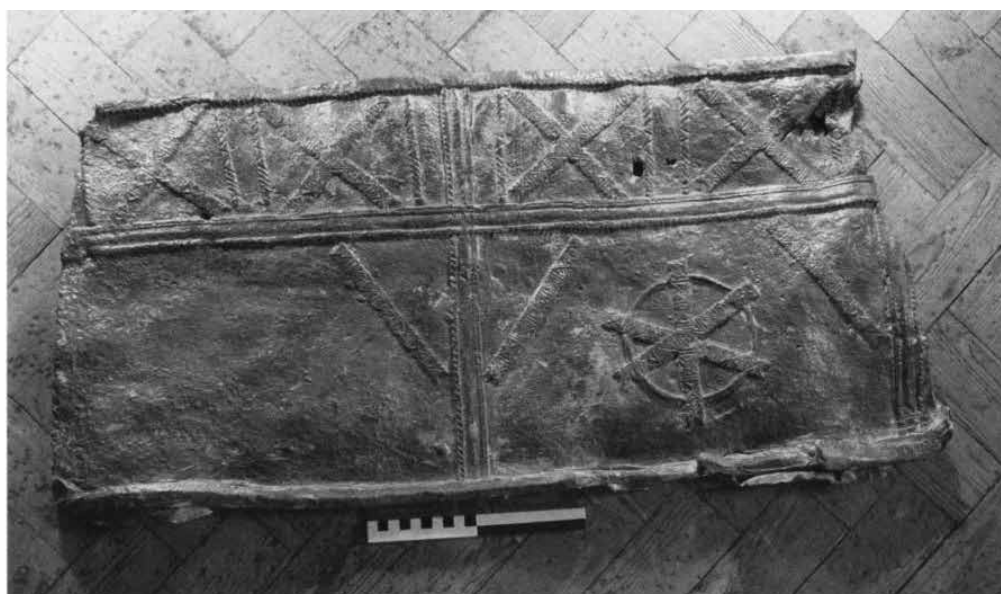
The similarity of the environments used for depositing the tank and their comparable states upon burial contributes towards the landscape of continued deposition concept referenced in the methodology chapter and which will be seen in the next chapter. The comparable patterns of artefact abandonment are visible across both groups, with extensive effort going into the burial of these objects. The deliberate destruction of the tanks often appears to provide evidence of clearly structured deposition of the tanks in these environments. Many were found in either remote locations or in difficult to reach environments such as ditches, pits, rivers, watering holes and wells. The same can be seen with those discovered in fields far from any nearby occupation. Whilst many of the tanks were found in connection with some form of settlement, a large number were also discovered in areas that appear to be far from any nearby occupation. This is a feature that will be increasingly visible in Chapter Six with analysis of the tanks in their respective environments. It also particularly evident examples discovered in fields such as the tanks at Bishop Norton, Mavis Enderby, Thompson and Trudoxhill. Many of the tanks discovered in fields were found in a mixture of complete and undamaged (Icklingham), complete but damaged (Cumwhitton, Grassington, Mavis Enderby, Newport, Parwich and Willingham) or deliberately fragmented states (Bishop Norton, Brough, East Stoke, Kenilworth, North Lincoln, Preshute, Thompson, Walesby, Wilbraham and Willingham). Their remote locations and these states upon deposition indicate that extensive effort went into their abandonment, firstly to move these artefacts to these locations and then in abandoning them in these methods described above. This will be important for the next chapter when I analyse the location of the tanks alongside other artefacts in these sites, especially when looking at their spatial locations to other finds and whether they were buried adjacent to settlement features or far from these locations.

5.7. Descriptions of the tanks: Dimensions and Decorations tanks?

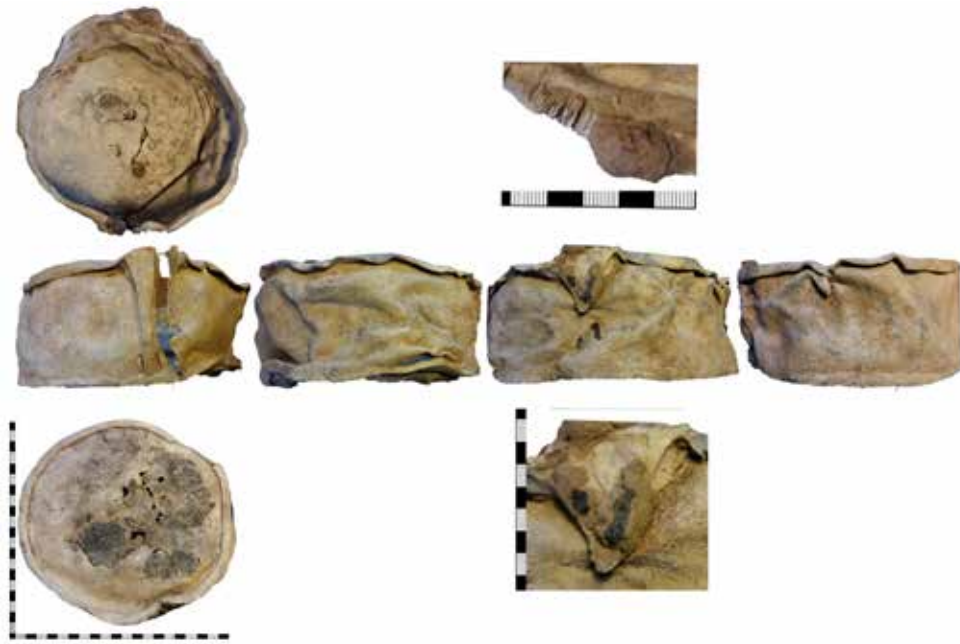


(Figure 5.18 A graph showing the decorations of the Roman and Anglo-Saxon/Early Medieval lead tanks, Authors' Own)

As seen in the Figure 5.18, far more Roman lead tanks are decorated than their Anglo-Saxon/Early Medieval counterparts. Out of the 38 Roman tanks discussed in this thesis, 34 (92%) of these were decorated with the mixed motifs seen in Chapter Three and in contrast, only four out of 25 Anglo-Saxon/Early Medieval tanks (16%) were decorated.

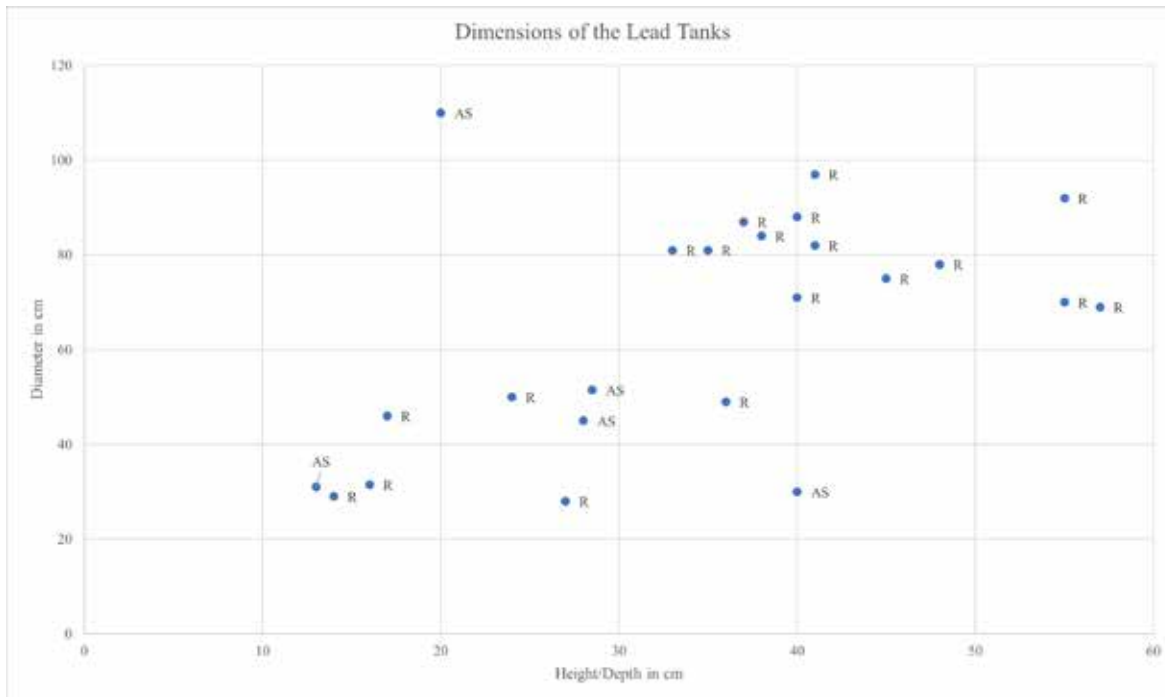


(Figure 5.19 The lead tank fragment found at Brough in Nottinghamshire, Watts 1995, 318)



(Figure 5.20 The lead tank discovered in East Goscote in Leicestershire, Birmingham Museum Trust)

The Roman tanks' decorative features are much more varied, ranging from cabled banding and zigzags, saltires, circles, inscriptions, frieze work, decorative figures, and geometric patterns. To illustrate the point, we can compare Figure 5.19 and Figure 5.20, the lead tank from Brough in Nottinghamshire and the lead tank discovered in East Goscote in Leicestershire. The Roman tank is decorated with cable banding and Saltire crosses whilst the Anglo-Saxon/Early Medieval tank, lacks the level of sophistication and decoration of its Roman counterpart. Nine Roman tanks were decorated with the Chi-Rho monogram; a feature usually used to tie them to elements of Christian religious practices like baptism or pedilavium (Toynbee 1963, 353-4; Guy 1981; Thomas 1981, 221-3; Watts 1991, 170-1 Petts 2003, 110; Crerar 2012,136). Furthermore, at least four showed very similar inscriptions (MALEDO FECIT VIVAS or UTERE EELIX) suggesting that there could be a single workshop producing these artefacts.



(Figure 5.21 A scatter graph showing the dimensions and heights of both sets of lead tanks, Authors' Own)

When comparing the lead tanks based upon their volumes and capacity, there are some issues with the data making comparisons difficult as the scatter graph above shows (Figure 5.21), especially as there are examples where this information was not readily available. There is a problem with some of the data. Five of the Roman tanks had no data on any of these features, i.e., their capacity, diameter, and weight. Likewise, eight of the Anglo-Saxon/Early Medieval tanks were also missing data on those aspects. There are further complications as only three Roman tanks and two Anglo-Saxon/Early Medieval tanks had any data on diameter. Other disparities included only two Roman tanks having weight data whilst five of their later counterparts had this data and 14 Roman tanks having data on volume/capacity whilst only one Anglo-Saxon/Early Medieval tank had volume/capacity data. However, based upon the available data for the diameter and height of the tanks and combined with the decorative features discussed above, the Roman ones are much larger and more finely made than their later counterparts. Authors generally agree that it took three sheets to create the Roman lead tanks whilst the Anglo-Saxon/Early Medieval lead tanks were either created from two sheets or from a single sheet (Guy 1981; Leahy 2003; Cowgill 2009). There is also a large disparity between both sets of tanks in their volume and capacity of these artefacts. As well as being larger than the later tanks, the Roman examples (except for the Ireby tank in Cumbria) appear to be able to hold a greater volume of liquid than the Anglo-Saxon/Early Medieval ones. The largest estimated volume for the Roman tanks is the Walesby tank with a possible volume of 360 litres whilst the largest for their Anglo-Saxon/Early Medieval counterparts was at most 20 litres.

5.8. Inconvenient Toolboxes? What artefacts have been discovered with the lead tanks from both periods?

The associated finds with lead tanks from both periods are just as diverse as their find contexts. The Roman and Anglo-Saxon/Early Medieval tanks are dated to the late fourth century and the eighth-tenth centuries either through decorative features or associated finds and these mainly consisted of either coins or pottery. However, as seen in Chapters Three and Four, at least three Roman tanks and five Anglo-Saxon/Early Medieval tanks were discovered containing artefacts. These mainly consisting of domestic materials including glass, pewter, and pottery as well as large tool hoards. Important disparities are visible in the number of tanks from both periods containing these artefacts. Only one of the Roman tanks (amounting to 2.70% of those artefacts and 1.59% of the total number of tanks) had a possible tool hoard, whilst the five Anglo-Saxon/Early Medieval tanks all contained tools of some variety (representing 20% of those tanks and 8.06% of the total number of tanks), demonstrating that far more Anglo-Saxon/Early Medieval tanks contained tools than the Roman ones. The variety in the tools contained in the Icklingham tank and those with the Anglo-Saxon/Early Medieval tanks is just as important as the number of tanks containing the tools. The Icklingham tank contained a mixture of nails, saw blades, structural fittings, hinges and pins and metal strips with nails interpreted as furniture fittings. These differed from those within the Anglo-Saxon/Early Medieval tanks, which were mainly a mixture of woodworking and carpentry tools (connected to building and possibly ship making), agricultural tools for cultivation and harvesting alongside limited evidence for metalworking and weaponry. Whilst both sets of tools reflect the widespread use of iron during those periods, the tools in the Anglo-Saxon/Early Medieval tanks appear to reflect its use by the different occupations represented by those artefacts, like metalwork hoards found with Bronze and Iron Age cauldrons (Gerloff 2010; Joy 2011). Whilst there are obvious differences between the types of tools in these assemblages, there are also some similarities between the tool hoards. The structural and furniture fittings in the Icklingham tank have parallels to the St Saviourgate hoard which contained at least twenty door or chest fittings alongside its associated tools, suggesting these were related to domestic occupation at St Saviourgate (CBA 1998, 16). The material at Icklingham could have been part of an assemblage from the nearby villa site in Horselands field or material in association with the fourth century building near the tank, with the villa site showing evidence for dismantling dated to the fourth century through a series of late fourth century bronze coins (Prigg 1878, 12–15; Fleming 2021 127). These also could have been buried for safekeeping or with a possible ritual connection, as seen in fourth-century iron hoards across Britain (Manning 1972, 243; Hingley 2006, 228).

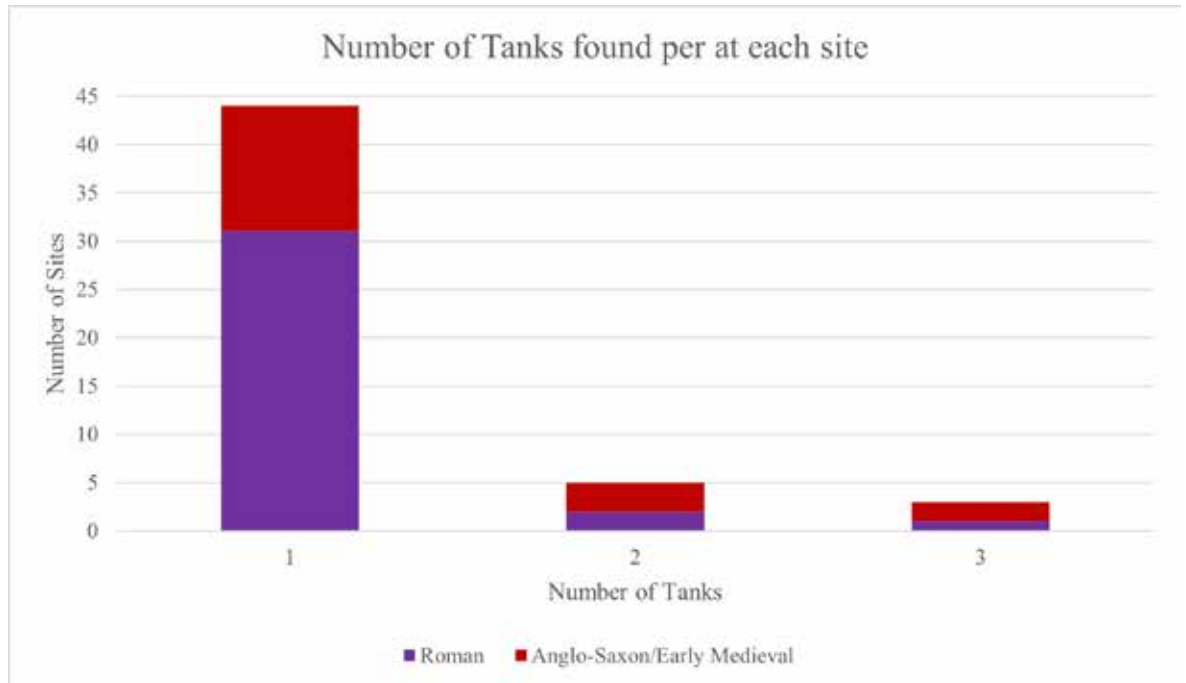
Variation in state is visible on the tools found with the Icklingham, Garton-on-the-Wolds, Grassington and St Saviourgate tanks, with the artefacts in these collections showing signs of wear and tear through use. In contrast, the Flixborough tools were almost pristine and appeared to be almost new, with hardly any signs of use, which suggested they had been purposefully chosen to be placed between the tanks (Loveluck 1997; Leahy 2007; Ottaway 2009; Leahy 2013). Furthermore, all the tanks but one (the Stidriggs tank) were buried intact, suggesting they had been intentionally abandoned in these locations. It is certainly possible that these artefacts were buried as these areas were abandoned by their inhabitants, either with the intention of reclaiming them or as a final act of leaving. Alternatively, they could have been buried with the intention of recycling both the tanks and the tools. This was an argument that was commonly used for supposed 'founder's hoards' from the Bronze Age, including the bronze cauldrons mentioned above. Depositions of tool hoards from the Iron Age and Roman

periods have often been assessed as an act of ritual deposition, with authors such as Manning analysing compositions of functional tools like those found with the lead tanks (Manning 1972, 238; Hingley 2006; 214–215; Crerar 2012, 153). Manning classed their deposition into three categories: disposal (i.e., rubbish), to preserve them for later reclaiming and for a possible votive action.

Manning paid particular attention to the care that had been placed into the disposal of these hoards, many of which had been buried in almost pristine condition and contained similar sets of items to those found with the lead tanks. These included agricultural, carpentry and smith's tools and domestic equipment as well as military equipment, particularly visible with the Corbridge and Newstead hoards (1972, 239, 242, 244). This is like the artefacts discovered with the lead tanks, many of which were also in a pristine and almost unused condition and matched the tools analysed by Manning. The burial of these tanks and their associated artefacts suggests a great deal of effort went into the abandoning of these materials, with the deliberate placement of the pewter, pottery, and tool hoards either in the tanks or in association with them appearing to indicate that they could have been buried with the intention of retrieval or recycling or were simply abandoned when the inhabitants left these areas. This is further emphasised by the fact that the Stidriggs and Trowbridge tanks were buried far from any nearby occupation that we know about. It could be that they were buried in relation to settlements, but these features have not been excavated or discovered yet. As seen in Section 5.7, these are large objects that could weigh over 140 kilograms, making it likely that more than one person was involved in disposing of these artefacts. Combined with the tool hoards, this indicates that a large degree of effort and selectivity went into burying these artefacts in these environments. The selectiveness of the artefacts and the environments chosen for deposition is a feature visible for tanks from the Roman and Anglo-Saxon/Early Medieval periods discovered in both 'wet' and 'dry' environments, as seen in the previous two chapters. It is also visible with similar types of depositions in the areas surrounding the lead tanks, as will be seen in the next chapter. It is also a feature that is closely connected to the state of the tanks upon deposition, a feature which further indicates the levels of effort invested in burying these artefacts.

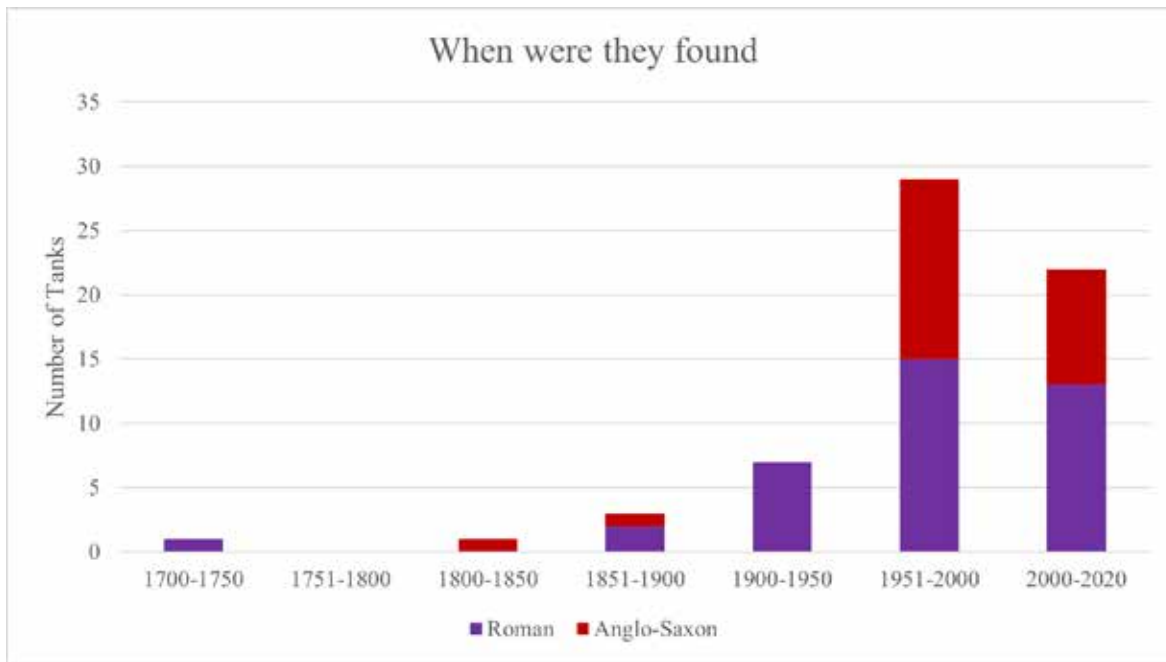
5.9. When were the lead tanks found?

With a recently discovered Roman tank from Rudston in Yorkshire, there are now 38 Roman tanks found on 34 sites as opposed to 25 Anglo-Saxon/Early Medieval ones found on 18 sites, meaning that 60.3% of the total number of tanks were Roman whilst only 39.6% were Anglo-Saxon/Early Medieval.



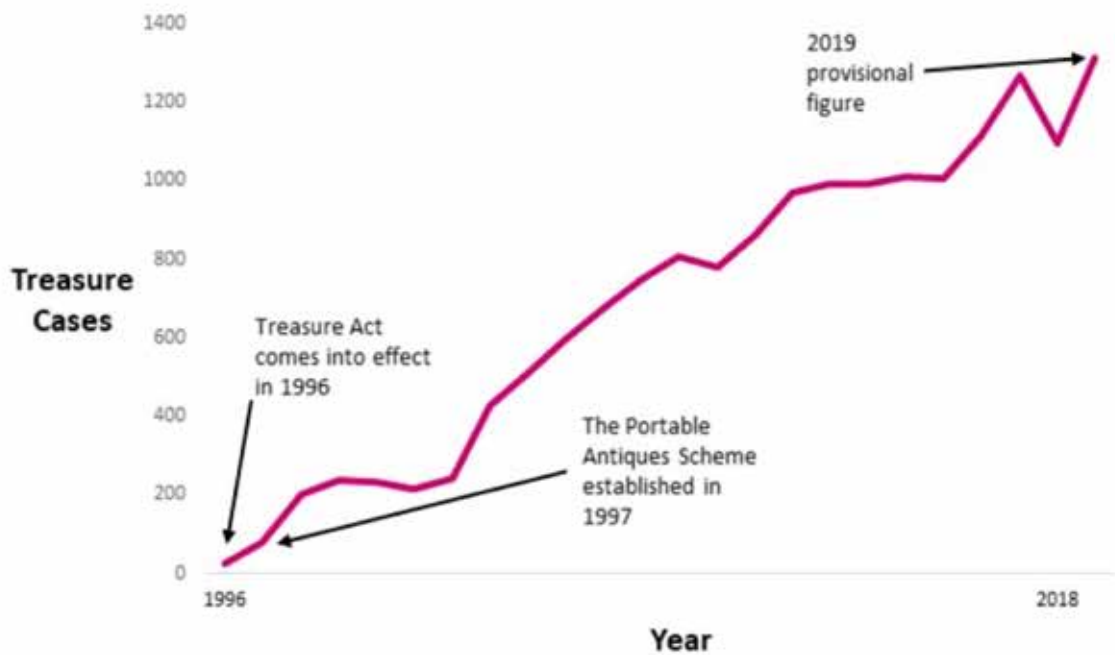
(Figure 5.22 A graph showing the number of tanks per site, Authors' Own)

The number of tanks per site is an important factor when investigating the data in greater depth and as Figure 5.22 shows, 43 (55%) of the tanks were found as a single tank per site. There were 31 sites with single Roman tanks (46%) as opposed to 13 sites with Anglo-Saxon/Early Medieval tanks (23%), reflecting the fact that more Roman tanks have been discovered than their later counterparts. Most of the sites with more than one tank were in the East Midlands and East of England, although Bourton-on-the-Water is in the South West and Garton-on-the-Wolds is in Yorkshire. These were all in regions with a significant cluster of tanks, connected with varying degrees of settlement activity and occupation. There were only two Roman sites (Ashton and Bourton-on-the-Water) with two tanks whilst three Anglo-Saxon/Early Medieval sites (Flixborough, Whithorn and Willingham) also contained two tanks. A single site from the Roman period contained three tanks and they were found at Icklingham. Three lead tanks from the Anglo-Saxon/Early Medieval periods were found at Bottesford and Garton-on-the-Wolds. The tanks at Bourton-on-the-Water, Flixborough, Whithorn and Willingham were all placed together, with the smaller of the two tanks at Bourton-on-the-Water, Flixborough and Willingham being inverted and placed within the larger one.



(Figure 5.23 A graph showing the main periods of discovery for the lead tanks, Authors' Own)

As seen in Figure 5.23, only three Roman tanks (Icklingham in 1726, Caistor in 1863, and Rochester in 1878) and two Anglo-Saxon/Early Medieval ones (Felixstowe pre-1878 and Willingdon in 1834) were discovered prior to 1900. From there, only seven Roman tanks (Bourton-on-the-Water, Huntingdon, Icklingham, Ireby and Pulborough) were found between 1900-1950 through a mixture of excavation, mechanical digger, and ploughing. The numbers then sharply rise from 1951-2000 and from 2000-2020, probably from a rise in excavations and metal detecting activities. A total of 24 tanks were discovered from 2000-2020, with far more of these being discovered by metal detectorists than from other periods, a factor that coincides with the Treasure Act in 1996 and the development of the Portable Antiquities Scheme in 1997. As seen in Figure 5.24 below, there has been a steady increase of reported finds with the establishment of the Portable Antiquities Scheme since 1997, with recent treasure cases in England being discovered more frequently by metal detectorists.



(Figure 5.24 A graph showing the rise in Treasure Cases since the founding of the Portable Antiquities Scheme, <https://www.gov.uk/government/statistics/statistical-release-for-reported-treasure-finds-2020-and-2021/reported-treasure-finds-202021-statistical-release>)

When analysing the finds methods for the tanks discussed above, there are some very clear parallels to data reported by the Department for Digital, Culture, Media & Sport on Treasure Cases reported in England, Wales, and Northern Ireland. The increase in discovery of lead tanks in the 21st century reflects the rise in recording of metal detecting and to try and save more ‘significant’ artefacts for museums and the public (Department for Digital, Culture, Media & Sport, 2022). This has even included illegal activities, as seen with English Heritage reporting a rise in ‘nighthawking’ at sites including Hastings and Goodrich Castle in Herefordshire (Rise in Illegal Metal Detecting at English Heritage Sites, 2020). The lead tank found near Trowbridge in Wiltshire in 2019 was discovered through possible illegal activities, where two metal detectorists went onto farmer’s land, discovered the tank, and removed it without permission of the landowner (Sophie Hawke per comms). Alongside metal detecting activities, archaeological finds, i.e., excavation and research, accounted for 2.7% of the total treasure cases in 2018. The figures seen here closely match the data seen above, since these two methods have been responsible for recovering many of the recently discovered tanks. In the 2000–2020 range on the years of discovery of the tanks the majority of these were metal detected finds (Allerton-Mauleverer, East Goscote, Flawborough, Ludford, Newport, Preshute, Thompson and Trudoxhill) closely followed by those found by archaeological excavations (Perry Oaks, Pineham, and Walbrook).

Conclusions

Comparing the tanks on both an intra and inter-site level highlighted clear similarities and differences for multiple aspects discussed in Chapters Three and Four. Including the recently discovered examples, most of the tanks from both periods were discovered in the East Midlands and East of England. In contrast, the North-East, Hadrian's Wall area and Wales are all noticeably missing tanks. Furthermore, many of the major urban and religious centres from the Roman and Anglo-Saxon/Early Medieval periods are noticeably lacking any lead tanks from either period. There were more Roman than Anglo-Saxon /Early Medieval tanks and sites, with many of these being single finds at their respective sites except for the outliers with three tanks at their sites. Many of these artefacts were found a significant distance from the nearest lead mine. However, they were much closer to Roman roads, rivers and settlements of some variety (particularly small settlements). This indicated that access to a trade network and economic potential to purchase either the completed artefacts or materials necessary to finish them was far more important than direct access to lead.

Whilst most of the environments were 'fundamentally' dry based upon their physical geography, the similarity of the tanks' deposition patterns in the 'wet' environments was useful for investigating interchangeable artefact burial practices between the two periods. Far more Roman lead tanks were found in pits, rivers, and wells than their later counterparts whilst more Anglo-Saxon/Early Medieval examples were recovered from ditches. Furthermore, fields were the most common find context of the find methods. Many of the contexts discussed in this chapter could be associated with domestic structures and potential settlements. Although there were still examples in areas far from known occupation, a factor that will be especially visible when analysing the landscapes containing the tanks in the next chapter.

Likewise, comparing the states of the tanks upon their recovery was just as important, identifying evidence for purposeful abandonment through placing the tanks in an intact or broken state and how this correlated to burying the tanks in specific features. Many of the contexts used for depositing the tanks were also used to deposit other artefacts in their surrounding areas. Natural features such as rivers and their floodplains alongside human made features like ditches and pits played similar important roles in artefact burials at all the sites containing the tanks. Comparing the evidence for deliberate fragmentation and damage revealed important patterns as well. Far more Roman examples were deliberately damaged than their later counterparts, although both examples showed very similar types of damage. Burning, crushing, dismantling through bladed or heated artefacts and tearing were visible across Roman and Anglo-Saxon/Early Medieval examples found in both 'wet' and 'dry' contexts. Combined with the associated finds, both the tool hoards and assembled pewter and mixed glass and pottery in the Enford and Trowbridge tanks, this indicated extensive effort had gone into burying these artefacts.

This was made even clearer when comparing the size and decoration of both sets of artefacts. The Roman tanks were much heavier, larger, and more finely decorated than their later counterparts, an important factor when assessing their finds contexts. Many of them were placed in areas where retrieval would likely have been very difficult, indicating intentional abandonment likely connected with the inhabitants of these areas leaving the region. Focussing on the finds methods and years of discovery revealed important similarities to recent trends reported concerning treasure cases in England. The use of the excavation and metal detecting

to discover the tanks matches more recent trends in archaeology, with a rise in metal detected finds since the creation of the Portable Antiquities Scheme in 1997. These discovery methods can be closely linked to the environments chosen for deposition, particularly the 'wet' and 'dry' contexts, which was a major part of this chapter. Comparing these factors further highlighted the use of these features in apparently ritual or deliberate depositions, a factor seen with large scale metalwork burials. These factors will be key to my next chapter where I analyse the landscapes of continued deposition concept, where I will investigate how natural and human-made features were used at these areas across multiple time periods.

A large, light brown, stylized number '6' is positioned in the background, partially overlapping the text. The number is composed of two thick, curved strokes. The top stroke starts from the left and curves upwards and to the right. The bottom stroke starts from the left, curves downwards and to the right, then loops back to the left, forming a large, open '6' shape.

Landscapes of
Continued Deposition

Chapter Six: Landscapes of Continued Deposition

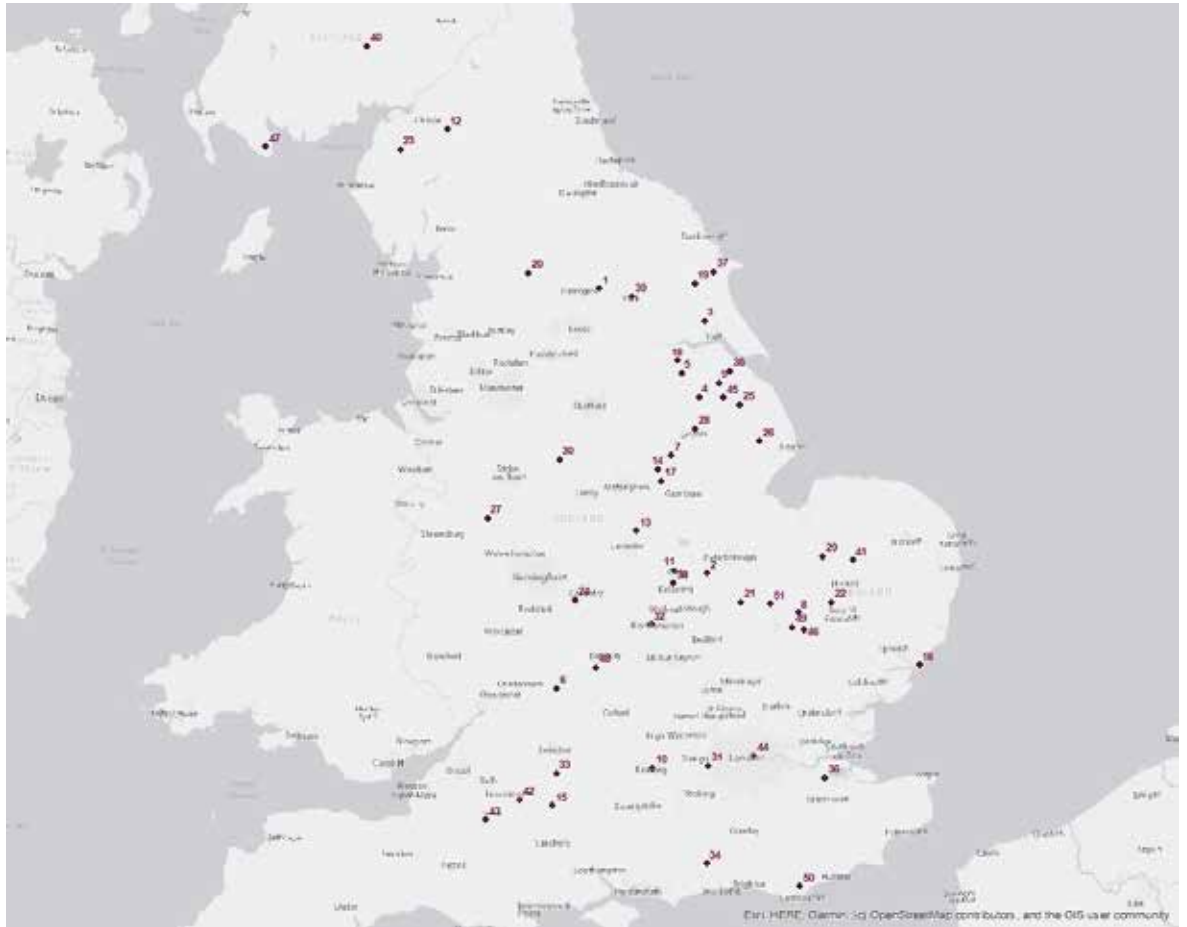
6.1. Introduction

With both sets of tanks compared in the previous chapter, this chapter will discuss the landscapes of continued deposition concept. The focus will be investigating continued patterns of artefact deposition in these areas alongside the lead tanks. Each report will start with an analysis of the site's topography, human landscape (activities and occupation in the area) and demonstrate the number of finds within 5km of the tank (with the exception of Walbrook that used an area of 2km). It will use in-depth analysis of the types of finds, their find locations and their find contexts. Evidence of deliberate abandonment will be a significant feature, focussed around hoarding or apparent 'ritual' or 'structured' deposition of these artefacts. It will also explore their locations relating to the lead tanks, looking for activity spread across these environments. The types of sites these finds are clustered around and their re-use will be essential for demonstrating continued depositions in these landscapes.

It will also allow assessments of the strength of the evidence for these areas being a landscape of continued deposition. In this case, each area will be analysed over whether it provides very weak, weak, moderate, strong or very strong evidence of being a landscape of continued deposition. Very weak evidence shows no evidence of deliberate deposition besides the tank and no evidence of settlement or burial patterns in the area surrounding the tank. Weak evidence consists of minimal evidence of continued artefact deposition practice in these areas through a distinct lack of material or visible patterns to the activities at these sites, with less than three examples of deliberate deposition. Moderate evidence comprises visible patterns of continued artefact burial or cemetery/settlement re-use on a far greater scale than the sites with weak evidence but with evidence of casual loss/surface finds. There are also less than five examples of deliberate deposition at sites classified as moderate. Sites analysed as strong evidence demonstrated overwhelmingly visible evidence for continued deposition patterns alongside a focus on the re-use of settlements and cemeteries, with more than five examples of deliberate deposition. Finally, very strong evidence will have more than ten examples of deliberate deposition and will also feature evidence of 'shrines' or potentially 'votive' It will also investigate re-use of features such as barrows and graves by later communities through secondary burials and grave goods. As mentioned in the Methodology in Chapter Two, a series of strict criteria will be applied to these sites regarding the types of depositions and the environments they were deposited in.

An intersite analysis will allow investigations into artefact deposition and activities in similar environments and provide an insight into broader patterns of activities across these regions. This will help demonstrate how the tanks' burial coincides with other artefact depositions and show continued use of these environments by their respective communities.

6.2. The Lead Tanks



(Figure 6.1 Map showing the locations of the lead tanks, author's own)

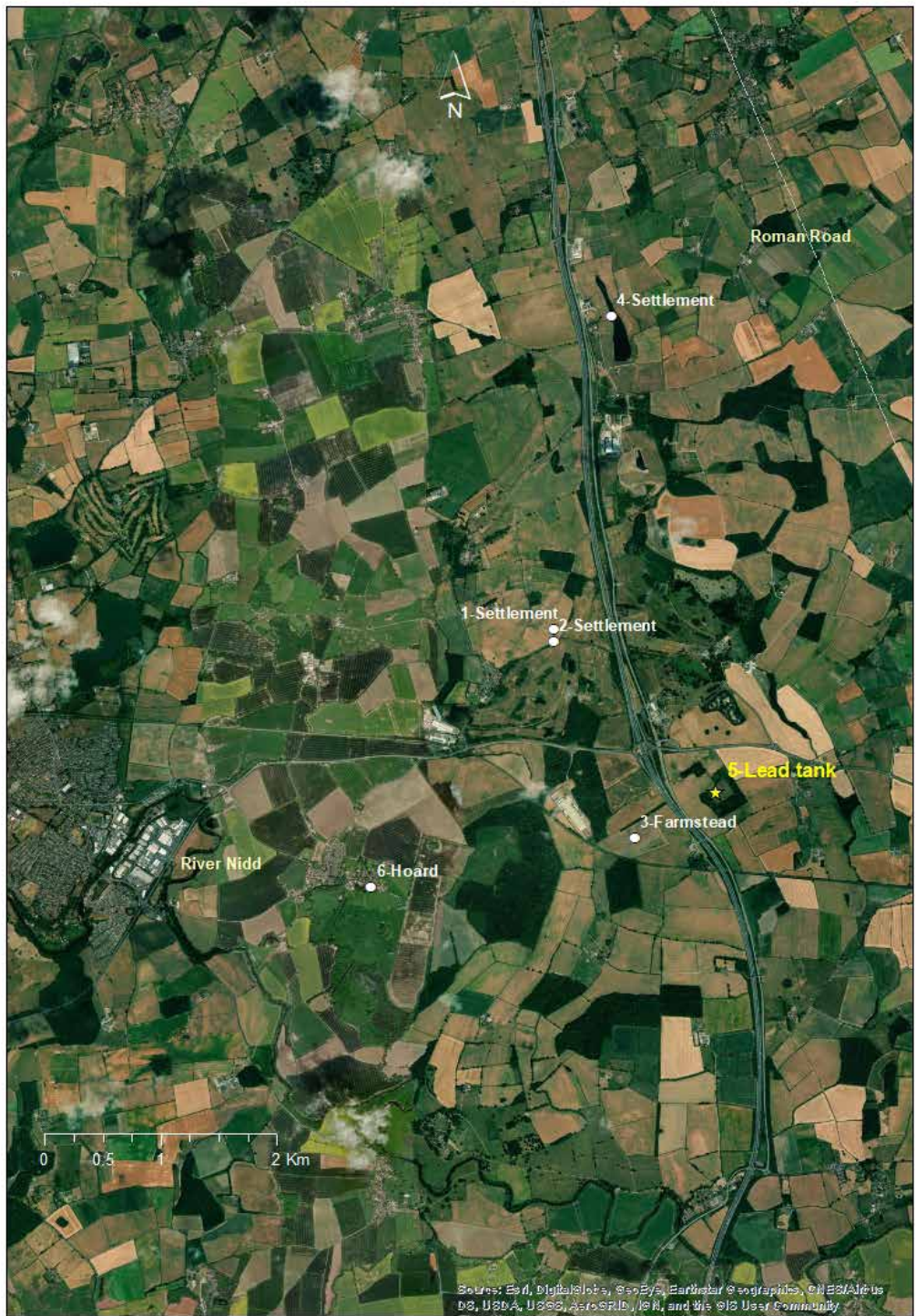
Allerton-Mauleverer

Topography

The village of Allerton Mauleverer is located in the middle of a shallow river valley, with a stream known as the Hugh Beck to the east of the village. The tank and town are located in the Vale of York, an area of flat, rolling farmland, as well as being 20 kilometres from the Yorkshire Wolds. The lead tank was found in the Hew Beck which runs through the village and was also 3.41km from the River Nidd (a tributary of the River Ouse).

Human Landscape

The name Allerton Mauleverer originally meant 'Aelfweard's farm/settlement' and was held by the Mauleverer family in the 12th century. The modern village dates to the Middle Ages and is mentioned in the Domesday Book as a settlement in the hundred of Burgshire in the county of Yorkshire (<https://opendomesday.org/place/SE4157/allerton-mauleverer/>). The village is east of Knaresborough and Harrogate and 11 kilometres south of the civitas capital Isurium Brigantium located at Aldborough. The tank was also 2.05km from the main Roman road of Dere Street, and 44.15km from the lead mine of Grassington in North Yorkshire.



(Figure 6.2: Map of Allerton Mauleverer and the various findspots, Authors own)

Legend:

- | | |
|----------------|----------------|
| 1 - Settlement | 4 - Settlement |
| 2 - Settlement | 5 - Lead Tank |
| 3 - Farmstead | 6 - Hoard |

Finds within 5km of the lead tank

North Yorkshire County Council Historic Environment Record (HER) 630 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	8	2
Bronze and Iron Ages	34	12
Roman	4	175
Anglo-Saxon/Early-Medieval	2	9
Medieval/Post-Medieval	98	550
Unknown or Other	180	22
Total	327	770

Prehistoric

No depositions met the criteria for inclusion.

Bronze and Iron Ages

The earliest occupation is from the Late Bronze Age and Early Iron Age, with settlement remains found at Flaxby near the site of a 'borrow pit' (1-Settlement: Monument Number 1128327). Those consisted of three 'urns' found at Ten Low Hill found following gravel extraction. Excavations in 1960 found a large circular depression filled with Late Bronze Age/Early Iron Age pottery alongside animal bones (Northern Archaeology Associates 1994, 1-3). The Iron Age activity at Flaxby was located at the base of a ridge with the features consisting of the remains of several buildings and pits. Pottery from the seventh/sixth centuries BC and hearth evidence was used to date the remains (Northern Archaeology Associates 1994, 19).

Roman

Roman material was also visible at Flaxby (2-Settlement: Monument Number 1128327) consisting of two areas of settlement or activity besides a possible cemetery and an extensive field system (Northern Archaeology Associates 1994). The Roman settlement was situated in a depression on the top of the ridge, with a mixture of sub-rectangular structures, a cobbled trackway and surface, pits, and ditches. Material from these features was a mixture of ceramics alongside domesticated animal remains (Northern Archaeology Associates 1994, 25-6). Another Roman farmstead was found at Allerton Park Quarry (3-Farmstead, Historic England:1537491) comprised of large enclosure ditches, interconnecting curvilinear and linear ditches, pits and postholes. Material evidence consisted of a fragmented beehive quern and three rotary querns, tile fragments and mixed pottery dated to the third, fourth and fifth centuries (North Pennines Archaeology 2008, 13). Further evidence is visible with a settlement at Bayram Hill (5-Settlement, Monument Number: MNY1155089) located near the lead tank. Excavations at Bayram Hill in 1994 discovered a rectilinear settlement site with a mixture of enclosures, a series of 'borrow'/storage pits and post-holes alongside a stone-lined well. Finds from these features comprised of pottery dating from the first to fourth centuries alongside mixed animal bones including a piece of worked deer antler (Northern Archaeological Associates 1994, 4-5)

Anglo-Saxon/Early Medieval

An incomplete lead tank (6-Lead tank, PAS: WMID-C31B1B) was found by a metal detectorist on a cobbled stream bed in 2014. The tank has a diameter of 110cm (with a maximum length of 48cm, and a maximum width of 28cm) and the sides are 1.9mm thick. Around 50% of the vat or tank is present and none of the sides are complete, with the highest standing at 20cm. The base is incomplete with several holes and repair marks and the base now has a ripple effect due to the water erosion. There appears to be no decoration present on either side of the tank and the rim was folded but no longer attached to the main body of the tank.



(Figure 6.3: Lead Tank found at Allerton Mauleverer, Birmingham Museums Trust)

Alongside the lead tank further evidence of deliberately abandoned material was found at Goldsborough. A hoard (6-Hoard: Monument Number: 53263) of 39 silver coins and fragmented ornaments was found in a lead chest in 1858 near Goldsborough Church (Wilson 1957, 72). The coins were a mixture of issues from Alfred the Great, Edward the Elder alongside mixed Islamic dirhams, dating up to AD920, with similarities to the artefacts in the Vale of York Hoard discovered near Harrogate in 2009 (Jarman 2021). Like the Goldsborough hoard, it displayed the breadth and interconnectivity of the Viking communities in this area, as well as displaying broad hoarding patterns across the region in the tenth century.

Medieval/Post Medieval

No depositions met the criteria for inclusion.

Analysis

Whilst the tank's findspot implies deliberate deposition, it could also have been chosen as a convenient place to deposit scrap metal. As there were only two finds that meet the criteria of evidence of a landscape of continued deposition, the lead tank and the hoard, this can be classified as weak evidence of structured deposition.

Ashton

Topography

Ashton is a village and civil parish in the east of Northamptonshire and lies in flat river valley with arable farmland without any woodland areas. It is situated on the east bank of the River Nene on the opposite bank of the Nene to the town of Oundle and is halfway between Durobrivae (Peterborough) and Titchmarsh. The lead tank was found 0.28km from the River Nene.

Human landscape

Archaeological excavations from 1974–1981 uncovered a small Roman town measuring 15 hectares that appeared to take advantage of the crossing at the River Nene. Ashton was a settlement in Domesday Book, in the hundred of Polebrook and the county of Northamptonshire. The tank was found 1.04km from the nearest Roman Road and 100.92km from the nearest lead mine Middleton in Derbyshire.



(Figure 6.4 Lead tank with Chi-Rho recovered from Ashton Northamptonshire, photo by N.H.Hawley)



(Figure 6.5 Ashton and the various findspots, Author's own)

Legend:

1 - Settlement	6 - Villa	11 - Cemetery
2 - Mounds	7 - Human Remains and finds	12 - Cemetery
3 - Axes	8 - Cemetery	13 - Burials
4 - Kilns	9 - Blacksmith's	14 - Coin Hoard
5 - Villa	10 - Lead Tank	15 - Cemetery

Finds within 5km of the lead tank

Northamptonshire Historic Environment Record 2953 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	63	1
Bronze and Iron Ages	32	6
Roman	46	48
Anglo-Saxon/Early Medieval	5	6
Medieval/Post Medieval	228	17
Unknown or Other	96	36
Total	470	114

Prehistoric

A multi-period settlement dating from the Neolithic (1-Settlement, HER: 361103) was indicated through pottery and lithic implements alongside a pit. A series of circular Neolithic mounds (2-Mounds, HER: 1194171) were excavated near Tansor Crossroads in 1995 with the first mound containing Neolithic and Mesolithic worked flints and charcoal. The enclosure was later transformed into a round or oval barrow in the Early Bronze Age, with mixed pottery and urn sherds in the barrow's surrounding ditch (Chapman 1996).

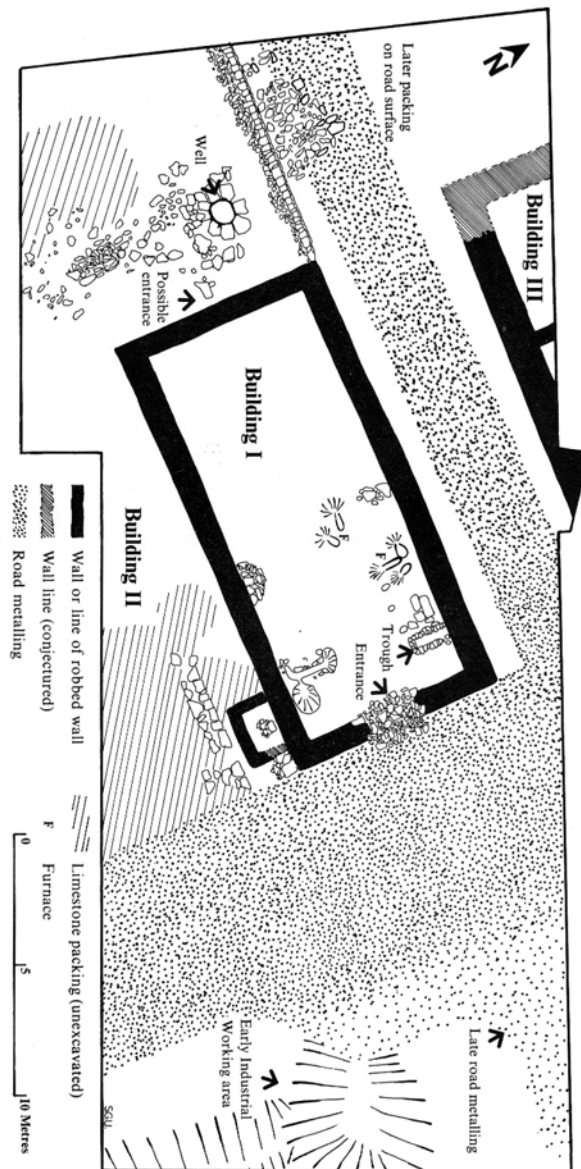
Bronze and Iron Ages

A Bronze Age cremation cemetery was indicated at the settlement site through six cinerary urns belonging to a flat urnfield uncovered in the cemetery at Oundle (Northamptonshire Archaeology 1980, 179-80). Two further urns (HER: 361043) were apparently uncovered in a barrow near Oundle prior to 1867 (VCH Northamptonshire 1975, 70-72). Three Late Bronze Age socketed axes (3-Axes, HER: 361148) were discovered in Oundle before 1948. These were reportedly found with 'eighty other arrowheads in an earthenware jar' (Northamptonshire Archaeology 1970, 209).

Roman

Most of the Roman remains were discovered near the River Nene and the original Roman settlement (Rodwell and Rowley 1975, 59) with occupation dated from the first to fourth centuries AD by pottery and coinage finds (RCHM 1975, 11-12; Taylor 2006). This can be seen with the mixed finds (4-Mixed Finds, HER: 2409/0/0), comprised of a mixture of flints, coins, bracelets alongside pottery (Taylor 2002). Further settlement evidence is visible with a villa (5-Villa, HER: 361823) through building debris including hypocaust tiles and pottery (Scott 1993, 143). Another villa was discovered in 1736 (6-Villa, HER: 361745) following the discovery of a mosaic by ploughing in a field called the Guild or Gilded Acre. An extensive Roman settlement (7-Settlement, HER: 360960) was visible as part of the 'Tansor Grange Complex'. Remains in this area were indicated through stone scatters, 4th coins and pottery (VCH Northamptonshire 1975, 92-3). A fourth century date was also provided for the cemetery and associated pottery (8-Cemetery, HER: 2409/6), discovered near the lead tank and containing 114 inhumations.

Metalworking facilities were also found with a series of buildings, (Hadman and Upex 1977, 7-8; Hadman 1984, 28), the most distinctive of these was a yard with several hearths and furnaces (9-Blacksmiths, HER: 2409/0/7).



(Figure 6.6, a map of the blacksmith's yard containing a lead tank, Hadman and Upex 1977, 8).

In 1976 in a well at the rear of the building a cylindrical lead tank was found (10-Lead tank, Hob Uid: 361094). The tank was 0.84m in diameter, 0.38m deep, had a volume/capacity of over 220litres and weighed over 152kg and bore a Chi-Rho monogram. A fragment of another lead tank was found in the well, this tank was undecorated and the dimensions are unknown. The remaining layers contained other artefacts and 39 coins dating from AD 330-380, with similar dates to fourth-century coins found in a sandpit south of the blacksmith's yard (Hadman and Upex 1977, 9; Guy 1977, 10; Frere 1978, 442). Dating evidence in the well ties in with a late fourth-century cemetery in the vicinity of the blacksmith's yard (8-Peripheral Cemetery and 11-Cemetery, HER: 2409/1). Taylor interpreted this a Christian cemetery (2002, 10) as the 176 inhumations were laid out in neat rows and oriented in a manner that suggested a Christian burial.

The fourth-century burials have comparisons to burials from earlier periods at Ashton, such as a possible cemetery (12-Cemetery, HER: 2409/2) found during excavations at Oundle railway station. Those consisted of bones and pins besides a hoard of 1,200 third century bronze coins in more than one vessel (13-Burials: 2409/2 and 14-Coin hoard: 2049/02/02). Shiel thought that these probably represented an accumulation by a single family (1977, 5), suggesting the cemetery was in use for some time.

Anglo-Saxon and Early Medieval

An Early-Saxon Cemetery (15-Cemetery, HER: 1331946) was revealed by excavation in 1999 with nine inhumations arranged in a north-south and east-west alignment. Grave goods included bone combs, beads, knives and an amulet.

Medieval/Post-Medieval

No depositions met the criteria.

Assessment against criteria

The findspot of the lead tank appears to be significant since it was buried beneath three metres of limestone in the well, ensuring it could not be retrieved. Based upon the criteria for inclusion, the depositions at Ashton provide moderate evidence for being a landscape of continued deposition.

Beverley

Topography

Beverley is located in East Yorkshire, situated in the Humber Estuary to the north of the River Humber and west of the River Hull and south of the Yorkshire Wolds. The tank was discovered 2.86km from the River Hull.

Human Landscape

Beverley is a market town and civil parish in the East Riding district of Yorkshire and was a settlement in Domesday Book, in the hundred of Sneculfros and the county of Yorkshire.

The town originated in the eighth century AD through its founding by St John of Beverley with a church dedicated to St John the Evangelist (Hopkins 2003). Its position on the Humber meant that Beverley developed as a trade centre producing textiles, leather and artefacts created from antlers (Hopkins 2003). The nearest Roman Road from the lead tank was 10.59km and the nearest lead mine was Middleton in Derbyshire 107.84km away.



(Figure 6.7 The lead tank from Beverley, used with permission of Kevin Moon and WYAS)



(Figure 6.8 – Beverley and the various findspots – Authors own)

Legend:

1 - Barrows	5 - Lead Tank
2 - Enclosures	6 - Coins and Pottery
3 - Coin Hoard	6 - Coins and Pottery
4 - Mixed Occupation	7 - Human remains and finds

Finds within 5km of the lead tank

Humber Historic Environment Record 1726 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	5	9
Bronze and Iron Ages	54	38
Roman	10	345
Anglo-Saxon/Early Medieval	5	9
Medieval/Post Medieval	178	358
Unknown or Other	138	34
Total	390	793

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

Westwood common had a group of Bronze and Iron Age round and square barrows, clustered around a group of four barrows (1-Barrows: Monument Number: 79109) that were excavated in 1875. One of these contained an Iron Age cart burial in a central oval grave (Greenwell 1906, 256; Stead 1979, 87) and similar cart and chariot burials were found in Yorkshire at Garton-on-the-Wolds and Pocklington (Brewster 1976, 280-1; Krakowka 2019; Roberts 2021). Six individual bowl and square barrows surrounded this group, showing continued use of this area as a funerary landscape. Alongside the barrows was a series of extensive occupation at Westwood Common (2-Enclosures, Monument Number: 1039041). These included Romano-British enclosures, linear boundary dykes and a short section of Roman road, comprising a small, defended settlement with surviving defensive banks and ditches.

A mixture of coinage hoards and settlement evidence continued into the Iron Age. The 21 Corieltavian gold staters found at Swinemoore Lane (3-Coin hoard) match a series of large hoards found 4.6km west of Beverley at Westwood. These were also Late Iron Age coins from the first century BC to AD, suggesting extensive trade networks with the Corieltavi tribe in Lincolnshire through the River Hull.

Roman

The occupation at Luck Lane (4-Mixed occupation, HER: 4685) mostly consisted of residual finds of tegulae and brick in contexts from the eighth and ninth centuries (Armstrong 1991, 104). One of the tiles saw re-use as a mould for casting copper-alloy ingots. This suggests that this material had been carefully curated for re-use by the later Saxon occupation at the site.

Excavations also discovered a lead tank (5-Lead tank) within a watering hole measuring 8 x 7.5m and 1.80m deep (Moon per comms). The lead tank found during excavations in 2019, was complete but had been deliberately squashed and was undecorated. Its location within a

multi-period site dating from the Neolithic to Medieval led to Moon arguing that it was Roman. The lowermost fill of the watering hole contained numerous, large oak timbers with most of these being unworked or diagnostic. Their placing in the watering hole and the deliberate squashing of the tanks suggested deliberate abandonment. Excavations in 1984-6 discovered remains at Eastgate (6-Coins and pottery) that consisted of mixed pottery alongside brick, tiles, and coins from the fourth century (Evans and Tomlins 1992, 121).

Anglo-Saxon/Early Medieval

The site at Lurk Lane (4-Mixed occupation) showed occupation from the Middle to Late Saxon period and into the Post Medieval period. Initial occupation of the site during the eighth and ninth centuries was dated through a small collection of 23 copper styccas, interpreted as an ending of the initial occupation at this site (Armstrong and Evans 1991, 7). The excavators uncovered the coins in a shallow scoop above a cobbled path, indicating deliberate concealment. The occupation was dated through a mixture of pottery and many of these were Mid-Late Saxon wares such as Ipswich Wares and Torksey Ware and with evidence of imports of Mediterranean Ware and Hedon Ware (Armstrong 1991, 84-7). The site had evidence of craftworking including stone and chalk loom weights, jet, shale and amber beads and amulet fragments (Foreman 1991, 122). Evidence of glass working was seen through beads, rings, and armlets. Metalworking included iron and lead tools such as leatherworking tools, styli for writing and agricultural tools. Fine jewellery such as annular brooches, decorated rings and buckles also dated the site from the Mid to Late Saxon period (Goodall 1991, 148).

Medieval and Post Medieval

Medieval occupation is visible through a series of burials (7-Human remains and finds, HER: 11689), discovered at the site of Library Gardens. Excavations in the 19th century uncovered stone coffins, skeletons, and a mixture of Medieval finds, showing continued use as a funerary landscape.

Assessment against criteria

The deliberate burial of the tank in the watering hole appears to be deliberate since it was at the base of this feature. Based upon the criteria for inclusion, the limited number of depositions at Beverley show weak evidence of being a landscape of continued deposition.

Bishop Norton

Topography

Bishop-Norton is located in North Lincolnshire and lies on the old River Ancholme and west of the Roman Road of Ermine Street. The new River Ancholme, a new straight channel constructed in 1635 is four km to the east of Bishop Norton. Bishop Norton is situated in an area of flat, rolling farmland, and 38 kilometres from the Lincolnshire Wolds. The lead tank was found 2.30km from the nearest river.

Human Landscape

Bishop Norton is a village and the main settlement of the civil parish of the same name in the West Lindsey district of Lincolnshire, England. [Bishop] Norton was a settlement in Domesday Book, in the hundred of Aslaoe and the county of Lincolnshire. Bishop Norton was the furthest north of the twelve manors owned by the Bishop of Lincolnshire during the Norman Conquest (Everson, Taylor and Dunn 2001). The lead tank was found 3.67km from the nearest Roman road and 78.05km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.9 - Map of Bishop Norton and the various findspots - Authors own)

Legend:

- | | |
|--------------------------------|----------------|
| 1 - Building Site | 4 - Settlement |
| 2 - Cropmarks | 5 - Tank |
| 3 - Building Remains and Finds | |

Finds up to 5km from the lead tank

Lincolnshire HER 669 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	62	25
Bronze and Iron Ages	32	93
Roman	32	1553
Anglo-Saxon/Early Medieval	3	167
Medieval/Post Medieval	31	1536
Unknown or Other	32	123
Total	192	3497

Prehistoric, Bronze and Iron Ages

No depositions from these periods met the criteria.

Roman

A possible Roman villa was recorded at Atterby (1-Building site, HER: MLI50547) following the discovery of Roman pottery and surface debris in 1958 (Jones 1988, 16). Surface finds formed a rectangular area measuring six metres by ten metres at this site, indicating a building site. The masonry consisted of tile and a quantity of stone, found by the excavations alongside coarse ware and grey ware pottery and glass (Jones 1988, 23; Scott 1993, 117). This Roman site, with irregular rectilinear crop marks extending for over 400 metres suggests that this was a large site centred around the Atterby Beck. Cropmarks also indicated a potential building (2-Cropmarks), showing a small rectangular ditched enclosure. This was subdivided with possible internal features, double ditches on the south and west sides and an entrance on the east side (Jones 1988, 7). Its proximity to Roman features seen in aerial photography was used to date it to this period, with the shape of the cropmarks believed to indicate a temple (Everson 1979, 24). However, this interpretation is now viewed as dubious at best (Jones 1988). Further Roman occupation is visible to the east of Glentham Cliff Farm (3-Building Remains and Finds, Monument Number: MLI50712), with occupation indicated by mixed stone, tiles and second to fourth century pottery (Thompson 1955, 10). A settlement straddling Ermine Street was discovered at Fox Wood (4-Settlement, HER: MLI54220). Occupation from this site included intaglio, pottery and tile debris and personal finds such as brooches and a small coin hoard dating from the Late Republic to the mid second century AD (Robertson 2000, 62)

A lead tank and pottery finds (5-Lead tank and pottery, HER: MLI50823) show continued Roman deposition in the area. The tank was divided into two fragments, with the fragments discovered in 1946 and 1955 by ploughing east of Beck Farm (Wright 1947, 140-1; Petch 1957, 9-10).



(Figure 6.10 Decorative scroll-work; top to bottom, Caistor, Bishop Norton, Flawborough, A Group of Romano-British lead tanks from Lincolnshire and Nottinghamshire Steve Malone)

The decorations on the tank, as illustrated in Figure 6.5, were like those at Caistor, and Flawborough with inscriptions, bordered above and below by cable moulding with lettering 30–40mm in height framed in 40–50mm bands. The tank had a foliate frieze below the inscription '...do fecit felix...'. The larger fragment was 0.33 m high, c. 0.46 m wide, 6 mm thick and the right edge of a side fragment has been 'roughly hacked'.

Anglo-Saxon and Early Medieval, Medieval and Post Medieval

No depositions from these periods met the criteria.

Assessment against the criteria

The burial of the lead tank far from any nearby occupation suggests it was placed there as potential scrap metal. Based upon the limited number of finds through the criteria for inclusion, Bishop Norton displays very weak evidence for being a landscape of continued deposition.

Bottesford

Topography

Bottesford is located in North Lincolnshire and lies near Bottesford Beck, a tributary of the River Trent, and west of the Roman Road of Ermine Street. Bottesford was once a rural settlement but is now part of the Scunthorpe conurbation. The town is directly south of Scunthorpe, west of Brigg and north of Gainsborough and Kirton in Lindsey. The tank was discovered 0.22km from the Bottesford Beck.

Human Landscape

Bottesford was considered to be a small Roman village connecting Ermine Street with Doncaster via Bottesford Beck. Bottesford was a settlement in Domesday Book, in the hundred of Manley and the county of Lincolnshire. The tank was 6.31km from the nearest Roman road and 76.90km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.11 - Map of Bottesford and the various findspots - Authors own)

Legend:

- | | | |
|-----------------|---------------------|---------------|
| 1 - Soil Layer | 4 - Pottery | 7 - Pottery |
| 2 - Coin Hoard | 5 - Occupation Site | 8 - Brooch |
| 3 - Coin Moulds | 6 - Pottery | 9 - Lead Tank |

Finds within 5km of the lead tank

North Lincolnshire HER 941 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	58	18
Bronze and Iron Ages	24	16
Roman	30	171
Anglo-Saxon/Early Medieval	6	20
Medieval/Post Medieval	14	295
Unknown or Other	52	38
Total	184	558

Prehistoric

No depositions from these periods met the criteria.

Bronze and Iron Ages

Excavations in 2012 and 2103 discovered Early Bronze Age finds (1-Soil layer) as residual artefacts. A sherd of Beaker was found besides fragments of fired clay and cattle bones. The same trench contained 12 fragments of long mammal bone alongside Roman pottery, indicating residual finds. Elsewhere, a disc-shaped flint scraper from the Late Neolithic/Early Bronze Age was found alongside a group of 13 Early Bronze Age worked flints.

Roman

Roman occupation is visible with a coin hoard of 154 denarii recovered near the site of Baldwin Avenue (2-Coin hoard). These were possibly local productions, with fragments of Roman coin moulds and brooches discovered near this location (3-Coin moulds). The dates of the coins match the pottery discovered at the Frederick Gough school (4-Pottery), which mostly dated from the late first to second centuries. There were also fragments of late second to early third century Dalesware and Torksey Wares (Glover 2012, 2, 4-5, 6, 13, 17-18; Wood 2013, 5-9, 13-15), recovered from a series of ditches.

Later activity is also visible at the Holme Hall Avenue Area (5-Occupation site), fourth-century pottery, a plate, a bracelet, and a padlock were discovered in 1953. Further finds in 1967-8 consisted of pottery and building materials besides a box flue fragment (Loughlin and Miller 1979, 187), indicating this was a villa site. Excavation in 2002 revealed a collection of Roman finds amongst later occupation evidence (6-Pottery). These were residual finds in Late Saxon to Post-Medieval contexts, with 13 tile fragments recovered (Morris and Holmes 2002, 3-8; Carlyle, Holmes and Morris 2003, 1-17).

Further Roman ceramics sherds from the Bottesford Beck (7-Pottery) indicated Roman activity. Dredging in 2002 discovered 72 pieces of mainly Roman greyware pottery alongside Anglo-Saxon and Medieval pottery and copper-alloy fragments.

Anglo-Saxon/Early Medieval

Anglo-Saxon and Medieval occupation were centred around the site of Baldwin Avenue and evidence included a cruciform and annular brooch (8-Brooch) discovered in the area (Dudley 1949, 223; Loughlin and Miller 1978, 188). These date from the fifth to sixth/seventh centuries, being common finds throughout east England through their use as grave goods (Stooley 1999, 17-19; Martin 2015, 1).

Excavations in 2001 discovered a Middle to Late Anglo-Saxon site, followed by later Medieval occupation. The three lead tank fragments (9-Lead tank, HER Number:19304) were contained in the fill of the western re-cut in the ditch. Two fragments were folded bases found at the bottom of the ditch whilst the third was the flattened sides of another tank (Boyer et al. 2009, 68). The first tank had a basal diameter of 0.56-0.60m and weighed 22.23 kg, the second tank had a base 2.9-3.8 mm thick (where measurable), with a diameter of c.0.44 m and weighing 6.8kg and the third tank had a height of c.0.30-0.49 m, internal diameter: c.0.28-0.30 m, weight: 12 kg and capacity of c.24 litres. The ditch contained mostly cattle bones and industrial debris and part of a smithing hearth bottom in the fill of the recut ditch. Much of the material was domestic debris, used to backfill the ditch when abandoning the site. This matches the material on land off Baldwin Avenue, where excavations in 2002 discovered a series of roughly parallel ditches dating from the Mid to Late Saxon period. There was a matching pottery assemblage to the Baldwin Avenue site (Lewis 2002, 53-4) and a similarly mixed animal bone assemblage.

Medieval and Post-Medieval

No depositions from this period met the criteria.

Assessment against criteria:

Based upon the criteria of inclusion, Bottesford has strong evidence for being a landscape of continued deposition. The depositional patterns in the Baldwin Avenue area occurred from the Roman to Medieval period show deliberate artefact abandonment likely coinciding with the abandoning of these sites. Many of the artefacts at Bottesford have clear parallels to finds at the other sites in Lincolnshire with evidence for continued artefact deposition from the Palaeolithic to Anglo-Saxon period centred around the Bottesford Beck.

Bourton-on-the-Water

Topography

Bourton-on-the-Water is a village and civil parish in Gloucestershire. The village sits on the banks of the River Windrush and lies on a flat wide vale within the Cotswolds. The lead tanks were discovered 0.04 km from the River Windrush.

Human landscape

Bourton-on-the-Water is located at the junction where the Roman road, the Icknield Way, met the Fosse Way and continued up to Templeborough in South Yorkshire. Bourton [-on-the-Water] was a settlement in Domesday Book, in the hundred of Salmonsbury and the county of Gloucestershire. The nearest Roman road from the lead tank was 0.79km whilst the nearest lead mine was 93.28km away at the Chewton Mendips in Somerset.



(Figure 6.12 – Bourton-on-the-Water and the various findspots – Authors own)

Legend:

- | | |
|--|----------------|
| 1 - Salmonsbury Camp | 7 - Burials |
| 2 - Burials | 8 - Settlement |
| 3 - Settlement | 9 - Settlement |
| 4 - Remains | 10 - Hoard |
| 5 - Five skeletons and a cremation urn | 11 - Burials |
| 6 - Lead Tank | |

Finds within 5km of the lead tank

Gloucestershire County Council: Historic Environment Record 1200 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	22	1
Bronze and Iron Ages	22	7
Roman	33	47
Anglo-Saxon/Early Medieval	5	4
Medieval/Post Medieval	80	5
Unknown or Other	65	0
Total	227	64

Prehistoric

Excavations of the Iron Age settlement Salmonsbury Camp (1-Salmonsbury Camp, HER 342) discovered a Neolithic enclosure alongside a series of Bronze Age pits and ditches (Harding 1976). These features contained residual finds of a Palaeolithic tranchet axe, flint flakes, arrowheads, and pottery from the Late Neolithic/Early Bronze Age.

Bronze and Iron Ages

A series of Mesolithic postholes and Bronze Age burials (2-Burials) were found in 2015 near the Salmonsbury Camp (Brett and Hart 2016, 5). A geophysical survey uncovered an oval enclosure formed from a gravel island overlying a clay layer (Brett and Hart 2016, 4). This contained sherds of Early Bronze Age beaker pottery and Mesolithic/Neolithic flints, whilst the western edge of the island contained the burials of twelve individuals (Brett and Hart 2016, 5).

The most notable evidence of occupation was the Late Iron Age site of Salmonsbury Camp, and excavations by Dunning between 1931 and 1934 revealed inhabitation from the pre-Iron Age into Roman periods, and Anglo-Saxon activity in its vicinity. Finds included a hoard of 147 currency bars discovered in 1860 and later single currency bars. The bars were situated one above the other and facing the same direction as if placed in a chest, suggesting deliberate abandonment or storage (Tylecote 1962 210-11; AHM Gloucester 1976, 17).

Roman

Roman remains inside and outside of Salmonsbury included a rectangular 'hut' overlying a circular Iron Age one, with rubbish pits and drainage ditches containing pottery (HER 2204). Coins from the site range from the first to the fourth century, showing continuous occupation during the Roman period. This mixture of Iron Age and Roman remains has similarities to those found at Cotswolds School (3-Settlement, HER: 1399427). Excavations in 1995 discovered Early Iron Age pits alongside a series of Roman gullies and a ditch (Cotswold Archaeological Trust 1997, 7-8).

Later evaluations in 2011 revealed an unenclosed Middle to Late Iron Age site and a Late Roman cemetery (4-Remains HER: 1399427). The Iron Age settlement included three post-built roundhouses and other structures (Hart et al. 2016, 77). Radiocarbon dating and pottery suggested it was abandoned by the start of the second century BC. The excavations recovered part of a ditched enclosure from the Roman period, used for human burial in the Late Roman period. There were 21 extended inhumations discovered in the excavation zone (Hart et al 2016), six of which were placed in stone cists.

At least six inhumation burials and a cremation urn from the Roman period were found (5-Skeletons and a cremation urn- HER: 21796) as part of a Romano-British cemetery (7-Burials). This cemetery contained 11 burials with a mixture of cremations and inhumations (Elrington 1965, 33). Roman occupation is also visible at Bourton with the lead tanks (6-Lead tank, Monument Number 330379) that were found from the site known as Lansdown ('Leadenwell Villa') during excavations in 1934.



(Figure 6.13 - The lead tank found at Bourton-on-the-Water, Cambridge Museum of Archaeology and Anthropology)

They were found crushed and buried together in a courtyard associated with a well. The first tank was decorated with a repeated saltire with five raised discs in the shape of a 'T' with an Inscription: C[I]VLI TS [F]EC[I]T which may be read 'C. IVLIVS made the tank'. The second tank was also decorated with a repeated saltire with six raised discs in the shape of an inverted 'T'. The first tank was 0.81m in diameter, 0.35m deep, sides 9.5mm thick with a capacity/volume of 182litres. The second tank was 0.97m in diameter, 0.41m deep, sides 6mm thick and 12.5mm thick at base.

The Leadenwell Villa was close to a settlement north-east of Bourton Bridge (8-Settlement and 9-Settlement, HER 330368) that consisted of a series of rectangular buildings along with forges and ovens, with occupation layers containing first to fourth-century pottery and over 700 coins dating from second to fourth centuries. A similar settlement was found at Whiteshoots Hill alongside a hoard (10-Hoard, PAS: IARCH-C3BF3A). Structures included masonry walls and other stone features alongside a mixture of early and late Roman pottery, ironwork and bronzes (Renfrew 1971, 26; Wilson 1972, 337-9). A hoard of 3,442 coins was found under a pile of stones. Later excavations in 2017 discovered a series of ditches and pits near the later Roman settlement.

Anglo-Saxon/Early Medieval

Occupation during the Anglo-Saxon/Early Medieval period is visible through several burials associated with Salmonsbury (11-Burials, HER: 526) dug into the rampart alongside two small cemeteries. One was close to the northern rampart whilst the other was close to the south-east corner of the Salmonsbury enclosure. Further evidence of Saxon occupation included finds recovered from the Cotswold School and a series of sunken feature buildings (Timby 1998, 359, 376, Walsh 2011, 245).

Medieval and Post-Medieval

None of the finds from this period met the criteria.

Assessment against criteria:

Based on the criteria Bourton on the Water has strong evidence for being a landscape of continued deposition. The continuous occupation and deliberate artefact deposition from the Palaeolithic into Anglo-Saxon periods clearly demonstrates this alongside the deliberate burials of the lead tanks and hoards.

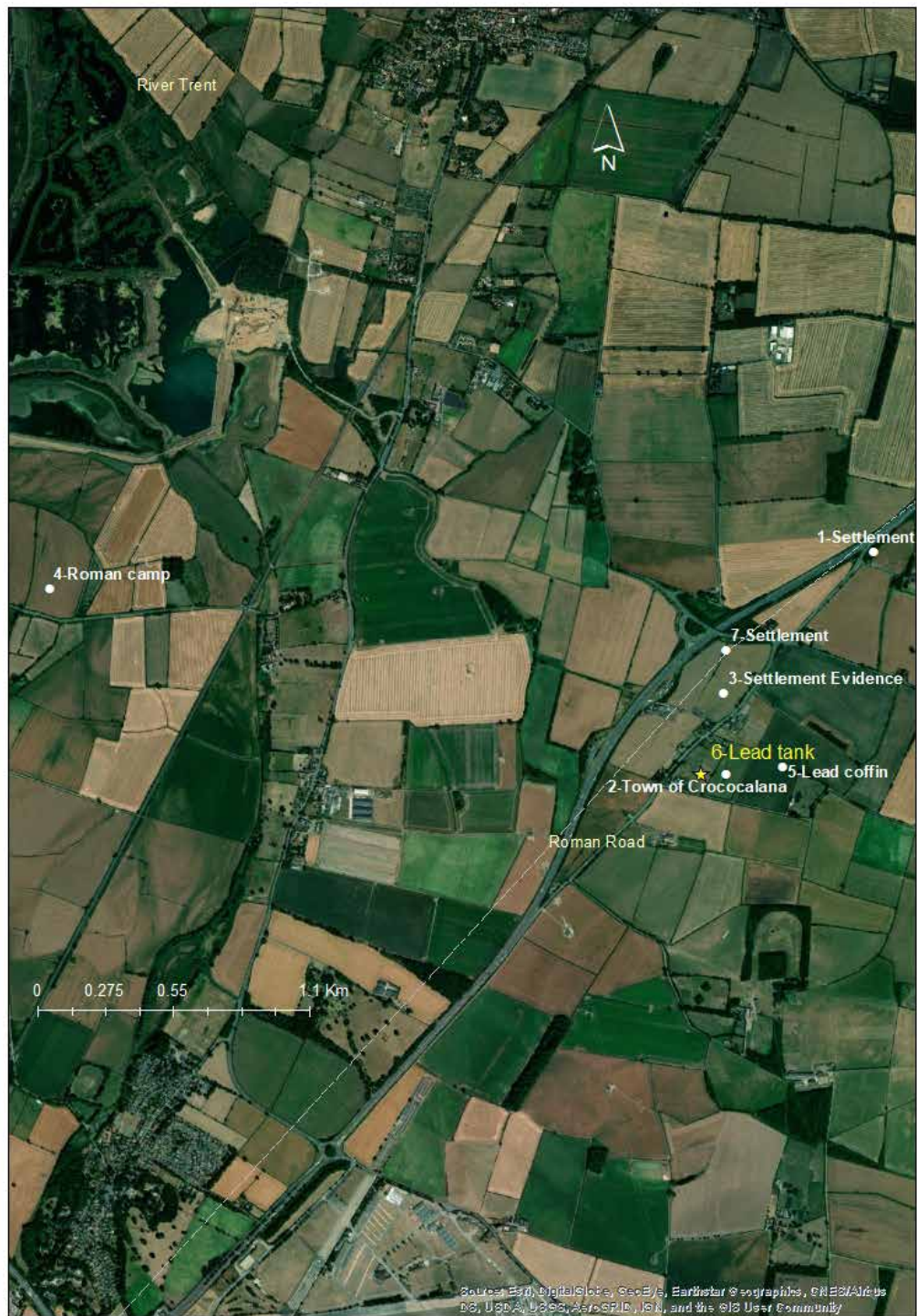
Brough

Topography

Brough is a small hamlet in Nottinghamshire and lies 2.95km to the east of the River Trent and the west of the River Witham. The lead tank was found 2.95km from the River Trent.

Human landscape

Brough is located in the Newark and Sherwood District of Nottinghamshire. The modern site is located on the site of the Roman town of Crococalana, a small town which originated as a fort. Danethorpe was a settlement in Domesday Book, in the hundred of Newark and the county of Nottinghamshire is close to Brough. The tank was 0.26km from the Roman Fosse Way and the nearest lead mine 53.9km away at Matlock in Derbyshire.



(Figure 6.14– Brough and the various findspots – Authors own)

Legend:

- | | |
|-------------------------|-----------------|
| 1 - Settlement | 5 - Lead Coffin |
| 2 - Town of Crococalana | 6 - Lead Tank |
| 3 - Settlement Evidence | 7 - Settlement |
| 4 - Roman Camp | |

Finds within 5km of the lead tank

Nottinghamshire HER 1686 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	23	54
Bronze and Iron Ages	27	32
Roman	26	928
Anglo-Saxon/Early Medieval	4	85
Medieval/Post Medieval	90	827
Unknown or Other	80	38
Total	250	1964

Prehistoric

None of the finds from this period met the criteria.

Bronze and Iron Ages

Evidence suggests that occupation began in the first century AD with Iron Age occupation visible to the east and south-east edges of the Roman town, with worked flint and a small scatter of Iron Age pottery discovered in 1991 (Knight 1991, 63; Jones and Knight 2001, 5). Excavations discovered a probable Iron Age settlement (1-Settlement, HER: M18428) and trenches discovered a series of pits and post holes containing Iron Age pottery.

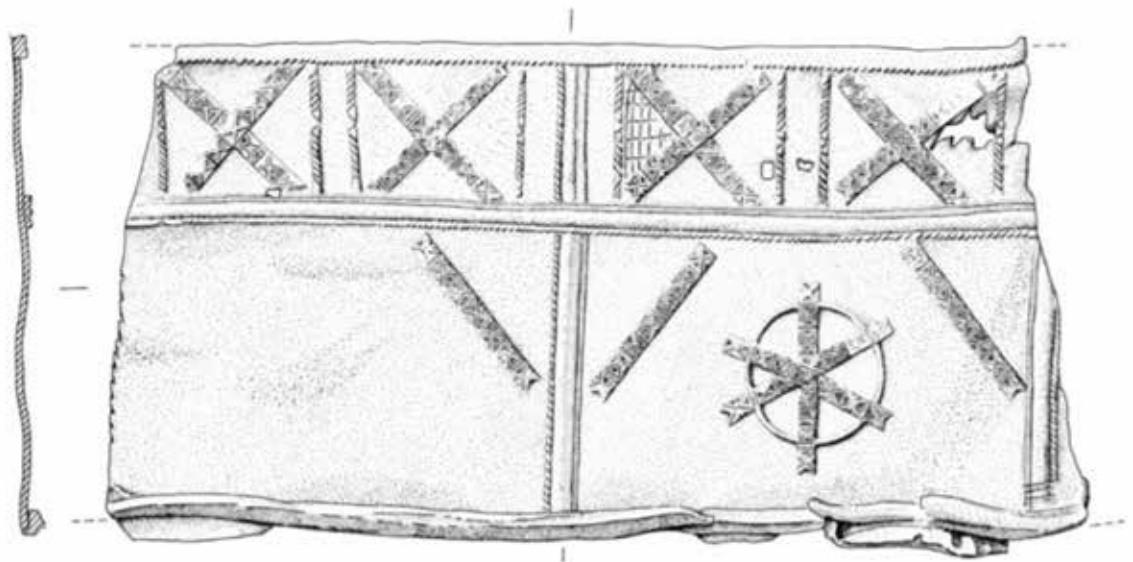
Roman

The main area of occupation was the Roman military camp of Crococalana (2-Town of Crococalana, HER: 324120), believed to originate in the first century AD before developing into a small town (RCHM 1999, 28-9). Brough was first identified as Crococalana in 1695 (Gibson 1695, 423), with later ploughing in 1732 indicating a sizeable occupation area (Horsley 1732, 439). Excavations in 1905 uncovered an extensive area of robbed out building foundations and traces of a house with painted wall plaster (Woolley 1906, 63-72). Finds included settlement evidence such as tile, iron and bronze objects which indicated possible military occupation (Whitwell 1982,39). Coinage evidence from the site dated from AD 81-383, showing a long period of inhabitation.

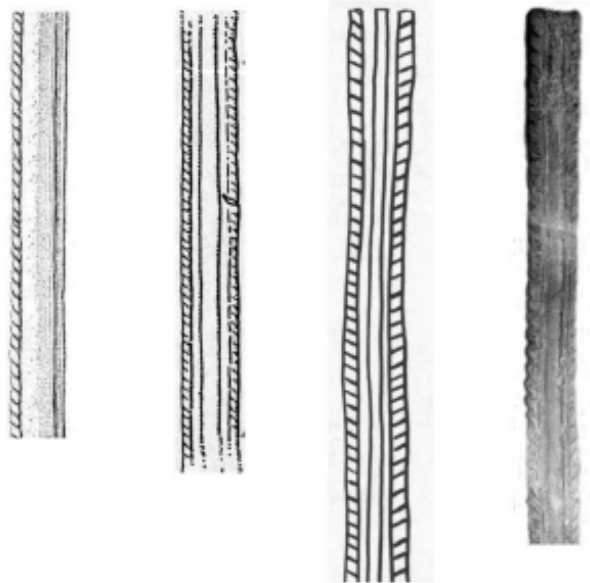
Aerial photography in 1960 revealed a maze of pits, drains, post-holes, foundation trenches and other features dug into the subsoil (3-Settlement evidence, Monument Number 131586). This area was disturbed by broad ditches of a rectangular enclosure, leading St Joseph to conclude that this was a “**straggling settlement**” constructed beside the Fosse Way that was later ‘rationalized’ through enclosure ditches (St Joseph 1961, 132). There was further evidence of Roman occupation in the Glebe Farm area consisting of abraded Roman pottery. Most of the features were a complex of enclosures and boundary ditches. A layer of colluvium sealed an early phase of features, showing continued occupation likely connected with the activities at Crococalana. Further evidence of military occupation was visible near Brough with the

temporary camp at Holme (4-Roman camp, HER: 324192). The camp consisted of a large sub-rectangular structure in the River Trent's lowlands surrounded by a defensive ditch (St Joseph 1961, 120).

The discovery of three lead coffins near Crococalana provided further evidence of occupation. An undecorated coffin was found in 1941 (5-Lead coffin, HER: 324120) in the fields east of the Roman site. It contained the remains of a possible male, with pottery by the head dated from the second to third centuries. These included a rim fragment from a greyware cinerary urn (Smith 1941, 107-9), but there were no other grave goods with the body. One of the 1971 coffins contained the skeleton of a young female, with isotope analysis indicating her remains dated from AD 300 (Wilson 1972, 10). The lead coffins have distinctive parallels to the panel of the lead tank (6-lead tank) through their shape and use of similar materials. The lead tank was discovered by a metal detectorist in the late 1970s in a field east of the A46 opposite the apparent site of Crococalana (Watts 1995, 318). The height of the fragment varies from 370 to 390mm, with a slight tapering from left to right. The thickness of the lead was 3 to 4mm and the width ranges from 730 to 820mm. Around the top of the fragment is a moulded band of lead 15 to 17mm wide with an indented lower edge and decorated with repeated saltire, cable banding and diagonal lines.



*(Figure 6.15 A lead tank fragment from Borough, Notts. (Drawing: City of Lincoln Archaeology Unit) Watts, Dorothy J. "A Lead Tank Fragment from Brough, Notts. (Roman 'Crococalana')." *Britannia*, vol. 26, 1995, pp. 318–22, <https://doi.org/10.2307/526887>)*



(Figure 6.16 Raised cable-edged strapping: left to right, Brough, Flawborough, Walesby, Ludford - A Group of Romano-British lead tanks from Lincolnshire and Nottinghamshire, Steve Malone)

As illustrated in Figure 6.x2 the Brough tank had cable-edged strapping that was similar to the tanks at Flowborough, Walesby and Ludford. The fragment showed evidence of deliberate and careful cutting, comparable to tanks at Bishop Norton and East Stoke, indicating intentional abandoning of this artefact. The fourth-century date of the tank, indicated through its St Andrew's Cross decorations and an apparent Iota-Chi monogram, coincides with the later coinage evidence at Brough.

Anglo-Saxon/Early Medieval

Evidence for activity following the Roman period is relatively sparse and consisted of poorly recorded stray finds in the form of brooches (VCH Nottinghamshire 1906, 246). These appear to be consistent with a possible cemetery, including a gold and garnet pyramidal stud that suggested high-status burials (Alvey 1980, 34-6; Knight 1991, 10; Knight and Walls 2001, 7).

An Anglo-Saxon settlement was discovered north of Glebe Farm (7-Settlement, M18429) and excavators discovered a shale spindle whorl, fragments of burnt animal bone and worked stone. These were besides four sherds of abraded Roman pottery and 14 sherds of pottery from the Anglo-Saxon period (Knight 2001, 21).

Medieval and Post-Medieval

None of the finds from this period met the criteria.

Assessment against criteria

Based on the criteria for inclusion, the limited number of depositions at Brough provide weak evidence of being a landscape of continued deposition, due to the scattered nature of the finds.

Burwell

Topography

Burwell is a village and civil parish in Cambridgeshire, 16km north-east of Cambridge, and lies on the south-east edge of the Fens. The village sits at the head of Burwell Lode, a man-made waterway connecting it with the River Cam (Boyes et al. 1977). The tank was found 4.10km from the nearest water source at the River Ouse.

Human Landscape

Burwell appears in the Domesday Book as Burewelle, Burwella and Burwelle in the hundred of Staploe (<https://opendomesday.org/place/TL5866/burwell/>). Its name was derived from the Anglo-Saxon “Burwell” meaning ‘fort near a spring’. The tank was 9.67km from the nearest Roman Road and 157.89km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.17 - Map of Burwell and the various findspots - Authors own)

Legend:

1 - Settlement	5 - Settlement	9 - Villa
2 - Hoard	6 - Site	10 - Hoard
3 - Settlement	7 - Settlement	11 - Lead Tank
4 - Cremation	8 - Finds	

Finds up to 5km from the lead tank

Cambridgeshire HER 1008 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	35	0
Bronze and Iron Ages	42	16
Roman	32	117
Anglo-Saxon/Early Medieval	5	8
Medieval/Post Medieval	16	210
Unknown or Other	80	9
Total	462	360

Prehistoric

Neolithic and Early Bronze Age occupation at Hallard's Fen (1-Settlement) consisted of mixed worked tools and debitage including flint cores, axes, scrapers, burins and arrowheads alongside polished stone axes (RCHM 1972, 40; Archaeological Solutions Ltd 2017, 7).

Bronze and Iron Ages

A Late Bronze Age hoard was discovered in 1867 at Burwell Fen (HER: 06397), containing over 60 items including tools, weapons, and personal items (Fox 1924, 324; Salzman 1938, 279; Pendleton 1999, 201; O'Connor 2013, 42-3). A series of smaller Late Bronze Age hoards were found at Burwell Fen (HER: 06381, 06382, 06445) mainly consisting of collections of two or three items with axes, spearheads, rapiers and rings (Salzman 1938, 279; Pendleton 1999, 201). A smaller Late Bronze Age hoard was discovered at St Mary's Churchyard (2-Hoard, 06769a). This contained a socketed axe, a socketed spearhead and a tanged chisel (Fox 1924, 324; Pendleton 1999, 201). Evidence at Newmarket Road suggested a Late Bronze Age settlement at Burwell (3-Settlement, HER: MCB22069). Pits were discovered in 2014 and postholes containing animal bones, worked flint tools and sherds of Late Bronze Age pottery (Fletcher 2014). Postholes in the southwest of the site represented possible buildings, indicating a potential Late Bronze Age settlement. The evaluation also discovered a cremation burial in an almost intact urn from a pit with the urn containing the remains of an adult and child (4-Cremation, HER: MCB22070).

An Iron Age settlement was found at Newmarket Road (5-Settlement, MCB17427). The site included two large pits containing deliberately placed artefacts including several intact pottery vessels, metalworking debris and a pierced pine marten mandible (Bailey 2006). Features at Isaacson Road included an Early to Middle Iron Age metalworking site (6-Site HER: MCB19232). Three postholes were uncovered containing Iron Age pottery alongside smithing and smelting. Other postholes contained flakes of hammer slag, indicating a Middle to Late Iron Age ironworking site (Masters 2006; Muldowney 2006; *ibid.* 2008).

Roman

Evidence for a Roman settlement was discovered in 1927-8 near Burwell church (7-Settlement, HER: 06764a) in a pit below a series of Anglo-Saxon graves. The upper fill of the pit contained Roman pottery sherds, tiles, stone, animal bone and wood and charcoal (RCHM 1972, 41). These suggested a substantial building destroyed by the Anglo-Saxon cemetery. A settlement was discovered at High Ness Farm (8-Finds, HER: 07962). The finds included tiles, lead artefacts, a small bronze figurine, mixed pottery and 32 mixed bronze coins from the third to fourth centuries. These finds matched the potential villa discovered 1.5km north-west of Exning and 1km south-west of Landwade (9-Villa, HER: 377367). The site was discovered in 1904 and excavations in 1958-9 revealed first century irregular timber huts that were succeeded by a larger timber barn and a v-shaped gully containing second century pottery (Webster 1987, 41-66; Scott 1993, 173). Excavations in 1968 revealed a settlement expanding for nearly 3km, with over 40 pits and a series of postholes and v-shaped ditches containing first to fourth century pottery alongside bricks and box and roof tiles (Taylor 1969, 32-3).

Evidence of hoarding patterns is visible with the hoard (10-Hoard, HER 06736) consisted of 18 bronze vessels discovered in 1967 (Browne 1976, 82). There was a mixture of bowls, cauldrons, a skillet, two penannular rings and two other vessels, deliberately stacked into each other (Wilson 1971, 270; Gregory 1976, 66). Trial excavations revealed pottery and building debris with a second to fourth century AD date (Browne 1976, 82). Deliberate abandonment was also visible with the lead tank (11-Lead tank, HER: 06787), discovered by a metal detectorist in 1977 in a ploughed field covered in Roman pottery (Guy 1978, 1).

The tank measured 684mm x 424mm x 873mm with a volume/capacity of 205 litres and decorated with circles within a zigzag with a row of raised discs below the rim. The tank was bent but otherwise intact, with a mixture of pottery sherds, roof tiles and part of a glass bowl found inside it.



(Figure 6.18 The lead tank at Burwell, Cambridge Museum of Art and Archaeology)
https://static.portal.maa.cam.ac.uk/portal-assets/media/library_images/web/588929_D_1977.13.1987.42.png

Anglo-Saxon/Early Medieval

An Anglo-Saxon cemetery (12-Cemetery, HER: 06764) was discovered near St Mary's Church (RCHM 1972, 41). Five burials were discovered in 1884 before later excavations between 1925-31 found 150 inhumations in total. Excavations discovered 127 skeletons in graves orientated east-west and no traces of coffins (Lethbridge 1926, 116-125, *ibid.* 1927, 116-125). The burials contained individuals from both sexes and with varying ages (Lethbridge 1929, 97-109; Meaney 1964, 61-2), with 77 of the burials containing grave goods including knives, iron chains, bone and bronze pins, iron buckles and beads whilst finds of note included a bronze rum-shaped work box and a gold disc pendant with set with garnets (RCHM 1972, 41; Gibson 2015, 149-160).

Medieval and Post Medieval

No depositions from this period met the criteria.

Assessment against criteria

Based on the upon the large numbers of artefacts included under the criteria, the depositions at Burwell provide strong evidence for it being a landscape of continued deposition. Occupation, burial and deposition patterns from the Palaeolithic to Saxon periods show a long instance of continued activity i

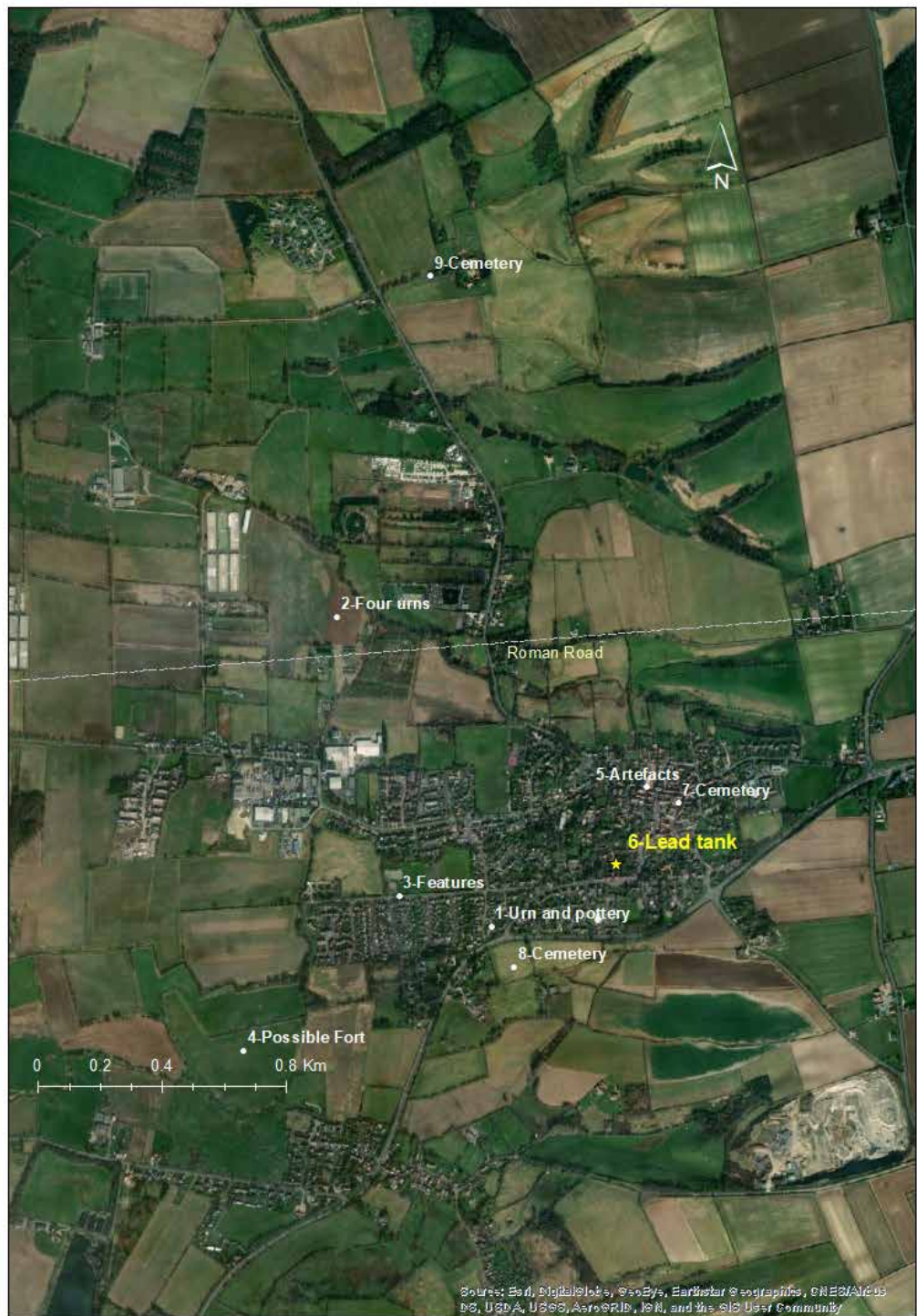
Caistor

Topography

Caistor is a town and civil parish in the West Lindsey district of Lincolnshire. The town lies on north-west edge of the Lincolnshire Wolds and on the Viking Way, a long-distance trail running between the Humber and Oakham in Rutland. The lead tank was found 5.10km from the River Ancholme which is the nearest river.

Human Landscape

The town is believed to have originated as a Roman castrum or fortress (HER: MLI54186). Evidence of the fourth century walled Roman town is visible through a series of extant walls which form an irregular polygon 160m by 225m. Caistor is referred to in the Domesday Book as "Castre" in the hundred of Yarborough. The lead tank was found 0.75km from the nearest Roman road and 92.10km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.19–Caistor and the various findspots–Authors own)

Legend:

- | | | |
|---------------------|-------------------|--------------|
| 1 - Urn and Pottery | 4 - Possible Fort | 7 - Cemetery |
| 2 - Four urns | 5 - Artefacts | 8 - Cemetery |
| 3 - Features | 6 - Lead tank | 9 - Cemetery |

Finds within 5km of the lead tank

Lincolnshire HER 710 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	58	152
Bronze and Iron Ages	32	359
Roman	25	591
Anglo-Saxon/Early Medieval	9	128
Medieval/Post Medieval	54	951
Unknown or Other	52	77
Total	230	2258

Prehistoric

No finds from this period met the criteria.

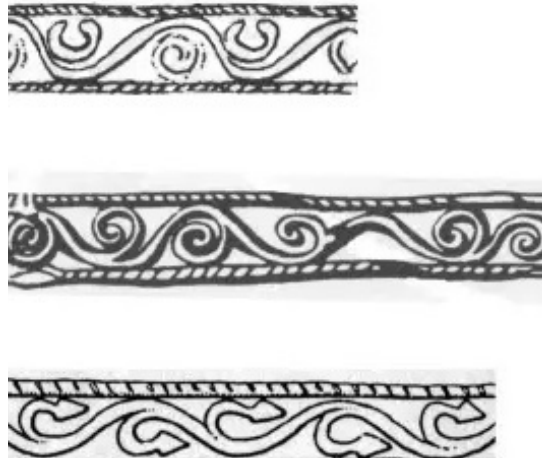
Bronze and Iron Ages

Bronze Age funerary practices are visible with a Bronze Age cremation urn and pottery (1-Urn and pottery, HER:MLI52677) found at Navigation Lane. There were also other pots, ash and blobs of red clay, suggesting a possible cremation cemetery. Four Early Bronze Age cremation urns were discovered at Sandbraes Sandpit (2-Four urns, HER:MLI50448) in 1957. The urns were found following the quarrying of a round barrow (Petch 1957, 92, 99). Other finds included flints, Pygmy knives, an unpolished Magdalenian axe, blade and resolve scrapers and flint microliths.

Roman

In 2003 archaeologists discovered Roman features at Caistor Grammar School (3-Features, HER:MLI84707) comprised of numerous ditches and two large pits. Later occupation included several linear features that contained pottery, iron hammerscale and animal bones (Pre-Construct Archaeology 2005). Excavations in 2008 unearthed the remains of part of a Roman wall (Allen Archaeological Associates 2009), suggesting a long-lasting settlement that coincided with the construction of the town walls.

A possible fort at Becklands (4-Possible Fort, HER: MLI50545) consisted of a double-ditched enclosure with rounded corners discovered in aerial photographs in 1976. Field walking in 2013 discovered a series of mixed roof tile and pottery alongside metalworking debris and brooches. Further traces of Roman occupation were discovered in 1996 at Bank Lane (5-Artifacts, HER: MLI53908). At least 28 sherds of pottery from the third to fourth century AD, likely coinciding with the construction of Caistor's wall defences (Lindsey Archaeological Services 1996). Lead tank fragments were found in Caistor Churchyard in 1863/4 (6-Lead tank, HER: MLI50872)). There were three pieces in a drain beneath the road (Hawkes 1947, 23-4), with deliberate fragmentation like the tanks at Bishop Norton (Lincolnshire) and Brough (Nottinghamshire). The tank is square and decorated with human figures framed within rectangles, probably two on each side with foliate bands between them.



(Figure 6.20 Decorative scroll-work; top to bottom, Caistor, Bishop Norton, Flawborough, A Group of Romano-British lead tanks from Lincolnshire and Nottinghamshire Steve Malone)

The decorations on the tank, as illustrated in Figure 6.20, were like those at Bishop Norton, and Flawborough with inscriptions, bordered above and below by cable moulding with lettering 30-40mm in height framed in 40-50mm bands. Similarly, the tank at Bishop Norton was inscribed with ‘...DO FECIT FELIX...’, the tank at Caistor with ‘CVNOBARRVS FECIT VIVAS’ and the tanks at East Stoke and Flowborough with ‘VTERE EELIX’ The tank was 0.696m at the base, 0.762m at the top, the sides were 0.635cm thick, and it weighed more than 22.68kg. The fourth century date of the tank was matched by a series of finds discovered at a Roman cremation and inhumation cemetery south west of Caistor (7-Cemetery, HER: 80311). This contained a series of skeletons alongside Roman pottery and cinerary urns (Trollope 1861, 151).

Anglo-Saxon/Early Medieval

Anglo-Saxon activities are visible with a cemetery (7-Cemetery, HER: MLI97592) with 74 inhumation burials at this site. Radiocarbon dating of two skeletons dated their remains to the eighth century and pottery from some of the graves had a fifth to ninth-century date. This provided a close overlap with the fourth-century Roman debris and suggested an extended period of use. Another cemetery was discovered near Nettleton Road dating from the fifth to the sixth centuries (8-Cemetery, HER: MLI50220) containing 17 graves. Seven of these contained grave goods including spearheads, a hanging bowl and beads (Leahy 1993, 41). Possible additional burials for this cemetery were discovered at 35 Nettleton Road in the garden of ‘Tree Tops’ consisting of a cracked possible female inhumation with grave goods (HER: 80311) and a nearby inhumation with a hanging bowl and a shield boss (Meaney 1964, 164; Everson 1982, 68-70; Brennan 1991, 56-7)

Another Anglo-Saxon cemetery was discovered in 1956 at Fonaby (9-Cemetery, HER: MLI50586) with several grave groups and unstratified artefacts and later excavations discovered more graves. Pottery from the Iron Age and Roman period suggested earlier activity in this area, whilst the Anglo-Saxon cemetery dated to the sixth century. Excavations revealed the cemetery contained 49 inhumation grave groups and 28 Anglo-Saxon pots and cremation vessels (Cook 1981, Leahy 2007). Evidence of later Saxon activity was discovered at the rear of Bank Lane (HER: MLI53908), with a metalled surface and tenth-century pottery sherds besides a whetstone and part of a quern.

Medieval and Post Medieval

Evidence for continued activity dated to the Medieval period is illustrated with a series of finds discovered at Caistor High School in 2010. These consisted of an east-west aligned wall alongside two ditches containing finds of animal bones, Medieval pottery and glass (Pre-Construct Archaeology 2011). Likewise, Medieval pottery and coins alongside a lead pilgrim bottle were discovered at Caistor Grammar School (HER: 80381).

Assessment against the criteria.

Based upon the limited number of finds included through the criteria, Caistor shows weak evidence of being a landscape of continued deposition.

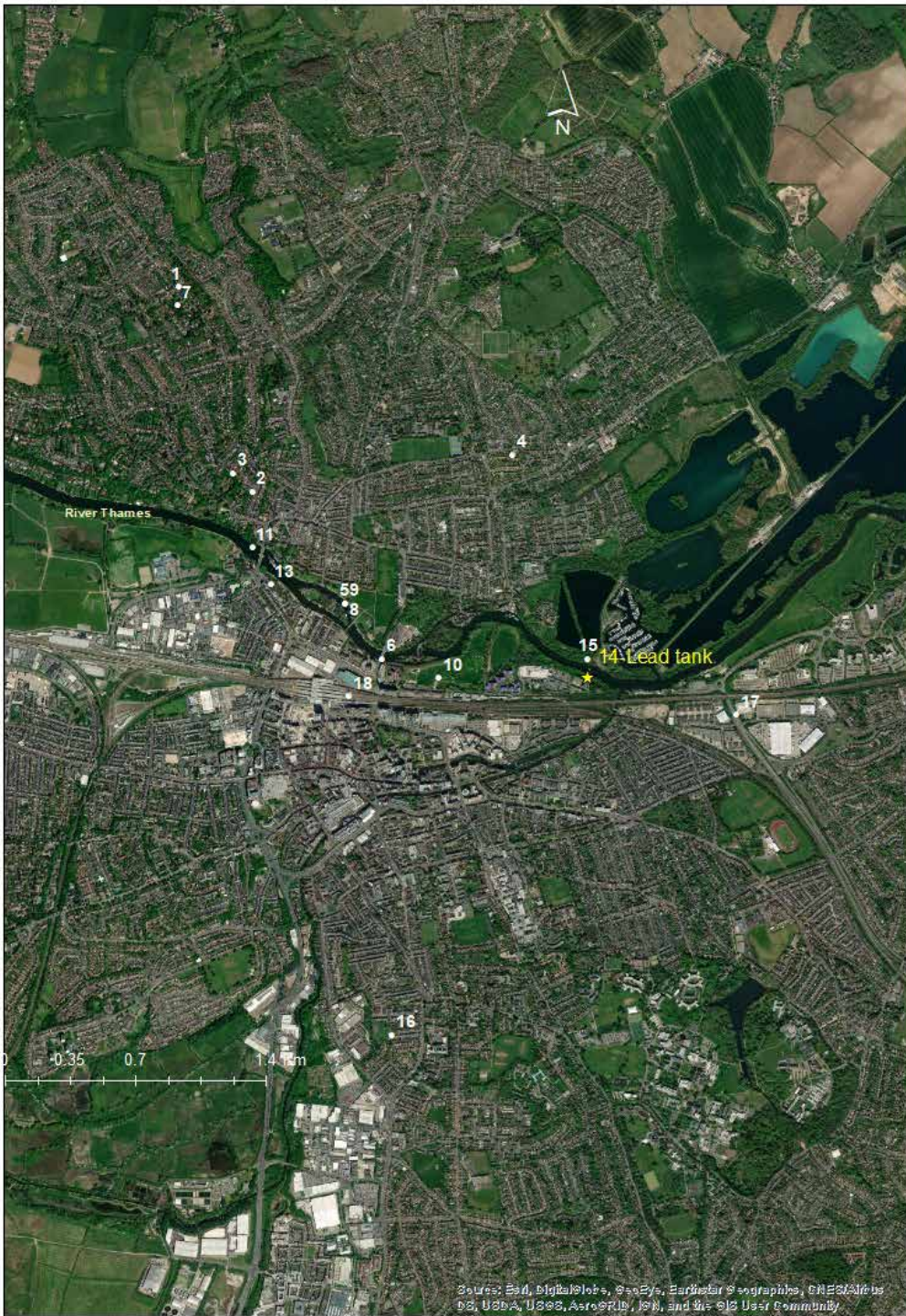
Caversham

Topography

Caversham in Berkshire is a village on the north bank of the River Thames, opposite the town of Reading. Caversham lies on a low flood plain and is situated on the lowest reaches of the Chiltern Hills. The lead tank was discovered 0.01km from the River Thames.

Human Landscape

Caversham is first recorded in the Domesday Book as a settlement in the hundred of Binfield. Most of the occupation was focussed around the area of Caversham Bridge. Caversham became a popular pilgrimage site due to the Shrine of Our Lady alongside the Chapel of St Anne with its associated well believed to have healing properties. The lead tank was found 9.29km from the nearest Roman Road and 120.46km from the nearest lead mine, Chewton Mendip in the Mendips.



(Figure 6.21– Caversham and the various findspots – Authors own)

Legend:

1 - Axes	7 - Pit and Finds	13 - Axedhead
2 - Axes	8 - Spearhead	14 - Lead Tank
3 - Axes	9 - Vessels	15 - Well
4 - Handaxes	10 - Axehead	16 - Hoards
5 - Finds	11 - Axehead	17 - Cemetery
6 - Artefacts	12 - Axes	

Finds within 5km of the lead tank

Berkshire Archaeology HER 1709 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	170	70
Bronze and Iron Ages	49	21
Roman	83	40
Anglo-Saxon/Early Medieval	15	2
Medieval/Post Medieval	27	130
Unknown or Other	222	4
Total	566	267

Prehistoric

The earliest period of occupation dates from the Paleolithic period, with clusters of finds from this period spread across the area. A gravel pit at Kidmore Road (1-Axes, HER: 00805.00.000) contained approximately 200 Palaeolithic Acheulian axes (Wymer 1968, 144-8). Similar finds were discovered at Toot's Farm (2-Axes: HER: 00788.00.000) where over 250 Acheulian axes and over 600 flint implements were discovered between 1892 and 1905 (Roe 1962, 17; Wymer 1968, 137-142). A large gravel pit known as Talbot's pit to the north of Caversham Heights (3-Axes, HER: 00792.00.000) contained at least 70 handaxes (Wymer 1968, 132-4).

A gravel pit at Henley Road/Donkin Hill (4-Handaxes, HER: 00807.00.000) contained Lower Palaeolithic hand axes besides a mammoth tusk and tooth (Wymer 1968, 160). The River Thames contained similar finds from the Mesolithic and Neolithic periods (5-Finds, 02000.00.000). There were tranchet axes, picks, a macehead, a flint knife and the butt of a broken flint axe (Wymer 1955, 12). Further Neolithic finds in the River Thames (6-Artifacts, HER: 02021.00.000) included a perforated hammer head and a mixture of ground and polished flint and stone axes (Adkins and Jackson 1978, 34, 41, 53-4). These were found east of Caversham Bridge near Bronze Age metalwork in the river, indicating deliberate abandonment similar to the other flint finds at Caversham.

Bronze and Iron Ages

Gravel quarrying uncovered a circular pit (7-Pit and finds, HER: 02925.00.000) containing black earth, charcoal, pottery, flint and a bronze pin tentatively dated to the Bronze Age (Journal of the British Archaeological Association 1914, 72). Most of the Bronze Age material consisted of metalwork retrieved from the River Thames including a spearhead (8-Spearhead, HER: 02043.00.000) alongside a Late Neolithic/Early Bronze Age drinking cup (9-Vessel, HER: 02043.00.001). Other metalwork included an Early Bronze Age flanged axe head (10-Axehead, HER: 02047.00.000) found in the foundations of Caversham Lock before 1881 whilst dredging revealed a Bronze Age axe head (11-Axehead, HER: 02051.00.000) alongside a flanged 'celt' west of Caversham Bridge (Peake 1932, 52, 220; Salzman 1999, 263).

Three Late Bronze Age socketed axes (12-Axes, HER: 00785.00.000) were found in 1951 (Taylor 2009, 2), the first axe displayed repeated use, the second was crushed and distorted and the third had an irregular break with the blade sawn-off (Taylor 1993). This indicated deliberate abandonment with similarities to the Bronze Age metalwork found in the Thames at Caversham.

Roman

A Romano-British axehead (13-Axehead, HER: 02076.00.000) recovered from the Thames shows similarities to the Bronze Age metalwork in this area. The lead tank (14-Lead tank, HER: 03520.00.000) was discovered in a timber-lined well at Caversham Marina (Frere 1989, 319). Its water-logged deposits contained artefacts from the fourth century AD with pottery, tiles, glass, metalwork, and the lead tank fragment. The tank was approximately 0.7m in diameter and 0.55m deep and it was decorated with cable banding and repeated saltire. The side of the fragment showed fire damage before being cut from the base, with a chisel or axe used to purposefully cut the base away (Frere 1989, 319).

A nearby well (15-Well, HER: 03521.00.000) contained a copper-alloy bolt of door/gate fitting. It was approximately 15 metres south-east of the well containing the lead tank, with the mixed finds indicating a potential villa near the Thames. Two coin hoards were also discovered in the area (16-Hoards, HER: 245018). The first of these was hoard of 50 fourth-century siliquae recovered in 1859 in a pot from the side of a gravel pit in Whitley between Milman and Swainstone Roads (Boon 1954, 41-4). Later in 1895 another hoard of 120 fourth to fifth-century coins in a glazed New Forest Ware pot was discovered in a similar gravel pit during excavations of a house in Milman Road (Boon 1954, 41-4).



(Figure 6.22 the lead tank with Chi-Rho from the well in Caversham Berkshire, photo by Leslie Cram Reading Museum)

Anglo-Saxon/Early Medieval

Saxon activity was visible with a cemetery (17-Cemetery, HER: 245015) found on the south bank of the Thames in 1891. Excavations recorded 14 inhumations, with five being aligned east to west whilst one of these burials was crouched and the rest were supine (Hawkes 1965, 50). The remaining nine burials consisted of cremations and the accompanying grave goods were a mixture of brooches, spearheads, knives and buckles alongside a burnt comb, used to provide the cemetery with a fifth to seventh-century date (Hawkes, Brown and Campbell 1979, 45). A later ninth-tenth century inhumation burial was discovered at Playhatch in 1966 (18-Inhumation, HER: 1155931) comprised of two male skeletons with an iron sword knife and arrowhead, a bronze pin and another iron fragment (Evison 1969, 330-45).

Medieval/Post Medieval

No finds from this era met the criteria for inclusion

Assessment against criteria

Based upon the large number of finds included through the criteria Caversham provides strong evidence of being a landscape of continued deposition, with many acts of deposition focussed around the Thames.

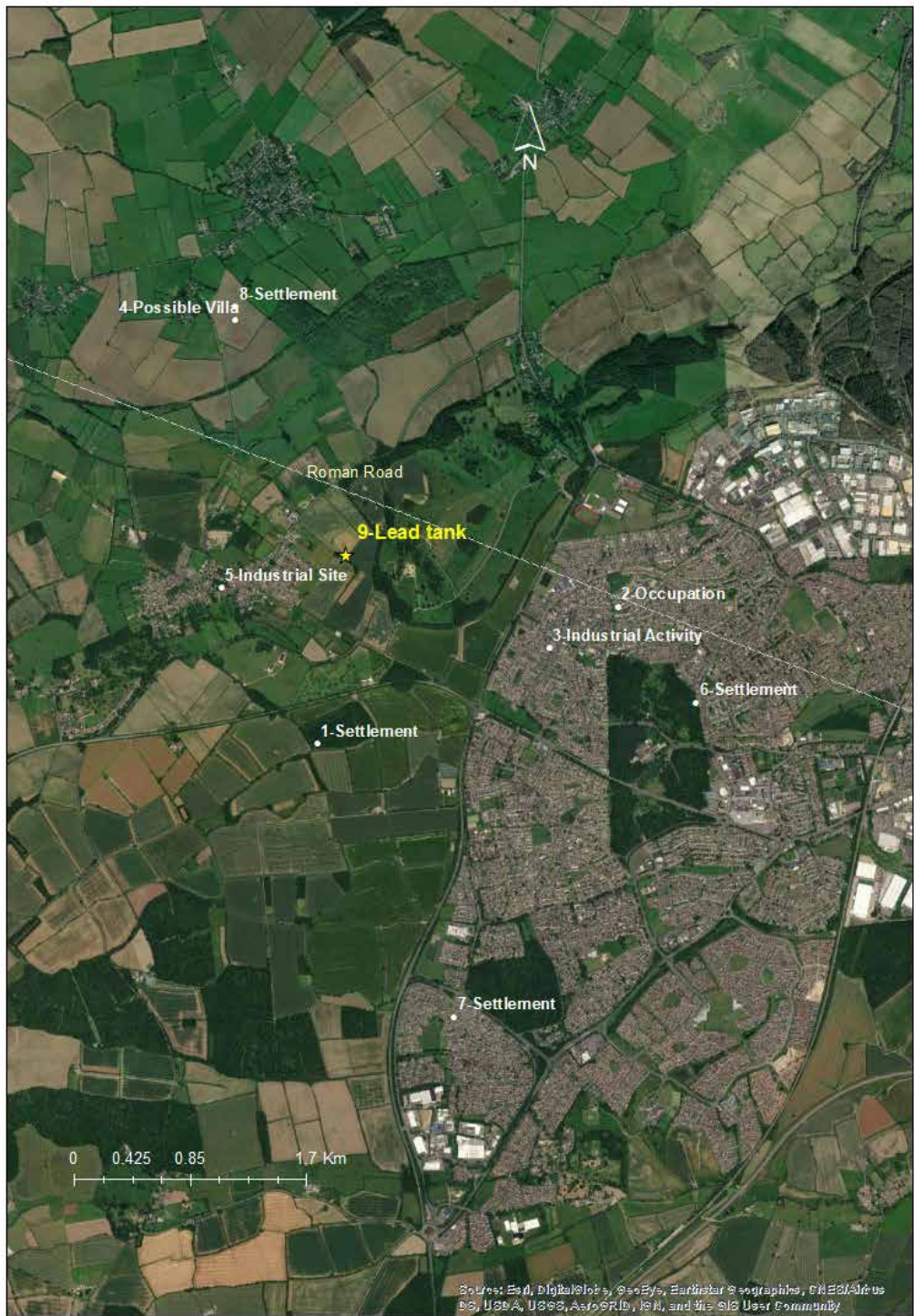
Corby

Topography

Corby is a town and borough in North Northamptonshire located in the Nene Valley. The town sits on the crest of a ridge of hills known as the Northamptonshire Sands and is south of the River Welland. The iron ore in these Northamptonshire Sands led the area to be extensively mined from the Roman period to the late 20th century. The tank was found 4.50km from the nearest river.

Human Landscape

The earliest evidence of settlement occurred in the ninth century when it was occupied and settled by Danish settlers who named it 'Kori's by' (Kori's Settlement). The settlement was later recorded in the Domesday Book as "Corbei". The Roman Road from Leicester to Godmanchester ran through Corby, with the tank only 0.42km from the road. The nearest lead mine was 86.01km away at Middleton in Derbyshire.



(Figure 6.23 – Corby and the various findspots – Authors own)

Legend:

- | | | |
|-------------------------|---------------------|----------------|
| 1 - Settlement | 4 - Possible Villa | 7 - Settlement |
| 2 - Occupation | 5 - Industrial Site | 8 - Settlement |
| 3 - Industrial Activity | 6 - Settlement | 9 - Lead Tank |

Finds within 5km of the lead tank

Northamptonshire Historic Environment Record 1118 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	14	34
Bronze and Iron Ages	13	16
Roman	31	54
Anglo-Saxon/Early Medieval	2	19
Medieval/Post Medieval	24	273
Unknown or Other	94	2
Total	178	398

Prehistoric

No finds from this era met the criteria for inclusion.

Bronze and Iron Ages

Excavations revealed a Middle to Late Iron Age settlement south of Old King's Wood (1-Settlement, HER: 1158/2) with Iron Age pottery and ditched enclosures. Iron slag in the upper ditch levels and part of a furnace bottom hinted at possible ironworking (Rees 2008). Geophysical survey and excavations discovered another Middle to Late Iron Age settlement, identifying a small concentration of roundhouses and enclosures containing Iron Age pottery (Thomas 2016, 4). Most of these were Late Iron Age sandy, shell-tempered and grog wares (Thomas 2016, 52). Further Iron Age occupation was discovered at the Shire Lodge housing estate (2- Occupation, HER: 346197). This consisted of a series of ditches and pits containing coarse pottery and clay alongside a semi-circle of burnt wood and shallow stones (Kille 1967,9; Moore 1968, 52). Evidence of industry in this area was visible with an iron smelting site at the Lodge Park Building Estate (3-Industrial activity, HER: 345967). Excavations uncovered a series of pits and a ditch containing charcoal and large amount of gritty-sandy, hand-made pottery alongside animal bones including a deer scapula (Kille 1970, 2-3).

Roman

Roman activity was visible in the area with a series of industrial activity and possible villas. Field walking activities east of Bringhurst Church in 1985 uncovered an artefact cluster interpreted as evidence of a villa (4-Possible villa, HER: 946900). This consisted of compact stone scatter associated with tile, tesserae, slate tiles and pottery (Scott 1993, 110). An industrial site was found at Cottingham in 1961-3 (5-Industrial site, HER: 346248) with features consisting of two corn drying ovens and the foundations of a possible iron working site (Scott 1993, 142). The brickwork was burnt and large amounts of scoria indicated iron working occurred at the site. Pottery finds including a first century vase alongside second to fourth century pottery and coins and these were used to suggest this was a potential villa site (Scott 1993, 142).

Evidence of settlements in this area also consisted of pottery and a figurine used to suggest a possible settlement (6-Settlement, HER: 345952). This consisted of a rare bronze bird on a ball figurine as well as pottery fragments (RCHM 1979 24). Further occupation was visible around the Beanfield Estate (7-Settlement, HER: 345951). The settlement appeared to measure 50 hectares and consisted of a 15m ditch containing second to fourth century pottery and animal bones alongside occupation debris including flue and roofing tiles and iron nails. Later excavations would discover a length of limestone slabs 15m long, a circular ditched feature alongside shallow gullies and depression containing pottery and a fragmented beehive quern (RCHM 1979, 24).

Anglo-Saxon/Early Medieval

Anglo-Saxon activity at Corby is visible through a ring-shaped settlement founded in the fifth to sixth centuries at Bringham (8-Settlement, HER: 346245). This was one of the earliest settlements founded by the Anglo-Saxons, located on an isolated hill in the Welland Valley (Hoskins 1957, 3, 11, 17). Evidence for Saxon activity at this site is visible through multiple pottery sherds discovered during fieldwalking activities (HER: MLE1299, MLE1290, MLE6135, MLE1295, MLE1294). The lead tank (9-Lead tank, PAS: WAW-A4D8D4) was discovered by a metal detectorist in the Cottingham district in 2007.

The tank showed deliberate fragmentation, with the base and half the side surviving in one piece and the remainder in six smaller fragments. The tank's exterior is decorated with eight relief-decorated triangular panels which alternate in orientation, half with the apex at the top and half with the apex at the base. The panels appear to be integrally cast as part of the vessel and measure 150.04mm long by 75.22mm wide. The tank is approximately 40cm in diameter, 19cm tall, the lead is approximately 3-4mm thick and weighs approximately 15kg.



(Figure 6.24 The lead tank found at Corby, Birmingham Museums Trust)

Medieval and Post-Medieval

No finds met the criteria.

Analysis

Based upon the limited number of finds which met the criteria for inclusion, Corby presents a weak case for being a landscape of continued deposition.

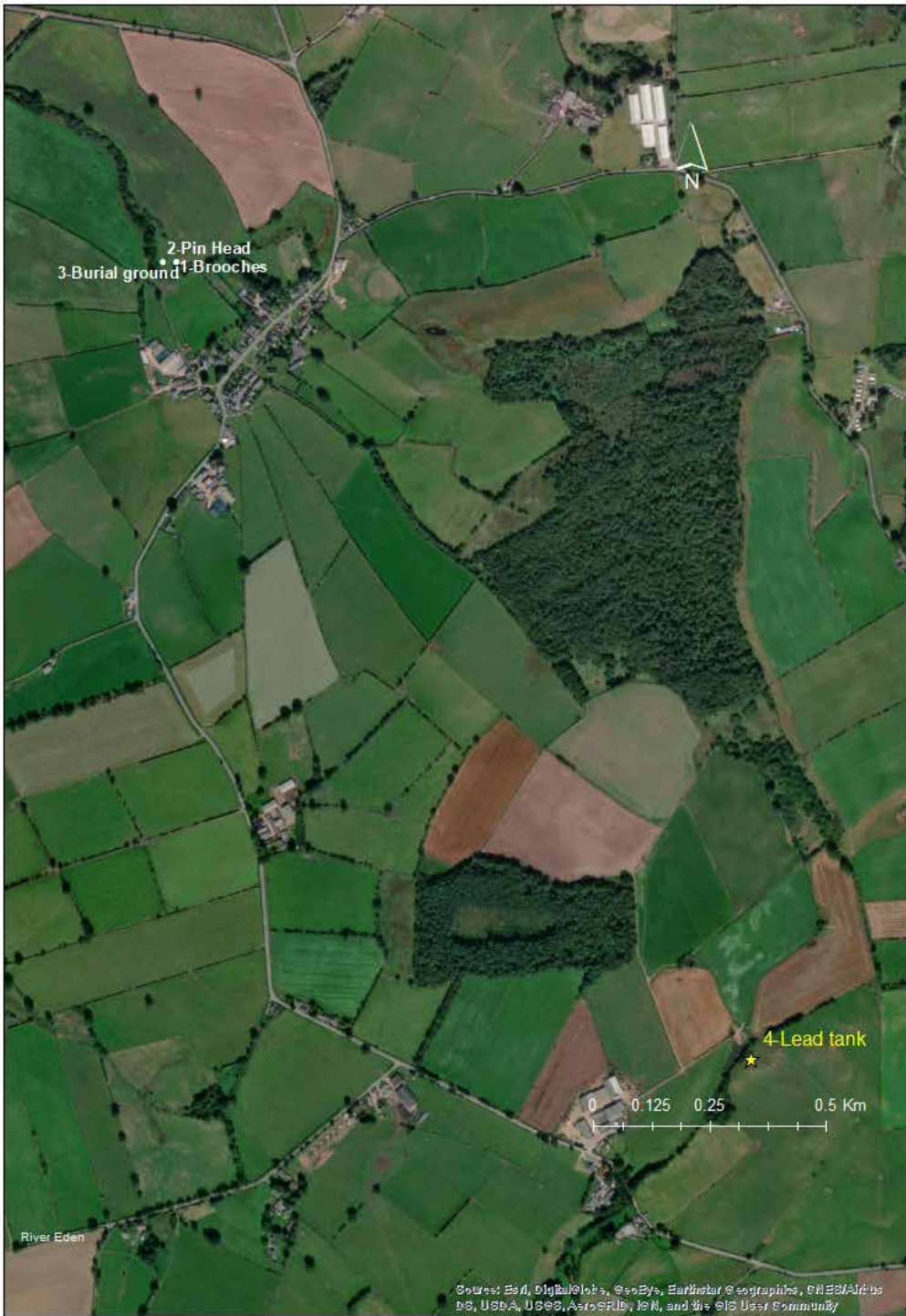
Cumwhitton

Topography

Cumwhitton is a small village and civil parish near Carlisle in Cumbria, on the east side of the River Eden. The village is situated in a series of small hills to the west of the North Pennines and northeast of the Lake District. The lead tank was found 1.90km from the River Eden.

Human Landscape

Cumwhitton is located 12km South East of Carlisle and just east of the M6 and is predominantly a farming village. The tank was 6.50km from the nearest Roman road and 25.11km from the lead mines at Alston Moor in Cumbria.



(Figure 6.25-Cumwhitton and the various findspots – Authors own)

Legend:

- 1 - Brooches
- 2 - Pin Head
- 3 - Burial Ground

4 - Lead Tank

Finds within 5km of the lead tank

	Historic England Research	Portable Antiquities Scheme
Prehistoric	3	0
Bronze and Iron Ages	17	1
Roman	2	17
Anglo-Saxon/Early Medieval	3	0
Medieval/Post Medieval	158	81
Unknown or Other	60	7
Total	243	106

Prehistoric, Bronze and Iron Ages and Roman

No finds from these periods met the criteria for inclusion.

Anglo-Saxon/Early Medieval

The most substantial evidence of occupation dated from the Anglo-Saxon period, with a pair of cast copper-alloy domed brooches (1-Brooches, PAS: LON-F2F201), a fragmentary copper-alloy gilded pinhead (2-Pin Head, PAS: LANCUM-EEFFFB) discovered with a burial ground (3-Burial ground, HER: 1602931). The brooches were a pair of double-shelled oval brooches dating from the early tenth century, decorated with a highly stylised zoomorphic design with a mixture of silver and gold gilding. These brooches had unmistakable similarities to a series of brooches found at Bedale (Hall 1982; Jansson 1984). The Cumwhitton finds were discovered in an apparent 'female' grave assemblage alongside a weaving chest, glass beads and an L-shaped slide key. The gilded pinhead was flat with heavily chipped and broken edges, with the front face heavily gilded whilst the back face was undecorated. The stud head's top had an incised inscription in English runes, with the runes transliterated as 'f u þ o r c e h n [i]' (futhorc). Disc headed pins like this are common finds in Anglo-Saxon contexts across Middle Saxon sites, with a relatively short use as they appear in eighth-century contexts but no later (Owen-Murray 2004, 142). Many examples on the PAS database were recorded as stray finds, and whilst these items were commonly gilded, only the example from North Lincoln and the Malton Pin from North Yorkshire displayed runes.

The burial ground and the lead tank provide the most extensive evidence of occupation in this area. Excavations by Oxford Archaeology North uncovered six richly furnished graves. Due to the highly acidic soil nature, a small skull fragment was the only evidence of human remains at this site. However, the graves were all richly furnished with an assortment of high-status goods. The graves were aligned east-west, leading to the view that these were individuals with possible 'Christian' beliefs buried in a richly furnished 'Pagan'-style (Oxford Archaeology North 2014). Metal detecting across this area discovered a concentration of nails, a fragment of a Late Saxon key, two more fragments of an earlier style of oval brooch and a possible sword fragment. These were all less than ten metres from the original findspots. Further excavations revealed five more graves with a similar east-west orientation and a curvilinear feature north-east of the first grave.

Once again, the soil acidity had erased any trace of remains, but the graves contained an extensive range of burial goods. Two of these male burials contained swords, a spearhead, a shield boss, an iron knife, a strike a light, a copper alloy pin and iron nail fragments, and a mixture of beads and silver rings near the neck area, suggesting a necklace. The female burial to the east of these had a mixture of beads, a jet ring, a mixture of iron and copper-alloy artefacts concentrated around the head area. A well-preserved jet bracelet and a copper-alloy belt fitting were also in this grave.

Further possible male burials north of this one contained a sword, spearheads, a strike-a-light, various beads and strap-ends, a set of prick spurs and a possible horse bridle alongside a knife and copper pin. The lead tank (4-Lead tank: LANCUM-227D54) was discovered by metal detector in 2010 across the river from the burial ground site. The tank was complete but bent in a manner which caused rips in the sides. This indicated deliberate abandonment, likely coinciding with Towton Farm's burials due to its Late Saxon date which was like the grave goods in the burial ground.

Medieval/Post Medieval

No finds from this period met the criteria for inclusion

Assessment against criteria

Based upon the very limited number of finds which met the criteria for inclusion Cumwhitton provides weak evidence of being a landscape of continued deposition.

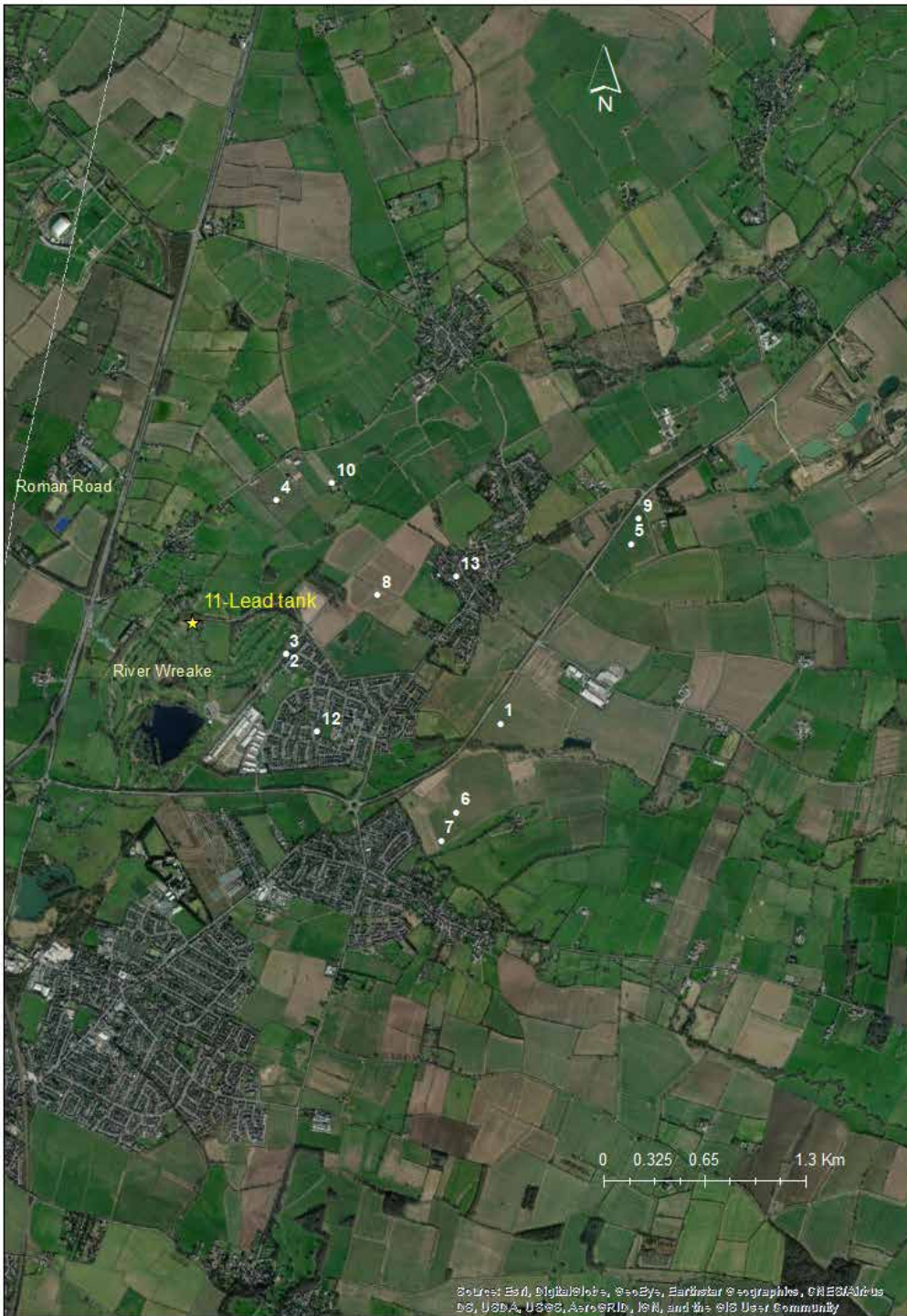
East Goscote

Topography

East Goscote is a village and civil parish in the Borough of Charnwood district of Leicestershire. The town is located on the River Wreake, a tributary of the River Soar, and lies in a flat valley with arable farmland. The Roman Road of Fosse Way passes to the east of East Goscote.

Human Landscape

The village's name derives from the Old English *gos-cot* 'cottages where geese are kept' and the Goscote Hundred (or Wapentake) is mentioned in the Domesday Book, this was later split into the West and East Goscote Hundreds. The village is built upon the site of a former British Army supply depot.



(Figure 6.26 – East Goscote and the various findspots – Authors own)

Legend:

1 - Settlement	6 - Late Iron Age site	11 - Lead tank
2 - Flint	7 - Roman site	12 - Pottery
3 - Pottery	8 - Roman site	13 - Remains
4 - Settlement	9 - Farmstead	
5 - Iron Age site	10 - Hoard	

Finds within 5km of the lead tank

Leicestershire and Rutland HER 1140 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	7	18
Bronze and Iron Ages	13	25
Roman	12	370
Anglo-Saxon/Early Medieval	7	37
Medieval/Post Medieval	10	321
Unknown or Other	83	17
Total	132	788

Bronze and Iron Ages

Excavations in 2004 discovered a Neolithic/Bronze Age settlement east of Rearsby Lodge Farm (1-Settlement, HER: MLE22924). A rare four-post structure with a central pit and associated features was recovered (Cooper and Randle 2008, 287). A large sub-circular pit with 96 sherds of Late Neolithic/Early Bronze Age pottery was recovered from across this area.

Gravel extraction in 1970 recovered flint finds (2-Flint, HER: MLE566) (Saville 1976, 29) and a mixture of stratified and surface finds alongside human remains and Roman pottery (Saville 1976, 31-2). Most were waste flakes alongside Mesolithic and Neolithic diagnostic pieces, indicating two distinct phases of activity. Occupation from the Iron Age and Roman period consisted of pottery beside the top stone of a beehive quern (3-Pottery, HER: MLE567).

Excavations in 2004/5 discovered a mixed period settlement west of North's Lodge (4-Settlement, MLE22952) with a ditch alongside two circular pits (Leicestershire Archaeological and Historical Society. 2008, 3-20), containing pottery alongside cattle bone fragments. A quantity of Late Bronze Age pottery was found in three pits on the site. A series of ditches were believed to be Iron Age alongside many pits and postholes as they had similar stratigraphic relationships to dated features (Ward 2007).

Excavations in 2004 revealed an enclosure and roundhouse with various pits near the Rearsby Bypass (5-Iron Age site, HER: MLE22930). Several deep, stone-filled pits inside the ring gully contained Mid to Late Iron Age pottery and evidence of cereal production (Cooper and Randle 2008, 290). The site East of Queniborough Brook (6-Late Iron Age site, HER: MLE22923) was analysed as a possible Late Iron Age 'ritual' site (Cooper and Randle 2008, 286). Excavations in 2004 recorded pits, postholes and linear trenches alongside boundary ditches. The excavators believed a ring ditch east of these was a barrow through its centrally placed pit (Cooper and Randle 2008, 286).

Roman

Roman occupation is visible with the site at Coppice Lane (7-Roman site, HER: MLE796) with finds including pottery, coins, brooches besides a pinhead. Excavations in 2004 recorded a Roman site (8-Roman site) referred to as Site 9 by Moore (Moore 2009, 36-37). Features included several gullies, a circular pit and two oven-like features, with pottery used to date these activities (Moore 2009, 37). A jug from the third or fourth centuries was recovered from the lower levels, indicating deliberate deposition (Cooper 2006, 227; Moore 2009, 43).

The lower fill contained six coins, an iron hook, a fragment of rotary quern and animal bones. Moore believed the layering of these finds represented structured deposition through the similarity to the burial of complete pots in the well at Silchester. Using Merrifield's work, he suggested that this had been a termination ritual (Merrifield 1987, 45-8; Moore 2009, 49), believing that these depositions either occurred in a single event for the disuse of the well or a limited duration where the well saw a 'ritual' focus.

These were matched by a Roman farmstead (9-Farmstead, HER: MLE22931) with two potential structures. The first consisting of a curvilinear ditch believed to represent the western side of roundhouse whilst the second was a cobbled surface believed to be a building platform (Leicestershire Archaeological and History Society 2008, 288-9). This indicated that the roundhouse was replaced at a later date by a possible rectilinear building. Various boundary ditches and pits were recorded across the site containing a mixture of first to fourth century pottery alongside numerous animal bones. There were also building tiles, evidence for lead working and a figurine or flagon in the shape of a lion. A coin hoard was discovered in an urn at Thrussington in 1950 (10-Hoard, HER, 965029). Most of the coins were fourth century issues including URBS ROMA denominations (Winter 1977, 1).

Anglo-Saxon/Early Medieval

An Anglo-Saxon lead tank was found by metal detector in 2016 on an 'island' between the River Wreake and a smaller stream just south-west of the Ratcliffe watermill site (11-Lead tank, PAS: WMID-C31B1B). There was evidence of deliberate damage, a split running almost its length and there are a series of hack marks suggesting an attempt at cutting up the object, whilst its position made it very difficult to retrieve.



(Figure 6.27, The Lead Tank at East Goscote, Leicestershire County Council)

The tank is made of two pieces with a flat circular base, now worn and patched, attached to shallow vertical sides soldered on to the base. The tank is 310mm in diameter, 130mm high, the upper edge has a turned rim, 15-20mm wide, and weighs several kilograms. The tank was 1.24km from the Roman Road of the Fosse Way and 53.60km from the nearest lead mine at Middleton in Derbyshire.

Other Anglo-Saxon evidence included pottery (12-Pottery, HER: MLE6103) from the site of the old ordnance factory. This was matched by the mixed remains (13-Mixed remains, HER: MLE16763) at Mill Road, with Anglo-Saxon and Medieval occupation visible with a hearth base alongside a series of pits containing mixed pottery from those periods (Thomas 2012, 241-2).

Medieval/Post Medieval

No finds from this era met the criteria for inclusion

Assessment against criteria

Based on the number of finds included through the criteria, East Goscote provides moderate evidence of being a landscape of continued deposition.

East Stoke

Topography

East Stoke is a village and civil parish in Nottinghamshire situated about 1.00km to the east of the River Trent on its south bank.

Human Landscape

East Stoke is believed to be the Roman town *Ad Pontem* (the place of the bridges) based upon the Antonine Itinerary. [East] Stoke was a settlement in Domesday Book, in the hundred of Newark and the county of Nottinghamshire. The village lies on the A46 Fosse Way which cut the village in two and 7.00 km south-west of Newark-on-Trent.



(Figure 6.28—East Stoke and the various findspots—Authors own)

Legend:

- | | |
|--------------------|---------------------|
| 1 - Sword blade | 4 - Occupation site |
| 2 - Ad Pontem fort | 5 - Lead tank |
| 3 - Villa | |

Finds within 5km of the lead tank

Nottinghamshire HER 1976 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	22	54
Bronze and Iron Ages	25	32
Roman	19	928
Anglo-Saxon/Early Medieval	3	85
Medieval/Post Medieval	23	827
Unknown or Other	83	38
Total	175	1964

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

A Bronze Age sword found in the River Trent at Gawburn Nip (1-Sword blade, HER: L3106) was a Late Bronze Age blade from the Ewart Park period. The sword was in good condition but with the edge slightly worn (EMAB 1965, 29; Davis 1999, 43). This sword is comparable to tools and weapons found in the River Trent and local rivers (Scurfield 1997; Cooper 2006, 9; Gurham 2010, 1; Mullin 2012, 47), as well as providing comparisons with the finds at Caversham (Reading) and Rochester (Kent).

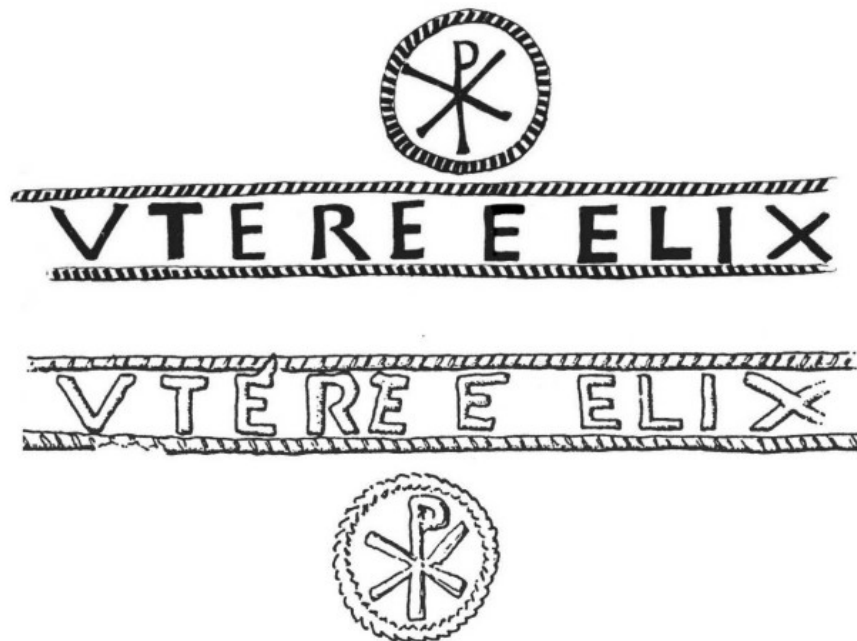
Roman

The most remains from this period were visible at the site of Ad Pontem (2-Ad Pontem fort, HER: 322257) between East Stoke and Farndon. Like Brough, East Stoke's association with the site of Ad Pontem ("the place by the bridges") is linked to the Antonine Itinerary (Rivet and Jackson 1970, 47). Its mention in this source suggested it contained a mansio (official Roman stopping place) or mutatio for changing horses en route (Burnham and Watcher 1990). The earliest phase included two superimposed buildings from the Late Iron Age beneath the fort rampart. These were a circular hut with a cobbled floor and a later rectangular hut, both with associated pottery (Watcher 1963, 16-17; Wilson and Wright 1964, 159). Occupation at this site lasted from the first to fourth centuries (Finch-Smith 1987, 284-5), originating as a first century fortlet or road post. It changed in the second century into a civilian town on the site of the fortlet, with these enclosed by earthwork defences before rebuilding in stone during the third century (Wilson 1965, 159-162).

Pottery on the edge of Stoke Wood and small iron objects at the corner of Stoke Wood (3-Possible villa, HER: 321690) show continued activities near the Trent at the corner of Stoke Wood. These were a mixture of pottery and small iron artefacts alongside a series of stone wall foundations (EMAB 1966, 40), classified by Scott as a possible villa (1993, 154). More pottery was found near a possible Roman building (4-Occupation site, HER: 321809), with a broad spread

of second to fourth-century pottery alongside tile fragments with mortar attached (Scott 1993, 154). These were found near the site of the flints, suggesting a possible settlement in this area (TPAT 1992, 46-7, 98). This indicated a broader spread of Roman occupation beyond the area of Ad Pontem, with activities centred around the River Trent.

The fragment of lead tank (5-Lead tank) was “**ploughed up in 1954 on the Roman site of Ad Pontem**” (Wright 1955, 147; Toynbee 1964, 335). Like the Brough tank, it was a single fragment decorated with a frieze of lattice-work with two human figures in long robes with raised arms either side of the inscription “**VTEREEELIX**” (luck to the user/use it with luck).



(Figure 6.29 Moulded inscriptions and chi-rho medallions from East Stoke (upper) and Flawborough (lower), Malone 2010, 140)

This is a misspelling of the typical second and third-century inscription “**UTERE FELIX**”, with another lead tank discovered at Flawborough (Nottinghamshire) in 1999 having the same misspelling as can be seen in Figure 6.29 above. Most of the Roman material came from the upper fills of the site’s enclosure ditch. It was mainly greyware from the Late Roman period (Wessex Archaeology 2017, 13), whilst coins found in the area surrounding Ad Pontem suggest an occupation into the late fourth century. This deliberate fragmentation and abandonment of this tank have similarities to the one at Brough (Nottinghamshire). This places the tank within the broader context of artefact deposition in Roman Nottinghamshire.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria East Stoke provides weak evidence of a landscape of continued deposition.

Enford

Topography

Enford is a village and civil parish in Wiltshire in the northeast of Salisbury Plain, a chalk plateau in the southwestern part of central southern England. The village is located on the banks of the River Avon, with the tank 0.11km from the river.

Human Landscape

The village of Enford is one of nine settlements on the banks of the River Avon located in the parish of the same name. Its name is derived from the Old English Enedford meaning 'duck's ford' and is recorded as 'Enedforde' in the Domesday Book in the hundred of Elstub. The nearest Roman road was 14.60km from the lead tank and the nearest lead mine was 59.05km from the tank at Chewton Mendip in Somerset.



(Figure 6.30–Enford and the various findspots–Authors own)

Legend:

1 - Bowl barrow	5 - Lidbury Camp	9 - Pit
2 - Bell barrow	6 - Chisenbury Camp	10 - Lead tank
3 - Barrow	7 - Casterley Camp	
4 - Midden	8 - Settlement	

Finds within 5km of the lead tank

Wiltshire and Swindon HER 823 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	27	28
Bronze and Iron Ages	137	100
Roman	48	783
Anglo-Saxon/Early Medieval	6	13
Medieval/Post Medieval	69	195
Unknown or Other	170	8
Total	457	1127

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

Bronze Age bowl barrows discovered near Haxton Down and Longstreet Down show the importance of the area for funerary activity. Grinsell's Enford 1 (1-Bowl barrow, HER: 220434) was one of the largest recorded in Wiltshire measuring 38m wide and 5.5m high. The twin bell barrows (2-Bell barrow, HER: 220331 and HER: 920486) contained large amounts of ash, flint flakes and animal bone alongside a primary cremation and bone pin (Grinsell 1957, 214). Another barrow east of Coombe (3-Barrow, HER: 220358) contained portions of a skeleton and urn fragments.

Evidence of Bronze Age occupation was at the East Chisenbury Midden (4-Midden, HER: 906436) and small-scale excavations uncovered chalk 'floors', hearths and a series of post and stake holes at the base of the deposit. The material accumulated during 850-600 BC and was mostly disposed domestic refuse (McOmish et al 2002, 68; Wessex Archaeology 2017, 1-2). Excavations in 2016 revealed further dumping of material, pottery, animal bone assemblages, worked flint and stone, human bone and worked bone indicating craft activities (Wessex Archaeology 2017, iv-v, 14). Late Bronze Age evidence at East Chisenbury Midden consisted of worked flints and pottery from the Late Bronze-Age to Early Iron Age (Wessex Archaeology 2017, 13).

Iron Age activity was visible at the site of Lidbury Camp (5-Lidbury Camp, HER: 220233) and excavations in 1914 dated Lidbury Camp to the Iron Age through 'La Tene' (450 BC- 1 BC) style artefacts found in eleven nearby Iron Age storage pits. Romano-British pottery overlying the Iron Age remains suggested continued occupation during the Roman period. Slag discovered in the ditches of Lidbury Camp suggested metalworking activities during its Iron Age and Roman occupation (Baggs et al. 1980, 115-134).

Further Iron Age activity is visible with the site of Chisenbury Camp (6-Chisenbury Camp, HER: 220236) a roughly circular Iron Age 'A' hill fort. Finds included pottery, part of a loom weight, three worked chalk discs, a bone 'counter' and a human jawbone as well as evidence

of human burials (Cunnington 1932-4, 1-3; Brooks 1964, 74-90). The materials matched the remains Casterley Camp (7-Casterley Camp, HER: 220402), an Iron Age univallate hillfort covering 27 hectares. It was comprised of a large Iron Age/Roman incomplete enclosure, with three related enclosures identified with the site. Finds from the site included locally produced pottery and mixed imported Gallo-Belgic wares alongside iron tools, brooches and saddle querns (RCHM 1990).

Roman

Roman occupation continued at Casterley Camp into the fourth century, with finds including mixed coins, Samian ware and personal effects including pins, bronze earpicks and tweezers, iron knives and nails and brooches (RCHM 1990). Another Roman settlement at Compton Down (8-Settlement, HER: 220391) showed further occupation in the area. This consisted of twelve huts and ditches with a causewayed entrance between its bank and ditch on a chalk spur above Water Dean Bottom (Grinsell 1957, 70). Excavations in 1967 uncovered a Roman villa (Vatcher 1967), with a domestic building discovered north of the village. The finds came from two areas, the first being between the River Avon and the A345 (9-Pit, HER: 220445) and the second excavated in 1967 was to the west of the A345 road. There were roof tile fragments and animal bones recovered from a series of pits (A, B, C and D) which had been cut through the pipe trench (Vatcher 1967, 126).

The other field contained a lead tank (10-Lead tank, HER: 220445), recovered by a mechanical digger in 1967 with the tank less than a metre below ground. The tank was 0.91m diameter (maximum) and contained Roman glass, charred wood and many Samian and New Forest ware sherds. (Vatcher 1967, 126). More New Forest ware sherds were discovered in the same trench alongside piece of floor tile and hypocaust flue tile, contained in a woodland clearing towards Enford (Vatcher 1967, 126). The third century pottery and building work indicated a domestic building or complex with part of it burning down during the third century AD.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No deposition from these periods met the criteria.

Analysis

Based on the criteria Enford provides weak evidence of being a landscape of continued deposition.

Felixstowe

Topography

Felixstowe is a coastal town in Suffolk at the tip of the Colneis peninsula and is located where the River Orwell flows into the North Sea. The lead tank was found 0.72km from the North Sea.

Human Landscape

Occupation at this area is visible through the Roman period fort, the Saxon Short Fort, under the site of Walton Castle. Felixstowe was originally known as Walton, a settlement on the River Orwell, and is recorded as this in the Domesday Book. The tank was found 18.30km from the nearest Roman Road and 234.73km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.31 - Felixstowe and the various findspots - Authors Own)

Legend:

1 - Hoard	7 -	13 - Statuette
2 - Metalwork	8 - Fort	14 - Brooches
3 - Hoard	9 - Burial ground	15 - Finds
4 - Urn	10 - Occupation	16 - Lead Tank
5 - Burial	11 - Occupation	
6 - Pottery	12 - Cemetery	

Finds within 5km of the lead tank

Suffolk HER 882 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	18	21
Bronze and Iron Ages	35	18
Roman	34	175
Anglo-Saxon/Early Medieval	11	36
Medieval/Post Medieval	9	241
Unknown or Other	326	13
Total	433	504

Bronze and Iron Ages

A founder's hoard discovered in 1883 (1-Hoard, HER: 391206) consisted of axes, knives, a sword fragment, a gouge and chape, 'casting' runners, pegged spearheads and a piece of bronze cake (VCH Suffolk 1911, 275). A Late Bronze Age metalwork collection (2-Metalwork, HER: 389667) was discovered in 1877 near Felixstowe and consisted of a bronze socketed spearhead and 'celt' alongside two further spearheads and another 'celt', suggesting this was a small hoard. Other evidence of Bronze Age hoarding was a collection of metalwork found pre-1885 (3-Hoard, HER: 391206). These included a mixture of tools and weapons, knives, a saw and chape, an ingot fragment and fragments of casting debris (Evans 1885). A series of pottery sherds were interpreted by Evans as either crucible fragments, based upon his interpretation of the finds as a founder's hoard, or sherds from a pot which may have contained these artefacts.

Bronze Age burials included a Collared Urn (4-Urn, HER: MSF3026) discovered in 1871 (Suffolk Institute of Archaeology 1962, 185). The urn was recovered alongside Roman finds, suggesting a residual find. Evidence of cremation burial practices (5-Burials, HER: 391203) consisted of Beaker ware sherds alongside burnt bone, stones, and charcoal (Clarke 1970, 326, 496). They were in a similar location to two skeletons discovered in 1853, believed to be part of a Roman burial ground (HER: 391165). Excavations in 1994 recovered evidence of a possible Bronze Age settlement at the former Brackenbury Battery. These uncovered ditches and slots containing Early Bronze Age material (6-Pottery, HER: MSF15385) consisting of Beaker ware pottery, flints and animal bones (Boulter 1995, 11-12).

Roman

The Roman period at Brackenbury Battery (7-Occupation, HER: MSF15385) comprised ditches and fills containing large amounts of domestic refuse (Boulter 1995, 21). Structural evidence was indicated by a large posthole packed with septaria and tile, indicating a potential building on the site. The ceramics dated from the second to fourth centuries, with quantities of Gallic wares alongside regional Nene Valley and Pakenham wares (HER: MSF15388). Other finds included a lava quern and tile fragments (Boulter 1995, 21). Trench digging in 1939 revealed Roman pottery sherds alongside two or three human skeletons with vessels and finger rings and pieces of deer antler. Other Roman settlements included the site near Walton Castle (8-Fort, HER: MSF2979).

The site has been lost due to coastal erosion, however, finds in the vicinity suggest an occupied settlement that was either a vicus or a port. These included a variety of Roman coins, urns and brooches (VCH Suffolk 1911, 289-91, 305-7).

Further settlement evidence was found near Felixstowe Church (9-Burial ground, HER: MSF3035), with Roman artefacts recovered alongside a Bronze Age Collared Urn in 1885. Coins from this area dated from AD 253-408, whilst sepulchral urns containing bones and ashes. Other areas of occupation included Foxgrove Gardens (10-Occupation, HER: 91186) with finds including Roman pottery sherds alongside ceramic building materials. Three second-century beakers were found alongside foundations of two walls and tile fragments, suggesting a possible villa site (Smedley and Jarvis 1955, 114; CBA 1961, 7). Besides these, an apparent 'ritual' with a hearth and well with cremated burials was found in 1873 on a cliff (11-Occupation, HER: 391218). A 'Caistor' Ware vase as at the base of the well, containing earth and acorns, led to the suggestion this was a 'ritual' well (Ross 1968, 284).

A further 'alleged' Roman burial ground was reported near the charred bones and beaker sherds (12-Cemetery, HER: MSF2979). There were two skeletons with four bronze armlets in two pairs (Fairclough 2014, 256). Other finds included a bronze statuette (13-Statuette, HER: MSF3037), a necklace, glass beads and several pots, indicating further grave goods. A similar mixture of finds was discovered near the Bronze Age hoard, consisting of brooch fragments, a bronze bust, a bronze and a bronze drop seal box with red and blue enamel (14-Brooches, HER: MSF3038).

Anglo-Saxon/Early Medieval

Anglo-Saxon occupation was found at Brackenbury Battery in 1995, with finds of pottery and mussel shells (Boulter 1995, 21-2). Other evidence from this period included a circular bronze brooch (VCH 1911, 348). Other brooch finds included a broken Type III cruciform brooch, a fragment of small brooch, a complete brooch, strap-ends, two pairs of tweezers and a fragmentary girdle hanger (15-Finds, HER: 391215). This appeared to be a funerary assemblage, thought to be from a female burial from the artefact assemblage (Ozanne 1962, 209). These were found near the lead tank (16-Lead tank, HER: 391227) discovered in 1878. The tank was 79cm in circumference, and 15cm high and with a foliage pattern similar to the tank discovered at Rochester (Kent), used to date it to the tenth century.

Medieval/Post Medieval

No finds from this era met the criteria for inclusion.

Analysis

Felixstowe provides strong evidence of being a landscape of continued deposition. The settlements and associated artefact depositions alongside funerary traditions provide clear evidence of this. Many of these funerary patterns show a mixture of cremation and inhumation practices accompanied by sizeable grave good collections. Most of the areas show overlapping occupation, particularly Brackenbury Battery and the Park. Similar patterns of artefact hoarding are visible with the Bronze Age metalwork collections into the Roman and Anglo-Saxon periods, showing continued occupation and artefact deposition across Felixstowe.

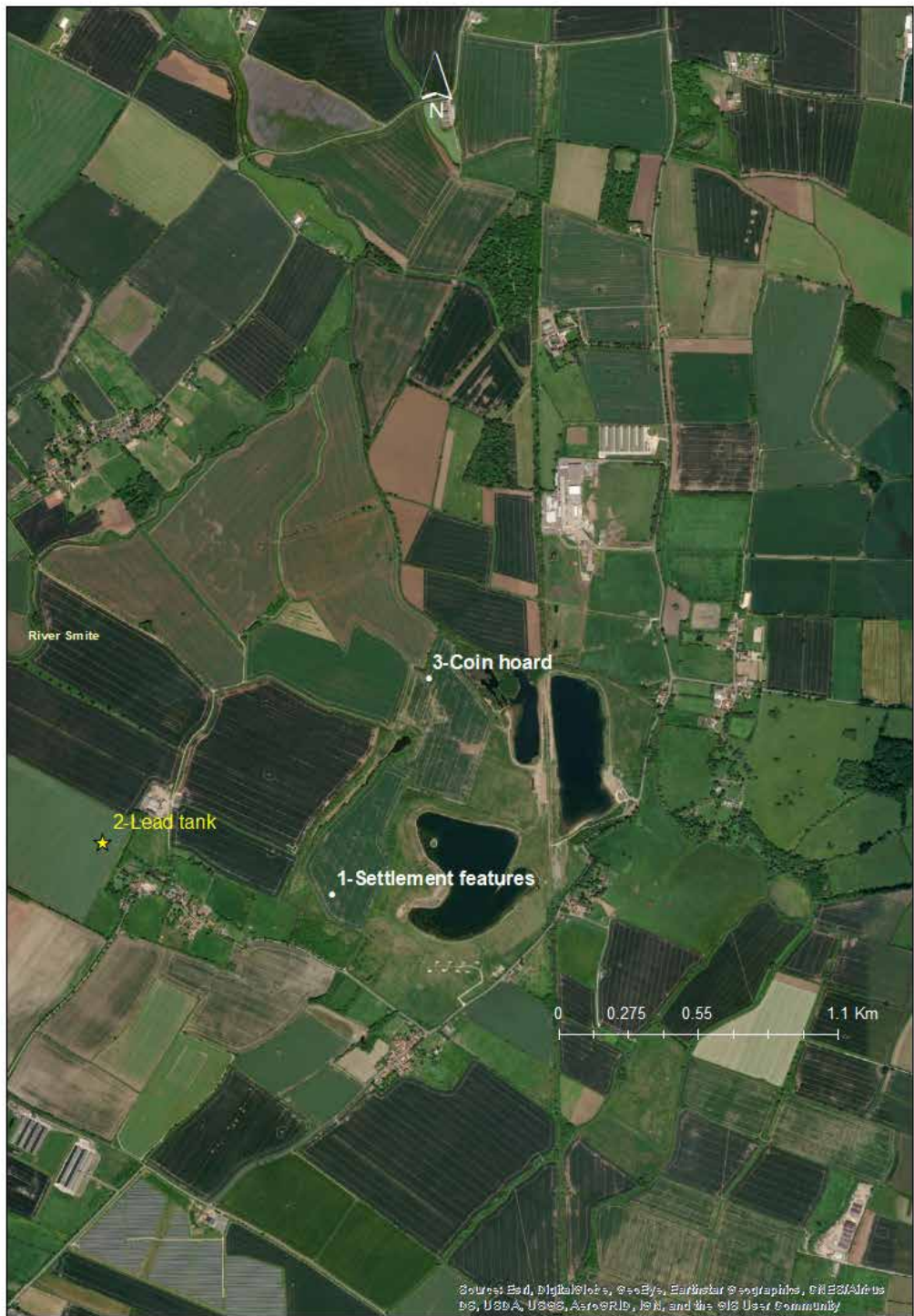
Flawborough

Topography

Flawborough is a small village and chapelry in south-east Nottinghamshire in the Rushcliffe district. It is located on a west and north-facing slope overlooking the River Smite which joins the River Devon at the northern tip of the parish and at the northern tip of the Vale of Belvoir. The lead tank was found 0.31km from the River Smite.

Human landscape

Flawborough is a linear village sitting on mainly farmland with evidence for quarry workings in the east of the parish. Flawborough is recorded as 'Flodberga' in the Domesday Book. The lead tank was 6.38km from the nearest Roman road and 50.71km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.32–Flawborough and the various findspots–Authors own)

Legend:

- 1 - Settlement features
- 2 - Lead tank
- 3 - Coin hoard

Finds up to 5km from the lead tank

Nottinghamshire HER 717 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	29	4
Bronze and Iron Ages	14	42
Roman	21	1183
Anglo-Saxon/Early Medieval	2	87
Medieval/Post Medieval	30	287
Unknown or Other	46	18
Total	142	1621

Prehistoric, Bronze and Iron Ages

No finds from these periods met the criteria for inclusion.

Roman

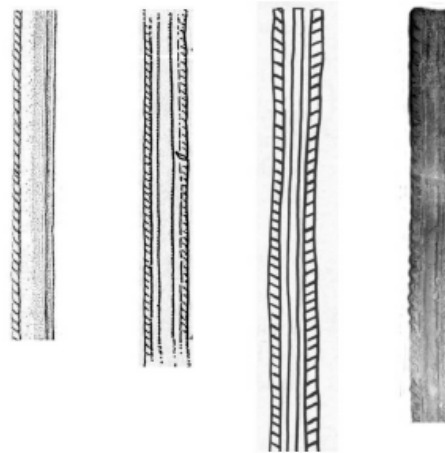
Material from the Roman period are similar to the finds at Brough and East Stoke (Nottinghamshire). A discovery of Roman material at Kilvington quarry in 1985 led to a reconnaissance excavation. This revealed Roman remains (1-Settlement- HER: 1164175) consisting of a large ditch with a wall foundation set into its filling. Three intercutting ditches and spreads of stone were also found at the site (Scott 1993, 154). These features all produced first to third century pottery, animal bone and a lead weight.

The most distinctive Roman artefact was a lead tank (2-Lead tank, HER: L10116), discovered by metal detecting in 1998 and its findspot lay within a shallow linear depression.



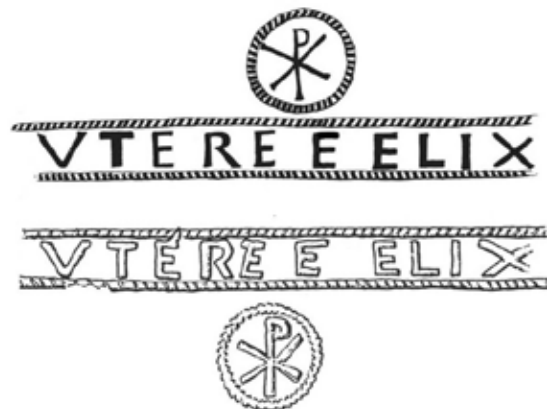
(Figure 6.33 Inscription on the lead tank from Flawborough (Photo: S Malone, Malone and Williams 2010 Rumours of Roman Finds: Recent Work on Roman Lincolnshire, 138-142)

The tank was complete, but cut in two halves and damaged in the form of ‘knocks, scratches, random circular punch marks and possible graffiti, with both sides bent and folded inwards’.



(Figure 6.34 Raised cable-edged strapping: left to right, Brough, Flawborough, Walesby, Ludford – Malone 2010,140)

As illustrated in Figure 6.34 the tank had cable-edged strapping that was similar to the tanks at Brough, Walesby and Ludford. The tank was approximately 0.82m in diameter and 0.4m deep and decorated with four figures in short tunics with arms raised, beneath the inscription. VTERE EELIX, within a frieze with tendril designs.



(Figure 6.35 Moulded inscriptions and chi-rho medallions from East Stoke (upper) and Flawborough (lower), Malone 2010,140)

This is a misspelling of the typical second and third-century inscription “UTERE FELIX”, with another lead tank discovered at East Stoke (Nottinghamshire) having the same misspelling as can be seen in Figure 6.35 above.

The field also had occasional surface finds of Iron Age, Roman and Medieval pottery, artefacts which were recovered from the ditches surrounding the pit containing the lead tank (Elliot and Malone 2005, 25). The tank was divided into two pieces lying on top of each other. The pit was created to fit these pieces, located at the intersection of a sequence of ditches. These dated from the first century BC to Late fourth century AD (Elliot and Malone 2005, 28-9). The pit containing the tank also contained a mixture of animal bone and Early and Late Roman pottery from other features. A shallow Post Medieval feature ran adjacent to these and cut into two of the ditches showing later activity in the area. This contained a combination of residual Roman finds

alongside sherds of Medieval and Post Medieval pottery. The state of the tank and its burial in the enclosure ditch suggests deliberate abandonment, likely coinciding with the abandoning of a possible settlement.

Anglo-Saxon/Early Medieval

No finds met the criteria for inclusion.

Medieval/Post Medieval

Later occupation is visible with the Post Medieval coins (3-Coin hoard, PAS: DENO-652D30) found in fields north-east of Flawborough. These were a mixture of 19 silver shillings from the reigns of Elizabeth I, James I and Charles I from AD 1560-1640. Two of the Elizabethan shillings were defaced whilst one was cracked, another two were deliberately bent and one of the Charles I shillings was also bent. Four of the shillings were also clipped, showing a mixed assemblage of coins that were likely deliberately abandoned. They were in a far more remote location than the other finds, since they were much further north than the other finds in this area.

Analysis

Flawborough provides weak evidence of being a landscape of continued deposition like Brough and East Stoke.

Flixborough

Topography

Flixborough is a village and civil parish in North Lincolnshire. It is situated 8km south of the Humber estuary, overlooking the floodplain of the River Trent on the western extremity of the Lincoln Edge escarpment. The lead tanks were found 1.11km from the River Trent.

Human Landscape

The most notable occupation at Flixborough consists of an Anglo-Saxon settlement excavated by Humberside Archaeological Unit from 1989-1991 (HER: 5018). Flixborough is listed as "Filchesburg" in the Domesday Book, translated as "fortified dwelling on the cliff slope" (Eminson). The lead tank was found 8.75km from the nearest Roman road and 79.73km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.36–Flixborough and the various findspots–Authors own)

Legend:

- | | | |
|--------------------|---------------------|---------------------|
| 1 - Bronze weapons | 4 - Occupation area | 7 - Occupation site |
| 2 - Cinerary urn | 5 - Settlement | 8 - Lead tanks |
| 3 - Cremation | 6 - Inhumations | |

Finds within 5km of the lead tank

North Lincolnshire HER 1123 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	49	85
Bronze and Iron Ages	21	114
Roman	37	947
Anglo-Saxon/Early Medieval	9	195
Medieval/Post Medieval	14	1723
Unknown or Other	24	282
Total	154	3346

Prehistoric

No depositions from this period met the criteria.

Bronze and Iron Ages

Ploughing at Willow Halt Quarry recovered a small Late Bronze Age hoard (1-Bronze weapons, HER: 1975) of bronze celts, spearheads and a sword (Dudley 1942, 92, Davey 1973, 95; Loughlin and Miller 1979, 198). This mixture of complete and fragmented material is similar to collections of Bronze Age material from Burwell (Cambridgeshire), Caversham (Berkshire), Felixstowe (Suffolk) and Oxborough (Norfolk). A cinerary urn (2-Cinerary urn, HER: 19681) found in 2001 at Flixborough Quarry was an undecorated Middle Bronze Age 'bucket' type. It was located one metre below the surface and had collapsed inwards (Leahy 2001; Chamberlain 2002).

Roman

A Roman period cremation (3-Cremation, HER: 19693) was discovered in a pit containing a black fill with fragments of charred bone, charcoal, and pottery throughout. The charred bone weighed 176g in total and analysis of the dentistry indicated that the individual was an adult (Leahy 2001; Chamberlain 2002). Other Roman occupation included the occupation site (4-Occupation site, HER: 1901) found during the erection of the Normanby Park works. This was a well-defined Roman occupation site, with finds including a bronze stand with a central column surmounted by a loose disc (Dudley 1949, 172). It had parallels to a first/second century AD example found during the excavations of Pompeii (Henig 1975, 212) and suggests it was imported from southern Italy. Further Roman occupation was visible west of Conesby Farm (5-Settlement, HER: 26092) following excavations in 2015. This consisted of a limestone building with a construction cut sealed by a sand layer with pottery, burnt stone and mortar fragments. There were also a series of ditches and pits containing pottery, animal bone, iron working slag and a possible furnace lining. Another pit was cut into this which contained second-third century pottery, iron smithing slag and a possible furnace lining (Peachey 2015, 15).

Anglo-Saxon/Early Medieval

Anglo-Saxon activity is visible with a cemetery near All Saint's Church (6-Inhumations, HER: 1965) in 1998. These occurred following the discovery of human remains during sand extraction, with extended burials in an east-west alignment that lacked grave goods (Buckleburry 2004, 361; Leahy 2007). These were like several graves found at the Mid to Late Saxon occupation site (7-Occupation site, HER: 5018). The site was discovered following finds of 'Roman' pottery and loom weights near a church in the deserted Medieval village of North Conesby. Excavations from 1989-91 revealed a rural settlement occupied from the eighth to eleventh centuries. There were over 40 buildings on two parts of a spur separated by a shallow depression which was gradually filled with refuse over time (Loveluck 1998, 146; Leahy 2007, 137). Most of the buildings had stone and clay hearths, with Building One at the site believed to be a chapel for the leading family of the settlement. Five inhumation graves were found in the structure, with a similar east-west alignment to the eleven burials found near All Saint's Church.

There was intense occupation from the eighth to the ninth century, with downsizing during the ninth and tenth centuries. Excavations recovered over 10,000 finds from this site, with activities ranging from literacy to craftworking. An alphabet ring, styli and a lead plaque indicate a possible religious site in the area (Loveluck 1997, 154-4; Leahy 2007, 140). Other finds included decorated dress accessories, domestic utensils, horse-riding gear, textile-producing equipment, pottery alongside metalworking and glass working evidence (Loveluck 1997, 154-5). Imported artefacts consisted of wheel-thrown pottery, glass vessels, coinage and a lava quern from France, the Low Countries and Germany (Loveluck 1997, 154-5; Adams 2017, 199, 249). Activities at the nearby sand quarry uncovered a lead tank and its associated tool hoard (8-Lead tanks, HER: 17283). There were two lead tanks found in a ditch during excavations between 1989 and 1991. The larger vessel was decorated with a cast design of vertical ribs and a six-armed star. The larger tank set above smaller one with a tool hoard inside it. The tank also had the inscription "VTERE EELIX" and the same inscription was on the lead tank found at East Stoke. The tool hoard was a mixture of agricultural and carpentry tools, contained between both tanks indicating deliberately burial of the artefacts, likely connected to the abandoning of the Anglo-Saxon site.

Medieval/Post Medieval

No depositions from this period met the criteria.

Analysis

Based on the criteria Flixborough provides weak evidence of being a landscape of continued deposition.

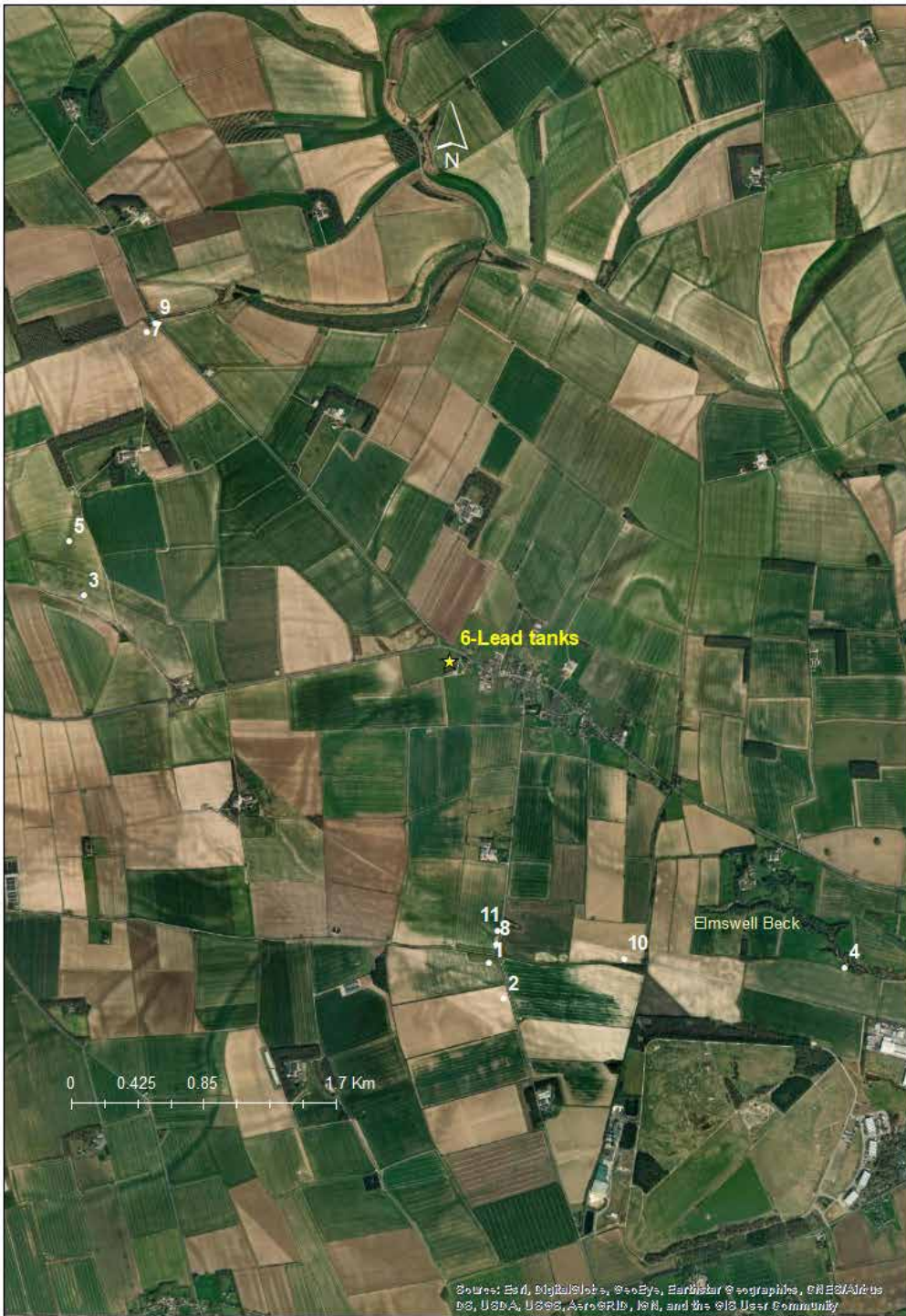
Garton-on-the-Wolds

Topography

Garton-on-the-Wolds is a village in the East Riding District of Yorkshire. Garton is located on the Yorkshire Wolds, a series of low hills which drop to the Vale of York on their west and flatten into the plain of Holderness on their east. The lead tanks were found 2.49km from the River Hull.

Human Landscape

Garton-on-the-Wolds is 5km north-west of Driffield town centre and is east of the small village of Wetwang. The village is listed as “Gabyune” in the hundred of Torbar in the Domesday Book. The lead tanks were found 4.45km from the nearest Roman road and 99.7km from the nearest lead mine at Grassington in North Yorkshire.



(Figure 6.37—Garton and the various findspots—Authors own)

Legend:

1 - Barrow	5 - Mixed occupation	9 - Barrow
2 - Barrow	6 - Lead tanks	10 - Cemetery
3 - Chariot burial	7 - Cemetery	11 - Cropmarks
4 - Settlement	8 - Cemetery	

Finds within 5km of the lead tanks

Humber Historic Environment Record 405 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	38	17
Bronze and Iron Ages	108	70
Roman	9	409
Anglo-Saxon/Early Medieval	8	41
Medieval/Post Medieval	9	223
Unknown or Other	3	10
Total	175	770

Prehistoric

Excavations in 1866-7 discovered a possible Neolithic round barrow at Garton Slack 81 with a 'trough' or 'crematorium' (Mortimer 1906, 238-41; Kinnes 1979, 9-10). Two parallel streams of gravel contained burnt gravel, charcoal and layers of incinerated adult and juvenile bones (Mortimer 1905, 238-41). An oval pit contained several burials with grave goods including a jade bead, a beaker and beaker sherds. Nearby gravel pits contained more beaker sherds and a crouched female (Kinnes 1979, 9-10). This burial was intact but one of the feet was replaced by worked flints. A bone pin was placed behind the head, and a flint scraper was discovered near the teeth and these were used to date these activities between 2200 to 1500 BC.

Bronze and Iron Ages

Bronze and Iron Ages occupation are visible with numerous round and square barrows such as Garton Slack round barrow 81 and 82 (1-Barrow, HER: 4416 and 2-Barrow, HER: 4417). Excavations in 1866 discovered a trough with burnt flint and chalk beside the burnt bones of six individuals. The trough also contained unburnt bones whilst a pit contained a burial. These were the crouched remains of a young male with a beaker at its feet, interpreted by Mortimer as the primary internment (Mortimer 1905, 235-7). Later authors believed the burial to be a secondary Late Neolithic/Early Bronze Age burial cut into the remains of the mound (Manby 1963, 173-205).

Iron Age square barrows were discovered with one containing a chariot burial (3-Chariot burial, HER: 7912). Quarrying activities in 1964-1965 uncovered further burials (Brewster 1971, 289) and a Bronze Age long barrow cremation alongside four square ditched Iron Age barrows, like Beverley (Yorkshire), and a cemetery of single graves. Excavations from 1967-1971 uncovered a mixture of Bronze and Iron Age barrows and graves alongside circular 'ritual' enclosures and a small rectangular enclosure with Iron Age pottery. A series of pits contained carved figurines, incised chalk blocks and weights alongside animal burials and infant remains (Brewster 1971, 289). Burial goods included glass beads alongside a body, blacksmiths' tools, and an iron mirror from a barrow.

A chariot burial was discovered (Brewster 1971, 289-90), surrounded by a rectangular barrow and a series of pits, containing a sheep burial and an inverted human skull. Both wheels were placed with their hubs on the grave bottom and the burial was laid across them, causing them to buckle inwards towards the centre (Brewster 1971, 290). The inhumation was a crouched adult male with the decapitated skeleton of a pig lying on its upper part. Excavations at Pocklington in East Yorkshire in 2017 discovered numerous graves and barrow burials, including a large square barrow containing a fully upright chariot and two upright horses. The inhumation was also placed in a crouched position whilst pig bones surrounded the chariot (Krakowka, 2019).

Roman

Roman occupation is visible with a mixture of settlements (4-Settlements, HER: 7912 and 5-Mixed occupation, HER: 4320). The settlement site had a corn drying kiln, hearths, enclosure ditches and pits. Finds included worked chalk figurines, coins, inhumation burials with grave goods. The homestead near the chariot burial contained a mixture of features with a well alongside numerous pits and ditch systems (Brewster 1971, 289). Coins (PAS: LANCUM-E3BE5C) were discovered near the settlement site, with nine silver denarii (108 BC to AD 79) alongside several other Republican and Imperial coins (46BC to AD 211).

Anglo-Saxon/Early Medieval

Evidence for Anglo-Saxon occupation is visible through the three lead tanks/buckets (6-Lead tanks) that were found during excavations in 1954. The lead tanks were complete and undamaged, with sooting and holes in base where lead had melted. The tanks were accompanied by Anglo-Scandinavian or Viking bone and iron artefacts (Cowgill 1994, 271), similar to the tank at St Saviourgate in York. Evidence for Anglo-Saxon burials were visible with a mixture of cemeteries and individual burials (7-Cemetery, HER, 4310, 8-Cemetery, HER: 4308, 9-Barrow, HER: 4309, 10-Cemetery, HER: 8083, and 11-Cropmarks). The first cemetery discovered in 1848-52, contained two groups with 30 inhumations. Finds included pottery, annular brooches and gold pendants, bones combs, iron knives, spindle whorls, buckles and bridle-bits. The second group had no accompanying grave goods, leading Mortimer to classify the first group as 'pagan' and the second group as 'Christian' (Mortimer 1906, 247-57). The other two cemeteries consisted of burials found during levelling of the Sledmere-Driffeld road (Mortimer 1906, 264-70). Excavations from 1959 found further remains, with a series of sceattas dating from AD 720-5 found with one of the burials. This cemetery was near the earlier Bronze Age round barrows, with the cropmarks indicating this was a Bronze Age barrow repurposed by later Anglo-Saxon communities as seen with other later Anglo-Saxon burials centred around earlier monuments (Williams 1998, 94-5).

Medieval/Post Medieval

No depositions from this period met the criteria.

Analysis

Based upon the criteria Garton represents a strong example of being a landscape of continued deposition.

Grassington

Topography

Grassington is a market town in the Craven District of North Yorkshire, located in the West Riding district of Yorkshire. Grassington is located in Wharfedale in the Yorkshire Dales, in the valley in the upper parts of the River Wharfe, with the town on the east bank of the Wharfe. The tank was found 1.61km from the River Wharfe.

Human landscape

Grassington is described in the Domesday Book as part of the estate of Gamal Barn which included seven carucates (840 hectares) of ploughland. Grassington is a former lead mining town, with a series of lead mines located above the village at Grassington Moor. The tank was found 13.17km from the nearest Roman road and 2.06km from the lead mines/workings at Grassington.



(Figure 6.38–Grassington and the various findspots–Authors own)

Legend:

- | | | |
|----------------------|---------------------------|---------------|
| 1 - Cairn and beaker | 4 - Grass Wood settlement | 7 - Metalwork |
| 2 - Burial | 5 - Settlement | 8 - Metalwork |
| 3 - Enclosure | 6 - Lead tank | |

Finds within 5km of the lead tank

Yorkshire Dales National Park Authority 2541 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	22	3
Bronze and Iron Ages	66	13
Roman	4	27
Anglo-Saxon/Early Medieval	1	9
Medieval/Post Medieval	259	93
Unknown or Other	198	122
Total	550	267

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

A series of cairns from the Neolithic and Bronze Age were found in the hills above Grassington, with a stone cairn discovered on High Close in 1892 (1-Cairn and beaker burial, HER: 488). This cairn had a series of chambers created from limestone boulders and separated by rectangular stone partitions. The largest and central chamber contained a cremation burial and four inhumation burials surrounded by flint artefacts. An Early Bronze Age All Over Corded Beaker found with these remains suggested the cremation was the primary burial whilst the inhumations were later additions (Arthur 1929, 354-365; Gilks 1973, 175, 177).

A large turf-covered stone cairn was found at Lea Green (2-Cairn, HER: 46643) on a small natural hillock. The cairn consisted of two large circular walls with a central circular grave pit containing a crouched skeleton under a limestone slab covering. The excavators dated the burial as Bronze Age whilst three secondary burials around the central burial were dated to the Iron Age through a bronze ring (Raistrick 1938, 127). A Late Bronze Age cairn at Lea Green (HER: MYD4032) showed similar interactions from later communities like Garton-on-the-Wolds (Yorkshire). Excavations in 1893 revealed a large turf-covered loosely packed limestone construction containing several burials at various parts in the mound (Raistrick 1938, 127). The grave goods included four iron knives, a bronze pin, a Late Bronze Age razor and a bone pin (Challis and Harding 1975, 57).

Iron Age occupation is visible with many field systems and hut circles above Grassington, including a walled enclosure (3-Enclosure, HER: 48432). A 'wall passage' at the north end formed from a small three-sided enclosure. This was constructed from loose rubble walling abutting a limestone scar, with a possible entrance located on the south side of the supposed 'wall passage'. Whilst there were no finds, similar 'wall passages' have been discovered at presumed Iron Age sites in the Wharfedale area, indicating a broader spread of occupation across the area. Another possible Iron Age site was discovered at Grass Wood (4-Grass Wood settlement, HER: 593890 and 46599). A single hut circle was found, although associated hut circles at Grass Wood Camp

and a concentration of hut circles and 'Celtic lynchets' were mapped to the south-east of this. Whilst Raistrick dated these to the Late Bronze Age (Raistrick 1937, 171), Iron Age/Roman stone spindle whorls alongside pottery sherds from both periods led to excavators providing an Iron Age/Roman date for these features (Raistrick and Chapman 1929, 166-9). The pottery was a mixture of thin redware, pseudo-Samian and terra-sigalata discovered at a 'kitchen-midden', with other 'kitchen-middens' at Grass Wood near the road producing pottery and coins from the first to fourth centuries.

Roman

There are parallels with a Late Iron Age to third-century Roman settlement on the site of Lea Green (5-Settlement, HER 46652) and this comprised 20 enclosures surrounded by a limestone wall. Excavations in 1893 found pottery alongside millstones, iron knives, bone artefacts and 32 flint flakes or chips (Raistrick 1937, 169-70). These were found in association with the Grassington field system created from stone and turf banks which dated from the Late Iron Age to Roman periods. This was a small settlement comprised of remains of rectangular huts and enclosures (Curwen 1928, 168-172; Frere and St Joseph 1984, 214-6), with numerous second to fourth-century pottery sherds providing similar dates to the material at Grass Woods and Lea Green. This occupation was probably based around lead mining, as seen with a cast lead pig or ingot (LANCUM-637434) found above Lea Green.

Anglo-Saxon/Early Medieval

Anglo-Saxon occupation is visible with a lead tank (6-Lead tank, PAS: LANCUM-DA3E25) and associated metalwork (7-Metalwork, PAS: LANCUM-205548) discovered in the hills alongside evidence of a potential settlement.



(Figure 6.39—Lead tank found at Grassington, Portable Antiquities Scheme)

The lead tank was found in 1975 by metal detector near a settlement at Lea Green. The lead tank was almost complete with a handle missing and was 360mm long, 300mm wide, and 180mm thick. There was a mixture of Anglo-Scandinavian iron tools with lead tanks. Another essential feature of the metalwork at Grassington was that at least three exceptionally well-preserved cauldrons (LANCUM-615765, LANCUM-6100C0 and LANCUM-60BED6) were included in this assemblage. The three cauldrons were found interlocking together, indicating they were buried upon the abandonment of the settlement, like the Flixborough hoard and tank in Lincolnshire.

Medieval/Post Medieval

No depositions from this period met the criteria for inclusion.

Analysis

Based upon the criteria Grassington provides weak evidence of being a landscape of continued deposition.

Huntingdon

Topography

Huntingdon is a market town in Cambridgeshire, located on the north bank of the River Great Ouse. The town is near Portholme Meadow, England's largest site of Special Scientific Interest. The lead tank was discovered in the River Ouse.

Human Landscape

Huntingdon is on the Roman road network and is situated on the Via Devana, located just north of the Roman town of Durovigutum at Godmanchester. The town appears in the Domesday Book as 'Huntedon', roughly translated as 'hunter's hill' or 'Hunta's Hill' (Ekwall 1936, 258). The tank was found 0.86km from Ermine Street and 127.17 km the nearest lead mine at Matlock in Derbyshire.



(Figure 6.40–Huntingdon and the various findspots–Authors own)

Legend:

1 - Complex	7 - Villa	13 - Coin hoard
2 - Remains	8 - Villa	14 - Cemetery
3 - Remains	9 - Remains	15 - Grubenhous
4 - Features	10 - Durovigutum	16 - Burials
5 - Remains	11 - Hoard	17 - Mixed remains
6 - Cemetery	12 - Lead tank	18 - Coin hoard

Finds within 5km of the lead tank

Cambridgeshire HER 1191 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	61	1
Bronze and Iron Ages	31	19
Roman	63	970
Anglo-Saxon/Early Medieval	6	7
Medieval/Post Medieval	87	99
Unknown or Other	57	6
Total	305	1102

Prehistoric

A Neolithic monument complex (1-Complex, HER: MCB16367, HER: 1080792) was discovered at Rectory Farm in Godmanchester. Excavations in 1988-1992 uncovered a trapezoidal enclosure with 24 free standing posts surrounded by a boundary ditch. A cursus monument was located on the southwest end of this containing a transverse ditch and a series of pits with charcoal, flint and stone artefacts and mixed pottery alongside human bones (Mcavoy 2000, 51-6).

Bronze and Iron Ages

Early Bronze Age finds were discovered alongside Anglo-Saxon artefacts in a gravel pit (2-Remains, HER: 01946) and these included stone axes and a flint knife, four skeletons, a coarse urn inverted over burnt bones, an iron fibula, a bronze pin and a puddingstone quern (Page and Proby 1926, 276-7).

Mixed remains at Pathfinder House (3-Remains, HER: MCB18577) consisted of Late Iron Age and Roman features cut by later Anglo-Saxon and Medieval features. Iron Age features (4-Features, HER: 1336910) were uncovered in 2000 and included a group of three pits, with one containing a horse's skull placed above a layer of cobbles and overlain by pottery.

Roman

Roman activity at Pathfinder House consisted of ditches, wells, cesspits and rubbish pits, graves and industrial features (Ashwell, Turner and Rothwell 2006). Similar Mixed Iron Age/Roman pottery and Roman remains at Watersmeet (5-Remains, HER: MCB16330) suggested an occupation site, consisting of an Early to Middle Roman enclosure succeeded by a Late Roman cemetery (Cooper and Spoerry 2000, 8-10; Nicholson 2006, 70-71). Two second century cremation groups were found at Watersmeet with the burials aligned east to west with no grave goods. Five outlying inhumations were orientated west-south-west to east-north-east with no evidence of coffins and grave goods present in only two cases (Nicholson 2006, 60). A large fourth-century cemetery (6-Cemetery, HER: CB14699) with evaluations revealing a series of 62 fourth-century Roman burials alongside droveways, kilns and ovens dating from the late third/early-fourth centuries (Jones 2003).

The cemetery area was near a Roman villa (7-Villa, HER: 02545a) with occupation dated from the first century AD and contained pottery and pots alongside mixed imported wares (Council for British Archaeology 1969, 3). A similar villa was discovered at Godmanchester (8-Villa, HER: 02546) consisting of a small corridor-house (Frend 1968, 19-43). Later excavations discovered a small clay hearth with a series of burnt planks, iron slag and iron objects, suggesting a small forging hearth (Frend 1968, 19-43).

Remains north of Park Lane (9-Remains, HER: 01537) were a series of rectangular timber framed buildings. A series of pits and boundary ditch were found whilst a small upright pottery kiln and furnace were constructed behind the buildings (Green 1976). A series of burials were found including a fourth-century inhumation in a fenced enclosure and three north-south facing coffined burials with colour-coated beakers. These activities can be seen in association with the large Roman settlement Durovigutum at Godmanchester (10-Durovigutum, HER: 00857), a walled town originally founded as a late first century fort which developed into a civil settlement on either side of Ermine Street (Green 1957, 85-8). Later in the third century a principia and walls were built, suggesting the town had achieved self-government or was used for tax collection (Wilson 1973, 250-3). A hoard (11-Hoard, HER: 366763) of first to third century coins was discovered in association with the bath-house which was gutted and left derelict at the end of the third century. Occupation continued into the fourth century but this was heavily reduced, with the mansion and basilica demolished and used to strengthen the city walls (Green 1977, 6-23).

A cylindrical lead tank with a flat base (12-Lead tank, HER: 02583) was discovered pre-1934 in the River Ouse. The tank had straight sides and one remaining lug and the tank was decorated with repeated saltire with circles between arms and measured 680.0mm x 370.0mm x 840.0mm. A large part of its side was missing which similar to the Caversham tank. Further evidence for deliberate deposition consisted of a coin hoard (13-Hoard, PAS: IARCH-5BA6B1) of 36 fourth-century coins from an inhumation cemetery in Godmanchester. Another cemetery (14-Cemetery, HER: 366559) was discovered with nine burials alongside first and second century pottery and tiles, part of an Anglo-Saxon cinerary urn and Medieval pottery and tiles (Garood 1927, 315-9).

Anglo-Saxon/Early Medieval

Excavators discovered Anglo-Saxon to Medieval activities at Pathfinder House (3-Remains, HER: MCB18578) including a large ditch and a pit cut into the Roman material. Evidence for other occupation included a grubenhuis (15-Grubenhuis, HER: 366866) besides pits and wattle-lined walls discovered during excavations in 1975 (Webster and Cherry 1975, 220). Pottery revealed a decline in activity in the late twelfth/early thirteenth century (Kaye 2006; Mellor 2009). A series of burials (16-Burials, HER: 366547) were uncovered in a gravel pit, with four skeletons besides a coarse urn inverted over cremated bones, a brooch, a pin, a flint knife and a quern and an axe (Meaney 1964, 106).

Medieval/Post Medieval

Other Medieval activities were found at Stukeley Road (17-Mixed remains, HER: 03958), with at least 20 skeletons orientated east-west alongside collections of Early Medieval to Medieval pottery and more than 200 coins (Cambridgeshire Archaeology 1993; Spoerry 1998). More

human remains were found in a pit, with evidence of shrouds suggesting these were from a nearby medical hospice. Later excavations in 2008 and 2014 uncovered an Anglo-Saxon and Medieval settlement, with three separate groupings of structural remains. These included ditches, boundary ditches and pitting activities dating from the ninth to twelfth centuries and twelfth to fourteenth centuries (House 2015).

Other Medieval remains include a coin hoard (18-Coin hoard, HER: 02682) with a collection of 1,108 silver coins from the late fifteenth and early sixteenth century placed in an earthenware pot with a second pot used as a lid (Dickinson 1965, 138-40).

Analysis

Based on the criteria Huntingdon provides strong evidence of being a landscape of continued deposition.

Icklingham

Topography

Icklingham is a small village in the Forest Heath District of Suffolk in East Anglia. The village is located on the banks of the River Lark, a tributary of the River Ouse. The lead tanks were found 0.33km, 0.57km and 1.70km from the River Larke.

Human landscape

The village is located on the Ickniel Way Path and is one of the largest Anglo-Saxon settlements in Suffolk alongside West Stow which is 5km south east of Icklingham. The village is listed in the Domesday Book in the hundred of Lackford. The lead tanks were found 3.60km, 3.62km and 4.76km from the nearest Roman road and 171.35km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.41–Icklingham and the various findspots–Authors own)

Legend:

1 - Pit	7 - Hoard	13 - Figurine
2 - Artefacts	8 - Hoard	14 - Figurines
3 - Hoard	9 - Scatter	15 - Lead cistern
4 - Villa	10 - Hoard	16 - Cemetery
5 - Lead tank	11 - Hoard	17 - Cemetery
6 - Lead tank	12 - Hoard	18 - Settlement

Finds within 5km of the lead tanks

Suffolk HER 1042 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	66	33
Bronze and Iron Ages	49	88
Roman	38	1421
Anglo-Saxon/Early Medieval	10	87
Medieval/Post Medieval	20	1248
Unknown or Other	32	64
Total	215	2941

Prehistoric

Earliest occupation dates are from the Palaeolithic period, with gravel pit 550 (1-Pit, HER: IKL 012) containing 17 Palaeolithic Acheulian hand axes and flakes from a glacial deposit (Wessex Archaeology 1996, 95). A mixture of Palaeolithic hand axes was found surrounding this pit (Wymer 1985, 132, 356), whilst Mesolithic and Neolithic flint axe heads and a flint sickle were discovered in pits near the Palaeolithic hand axes (PSIA 1968, 132; *ibid.* 1969, 322). A large collection of 1,515 Neolithic stone artefacts was discovered at Lackford (2-Artefacts, HER: 380021) including a series of axes, picks, blades and arrowheads (Roe 1968, 272).

Bronze and Iron Ages

Bronze Age finds included a collection of Late Bronze Age socketed axes (3-Hoard), found alongside a bronze ingot (Suffolk Institute of Archaeology 1984, 324).

Roman

Iron Age, Roman and Anglo-Saxon occupation was recorded at Horselands Field (4-Villa, HER: IKL 034) with excavations in 1877. Further excavations discovered a hypocaust and building walls alongside third-century coins (Prigg 1878, 12-15; *ibid.* 1888, 221). Deliberate dismantling was visible with the removal of tiles and further missing evidence from structural remains, dated to the late fourth century through "**small brass**" coins including a small hoard of 33 coins. Other finds included pottery, animal bones and an iron axe head (Prigg 1901, 72-5). Later activities at 'the Icklingham villa site' discovered a lead tank (5-Lead tank, HER: IKL 034) in 1939, close to the site of the villa (Kraay 1942, 219-220; West and Plouviez 1976, 66).

The tank was complete and undamaged with a Chi-Rho symbol on the side of the tank in two places and although the chi-rho is correctly marked; the positions of the alpha and omega have been reversed. Although this could have had religious significance; it is more probably the result of a mistake in the casting process by someone unaccustomed to the Greek alphabet. There were no contents with the tank except one coin of Valentinian and the tank had a diameter of 0.810m, was 0.330m high and 5mm thick with a volume/capacity of 173 litres.



(Figure 6.42–Icklingham Lead Tank found in 1939, British Museum)



(Figure 6.43–Icklingham Lead Tank found in 1971, Ipswich Museum)

The tank has close parallels to another lead tank (6-Lead tank, HER: IKL 033) found in Horselands Field in 1971 close to the site of an apsidal building ('church') and inhumation cemetery. The tank was complete and undamaged with a diameter of 0.87m, 0.37m deep with a volume/capacity of 220 litres. It was also decorated with a Chi-Rho monogram and containing iron door fittings, iron tools and strips of metal (West and Plouviez 1976, 74-8).

Excavations in 1974 discovered a Late Roman, possible Christian inhumation cemetery overlying an earlier second-century site (HER: 379971). There were 45 inhumations with one contained in a stone coffin and three showed apparent 'shackle-lesions' (West and Plouviez 1976, 103-125).

Trenching in 1839 discovered a pewter hoard (7-Hoard, HER: IKL 307) consisting of dishes and plates, an amphora, and a little pan, buried 0.45m below the surface and clustered in a manner which suggested a hasty burial. Later discoveries included two small Roman brass coins and a bronze vessel (VCH 1911, 309-10; West and Plouviez 1976, 63). Another pewter hoard (8-Hoard, HER: IKL 306) with 18 vessels was recovered in 1853 alongside a pewter hoard with a Late Roman bronze cauldron. More pewter finds were discovered in the artefact scatter (9-Scatter, HER: IKL 305). Ploughing unearthed pottery alongside bones, oyster shells, iron objects, pewter pieces, tile, and brick (Briscoe 1958, 92), suggesting a villa site.

At least three-coin hoards showed evidence of apparent 'votive deposition', including two discovered in 1902 and 1906 (10-Hoard, HER: IKL 312 and 11-Hoard, HER: IKL 311). These were a mixture of second to fourth-century coins, with the third hoard containing 1084 bronze and silver coins in an earthenware jar bowl discovered in 1906 (Numismatic Chronicle 1929, 319-327; *ibid.* 1938, 59-61; Casey 1979, 45-7). A silver hoard discovered in 1880/90 (12-Hoard, HER: IKL 312) consisted of 230 fourth-century silver coins. The hoard reportedly contained 349 fourth-century silver coins in a small pot (Prigg 1901, 76-9), with similarities to the other coin hoards. Another coin hoard (HER: 868931) consisted of 250 fourth-century coins alongside fragments of a woollen container (Grew 1979, 376). The coin hoards provide comparisons to the pewter hoards and apparent 'votive' bronze figures (13-Figurine, HER: IKL 083 and 14-Figurines: IKL 213). These figures were a single bronze Hercules and a bronze Hercules and Mercury found together (Green 1976, 213). Further evidence of apparent ritual activity included a collection of mixed bronzes with a plaque depicting the head of a horned goddess, two snakes and two amulets (Green 1973, 213). Further evidence of apparent votive deposition consisted of the lead cistern (15-Lead cistern, HER: IKL 301), found in an intact state in 1726. The tank was complete and undamaged, decorated with cable banding with Raised dots and a single '^' shaped motif. The tank was 0.71m in diameter, 0.4m deep with a volume/capacity of 182 litres.

Anglo-Saxon/Early Medieval

Anglo-Saxon occupation was visible with a cemetery discovered at Mitchell's Hill (16-Cemetery, HER: IKL 026) in 1850-1854 and 1866. This consisted of 27 burials including child burials with two small pots and a cruciform brooch and a horse burial (Macgregor and Bolick 1993, 230). Grave goods included mixed beads and brooches, a comb, pottery and personal effects (Macgregor and Bolick 1993, 230). A large cremation cemetery with over 500 Early Saxon cremation burials was found discovered in Lackford (17-Cremations, HER: 379960). Excavations in 1974 uncovered cinerary urns covered by flint nodules or Roman tiles on a high northerly spur with the River Larke to its north. A large number were deliberately holed before burial whilst grave goods included brooches, beads, iron shield bosses, spearheads and farming equipment, combs, tweezers and shears that were broken before internment (Scott 1993, 290-30). Extensive Anglo-Saxon activity was visible at the nearby West Stow settlement (18-Settlement, HER: WSW 002) and associated cemetery. Excavations from 1957-1961 and 1965-1972 revealed 67 sunken featured buildings alongside seven post-hole buildings interpreted as halls, a series of smaller structures, two large hollows or animal pens, pits and various unassociated postholes (West 1985, 12-14). Artefacts at the site included pottery, various bronze, iron and bone artefacts

and fourth-century Roman coinage. The cemetery at West Stow Heath (WSW 003) was discovered in 1849 and contained over 100 burials including a coffined inhumation with grave goods consisting of Early Saxon brooches, beads, bracelets, buckles, combs and coins, finger rings, girdle hangers, knives, pins, swords and tweezers (West 1985).

Medieval/Post Medieval

No depositions from this period met the criteria.

Analysis

Based on the criteria Icklingham provides strong evidence of being a landscape of continued deposition.

Ireby

Topography

Ireby is a small village in Cumbria north of the River Ellen in the High Fells. Ireby is located north of the Beck o'Skiddaw, a series of mountain ranges in the Lake District with views of the Caldbeck Fells in the Northern Fells of the Lake District. The tank was 0.23km from the River Ellen.

Human Landscape

Ireby was a settlement in Domesday Book, in the hundred of Amounderness and the county of Yorkshire. Ireby was originally a market town which received a market charter in 1237, leading it to turn into a sheep market. The nearest Roman road was 3.59km away whilst the nearest lead mine was 51.61km away at Alston Moor in Cumbria.



(Figure 6.44–Ireby and the various findspots–Authors own)

Legend:

- | | |
|-----------------|-------------------------------|
| 1 - Burial urn | 4 - Settlement and enclosures |
| 2 - Bowl barrow | 5 - Lead tank |
| 3 - Bowl barrow | |

Finds within 5km of the lead tank

Lake District National Park HER 136 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	6	1
Bronze and Iron Ages	10	1
Roman	10	3
Anglo-Saxon/Early Medieval	0	0
Medieval/Post Medieval	68	5
Unknown or Other	4	0
Total	98	10

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

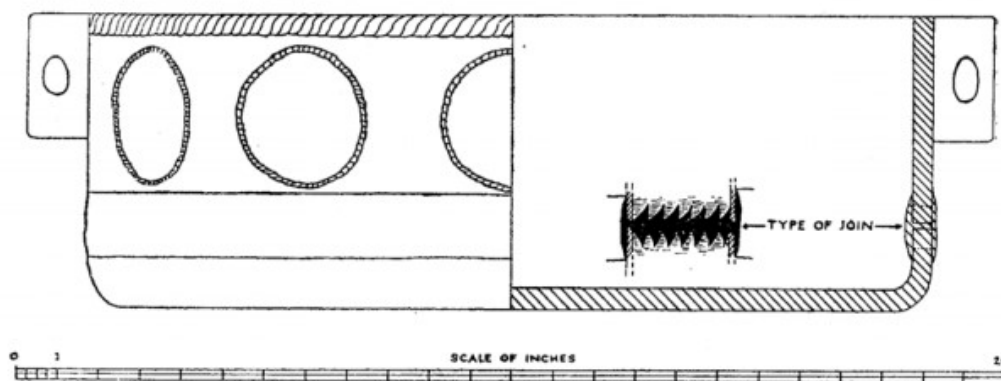
A Bronze Age burial urn (1-Burial urn) was discovered during stone quarrying in 1858, with a broken earthen vase or urn containing bones alongside an intact small earthen jar. Other instances of Prehistoric activity included bowl barrows near Aughtertree Fell (2-Bowl barrow and 3-Bowl barrow). Excavations in 1881 revealed a circular turf mound containing 12 funerary urns arranged in a circle at the centre of the mound (Ferguson 1883, 190-1; Bellhouse 1967, 26). Whilst these contained cremated human bone, there were no associated grave goods (Longworth 1984, 167; Bewley 1994, 161). The urns were categorised as ‘Second Series, North-Western’ and were **“expected to be earlier, rather than late”** Bronze Age (Bewley 1994, 161; Gibson and Wood 1997, 129). The collared urns suggest an Early Bronze Age date, with the arranging of the urns in a circle like arrangements in the barrow cemetery at Ewanrigg in Maryport. The other barrow associated with was an oval, flat-topped Bronze Age barrow with the tumulus also containing urns. Similar bowl barrows in the area included a bowl barrow near the southern edge of Aughtertree Fell. This was a turf-covered flat-topped slightly oval-shaped earth and stone mound on a similar scale to the Aughtertree barrows.

The remains at Aughtertree Fell (4-Settlement and enclosures) consisted of a mixture of settlements and enclosures. Three settlement enclosures, with an irregular aggregate field system, have been classified as Iron Age or subjectively Romano-British Iron Age through morphology with similar structures. These settlements included upstanding earthworks, with the eastern of the three settlements being sub-circular with a series of earth and stone banks subdividing the settlement into enclosures or stock pens. Traces of a hut circle were located north of the centre whilst others were built against the main enclosure wall. The central of the three settlements was rectangular with faint traces of a rectangular enclosure that were believed to be a stock pen. The most western of these was sub-circular and had two small enclosures or stock pens and faint traces of two hut circles. The associated field systems were visible with numerous earthwork banks interpreted as field boundaries and three large sub-rectangular enclosures to the east of the settlement. Two large fields south of the settlements and linear features connected these features, showing an intensely occupied area. Earlier activities near

Aughetree Fell included enclosures on the summit of Green How, believed to be a Neolithic causewayed enclosure. Aerial photography in 2000 revealed an oval enclosure showing a causewayed form on the outer perimeter (Horne, MacLeod and Oswald 2000, 12). Worked flints, and flints from Yorkshire and the Irish Sea, were found in the vicinity and were given a Neolithic date (Cherry 2009, 10).

Roman

Evidence for Roman activity is limited as the lead tank (5-Lead tank) provides the most significant evidence of Roman activity discovered in a field 300m west of Ireby village through ploughing in 1943 (Richmond 1945, 168-9). However, the report lacks specific information on its context.



(Figure 6.45 Roman vat of lead from Ireby, showing details of construction)

Richmond, I. 1945: 'A Roman vat of lead from Ireby, Cumberland', Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society New Series, 45, 163-71)

The tank was decorated with cable banding and repeated circles and was 0.46m in diameter, 0.17m deep, with sides that were 6mm thick and a volume/capacity of 27.12litres This is one of the further northern examples and was discovered in a complete and undamaged state, suggesting likely deliberate abandonment. There was evidence for previous repairs whilst the iron lugs were distorted, possibly from being used to lift/drag the tank to this area.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria Ireby provides weak evidence of being a landscape of continued deposition.

Kenilworth

Topography

Kenilworth is a market town in the Warwick District of Warwickshire. The town is situated on the Finham Brook, a tributary of the River Sowe which flows into the Rive Avon 3km north-east of the town. The lead tank was found 1.21km from Finham Brook.

Human Landscape

Kenilworth is recorded in the Domesday Book as Chinewerde in the hundred of Stoneleigh. Kenilworth is famous for the twelfth century Kenilworth Castle and Kenilworth Abbey constructed by Geoffrey de Clinton. The lead tank was 12.19km from the nearest Roman road and 81.95km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.46–Kenilworth and the various findspots–Authors own)

Legend:

- | | |
|----------------|-------------------------|
| 1 - Settlement | 4 - Medieval occupation |
| 2 - Coin hoard | 5 - Mixed Metalwork |
| 3 - Lead tank | |

Finds within 5km of the lead tank

Warwickshire HER 577 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	18	43
Bronze and Iron Ages	4	11
Roman	14	55
Anglo-Saxon/Early Medieval	1	9
Medieval/Post Medieval	92	93
Unknown or Other	50	2
Total	179	213

Prehistoric, Bronze Age and Iron Ages

No depositions from these periods qualified for inclusion.

Roman

A possible settlement was located 200m north-west of the Common (1-Settlement). These consisted of gravel paths and foundations, square drainpipes, and painted stones found in 1923. The largest accumulation of coins (2-Coin Hoard, HER: 1303571) was a mixture of 42 silver denarii from the first to third centuries discovered in 1993. Metal detecting in 1997 and 2004 added a further 25 coins of Antoninus Pius and Lucius Verus (Ireland and Wise 1997; *ibid.* 2002). Ireland and Wise reported a copper-alloy mount and an enamelled Polden Hill brooch alongside greyware fragments in the same field. A lead tank that was found in 1989 during excavation (3-Lead tank) that also showed evidence of abandonment, with a deliberately cut fragment discovered alongside several lumps of molten lead and burnt clay similar to the Enford (Wiltshire) tank (Guy 1978; Crerar 2012). The tank was at least 0.5m in diameter, 0.24m deep with a volume/capacity of at least 47litres. Whilst there was no evidence of occupation in the surrounding areas, the lugs were distorted like the Ireby (Cumbria) example, suggesting these were used to drag/lift the tank to the area of deposition.

Anglo-Saxon/Early Medieval

No depositions from this period qualified for inclusion.

Medieval/Post Medieval

Medieval occupation is visible at numerous sites such as Clinton Lane (4-Medieval settlement). Trial trenching at this site revealed scattered occupation from the 12/13th to early 14th century including a timber framed building (Jones 1997; Mould and White 1997, 39). Later excavations recovered an Early Bronze Age urn, showing continued occupation at Clinton Lane. Other Medieval remains included a mixture of Medieval and Post Medieval metalwork (5-Mixed metalwork) at Bulkington. Metal detecting recovered a cast bronze leg or foot from a bronze

bowl or jug with a mixture of Late Medieval pewter and iron artefacts. This mixture of finds is similar to other finds across Kenilworth, such as mixed Medieval and Post-Medieval coins and metalwork found south-west of Kenilworth castle.

Analysis

Based on the criteria Kenilworth provides weak evidence of being a landscape of continued deposition.

Ludford

Topography

Ludford is a village in Lincolnshire in the East Lindsey district of Lincolnshire. It sits on the edge of the Lincolnshire Wolds and is on the summit of these hills. The village is at the north end of the River Bain, a tributary of the River Witham, with the tank found 0.59km from the river.

Human Landscape

Ludford is created from the villages of Ludford Magna and Ludford Parva. The name likely means 'Luda's Ford' from the Old English Luda and Ford. Ludford was a settlement in Domesday Book, in the hundred of Wraggoe and the county of Lincolnshire. The tank was found 10.98km from the nearest Roman road and 99.14km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.47–Ludford and the various findspots–Authors own)

Legend:

- | | |
|---------------------------|---------------|
| 1 - Settlement & Cemetery | 5 - Coins |
| 2 - Settlement | 6 - Coins |
| 3 - Five ditches | 7 - Lead tank |
| 4 - Coins | |

Finds within 5km of the lead tank

Lincolnshire HER 432 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	71	3
Bronze and Iron Ages	68	9
Roman	14	364
Anglo-Saxon/Early Medieval	0	27
Medieval/Post Medieval	64	319
Unknown or Other	5	37
Total	222	759

Prehistoric

No depositions from this period qualified for inclusion.

Bronze Age and Iron Ages

Much of the evidence of occupation is spread out across the town with concentrations near Ludford Grange. There is evidence for occupation during the Iron Age and Roman period (1-Settlements & Cemetery, HER: 40610) and geophysical investigations uncovered a settlement with two phases of occupation. The first phase occurred during the Late Iron Age and early Roman period, with evidence consisting of coinage and brooch finds in the Ludford Grange area. A second phase of activity, dated from the third to fourth century, was on a much larger scale which suggested Ludford was a small town extending towards the River Bain (O'Neil 1948, 31; Lindsay Archaeological Services 2000). A series of burials found south of the A631 are believed to be the town's cemetery. Excavations revealed three burials, two were contained within lead coffins whilst the third was in a wooden coffin. Several other graves were identified in the area. A second excavation north-east of the coffins uncovered a large pit containing quantities of domestic refuse comprised of third century pottery (Lindsay Archaeological Services 2000).

Roman

Further evidence of Roman activities was found with a small Roman settlement (2- Settlement, HER: 40654) and a stone wall discovered in 1977 following ploughing (Grew 1980, 366). There were three phases of development, the first comprised of four roughly parallel gullies running down to the River Bain 50m to the north. The second was represented by two ovens, interpreted as possible corn dryers, whilst the third consisted of a small rectangular structure believed to be the base of a third, possibly unfinished corn dryer (Grew 1980, 366). Pottery from this site was from the third and fourth century, with similar dates to pottery and iron slag found in the ditches at Galley Hill (3-Five ditches, HER: 46714).

Coins and brooches in the Ludford Grange area had similar dates to the pottery. These included mixed third to fourth-century coins alongside a bronze ornament (4-Coins, HER: 40609) and a mixture of coins near Ludford Grange alongside human remains, Samian ware and gold ornaments (5-Coins). The most extensive evidence of Roman activity is from an area

believed to be a Roman settlement near Ludford (6-Coins, HER: 40609)). A total of 99 third to fourth-century coins were found in 1975 and 1976 besides a lead weight and bronze thistle-headed dress pin. Pottery from this site included mixed third to fourth century domestic and imported wares.

A lead tank (7-Lead tank, HER: LIN-E8F806) was a significant distance from the remainder of the other finds which were clustered together. The lead tank was found in 2006 through metal detecting and consisted of two pieces deliberately fragmented. It was placed in an oval pit only just big enough to hold the fragments. One fragment was decorated with cable banding and the other fragment undecorated. The decorated tank panel measures 40mm by 28mm and the undecorated tank panel measures 38mm by 27mm. This was much like the Flawborough (Nottinghamshire) example, with the deliberate fragmentation showing similarities to the other examples from Lincolnshire.



(Figure 6.48 The lead tank fragments from Ludford, The Portable Antiquities Scheme)

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based on the criteria Ludford demonstrates weak evidence of being a landscape of continued deposition.

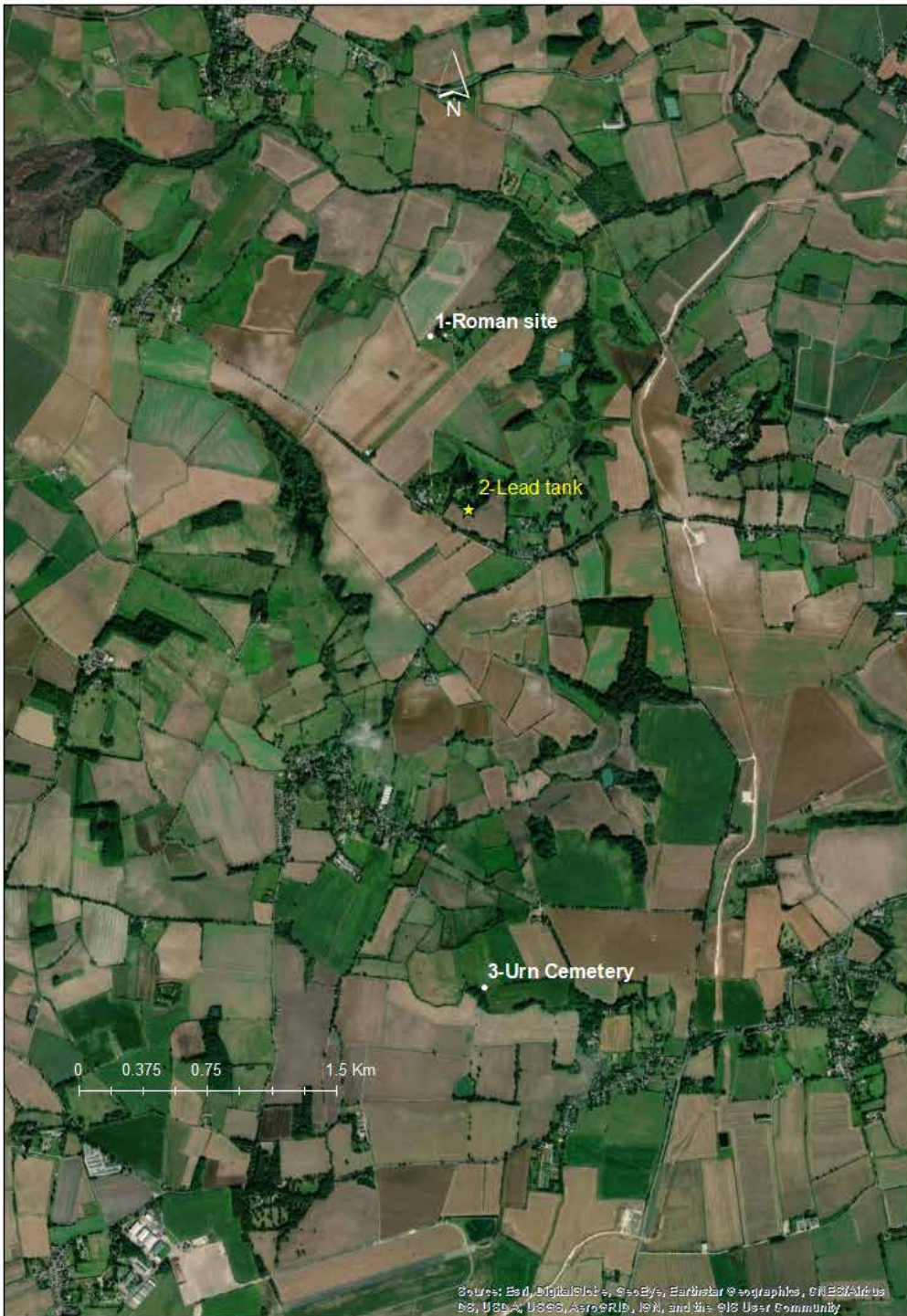
Mavis Enderby

Topography

Mavis Enderby is a hamlet and civil parish in the East Lindsey district of Lincolnshire, located in a small valley in the Lincolnshire Wolds between the River Bain and the River Lymn. The lead tank was discovered 1.83km from the River Lymn.

Human Landscape

Mavis Enderby is seven km east of the town of Horncastle, known as Banovallum in the Roman period. Enderby was a settlement in the Domesday Book in the hundred of Bolinbroke. The lead tank was found 7.66km from the nearest Roman road and 106.20km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.49–Mavis Enderby and the various findspots–Authors own)

Legend:

1 - Roman site
2 - Lead tank

3 - Urn Cemetery

Finds within 5km of the lead tank

Lincolnshire HER 965 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	61	12
Bronze and Iron Ages	50	105
Roman	27	46
Anglo-Saxon/Early Medieval	4	82
Medieval/Post Medieval	127	234
Unknown or Other	24	4
Total	293	483

Prehistoric, Bronze and Iron Ages

No depositions from these periods met the criteria for inclusion.

Roman

A potential Roman settlement was discovered at Mavis Enderby included two rectilinear cropmarks alongside greyware pottery and tiles discovered by fieldwalking north-west of Northfield Farm, indicating that there was a settlement during the Roman period in this location (1-Roman site). A first century Aescia brooch and a second century enamelled disc brooch were discovered near this site, indicating further Roman activities at this location.

Anglo-Saxon/Early Medieval

Later occupation is visible with a lead tank (2-Lead tank, PAS: LEIC-DCF738), discovered by metal detector in 2013 in a field near Eastfield Farm.



(Figure 6.50 The lead tank found at Mavis Enderby, Leicestershire County Council)

The tank was 310mm in diameter, 130mm high, weighed several kgs and the upper edge had a turned rim that was 15-20mm wide. The tank had been compressed which led to crumpling and parts of the tank missing, and holes in the base indicated deliberate damage. An Anglo-Saxon urn cemetery (3-Urn Cemetery, 354119) was discovered at Hall Hill alongside surface finds from the Mesolithic and Roman periods. Following ploughing in 1954 discovering Saxon pottery, excavations revealed 21 urns with cremations (Petch 1957, 17; Enderby 1977, 78).

Medieval and Post-Medieval

No depositions from this period met the criteria for inclusion.

Analysis

Mavis Enderby provides weak evidence of being a landscape of continued deposition, with most of the occupation occurring during the Roman period.

Newport

Topography

Newport is market town in the borough of Telford and Wrekin in Shropshire, near the Shropshire-Staffordshire border. The River Meese, which flows from the largest natural lake in the Midlands the Aqualate Mere, lies north of the town. Newport sits on a sandstone ridge to the east of the Welsh border and to the west of the Aqualate Mere. The lead tank was found 0.53km from the River Meese.

Human landscape

The earliest settlements in the area are two dating to the Anglo-Saxon period. The first of these 'Eastun' has been identified as Church Aston whilst the second 'Plaesc' (meaning shallow pool) is now Newport (Newport Historic Society 2008, 15). The village of Meretown was a settlement in Domesday Book, in the hundred of Cuttlestone and the county of Staffordshire was close to Newport. The town is located near the Via Devana, a Roman road which ran from Colchester to Chester, with the tank 1.35km from the road and 47.25km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.51–Newport and the various findspots–Authors own)

Legend:

- | | |
|---------------------------|---------------------------|
| 1 - Bronze artefacts | 4 - Pottery and metalwork |
| 2 - Pottery and metalwork | 5 - Lead tank |
| 3 - Hoard | |

Finds within 5km of the lead tank

Shropshire HER 517 results

Staffordshire HER 268 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	2	20
Bronze and Iron Ages	9	19
Roman	9	95
Anglo-Saxon/Early Medieval	2	11
Medieval/Post Medieval	146	592
Unknown or Other	14	18
Total	182	755

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

A series of mixed bronze artefacts were found in Oulton (1-Bronze artefacts HER: 74161) consisting palstave axes alongside fragments of rapiers and swords (Shaw 1801).

Roman

Roman and Early Medieval into Medieval artefacts show continued activity in this area. Roman material mainly consisted of pottery and coinage, with a concentration of Roman pottery and metalwork recorded during fieldwalking and metal detecting surveys at Edgmond Road (2-Pottery and metalwork, HER: 31611). The pottery was mainly Severn Valley ware, with 70 sherds recovered from the area. Three Roman coins from the reign of the Emperor Quintillus (AD 270) were also recovered during metal detecting (Meeson 2015). In the same area a hoard of 68 third century radiates (3-Hoard, PAS: 2920) were discovered in 1992 by a metal detectorist and were in poor condition

Anglo-Saxon/Early Medieval

Later activities at this site included Medieval pottery and metalwork (4-Pottery and metalwork, HER: 31610) with pottery from the 12th to 14th centuries, metalwork finds including a 13th century Limoges figurine and an enamelled sword pommel (Meeson 2015). The lead tank (5-Lead Tank, HER: HESH-4E1B95), was found in 2014 in fields near Forton. The tank was 51.4cm in length, 50.9cm wide, 12.1cm high and the diameter of the base was approximately 47.0cm. The side wall is 4.8mm thick towards the base and 6.7mm at the rim and the tank weighs 25.2kg. This example appeared to have been deliberately abandoned since it was crushed/flattened in a way that distorted the profile and shape of the tank just like the Beverley (Yorkshire) and Bourton-on-the-Water (Gloucestershire) examples.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria, Newport provides weak evidence of being a landscape of continued deposition.

North Lincoln

Topography

Lincoln is a cathedral city and county town of Lincolnshire in the East Midlands. The town lies directly on the River Witham which divides the town into two zones, with the lead tank found 2.30km from the Witham.

Human landscape

The earliest settlement at Lincoln was from the Iron Age, with remains of a first-century BC settlement discovered around the Brayford Waterfront area. Timber houses and pottery were found on the east side of a pool. Following the conquest of Lincolnshire in AD 48, a legionary fortress was constructed on a hill overlooking the River Witham (HER: 1406862). The fortress became a veteran's colony with the creation of a settlement following the movement of the occupying legion to York (Douglass 2001). The colony later becoming a thriving town known as Lindum Colonia (HER: 326486), with excavations revealing the town's forum, a possible temple and public baths (HER: 326587) as well as the roman waterfront and at least several minor buildings. The town's walls (HER: 1406943) were constructed in the late second/early third centuries (Whitwell 1970, 27). The town is believed to be the capital for the province Britannia Secunda during the fourth century AD and was listed as providing a bishop for the Council of Arles in AD314 (Jones 2002, 119; Mattingly 2006). The town is listed in the Domesday Book as Lincolne. The town is located on the northern end of the Roman road Fosse Way with the tank found 0.26km from it and 69.85km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.52–North Lincoln and the various findspots–Authors own)

Legend:

- | | |
|---------------|----------------|
| 1 - Metalwork | 8 - Burials |
| 2 - Hoard | 9 - Coins |
| 3 - Hoard | 10 - Coins |
| 4 - Basilica | 11 - Hoard |
| 5 - Villa | 12 - Hoard |
| 6 - Cemetery | 13 - Hoard |
| 7 - Burials | 14 - Lead tank |

Finds within 5km of the lead tank

Lincolnshire HER 1890 results

	Historic Environment Research	Portable Antiquities Scheme
Prehistoric	23	27
Bronze and Iron Ages	26	69
Roman	70	1061
Anglo-Saxon/Early Medieval	18	76
Medieval/Post Medieval	153	655
Unknown or Other	74	36
Total	364	1924

Prehistoric

No depositions from this period qualified for inclusion.

Bronze Age and Iron Ages

A series of eleven bronze celts (1-Metalwork, HER: 26517) were found in the River Witham and these were not the only metalwork to have come from the river. One of the most famous discoveries being the Iron Age Witham Shield (HER: 349667) discovered near Washingborough in 1827, with similar La Tene stylistic features to the Battersae Shield in London (Piggott 1950, 22, 28). This was found in association with an iron sword and the 'locket' of a bronze scabbard. Later excavations in 1981 this area would reveal posts interpreted as the foundations for a causeway alongside large quantities of iron tools and weapons (eleven spears and six swords) and part of a human skull with a sword fragment lodged within (Field and Pearson 2003). The later excavations in 2003 would discover more sections of causeway alongside a complete spear, a currency bar, a sword and dagger and bronze fittings that were deliberately broken before their burial. The most important finds were two votive boats (Field and Pearson 2003). Iron Age activity is also visible through finds such as a hoard of 39 gold staters discovered in 1997 (2-Hoard, PAS: IARCH-2D6EC3). These were scattered across a field, with evidence that more coins were in this area (De Jersey 2014). A larger hoard of 282 staters (3-Hoard, PAS: LIN-EB6C54) was found near Riseholme. This was a mixture of 40 gold staters alongside 231 silver units and 11 silver half units, all of which were North Eastern types from the Corieltauvi tribe. Whilst many were uninscribed the remainder had commonly used inscriptions from Iron Age Lincolnshire such as VEPO CORE, AVNT COST, and IISVPRASV. The coins were found within a bag placed in a small shell-tempered ware jar.

Roman

The most substantial evidence dates to the Roman period, with the remains of the colony and city visible through a number of features including the fort and town, with the basilica on the south side of the forum (4-Basilica, HER: 1407090). A possible villa (5-Villa, HER: 326749) was uncovered in 1910, comprised of a tessellated square pavement alongside a water pipe and plaster as well as pottery (Scott 1993, 119). Besides this, cemeteries (6-Cemetery, HER:

326468) and burials are visible across Lincoln including a series found at the ironstone mines at Greetwell (7-Burials, HER: 349680). The cemetery consisted of 12 stone and three burnt clay coffins discovered in an oval grave containing multiple human remains in a quarry at Burton Hill Top between 1864-1870. Another series of burials (8-Burials, HER: 1331962) were uncovered besides a possible Early Medieval kiln and a Medieval Road surface during excavations in 1994 at Cathedral Street. The burials were outside the east side of the lower town walls, with the kiln dated to the late 10th century through wasters. A series of coin hoards are also visible across York, such as a small collection of 11 bronze first century coins (9-Coins, PAS: IARCH-D6D82B). These were uncovered in a drain trench on the west side of Ermine Street (Petch 1958, 104-106; Robertson 2000, 11). A series of fourth-century nummi hoards consisted of a hoard of 28 copper alloy nummi (10-Coins, PAS:2017 T912) and a hoard of 40 bronze nummi (11-Hoard, PAS: LIN-F68DE3). A similar hoard of fourth-century copper alloy nummi (12-Hoard, PAS: LIN-86184B) consisted mainly of forgeries dating from AD350-380s. A collection of 78 mixed second, third and fourth-century bronze coins (13-Hoard, PAS: IARCH-BAAEC7) was found in a drain trench in 1956 at number 91 Broadway. The coins were found in a uniform layer of dark occupation material more than 0.6m thick with fourth-century pottery and animal bones (Robertson 2000, 346). A lead tank (14-Lead tank, PAS: LIN-9C11F6) was found by a dog walker in 2013 north of the Ermine Estate area.



(Figure 6.53–The North Lincoln lead tank, Lincolnshire County Council)

The tank was 610mm long, 330 mm high, 20mm thick and consisted of a highly decorated fragment with the inscription 'MELEDOFECITFELIX' (Meledo made this, may you have good fortune) and showed signs of being chopped into three pieces. This is comparable to fragmentation patterns to examples at Bishop Norton and Caistor (Lincolnshire). The decoration and inscription were similar to the Bishop Norton find, inscribed with '...DOFECITFELIX' which suggested these were produced at the same workshop.

Anglo-Saxon/Early Medieval

A series of Saxon artefacts (HER:1236672) were recovered from the Cathedral's vicinity, such as an Anglian urn discovered in 1887 and a girdle hanger in 1906 whilst a sixth century sherd was discovered in a section of the Colonia's wall in East Bight in 1953. A sixth century bronze pin with a curled head found before 1957 suggests that a cremation cemetery could be located beneath the Cathedral's east end (Meaney 1964, 157).

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria North Lincolnshire shows strong evidence of being a landscape of continued deposition.

Oxborough

Topography

Oxborough is a village in Norfolk and civil parish, located north of the River Gedder and the River Wissey. The village lies roughly in the middle of a triangle whose corners are Swaffham, Downham Market, and Thetford. The lead tank was found 0.42km from the River Gedder.

Human Landscape

Oxborough was a settlement in Domesday Book, in the hundred of [South] Greenhoe and the county of Norfolk. Oxburgh Hall has been the home of the Bedingfield family since it was built in 1482. The lead tank was found 8.95km from the nearest Roman road and the nearest lead mine was 155.06km away at Middleton in Derbyshire.



(Figure 6.54–Oxborough and the various findspots–Authors own)

Legend:

- | | |
|-------------|-----------------------|
| 1 - Dirk | 5 - Possible cemetery |
| 2 - Weapons | 6 - Villa |
| 3 - Hoard | 7 - Bottle and bowl |
| 4 - Torcs | 8 - Lead tank |

Finds within 5km of the lead tank

Norfolk HER 663 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	23	10
Bronze and Iron Ages	46	448
Roman	22	2375
Anglo-Saxon/Early Medieval	10	252
Medieval/Post Medieval	48	2378
Unknown or Other	33	37
Total	182	5500

Prehistoric

No depositions from this period met the criteria for inclusion.

Bronze and Iron Ages

One of the most distinctive finds was a Middle Bronze Age (1450-1300 BC) ceremonial dirk (1-Dirk) discovered in 1988. This was protruding from a peat bog near Oxborough (Needham 1990, 239) and had been deposited point down, leading to its suggestion that it was a 'votive offering' to be retrieved later (Needham 1990, 239-52). Its large size (70cm) and weight (2.37kg) made it **"ridiculously large and unwieldy"** and suggests that it was never intended for practical use. A lack of holes on the hilt of fitting a handle also suggested apparent votive use. The Oxborough dirk is one of six large examples from north-west Europe, including two from Norfolk at East Rudham and Kimberley. A hoard of 19 Bronze Age spearheads (Spearheads, HER: 356989) was found in 1814, although their exact location has been disputed, and consisted of 19 **"Class V"** copper-alloy spearheads each measuring 75cm long (Rye 1909, 19). A series of mixed bronze weapons (2-Weapons, HER: 380467) were also discovered in the River Wissey. These consisted of three Late Bronze Age spearheads and an Iron Age La Tene II sword/rapier discovered during dredging in 1928 (Clarke 1939, 94). Further Late Bronze Age metalwork from the River Wissey was a hoard (3-Hoard, HER: 380487) comprised of two leaf-shaped swords and three spearheads alongside a halberd and a sword chape (Evans 1888, 270, 282, 305, 314) and these had all been broken. Iron Age metalwork included a small hoard of six torcs (4-Torcs, HER: 380489) were discovered near Stoke Ferry.

Roman

Further mixed finds indicated long-term occupation of this area, such as the possible cemetery site (5-Possible cemetery). Finds in this site continued from 1895 to 2014 and the first finds included a cinerary urn containing human bones, leading J.J. Coulton to believe this area was a Roman burial ground located near St Mary's church. Finds from 1901 to 1907 were a mixture of human bones, pot sherds, a stone spindle whorl, and possible Neolithic flint. Finds in 1960 included fragments of burnt Samian mortaria alongside scatters of Anglo-Saxon and Medieval pottery near Chadalcote Farm. Later finds included mixed Mesolithic and Neolithic worked flints and axe heads, a Bronze Age chisel, Iron Age and Roman coins, Early Saxon to Late Saxon

brooches and strap-ends, sheet finger rings, pinheads, and a dagger (Wade-Martins 1980, 79-80; Silvester 1997, 77-90; Gurney 2005, 736-750). This site was north of the possible villa site at Little Holme (6-Villa, HER: 380452) which contained similar clusters of artefacts to those found in this location. These were a mixture of part of a Roman building with flint and sandstone rubble comprising three rooms. The excavations discovered numerous floor and roofing tiles and amphora fragments alongside third and fourth century coins (Philips 1970, 250; Scott 1993, 136).

A pear-shaped bottle and bowl (7-Bottle and bowl, HER: 4733) were found in 1929 in the River Wissey and the bowl was Pre Medieval but believed to be either Neolithic, Iron Age or Anglo-Saxon. It was argued that the bottle was Roman due to similarities to third to fourth-century pewter jugs. Its location in the River Wissey provides important contrasts to the lead tank (8-Lead tank, HER:21452), which was originally believed to have been retrieved from the River Wissey. The tank was decorated with a repeated double cross pattée within a circle, separated by vertical lattice bands and was 0.49m in diameter, 0.36m deep with a volume/capacity of 68litres. The tank was found in 1984-5, although the exact findspot has seen extensive debate. Guy believed it had been discovered by a mechanical excavator adjacent to the River Wissey (1989, 234). The HER record states that it was found in a load of scrap obtained from a farmer who had found it in the river. The grid reference supplied said it was found by a dyke when ploughing and not in the river. This was found alongside a first century, third century and fourth-century coin at this spot. Its battered nature suggested a possible deliberate abandonment. Deliberate abandonment was also visible with two pewter hoards (Pewter, HER: 380444), with six pewter plates discovered after ploughing in peat (Turner 1959, 4; Peal 1967).

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from this period met the criteria for inclusion.

Analysis

Based on the criteria Oxborough provides moderate evidence of being a landscape of continued deposition

Parwich

Topography

Parwich is a remote village in the Derbyshire Dales centred around an open green. The village is surrounded by fields and hills whilst a stream which provides the village its name flows through the centre of the village. The lead tank was found 3.22km from the nearest river.

Human landscape

Parwich is mentioned as Pevrewic in the Domesday Book under lands in Derbyshire belonging to King William. The tank was found 1.53km from the nearest Roman road and 1.44km from the lead mine at Parwich, discovered in connection with a Roman metalworking site (HER: 606972).



(Figure 6.55–Parwich and the various findspots–Authors own)

Legend:

- | | |
|----------------|----------------|
| 1 - Barrow | 6 - Lead tank |
| 2 - Barrow | 7 - Settlement |
| 3 - Coin hoard | 8 - Farmstead |
| 4 - Coin hoard | 9 - Settlement |
| 5 - Coin hoard | 10 - Barrow |

Finds within 5km of the lead tank

Derbyshire HER 710 results

	Historic Environment Records	Portable Antiquities Scheme
Prehistoric	43	0
Bronze and Iron Ages	79	3
Roman	26	10
Anglo-Saxon/Early Medieval	3	0
Medieval/Post Medieval	83	34
Unknown or Other	6	2
Total	240	49

Prehistoric

Evidence of Prehistoric occupation is illustrated with a round barrow on Parwich Moor (1-Barrow) alongside a second barrow recorded by Barnatt (Marsden 1977, 84; Barnatt 1989). The first had two cists containing single inhumations covered with large stones, with one of the skeletons in a contracted position and accompanied by a flint 'spear-head' and a small bronze pin. The finds at Parwich Moor were matched by a mutilated round barrow known as Shuttlestone Barrow (2-Barrow). Excavations in 1848 uncovered a single inhumation accompanied by a dagger, an axe, a jet bead and a circular flint (Gerloff 1975, 50-1; Marsden 1977, 48; Needham 1983, 295). Two further barrows were found on Low Moor which were opened in 1849, with the first being a 'large and perfect tumulus' constructed above a large grave. The other barrow was smaller and appeared to have been disturbed at a later date since only fragments of pottery and human bone were found (Marsden 1977, 83). Another barrow at Liffs Low (3-Barrow, HER: 307802) consisted of a Neolithic round cairn excavated in 1843 with a central sub-rectangular cist. This contained a crouched adult inhumation with an antler macehead, a pottery vessel, axeheads and flint lozenge arrowheads alongside flint spearheads, a knife and a serrated blade (HM Stationary Office 1965, 32; Kinnes 1979, 17, 65). Later excavations in 1984 uncovered three more inhumations, one with a Beaker and a polished stone pendant, as well as stakeholes and pits in place before the barrow. Another barrow excavated in 1843 at Minninglowe Hill (4-Barrow, HER: 307813) consisted of a cist with a cremation burial and an iron knife in an iron sheath alongside two inhumations. Extending the tumulus on its south side uncovered a skeleton and another cremation besides an ornamental drinking cup, a bronze or copper pin and a flint spearhead (Bateman 1848, 41; *ibid* 1863, 83). Similar mixed remains were discovered in two barrows at Painstor Low near Alsop in 1845 (5-Barrows, HER: 307849). The first of these contained a female skeleton alongside several horses' teeth and two flint implements in an irregularly formed mound. The second contained two skeletons and fragments of a coarse red ware urn.

Bronze and Iron Ages

No depositions from this period qualified for inclusion

Roman

Roman occupation is visible with a series of coin hoards (3-Coin hoard, 4-Coin hoard and 5-Coin hoard) and a lead tank (6-Lead tank). Many of these hoards were found at Parwich Hill, including a hoard of coins discovered in 2018 by metal detectorists. These were found in the side of a Bronze Age barrow and there were 261 coins in total, with the majority being fourth century nummi, a radiate of Gallienus and later coins from the House of Valentinian (AD 364-78). Their burial in a Bronze Age barrow suggests a votive action, consistent with other Roman coin finds in burial mounds with similar dates. A coin hoard was discovered in 1849 and Bateman reported that 80 small Roman brass coins of Late Roman Emperors were found during **“an examination of the tumulus in a plantation on the summit of Saint’s Hill near Parwich”** (1861, 61; Robertson 2000, 412). This had been reportedly destroyed by retrieving stone for the walls of an enclosing plantation, with the coins scattered about the barrow (Robertson 2000, 412).

Coin hoard 10 consisted of 80 first to second century denarii in an urn (Robertson 2000, 61), discovered in 1769 and recovered alongside a ‘military’ weapon and an urn. The coins were well preserved, with the hoard found in association with the possible fort at Lombard’s Green. The coin hoards are visible alongside a lead tank (6-Lead tank) that was found in 2010 by metal detector.



(Figure 6.56 - The lead tank found at Parwich, Birmingham Museums Trust)

This vessel was 0.16m in height, 0.315m in diameter and slightly damaged as the side had come free of the strip attaching it to the base at one point. Like the Garton vessels, the base of the vessel had patches of dark brown to black deposits which appeared to indicate burning. Roman

settlements are also visible in the area at Royston Grange (7-Settlement, HER: 1149181 and 8-Farmstead, HER: 606972). Excavations from 1988-1992 revealed a farmhouse and postholes alongside buildings and a field system. These activities were dated from the second to fourth-centuries AD based upon pottery and coinage finds (Hodges and Wildgoose 1981, 45-6; *ibid.* 1991, 46-50). Two inhumations were found in this area, believed to represent a potential small cemetery, and evidence for lead working consisting of debris in the later phase of the hall (Hodges and Wildgoos 1981, 46). Further evidence for lead working was found in the site's northern paddock with a lead rake (a small shaft cut through a lead vein), with a mixture of lead and fluorspar material crushed on the site and thrown either side of the pit (*ibid.* 1981, 47). Another settlement at Rainster Rocks (9-Settlement, HER: 310974) was a mixture of orthotic boulder walls and platforms alongside a field system. Excavations in the early 20th century revealed fine and coarse ware pottery, metalwork and coins from the third and fourth centuries (*Antiquaries Journal* 1939, 432-3).

Anglo-Saxon/Early Medieval

An Anglo-Saxon barrow (10-Barrow, HER: 308078) was found at Stand Lowe in 1845 containing a seventh century inhumation accompanied by a glass bead necklace, a needle box and silver needle, two bronze buckles and two iron knives (Bateman 1848, 74-6; Fowler 1954, 148; Ozanne 1962, 31, 33). Prehistoric flints were residual finds which had been dragged into the burial at the centre of the barrow's mound.

Medieval/Post Medieval

A Cistercian Grange consisting of three buildings was discovered during the excavations which uncovered the earlier Roman farmstead. The first phase of activity dated from the twelfth to thirteenth-centuries, with the first building constructed in a similar manner to the large building at the Roman farmstead and a twelfth-century woolhouse at Fountains Abbey (Coppack 1986, Hodges and Wildgoos 1991, 47-8). The second phase saw the construction of the second building at the site, resembling a monastery more than a farm (*Ibid* 1991, 48). Just before the site's abandonment the upper porch of the site's second building was used for iron smelting whilst a field wall was created across the south edge of the site (*ibid.* 1991, 50).

Analysis

Based upon the criteria Parwich shows moderate evidence of being a landscape of continued deposition.

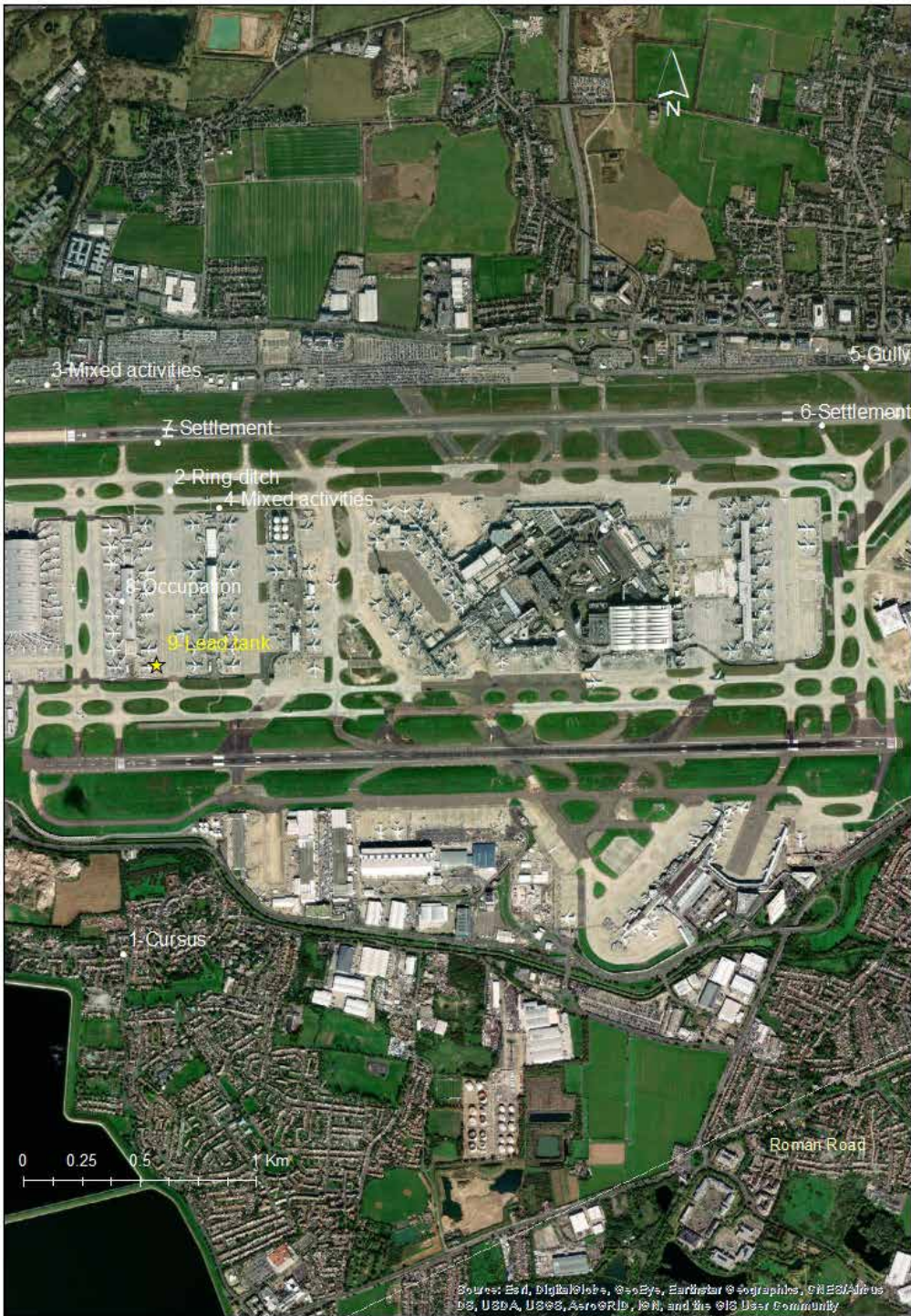
Perry Oaks

Topography

Perry Oaks is in South West London in the Heathrow district of London in the Colne Valley. Much of Heathrow was originally farmland, with three major agricultural settlement clusters with fields and orchards in the late nineteenth century. The lead tank was found 1.35km from the River Colne, a tributary of the River Thames.

Human landscape

Evidence for human occupation at Perry Oaks dates from as early as the Neolithic, with a large settlement believed to have been in the Heathrow area through waste pits filled with struck flints, arrowheads and pottery fragments (Cotton, Mills and Clegg 1984, 36). Stanwell, a village close to Perry Oaks, was a settlement in Domesday Book, in the hundred of Spelthorne and the county of Middlesex Evidence for a long-lasting settlement at Perry Oaks (HER: ELO567) was discovered during the construction of Heathrow Terminal 5. The lead tank was found 2.86km from the nearest Roman road and 153.02km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.57—Perry Oaks, South West London and the various findspots—Authors own)

Legend:

- | | | |
|----------------------|----------------------|----------------|
| 1 - Cursus | 4 - Mixed activities | 7 - Settlement |
| 2 - Ring ditch | 5 - Gully | 8 - Occupation |
| 3 - Mixed activities | 6 - Settlement | 9 - Lead tank |

Finds within 5km of the lead tank

Greater London HER 1041 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	49	5
Bronze and Iron Ages	21	2
Roman	13	4
Anglo-Saxon/Early Medieval	0	0
Medieval/Post Medieval	43	8
Unknown or Other	84	1
Total	210	20

Prehistoric

A Prehistoric cursus was discovered at Stanwell (1-Cursus, HER: 932648) during the excavations of Heathrow Terminal 5 from 1996–1999 and 2002. Earlier trial trenching in 1977 and excavations from 1979–1985 revealed a pair of flat-bottomed ‘U-shaped’ parallel ditches. These ditches were 3.60m and 1.18m deep with similar fills and Neolithic pottery, with these ditches interpreted as a cursus which extended over 3.60km from the Colne Valley to Stanwell (Poulton 1978, 239–242; O’Connell 1990; Lewis 2006).

Bronze and Iron Ages

An Early Bronze Age causewayed ring-ditch (2-Ring-ditch, HER: ELO1377) with two complete ditch segments was found alongside two partial segments, with limited finds including undiagnostic flint flakes. These ditches’ causewayed/segmented form led to a Neolithic/Early Bronze Age date assigned to them (Canham 1978). Other Bronze Age activity included Middle Bronze Age activities (3-Mixed activities, HER: ELO4312 and 4-Mixed activities, HER: ELO4312) with a mixture of features including a Bronze Age field system alongside a rectangular post-built structure and associated ditch, and a later Roman ditch. Most of the datable artefacts were from the Middle Bronze Age with a small number of Neolithic finds alongside them. These finds’ dates were closely matched by a gully at Newall Road/Netley Road (5-Gully), containing Late Bronze Age to Early Iron Age pottery (Museum of London Archaeology Service 1995).

Occupation in the area is visible with settlements from the Iron Age (6-Settlement, HER: 394619 and 7-Settlement, HER: 1145592) discovered at Heathrow during extensions to Runway 1. One was an Early Iron Age settlement with a series of round huts alongside the north side of the enclosure within the ramparts and a small rectangular “**temple**”. This consisted of a rectangular shrine with a sleeper trench forming the foundations of a small building and a series of posts surrounding the shrine, resembling Classical Greek temples (O’Neil 1948, 25–29). This site dated from 300 BC based upon pottery finds whilst a series of hearths contained Neolithic ‘B’ pottery, indicating earlier occupation in this area. The other settlement discovered contained a mixture of pits, post-holes and traces of ditches containing Iron Age and Roman pottery alongside animal remains and pieces of bronze and iron artefacts, including brooches and a currency bar (Canham 1979). A mixture of Neolithic/Bronze Age flints was also found in one of the ditches, showing similarly mixed occupation to the other Iron Age sites.

These remains have similarities to the settlement discovered at Perry Oaks (8-Occupation, HER: ELO567), with occupation dating from the Palaeolithic to the Post-Medieval period. The earliest finds were a series of worked flints from the Mesolithic and Neolithic periods and these were found alongside a Bronze Age cremation burial, a Neolithic stone axe, and a Middle Bronze Age wooden bowl (Mckiney 2006Roe 2006). The cremation burial was discovered in a possible round barrow alongside fragments of Early Bronze Age pottery whilst further cremated bone was discovered in two Bronze Age pits (Mckiney 2006).

Pits at the site contained a mixture of Bronze Age and Iron Age artefacts, with two cups found in a pit alongside a Middle Bronze Age coiled bronze ring found in the base of a pit. The ring was coiled three times to form a short cylinder, with similar examples found in metalwork hoards from the Taunton phase at Hollingbury and Stump Cross in Sussex and Durnford/Lake in Wiltshire (Smith 1959, 149; Moore and Rowlands 1972, 61-3 Rowlands 1976, 96). Associated pottery in the pit had a similar date, whilst other Middle Bronze Age evidence consisted of the spearhead found in a re-cut field boundary (Scott 2006). This was a side-looped example with plain, flat blades and are distributed throughout southern Britain, with a notable concentration in the Thames Valley (Rowlands 1976). They have sometimes been found at settlements or occasionally in burials, with their placement in wet places, ditches or hoards suggesting different uses and different reasons for abandonment (Lawson 1999, 100).

Roman

Roman occupation at Perry Oaks is visible with a series of metalwork finds, with a number of first century brooches and a pair of copper and iron finger rings (Scott 2006). Roman period pottery comprised over 2,287 sherds of first to fourth-century sherds, most being locally manufactured, from a mixture of ditches, pits and wells/waterholes (Brown 2006). The most distinctive Roman find at the site was a lead tank (9-Lead tank), discovered in a crushed state in a disused water hole with only part of the base and some of the side surviving (Petts 2006).



(Figure 6.58 Lead tank found at Perry Oaks, Wessex Archaeology)

The tank was made from lead sheet 0.06m thick and what remained of the base had two straight sides that were 0.66 m and 0.40 m. The tank had a curved outside edge with a surviving circumference of 0.79 m and the remaining side was 0.34 m high and 0.79 m long. The decoration of the tank was quite simple with the top edge having a beaded rim, the side was divided into panels with a horizontal strand of cable design and within each panel there was a floating saltire drawn with a cable strand. The tank was damaged at the top and was badly distorted, with signs on the base indicating an axe had been used to destroy this artefact like the Trudoxhill (Somerset) and Mithraeum (London) examples. The remains of the tank from Flawborough had been folded in on itself in a similar manner to this tank (Elliot and Malone 1999).

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Perry Oaks provides weak evidence of being a landscape of continued deposition, with many of the activities at the site providing close similarities to nearby settlements at Heathrow from the Bronze Age and Iron Age. Similar artefact depositional practices were also occurring, with many of the artefacts at Perry Oaks found buried at the base of pits or disused water holes. These artefacts provide clear comparisons with others found in the Thames Valley, providing evidence of broader occupations and artefact burial across this region.

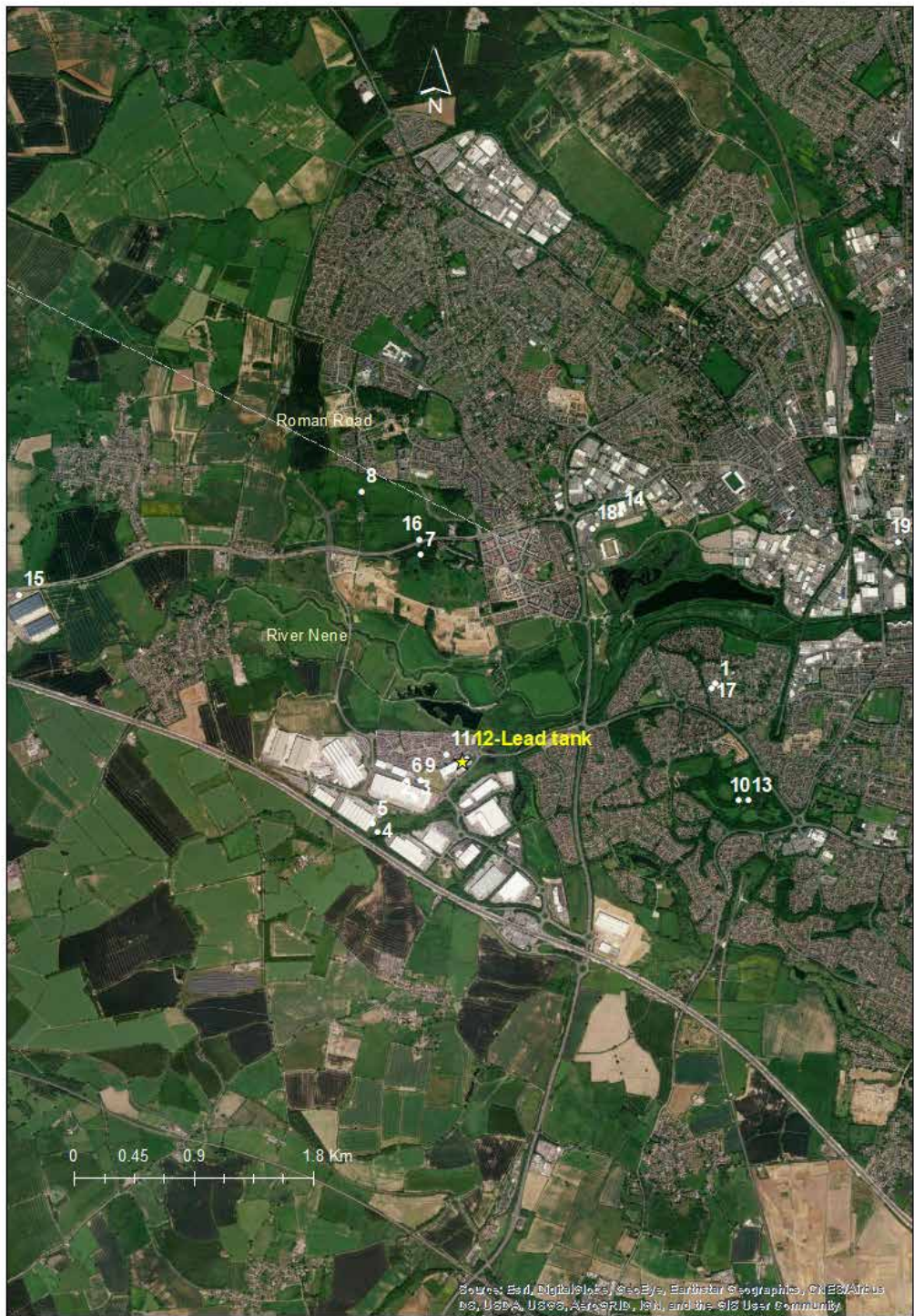
Pineham

Topography

Pineham is a village in Northamptonshire located between the M1 and the River Nene. The site lies in a valley just south of the River Nene with the site on a hill overlooking the river's floodplain. The tank was found 0.51km from the River Nene.

Human landscape

The site of Pineham Barn is on the western edges of Northamptonshire, near the major Roman settlement at Duston. The village of Upton, close to Pineham, was a settlement in Domesday Book, in the hundred of Nobottle and the county of Northamptonshire. The lead tank was found 1.65km from the nearest Roman road and 105.60km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.59–Pineham and the various findspots–Authors own)

Legend:

1 - Enclosure	6 -	11 - Settlement	16 - Settlement
2 - Pits	7 - Enclosure	12 - Lead tank	17 - Grubenhau
3 - Cemetery	8 - Settlement	13 - Cemetery	18 - Cemetery
4 - Burial	9 - Evaluation	14 - Settlement	19 - Royal Palace
5 - Burial	10 - Hillfort	15 - Villa	

Finds within 5km of the lead tank

Northamptonshire Historic Environment Record 4434 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	59	2
Bronze and Iron Ages	36	32
Roman	81	172
Anglo-Saxon/Early Medieval	16	15
Medieval/Post Medieval	88	263
Unknown or Other	155	10
Total	435	494

Prehistoric

A Neolithic causewayed enclosure was found at Briar Hill (1-Enclosure, HER: 620772) and excavations from 1974-1978 discovered two concentric ditch circuits (Wilson 1975, 178-85). The excavations showed several phases of recutting, with finds consisting of postherds, flints, polishing stones, stone axe fragments and querns (Bamford 1979, 84). Several pits contained late Neolithic pottery whilst a group of at least Bronze Age cremations were found in pits and four of these were in bucket-shaped urns.

Bronze and Iron Ages

Bronze Age cremations were discovered with a series of pits (2-Pits, HER: 8865/1/3,) and burials (3-Cemetery, HER: 8865/1, 4-Burials, and 5-Burials) that were near each other. There were nine pits in total and five of these contained Early Bronze Age pottery whilst all showed clear evidence of burning (Brown 2007, 7). The cremation burials consisted of several human cremations with a further five burnt deposits alongside these all contained in pits (Brown 2007, 7).

Evidence for Iron Age occupation is visible at Pineham North (6-Settlement, HER: 5092 and 7-Enclosures, HER: 4558/1/1), Upton Lodge (8-Settlement, HER: 1604802) and Pineham (9-Evaluation, HER: 5092). Evidence for Late Iron Age included features containing second to first century BC pottery. These consisted of five gullies, including a roundhouse, and three pits indicating an initial farming settlement before construction of enclosure ditches in the first century AD (Carlyle 2007, 6). Further Iron Age occupation was visible with the hillfort at Hunsbury Hill (10-Hillfort, HER: 343279). The fort's interior contained over 300 pits, one of which contained a crouched inhumation with an iron chariot wheel, bridle bit and other iron pieces (RCHM 1918, 277-283). Other finds included mixed Iron Age and Roman pottery alongside worked flints, over 150 bee-hive querns and iron objects and slag indicating metalworking activities (Jackson 1993).

The development of these features has parallels to the multi-period site at Pineham North (11-Settlement, HER: 5092). Excavations suggested a Middle to Late Iron Age settlement centred around two enclosure ditches (Morris 2002, 5, 8). Pottery evidence and a geophysical survey suggested continuation into the Roman period. A complete currency bar was found in the base of one of the ditches, suggesting links with Hunsbury Hill fort (Preece 2018, 9).

Roman

Roman activity continued with evidence for activity at Pineham discovered by ULAS. Two enclosures north of these included one associated with a T-shaped malting oven and a hearth. A large timber building was found in Enclosure 3 consisting of a circular building with a tiled roof. Cremation burials were west of this building, with coinage and pottery from this period suggesting second century occupation which tailed off into the third century. The site with the lead tank consisted of a Roman rural settlement consisting of boundaries/paddocks, a watering hole, cobbled surfaces, ovens/kilns and wells (Horne 2015, 54-6). The fragmented lead tank (12-Lead tank), was found in 2013 in a short section of ditch forming the southern boundary of one of the enclosures (Speed and Harvey 2016, 59-72).



(Figure 6.60—Decorated side piece and half of the circular base of the Pineham lead tank during excavation, ULAS)

The lead tank was decorated with a simple geometric pattern, comprising of plain and cable horizontal and vertical banding and zigzags. The tank was approximately 0.4m high, with a diameter of 0.88m, weighed 140kg and had a capacity/volume of 240litres. A fourth century human burial lay within the same ditch, whilst three other human burials lay adjacent to the ditch. Two lead ingots were also placed in the ditch fill with fourth century pottery fragments and a nummus coin. The deliberate fragmentation of the tank combined with the placing of the bodies suggest deliberate abandonment of this site.

These were not the only Roman period burials in the area, with an inhumation cemetery at Hunsbury Hillfort (13-Cemetery: 343287). Further Roman remains consisted of the Roman settlement at Duston (14-Settlement-343603) on either side of Weedon Road. Two decapitated burials lay north of a series of burials associated with a ditch system. A hoard of 45 third century gold radiates were found in a pot, with the site near a second century-fourth century villa (15-Villa, HER: 341461). The 'villa' was first discovered in 1846, with rescue excavations in 1966 revealing a stone cistern east of the villa whilst a metalled surface contained two cleft ox skulls, each accompanied by a pair of hooves (Brown 1967, 186; Scott 1993, 146). This appeared to indicate that it was a shrine.

Anglo-Saxon/Early Medieval

There was evidence for continued occupation at Northampton Sands, with occupation from the Iron Age to Anglo-Saxon period. A settlement (16-Settlement. HER: 5134) was found in 1965 with the remains of a small building visible through post holes (15-Grubenhau: 5134/0/2). Clearing of the site revealed burnt layers alongside a wooden H-shaped structure in the centre of the hut, with over 303 loom weights suggesting it was a loom shed (Jackson 1969, 202-221). This was close to a cemetery (17-Cemetery, HER: 34362) discovered in 1902 (George 1903, 311-2). Excavations from 1902-1904 uncovered over 100 skeletons, with many lacking grave goods. Although other graves contained brooches, necklaces, wrist claps, shield bosses, weapons and wooden buckets with bronze 'bands' (George 1919). A lead coffin in the middle of the cemetery suggests possible continuity from the Roman to Saxon period (Meaney 1964, 189). Further Saxon remains were visible with the royal palace complex with a possible minster church, cemetery and chapel at St Peter's Church (18-Royal Palace, HER: 343596). The original palace was a timber hall with annexes at its west and east ends and these were replaced in the ninth century by a rectangular stone building (1985, 113-138).

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Pineham provides strong evidence of being a landscape of continued deposition.

Preshute

Topography

Preshute is a civil parish in Wiltshire with the River Kennet, a tributary of the River Thames, and the A4 crossing the parish. The village is on the chalk of the Marlborough Downs, with the parish being mainly downland and farmland. The tank was 2.00km from the River Kennet.

Human landscape

Preshute is immediately west and northwest of Marlborough in Wiltshire, with a Prehistoric earthwork called the mount forming the motte of Marlborough Castle. Marlborough was a settlement in Domesday Book, in the hundred of Selkley and the county of Wiltshire. The lead tank was found 1.50km from the nearest Roman road and 64.55km from the nearest lead mine at Lower Machen.



(Figure 6.61—Preshute and the various findspots—Authors own)

Legend:

- | | |
|-----------------|-----------------|
| 1 - Bowl barrow | 8 - Settlement |
| 2 - Barrow | 9 - Tool hoard |
| 3 - Burials | 10 - Lead tank |
| 4 - Enclosures | 11 - Vessels |
| 5 - Hoard | 12 - Hoard |
| 6 - Settlement | 13 - Coin hoard |
| 7 - Coins | 14 - Coins |

Finds up to 5km from Preshute by source

Wiltshire and Swindon HER 1418 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	94	4
Bronze and Iron Ages	218	75
Roman	71	80
Anglo-Saxon/Early Medieval	3	7
Medieval/Post Medieval	110	64
Unknown or Other	70	3
Total	566	233

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

One of the most definitive barrow examples in the area was the Manton bowl barrow (1-Barrow, HER: MW114178) south of Preshute. Excavations in 1906 revealed a bowl barrow containing a crouched inhumation close to the presumed centre of the mound (Cunnington 1907, 1-20; Pugh and Cristall 1957, 187-8). A clay stud was in front of the skull whilst a small knife-dagger, a gold-bound amber disc, a gold-bound shale bead and a gold 'halberd pendant' were found behind the head and shoulders. Alongside were found 150 shale beads, five amber beads and a 'grape-cup' (Annable and Simpson 1964, 101; Hadaker 1974, 10-11; Gerfloff 1975, 161). Three bronze awls were found near the feet alongside a small bronze dagger blade and three further beads with an incense cup close to the skeleton. A Collared Urn was found three metres south of the skeleton and 0.35m below the surface of the barrow (Longworth 1984, 288). This originally stood upright and had bones beneath it, suggesting this was a possible secondary burial.

Another bowl barrow (2-Barrow, HER: 221596) contained large quantities of pottery, charcoal, animal bones, deer, oxen and pig teeth (Grinsell 1951, 155). Further burials included a crouched male burial in a flat grave (3-Burials, HER: 220821) and the partial remains of a second individual at Lockeridge. The crouched burial was accompanied by a Beaker and flint dagger (Cunnington 1926, 395-6; Grinsell 1951, 120). Bronze Age occupation was also discovered in 1977-9, with a series of enclosures at Dean Bottom (4-Enclosures, HER: 221580). There were two phases of occupation, with a short-lived Early Bronze Age settlement visible through features including post-holes and Beaker pottery. There was more substantial occupation in the Middle Bronze Age with a series of terraced platforms, including a possible sarsen structure, and cobbled surfaces. A dog and calf burial were found nearby whilst there was also evidence for quern production after the abandonment of the excavated structures (Gingell and Allen 1993). Bronze Age hoarding was visible with a hoard of ten socketed axes (5-Hoard, HER: 220636) at Manton Copse in 1914 (Goddard 1915, 477-80).

A mixed Iron Age and Early Roman settlement (6-Settlement, HER: 221634) consisted of a 'Celtic' field system, a rectangular enclosure with four circular timber buildings and an enclosure ditch. Finds included a long-necked Beaker from a flexed child inhumation alongside a ring-headed pin and a miniature bronze socketed axe alongside Roman brooches and a manicure set (WANHM 1967, 16-33; *ibid.* 1975, 133-4). A mixed hoard of Late Iron Age and Early Roman coins (7-Coins, HER: 220520) were found in a pot at the top of Salisbury Hill in 1856.

Roman

Much of the occupation at Preshute was from the Roman period, with evidence for occupation visible with the settlement at Overton Down (8-Settlement, HER:221734) A tool hoard (9-Tool hoard) contained a mixture of 18 tools that included a mowers anvil. Mowers anvil were common finds in fourth-century assemblages, such as those from Great Chesterfield and the Silchester 1900 and Silchester 1980 hoards (Manning 1988, 59). A lead tank (10-Lead tank, PAS: WILT-95F01A) was discovered in a field by metal detector in 2016.

The tank was 1.005m in length and 0.300m high and decorated in raised oval sections forming a Phallic motif and applied cable bands. The tank was in three fragments (A, B and C) in the same field as the tools. The upper part of Fragment A had a pick mark whilst Fragment C had multiple pick marks and the bottom of the fragment and the left side of the panel had clear cut marks. The fragmentation and rolling together of these pieces show deliberate abandonment, likely coinciding with the abandoning of the tools. These were also found close to pewter vessels (11-Vessels, HER: 221463) and hoard (12-Hoard, PAS: IARCH-329BDD), with the vessels comprised of 12 Roman pewter dishes found beside the inhumations of two individuals. The skeletons were found in shallow graves near the pewter, with numerous pottery fragments and coins from the Lower Empire found in the soil surrounding the area. The largest dish and two dishes and two saucers were all highly damaged (Peal 1967, 19-37), suggesting a similar abandonment to the lead tank.



(Figure 6.62–The Preshute lead tank, Salisbury and South Wiltshire Museum)

A hoard of 26 silver siliquae was found alongside these finds, with the coins all found close together and ranging from Julian to Honorius (Robertson 2000, 397). At least fifteen 3rd century brass coins were also found around this spot (Robertson 2000, 397), with these coins considered separate from the pewter and burials. A further coin hoard was north of this (13-Coin hoard, PAS: IARCH-ECC8C1) with 465 debased third century radiates found with later Roman bronzes of other periods. Other Roman coin hoards including a collection of 531 fourth-century coins (14-Coins, HER: 220517) discovered in 1890 in an earthen pot on Grantham Hill (WANHM 1892, 39-41).

Anglo-Saxon/Early Medieval

No depositions from this period qualified for inclusion.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based on the criteria Preshute shows strong evidence of being a landscape of continued deposition.

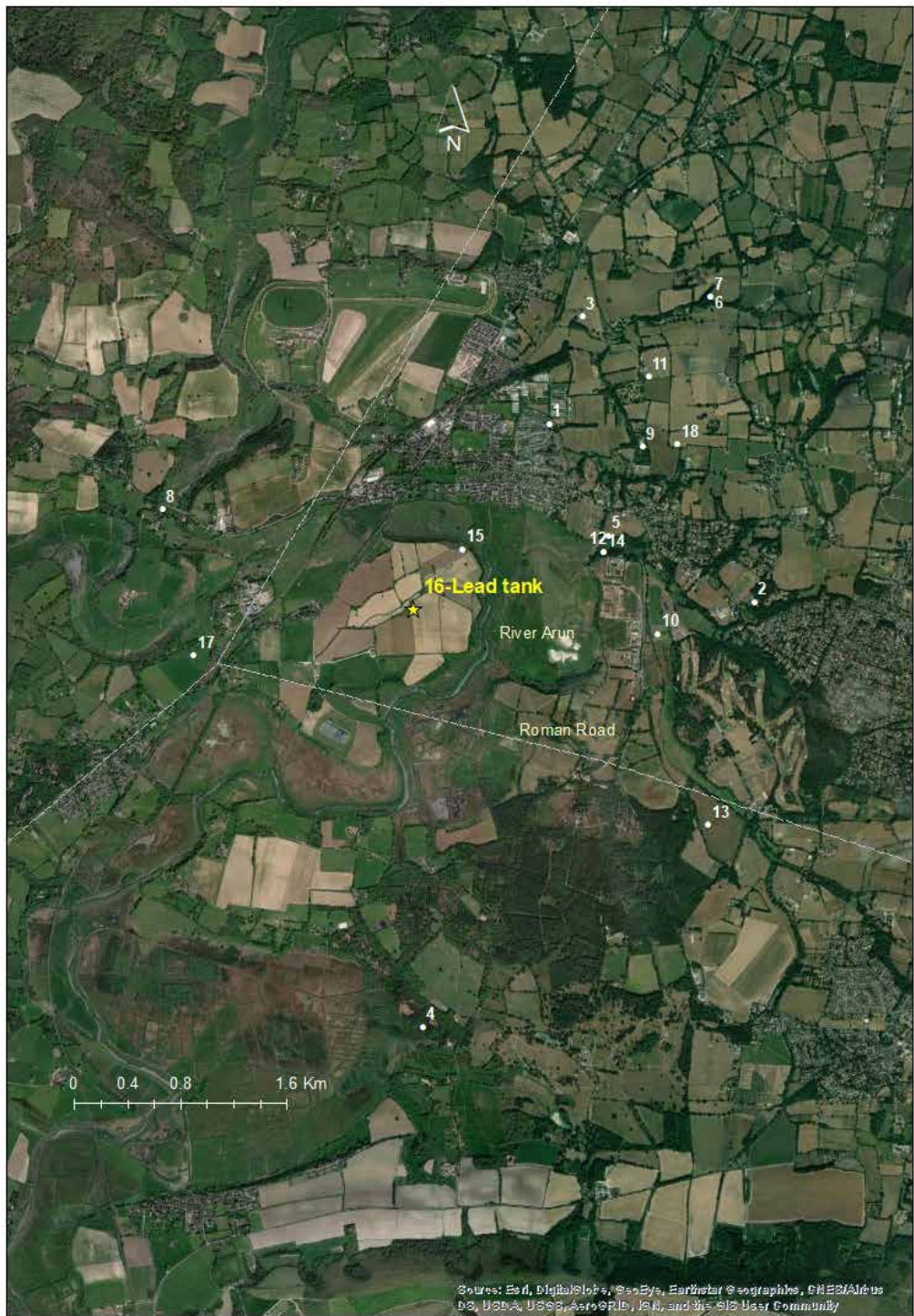
Pulborough

Topography

Pulborough is a village and civil parish in the Horsham district of West Sussex. The village is at the confluence of the River Arun and River Rother, looking southwards over the broad floodplain of the Arun with the South Downs behind it. The lead tank was found 0.49km away in the River Arun's floodplains.

Human landscape

The village sits on the Stane Street, a Roman road from London to Chichester, and was used by the Romans to ford the Arun. Pulborough was a settlement in Domesday Book, in the hundred of Easwithe and the county of Sussex. The lead tank was found 0.76km from the Stane Street and 153.71km from the nearest lead mine at Chewton Mendip.



(Figure 6.63–Pulborough and the various findspots –Authors own)

Legend:

1 - Evaluation	7 - Villa	13 - Coin hoard
2 - Mounds	8 - Urns	14 - Hoard
3 - Palstaves	9 - Foundations	15 - Statuette
4 - Barrows	10 - Bath house	16 - Lead tank
5 - Mixed finds	11 - Lead pigs	17 - Cemetery
6 - Urn	12 - Coin hoard	18 - Mausoleum

Finds within 5km of the lead tank

Wiltshire and Swindon HER returned 1377 records

	Historic England Research	Portable Antiquities Scheme
Prehistoric	94	4
Bronze and Iron Ages	218	75
Roman	71	80
Anglo-Saxon/Early Medieval	3	7
Medieval/Post Medieval	110	64
Unknown or Other	70	3
Total	566	233

Prehistoric

The earliest occupation is from the Prehistoric period, with evaluations (1-Evaluations) discovering a mixture of Prehistoric woodland clearance alongside Neolithic or Bronze Age worked flints and a Middle Bronze Age bucket urn (Surrey County Archaeology Unit 2011, 8-10). A pair of mounds (2-Mounds, HER: 976583) was discovered alongside an enclosure on Nutbourne Common. The second was examined in 1833 revealing a circular platform with a central depression surrounded by a circle of stones 1.2m wide (Martin 1857, 109-118). Finds included coarse pottery and a fragment of quern/millstone.

Bronze and Iron Ages

Bronze Age material is visible with a series of metalwork finds including palstaves (3-Palstaves) discovered alongside a series of Prehistoric flints and a corn grinding stone at Broomersfield Farm, with a similar example discovered near Stane Street (Grinsell 1931, 56). Ten Bronze Age bowl barrows (4-Barrows, HER: 393267) were found measuring from 22m-27m in diameter and 1.2m-2m high. (Holden 1959, 127).

Extensive Iron Age and Roman remains are visible, with a series of mixed Iron Age and Roman deposits at Marehill (5-Mixed finds). Sewer works in 1958 discovered first-century pottery, fragments of wood and bone at the base of a ditch (Lewis 1960, Archaeology South East 2008). Mixed Iron Age and Roman finds were discovered at the site of the Borough Farm Roman villa (7-Villa). Excavations from 1909-11 discovered an Iron Age urn (6-Urn) amongst the remains (Praetorius 1911, 121-9). A series of mixed Iron Age and Roman urns (8-Urns, HER: 393003) were found at Stopham indicating a possible kiln or cemetery site. In 1877 fragments of Iron Age red pottery were found alongside two handled urns north of Stopham House (Sussex Archaeological Collection 1878, 203). More urns were found in 1890 in the same area (Sussex Archaeological Collection 1927, 91).

Roman

A Roman villa was discovered in 1817, with later excavations in 1909-11 discovering a minor villa. Other finds included coins, window glass and Roman pottery and jewellery, with moulds indicating production and distribution of Samian-esque pottery at the villa. Similar remains

were found in 1910 at Homestreet Farm (9-Foundations, HER: 392900), with excavations discovering foundations of Roman buildings. Excavations in the 1930s and 1960s uncovered the remains of a bathhouse (10-Bathhouse, HER: 392908) and an associated industrial site visible through a series of pits, post-holes and ditches (Winbolt 1937, 13-36; Barton 1963, 20-22; Evans 1996, 103). Later excavations in 1970 revealed further buildings, including an apparent temple.

Metalwork finds indicated extensive Roman activities, with four lead pigs of Domitian (11-Lead pigs), discovered in 1824 at the site of Boomer's Hill (Winbolt 1935, 63). A collection of coins was found in 1984 (12-Coin hoard) (Aldsworth 1985) with 1,300 late third century bronze radiates from the reign of Tetricus II (AD 271-4). Other hoards included a deposition of 1,800 mixed third and fourth-century coins (13-Hoard, HER: 392909, PAS: IARCH-6FAD71) discovered in 1855 near a spring at Redford (Robertson 2000, 279). Another hoard of 1,559 third century radiates (14-Hoard, PAS: IARCH-35F7AC) was found in 1983. Activities were also visible near the River Arun, with a bronze statuette of Hercules (15-Statuette) discovered in 1908 (Winbolt 1935, 63). A lead tank (16-Lead tank) was discovered in 1943 by mechanical digger in the floodplains of the river (Curwen 1943, 155-7). The lead tank was 0.78m in diameter, 0.48m deep and had a capacity/volume of 209litres. The tank was decorated with cable patterning with a large saltire next to chi-rho. One fragment was deliberately and carefully cut.

A cremation cemetery (17-Cemetery, HER: 393024) was found in 1863, with the cremations placed in urns or amphora and in a well-like shaft (Piggott 1968, 255-68; Green 1976, 216). These were found in association with Hardham Roman Camp (HER: 393011), a rectangular enclosed settlement measuring 1.4 hectares across Stane Street (Smith 1987, 118, 277). Excavations discovered a civilian settlement under the enclosure, with finds including three cremation burials and a fibula brooch whilst pottery production was visible with a large quantity of wasters in a pit. The cremation burials comprised five graves containing a wooden box alongside cinerary urns with burnt human remains. Grave goods included pottery, sandals, vases, and bronze fibulae. Other burials were found in a timber-lined shaft, with fragments of leather, animal bones, pottery fragments and two round stones besides the cinerary urns containing burnt remains. A second and third shaft contained three cremation urns in a wooden box. Alongside a similar mixture of animal bones and pottery, these also had bent iron and bronze artefacts besides worked flints and Roman coins. This led Green to describe them as 'ritual pits' owing to the composition of the finds and showing deliberate abandonment like the lead tank. This was not the only evidence of Roman burials in the area, with a mausoleum (18-Mausoleum, HER: 392901) of the cart-wheel type. This consisted of a short circular mound measuring 19m in diameter and 0.2m high, with excavations from 1815-1817 revealing it was constructed over a circular chamber (Sussex Archaeological Collections 1859, 141-2).

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria Pulborough shows strong evidence of being a landscape of continued deposition.

Riby Cross Roads

Topography

Riby Cross Roads is a small village in the West Lindsey district of Lincolnshire on the Lincolnshire Wolds. The town is northwest of Hermitage Wood and lies in arable farmland. The lead tank was found 3.33km from the nearest river.

Human landscape

Riby was a settlement in Domesday Book, in the hundred of Yarborough and the county of Lincolnshire. The village is 6km south west of Grimsby and 9.5km northwest of Caistor. The lead tank was found 8.35km from the nearest Roman road and 101.58km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.64–Riby Cross Roads and the various findspots–Authors own)

Legend:

- | | |
|--------------------|------------------------|
| 1 - Hoard | 4 - Rural settlement |
| 2 - Possible villa | 5 - Lead tank |
| 3 - Cemetery | 6 - Settlement remains |

Finds within 5km of the lead tank

North East Lincolnshire HER 561 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	16	23
Bronze and Iron Ages	10	39
Roman	6	75
Anglo/Saxon/Early Medieval	6	39
Medieval/Post Medieval	52	225
Unknown or Other	19	35
Total	109	436

Prehistoric, Bronze and Iron Ages

No depositions from these periods qualified for inclusion.

Roman Roman period activity is also visible in the area, with pottery found at the Riby Cross Roads Anglo-Saxon site. These were mostly greyware body sherds from the second and third centuries (Steedman 1994, 235). The pottery matches those of the coin hoard (1-Hoard, HER: MLI50020), with between 15-20,000 third century bronze radiates packed into a large, globular two handled urn (Robertson 2000, 179-80). Ploughing at the site in 1957 revealed ditches containing second century Roman pottery (Wilson 1954, 94; Petch 1957, 107-8), providing similar dates to the materials found at Riby Cross Roads Anglo-Saxon settlement. A possible villa (2-Possible villa, HER: MLI54231) was west of the Anglo-Saxon settlement at Riby Cross Roads. Finds in this area included building debris, pottery and gold and silver coins.

Anglo-Saxon/Early Medieval

Occupation is visible from the Anglo-Saxon period with a cemetery (3-Cemetery, HER: MLI50022) and substantial rural settlement (4-Rural settlement, HER: MLI52885) at Riby Cross Roads. The cemetery was discovered in 1915 and consisted of Early Saxon remains. There was a small beaker-shaped vessel created from rough red ware with a neckline above a series of continuous stamping (Myers 1951, 98). These were found in association with a series of skeletons alongside an iron knife, a bronze annular brooch and amber, amethyst and glass beads (White 1982, 81-2; Leahy 1991, 41). Later burials were discovered, suggesting a seventh-century cemetery, with all the burials arranged in regular rows.

This cemetery was south of a substantial rural Middle Saxon settlement excavated following identification from aerial photography (Steedman 1994, 212-4). The site was divided into six areas (Areas A-F) and a pit in Areas B contained unfired clay loom weights and numerous ditches and pits containing Early to Middle pottery (Steedman 1994, 219, 221-222). A series of enclosure ditches in Areas C and D and B and F contained a mixture of iron knives, harness fittings and a bone comb whilst one of the latest ditches in the south side of the settlement contained a lead tank (5-Lead tank). The tank was found during excavation in 1991, like the Bottesford tanks, lying horizontally in the fill of a ditch alongside a substantial quantity of Middle Saxon pottery.

The tank was approximately 285mm high and with a diameter of approximately 515mm. The tank had been crushed with the sides folded flat and laid across each other in the centre (Cowgill 1994, 267), indicating deliberate abandonment.

Other activities at Riby Cross Roads were visible with over 240 pieces of ironwork (Steedman 1994, 249-254) and fragments of lead alloy and metalworking slag indicating extensive smithing activities at the site. Craftworking was also visible with a series of fired and unfired clay weights, with similarities to those discovered at the Anglo-Saxon site at Flixborough. The animal assemblage was like the rural settlement at Bottesford, with a large proportion of cattle bones alongside sheep and other domesticated animals (Steedman 1994, 290). Combined with the pottery assemblage, this indicated mostly domesticated occupation with ironworking and craftworking.

Medieval/Post Medieval

Later activities included shrunken Medieval remains (6-Settlement remains), with earthworks comprised of a hallow way with rectangular plots and stone walls besides a further series of hollows and stone foundations (Everson, Taylor and Dunn 1991, 113). Excavations in 2003 found a Medieval ditch on a similar alignment to these features and a Post Medieval drain, showing continued activities following the Anglo-Saxon period.

Analysis

Riby Cross Roads presents weak evidence for being a landscape of continued deposition, with most of the occupation centred around the area of the Anglo-Saxon settlement.

Rochester

Topography

Rochester is a town in Kent which serves as the lowest bridging point of the River Medway, with the lead tank found in the river. The town lies in the area known as the London Basin whilst the Hoo Peninsula, consisting of London Clay and alluvium brought down by the Medway and Thames, lies just north of the town.

Human landscape

The town was one of two administrative centres for the Cantiaci tribe. Following the invasion of AD 43 and a battle at the Medway, Rochester was a Roman settlement known as Durobrivae. Rochester became a bishopric and cathedral city for the kingdom of Kent in AD 604. Medieval occupation is particularly visible with Rochester Cathedral and Rochester Castle. Rochester was a settlement in Domesday Book, in the hundred of Rochester and the county of Kent. The tank was found 0.10km from the nearest Roman road, Watling Street, and 220.56km from the nearest lead mine at Chewton Mendip in Somerset.



(Figure 6.65–Rochester and the various findspots–Authors own)

Legend:

1 - Flints	6 - Coffin	11 - Coins	16 - Pits	21 - Lead tank
2 - Hoard	7 - Coffin	12 - Inhumation	17 - Ritual Pits	22 - Swords
3 - Settlement	8 - Coffins	13 - Burials	18 - Temple	23 - Cemetery
4 - Pit	9 - Urns	14 - Cemetery	19 - Villa	24 - Cemetery
5 - Mint & Pit	10 - Urns	15 - Cemetery	20 - Villa	25 - Burial ground

Finds within 5km of the lead tank

Kent HER 2330 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	30	23
Bronze and Iron Ages	70	81
Roman	76	80
Anglo-Saxon/Early Medieval	20	16
Medieval/Post Medieval	169	218
Unknown or Other	513	21
Total	878	439

Prehistoric

Lower Palaeolithic flint impalements (1-Flints, HER: 1084982) were found in St Georges Road and consisted of 40 hand axes, a Levallois core and a miscellaneous object (Wessex Archaeology 2003, 132).

Bronze and Iron Ages

A feature containing Late Bronze Age/Early Iron Age and Late Iron Age pottery, cereal remains and worked and burnt flint (Wessex Archaeology 2007) was also found. Evidence of Bronze Age occupation is visible with metalwork finds found in the River Medway. A Bronze Age sword was discovered at Chatham Reach in the River Medway in 1871 (HER: TQ 76 NE 62.) and a socketed axe (HER: TQ 76 NE 45) was also found in the Medway near Chatham. A spearhead and dagger and two rapiers (HER: TQ 76 NE 26 and HER: TQ 76 NE 24) were recovered near the River Medway in 1930 (Jessup 1930, 102, Burgess and Gerloff 1981, 47-8, 178). A founder's hoard with 39 artefacts (Founder's Hoard, HER: 416074) was discovered in 1893 at Stoke. Further discoveries of founder's hoards included a collection of 165 Late Bronze Age metal artefacts found in 1973 at Roper's Farm (Moad 1974). The burier had forced some of the weapon points into the axe sockets to break them up since many contained broken fragments (Moad 1974).

Iron Age occupation is visible with a mixed Iron Age and Roman settlement under Rochester Cathedral (3-Settlement, HER: 1311896). Excavations revealed two first century AD pits with Belgic pottery (Ward and Anderson 1990, 91). Further Iron Age activity was visible with a pit (4-Pit, HER: 416298) and mint (5-Mint, HER: 416079) at an apparent 'Belgic rubbish dump' (Wilson and Wright 1962, 158). This consisted of postholes of a large structure with associated Belgic coin moulds, slag, coins and brooches alongside a gravel trackway and ditches (Chaplin 1962).

Roman

Roman occupation is visible with a series of burials and mixed occupation sites. A timber and daub building were discovered at High Street near the coin moulds. A series of lead coffin burials (6-Coffin, 7-Coffin, HER: TQ 76 NW 109, and 8-Coffins, HER: TQ 76 NW 70) included a lead coffin containing the remains of a small child recovered in 1926 (Taylor and Collingwood 1926, 238). Further lead coffins (HER: TQ 76 NE 32) were discovered during grave digging in the new

cemetery at Chatham. Another lead coffin (HER: TQ 76 NE 706) was found in 1883 opposite St Mary's Church, containing a pottery vessel and decorated with cockle shells and a 'large cross' (Wheatley 1927, 164; Toynbee 1954, 42). A series of cremation urns (9-Urns, HER: TQ 76 NW 42 and 10-Urns and HER: TQ 76 NE 6) were a mixture of cinerary urns alongside Samian and Upchurch vessels found in 1895 (Jessup and Taylor 1932, 169). These were found alongside a series of fourth century coins (11-Coins, HER: 416230) during the reconstruction of Watling Street at Strood.

Other possible cemetery sites included the inhumation and wallbank (12-Inhumation, HER: TQ 76 NW 728) was found alongside a Roman building. Other burials included those found at Luton Brickfield in 1869 (13-Burials, HER: TQ 76 NE 35). Finds included glassware, a bronze jug and basin, an iron lamp, a bronze hasp, Samian Ware, and components of a small spade (Jessup 1959, 27-8). The small spade was identified as a 'ritual' iron shovel with similarities to those at the Carrawburgh Mithraeum and a walled cemetery at Littlington in Cambridgeshire (Baggs, Kettering and Meekings 1982, 54). Further burial evidence at Rochester included an inhumation cemetery (14-Cemetery, HER: 416217) discovered in 1853. A number of skeletons were found with pottery, coins, charcoal, oyster shells and a puddingstone quern (Steele 1854, 360; Jessup and Taylor 1932, 169). Another inhumation cemetery (15-Cemetery, HER: 415898) was uncovered in 1897 that revealed 11 inhumations accompanied by Castor and Samian ware pottery (Payne 1898, 14-21; Jessup and Taylor 1932, 149).

Further evidence of occupation in this area includes pits found in 1899/1900 at Strood (16-Pits, HER: TQ 76 NW 24) containing large volumes of material. Other evidence of 'ritual' included 12 'ritual' pits (17-'Ritual' pits, HER: TQ 76 NW 116) containing mixed Samian vessels, 'Upchurch' beakers, coins, rings, knives, nails, bone pins, animal bones and oyster shells (Green 1976, 229). One of these pits contained a human skeleton, used to further this analysis of these being 'ritual' pits. A possible temple (18-Temple, HER: 1186231) was a late first century enclosed settlement interpreted as a temple/'Romano-Celtic' type shrine. More evidence of possible ritual activity was found at a villa (19-Villa, HER: 416103) discovered in 1887-9 during excavations for chalk. Five rubbish pits in the vicinity of these features contained large quantities of first century (Samian, Castor and Upchurch) pottery, a bronze statuette of a wingless Cupid, bracelets, pins, rings and fibulae. Other finds included bone and ivory pins, a worked deer-horn, a broken jet ornament, mixed second to fourth century coins whilst a lead coffin was found south of the villa (Green 1976, 229).

These remains were similar to another villa (20-Villa, HER: 415904) discovered in 1800-1810 with foundations of three rooms with large quantities of painted wall plaster and broken tiles were uncovered alongside pottery (Samian), glass fragments and four first century coins. A series of urned cremations were also in this area (Scott 1993, 105). A lead tank (21-Lead tank) and the swords (22-Swords, HER: 416223) are also evidence of possible ritual activity, since these finds were discovered in the River Medway (Arnold 1887, 190; Crerar 2012). The lead tank was found in 1878, was 0.29m in diameter, 0.14m deep and decorated with flanges that divided the sides into twelve irregular panels with foliage design 'not unlike Roman work'.

Anglo-Saxon/Early Medieval

Mixed Roman and Anglo-Saxon cemeteries show continued burial practices at Rochester, including a cemetery discovered in 1852 (23-Cemetery, HER 416100). Grave goods included vessels, personal ornaments, coins, and weaponry from the Roman and Anglo-Saxon periods. A cemetery found at Saxonby House in 1892 (24-Cemetery, HER: 416166) with eleven graves with grave goods, with 27 burials uncovered in excavations from 1896-1900 and in 1979 (Meaney 1964, 134; Williams and Payne 1979, 284-6). These burials had parallels to a burial ground contained in a series of barrows at Chatham (25-Burial ground, HER: 415907). Excavations in 1779 discovered inhumations with the head facing north and an assemblage of grave goods including swords, shield umbos, spearheads, square-headed and saucer brooches, pendants, buckles, beads, pottery, glassware and Roman coins (Meaney 1964, 121).

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Rochester provides strong evidence of being a landscape of continued deposition.

Rudston

Topography

Rudston is a village and civil parish in the East Riding of Yorkshire. The village is located near the Gypsy Race, a winterbourne stream and the most northerly of the Yorkshire chalk streams that flows through the Great Wold Valley through a series of springs, with the lead tank 1km from this stream.

Human landscape

Rudston is situated between Driffield and Bridlington, with the village 10km west of Bridlington. Rudston is listed in the Domesday Book in the hundred of Burton as Rodestan . The tank was found 0.45km from the nearest Roman road and 110.95km from the nearest lead mine in Grassington, Yorkshire.



(Figure 6.66 - Rudston and the various findspots - Authors own)

Legend

1 - Occupation	5 - Cemetery	9 - Villa
2 - Occupation site	6 - Villa	10 - Settlement
3 - Barrow	7 - Lead tank	11 - Cemetery
4 - Barrows	8 - Villa	12 - Cemetery

Finds within 5km of the lead tank

Humber Historic Environment Record 575 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	32	17
Bronze and Iron Ages	73	70
Roman	17	409
Anglo Saxon/Early Medieval	5	41
Medieval/Post Medieval	33	223
Unknown or Other	28	10
Total	188	770

Prehistoric

Prehistoric occupation is visible through sites such as a Neolithic occupation site (1-Occupation, HER: 910779) that consisted of an excavated oval hollow with a hearth alongside pottery, flint wasted and implements such as arrowheads, scrapers, axes and burnt animal bone (Manby 1975). Another occupation site (2-Occupation site, HER: 910780) contained mixed Neolithic to Late Bronze Age activities with Neolithic pits containing a mixture of pottery, flints including arrowheads, blades and flakes, scrapers, stone and animal bone and pieces of jet (Manby 1974; *ibid.*1975). A Neolithic long barrow (3-Barrow, HER: 79508) was excavated in 1860 and consisted of two long mounds joined together to form a V-shaped structure. A trench and several pits at the South-East end of the barrow were discovered in association with a crematorium area, a 11.5m long section of burnt earth running through the trench with a series of disarticulated bones. A potential secondary burial was uncovered 0.30m above the natural surface whilst Anglo-Saxon pottery was found at various depths on the south side of the mound (Greenwell 1860, 497-501; Ramm 1970, 6).

Bronze and Iron Ages

Occupation from this period consisted of pair of round barrows (4-Barrows, HER: 79491), excavated in 1870. Barrow 64 was comprised of earth except for the centre where a chalk mound was enclosed within the larger earth mound. This inner mound covered a central grave containing a disturbed male skeleton surrounded by charcoal. There was also another undisturbed male inhumation, also surrounded by charcoal with wood, with a small flint knife behind the head with more flint artefacts surrounding the head and neck (RCHM 1963). A secondary burial south of the mound consisted of a middle-aged female. Barrow 65 also contained a central grave with a disturbed inhumation with Beaker sherds, charcoal and some wood remains. The mound's fill also contained part of a child's skull, a piece of a cinerary urn, multiple pottery sherds and flint artefacts (Dawkins 1878, 252-3).

Iron Age occupation is visible with a Square Barrow cemetery (5-Cemetery, HER: 910615) south of Middle Dale (Challis and Harding 1975, 59; Whimster 1981,379-381). Excavations from 1968-1975 recorded 189 burials, with all but a few lying at the centre of square enclosure ditches with the burials grouped into those arranged North-South and East-West. Grave goods were found with the North-South orientated graves, with 50% of the skeletons in this group accompanied

by artefacts, comprised of mixed brooches, pig bones and vessels. The East-West orientated graves had swords, spearheads, iron knives, bracelets, glass beads, finger rings, a ring-headed pin, spindle whorls, a shield and a bronze toe ring (Stead 1971, 217-226; Whimster 1981, 381).

Roman

Rudston Villa (6-Villa, HER: 79473) consists of a courtyard villa with mosaics and a bath-house on its east side, with this phase of occupation dating from the third-fourth centuries AD. Evidence for earlier first-second century occupation is visible through a rectangular enclosure with an earlier Iron Age settlement beneath it. A number of mosaics were found at the villa, including the 'Venus' mosaic uncovered in 1933 and the 'Charioteer' mosaic discovered in 1971 and dated to the fourth century AD.



(Figure 6.67—The lead tank found at Rudston, North Lincolnshire Museum)

A lead tank (7-Lead Tank, PAS: NLM-41D6C6) was discovered in 2020 by metal detectorists in the base of a circular pit cut into chalk subsoil, with the pit dug at the end of an ash-filled channel alongside the tumbled rubble of a wall footing. This footing included chalk rubble and sandstone quern fragments, with part of the structure overlaying the tank after it had collapsed. Pottery and animal bones were in layers both above and below the tank. The tank was 10cm high, 1cm thick with a diameter of 60cm. The tank was found in connection with a substantial settlement, believed to be part of a ladder settlement, with numerous first to fourth-century AD artefacts discovered in this area. Evidence for further villa occupation was visible with a pair of villas seen through cropmarks (8-Villa, HER: 79578 and 9-Villa, HER: 910829) and a settlement (10-Settlement, HER: 81305). The first of the villas consisted of a fourth-century Roman villa excavated in 1904 which uncovered three mosaics and later excavations in 1951 and 1955 revealed an E-shaped building with three wings connected by a corridor. These excavations discovered six more mosaics which served as floors for the corridor, with this phase of activity dated to the early fourth-century AD through a coin of Constantine. These remains were above a series of earlier foundations and pottery and other artefacts that suggested this site was occupied by a farmstead from the Iron Age to the third century AD (Scott 1993, 98).

Anglo-Saxon/Early Medieval

Occupation from this period is indicated by a pair of inhumation cemeteries (11-Cemetery, HER: 910604 and 12-Cemetery, HER: 79461) and the first of these was discovered in 1819, with over 100 burials identified at the site. The other cemetery consisted of a fifth to sixth-century inhumation cemetery first recorded in 1814. Material from the later graves consisted of brooches, wrist clamps, a bronze ring, plain strap ends, an oblong bronze buckle, a perforated Roman coin and glass beads as well as weapons including spear or lanceheads and a shield boss (Meaney1963, 292).

Medieval and Post-Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Rudston provides moderate evidence of being a landscape of continued deposition.

Rushton

Topography

Rushton is a small hamlet in Northamptonshire situated in a flat valley surrounded by woodland. Rushton is located on both sides of the River Ise, a tributary of the River Nene, with the tank found 0.06km from the river.

Human landscape

The village is made of up three deserted Medieval villages of Barford (near Barford Lodge), Glendon (east of Glendon Hall) and Rushton St Peter, all of which are in the Domesday Book. The lead tank was found 7.43km from the nearest Roman road and 91.41km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.68–Rushton and the various findspots – Authors own)

Legend:

- | | |
|----------------|---------------------|
| 1 - Settlement | 6 - Cremation |
| 2 - Settlement | 7 - Well and burial |
| 3 - Lead tank | 8 - Burials |
| 4 - Bath house | 9 - Burials |
| 5 - Villa | |

Finds within 5km of the lead tank

Northamptonshire Historic Environment Record 2721 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	18	7
Bronze and Iron Ages	23	19
Roman	48	283
Anglo-Saxon/Early Medieval	17	9
Medieval/Post Medieval	76	66
Unknown or Other	81	90
Total	263	474

Prehistoric

No depositions from this period qualified for inclusion.

Bronze Age and Iron Ages

A Middle Iron Age settlement (1-Settlement, HER: 4088/0/2) consisted of ditches, gullies and enclosures south-east of Stonefield Lodge (Richmond 2011). Various pits in the enclosures appeared to be used for quarrying ironstone or storage. They were similar to those on other Iron Age sites, suggesting this site had agricultural and industrial functions for local, small-scale iron manufacturing (Richmond 2013). A further 13 pits south-west of these features also appeared to be used for storage functions, with one these containing fragmentary remains of a possible male individual. An isolated burial was found within a shallow grave bordering a trackway. Pottery found in features on the site dated from the Middle Iron Age and indicated that further activities were occurring north of the site. Another Iron Age settlement (2-Settlement, HER: 346074) was discovered extending from Kettering to Geddington. Quarrying discovered mixed Iron Age and Roman coins, three skeletons and a large Iron Age pot in Weekley Hall Wood. Later excavations uncovered 97 postholes which appeared to indicate granaries (Cunliffe 1974, 170-1; Jackson 1976, 82), roundhouses and two possible Bronze/Iron Age pits alongside a ditched trackway (Jackson 1976, 74, 76). The pits and postholes contained splintered bone pieces and Early Iron Age pottery fragments.

Roman

Further Iron Age and Roman occupation are visible surrounding a lead tank (3-Lead tank, HER: 3931/0/0) discovered near a Roman bath house (4-Bath house, HER: 3961/1/1) and villa (5-Villa, HER: 3961/1). The fragment lead tank was discovered in 199 in the eastern side of a ditch near the bath house. The tank was 0.2m in diameter, 0.27m deep, with an approximate weight of 25kg and decorated with repeated Saltire and repeated circles. The tank's sides were complete but cut vertically and folded with the base missing. Excavations in 1995 uncovered the bath house, and subsequent excavations from 1996-2002 revealed an extensive complex with evidence of several modifications and rebuilds that made accurate dating problematic (Chapman 1996, 216). Other finds included the cremation (6-Cremation, HER: 8586/0/1) and the well and burial (7-Well and burial, HER: 9106/0/1). The cremation comprised burnt remains in an urn with three

glass vessels deposited as grave goods and burnt figs (McKinley 2005). The well contained mixed pottery and human remains in a black mud layer with a tumulus in the vicinity (Jenkins 2002). Further burials were discovered at the site of the Mount (Burials, HER:346047) a conical flat-topped mound with Iron Age and Roman settlement features in its vicinity. Excavations in 1964 revealed a robbed primary burial with second century pottery and 24 decapitated burials (men, women and children). These were in two rows outside the southern perimeter of the mound (Benson 1965, 210).

Anglo-Saxon/Early Medieval

Anglo-Saxon activities included a series of burials (8-Burials and 9-Burials) discovered during the villa excavations in 2003. These revealed parts of a body near limestone slabs and more skeletons east of the bath house, one of which was buried with a dog and a possible sword. One of these remains was a skull whilst another was a small child, with other bodies and bowls found north and west of the bath house (Northamptonshire Archaeology 2004). A mixed Late Saxon and Medieval settlement (10-Settlement, HER: 346067) were found as part of Newton village. Excavations from 1970-3 revealed a large number of pits and postholes besides a sleeper beam trench and 14th-century occupation debris, indicating post-built and sill beam-based buildings (RCHM 1979, 112-116). Ironstone quarrying would discover an Early Saxon cemetery containing burials with associated grave goods consisting of several urns and a pair of girdle hangers in its vicinity (Meaney 1964).

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based on the criteria Rushton provides weak evidence of being a landscape of continued deposition.

St Saviourgate

Topography

St Saviourgate is an historic street in York located just outside the walls of Roman Eboracum. York itself lies within the Vale of York, a flat arable landscape bordered by the Pennines, the North York Moors and the Yorkshire Wolds, with the city at the confluence of the Foss and Ouse. The lead tank found 0.20km from the River Foss.

Human landscape

The area of York was originally occupied by the Brigantian tribe before later conquests by the Romans in AD 71. St Saviourgate was located just outside of Roman Eboracum, the legionary fort and later city in the Roman Empire founded on the north bank of the River Ouse. York was a settlement in Domesday Book, in the hundred of York. The tank was found 0.14km from the nearest Roman road and 63.93km from the nearest lead mine at Grassington in Yorkshire.

Finds within 5km of the lead tank

City of York HER 3622 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	3	9
Bronze and Iron Ages	17	18
Roman	76	292
Anglo-Saxon/Early Medieval	26	39
Medieval/Post Medieval	626	906
Unknown or Other	862	56
Total	1610	1320

Prehistoric

A series of miscellaneous finds (1-Finds, HER: 58231) provide evidence for Prehistoric occupation at York such as Neolithic stone and flint implements.

Bronze and Iron Ages

A series of Bronze Age artefacts were part of the miscellaneous finds, including a range of Early Bronze Age Beakers and implements including a hoard of socketed axes and a range of other bronze artefacts.

Roman

Excavations in 1997 at 9 St Saviourgate found evidence of a mixed Roman, Viking and Medieval area of activity (2-Occupation, HER: 1223823). The excavators placed three trenches at the site and most of the contexts in these features were believed to be rubbish dumps (Carrot et al. 1998, 3-11). Occupation in this part of York can be seen from multiple periods and during the digging of foundations for new houses a large number of animal horns were found (Drake 1788, 95; Wilson 1999). This led to the belief that there was a Roman temple in this area near the palace. The most notable Roman occupation at York consisted of the Roman fort Eboracum (HER: 58143) and a large vicus and accompanying cemetery discovered at York Castle (HER: 58178) and another extramural settlement on the northwest and southwest sides of the fortress (HER: 58148) which included the quays.

A series of coin hoards (3-Coin hoard, PAS: IARCH-90AAA7, 4-Coin hoard, PAS: IARCH-A99CC7 and 5-Coin hoard, PAS: IARCH-FF5C6B) show evidence of deliberate depositions. Two of these consisted of 200 silver denarii at Foss Island (IARCH-FF5C6B) and 700 silver denarii (IARCH-90AAA7) found in a 'wooden box' at New Street (Radley 1967, 118; Robertson 2000, 235, 431). The smaller hoard of 35 first century silver denarii (IARCH-A99CC7) was found in the Praetentura of the legionary fortress (Thorp 1976, 5; Goodburn 1976, 315). A larger hoard of 2,800 fourth century bronze coins (6-Hoard, PAS: IARCH-35AE4E) was found in a broken storage jar in 1966 (Robertson 2000, 333-334).

Numerous cemeteries and burials from the Roman period have been discovered in the area, such as a cemetery (HER: MYO2021) discovered at Fishergate (RCHME 1961, 69). This consisted of a first-second-century cremation cemetery on the east side of Fishergate with many cinerary urns. Later excavations at the Barbican, Kent Street Coach Park, Fishergate House and Blue Lane Bridge Mecca Bingo produced further cremations and inhumations, revealing a much larger mixed cemetery in this area (York Archaeological Trust 2021, 1, 6-7). A large barrow second-fourth-century cemetery (HER: 56611) was found containing mixed cremation and inhumation in the 1840s. Another mixed cremation and inhumation cemetery (HER: 56612) included a burial vault with a coffin discovered beneath a house.

Anglo-Saxon/Early Medieval

Anglo-Scandinavian occupation was visible at St Saviourgate through several pits, also believed to be rubbish pits through their assemblages. The pit containing the lead tank and cauldron was in a pit containing wood chips, brick/tile fragments and bone fragments (Carrot et al. 1998, 17). The lead tank (7-Lead tank, HER: 1223823) was found during excavations in the 1960s and contained a cauldron and assemblage of 'Viking' age metalwork (Ottaway 2009), with its location in an apparent rubbish pit suggesting either deliberate abandonment or placement following disuse of the site in the Anglo-Scandinavian period. These mixed remains had similarities to occupation discovered near St Saviour's Church (8-Excavations, HER: 659342). Excavations in 2004 found a similar mixture of Roman, Anglo-Scandinavian, and Medieval occupation in this area. The Roman remains discovering Roman brick, pottery and tile alongside a copper-alloy ring (Evans 2009, 21). The Anglo-Scandinavian material included antler offcuts, a tooth blank plate, a whittle tang knife, clench bolts and spindle whorls alongside late ninth century pottery. Medieval evidence was visible with a series of graves sealed beneath clay layers overlain by substantial walls (Evans 2009, 9, 12).

The remains at St Saviourgate were like those found at the nearby Coppergate (9-Occupation, HER: 658876). Excavations in 1972-4 discovered waterlogged deposits from the Anglo-Scandinavian period, with remains of timber buildings alongside textiles and leather. Excavations from 1976-81 found a large-scale settlement including re-used Roman and Medieval roof tiles, timber and woven wattles, pathways, screens, and metalworking debris. Evidence of craftworking was visible with similar tools to those discovered with the lead tank, including a mixture of woodworking and metalworking tools. One of the most distinctive finds was the Coppergate Helmet, discovered at the bottom of a pit believed to be a well (Tweedle 1992, 851). Other finds in the pit included a sword beater, a churn dasher, a crucible fragment, an antler beam, a rubbing stone, glass fragments and fragments of hearth lining alongside iron and slag fragments (Tweedle 1992, 864-5). This suggested the helmet had been deliberately hidden, with part of the cheek piece and the camail placed within the helmet itself before it was placed upside down within the pit. Deliberate deposition was also visible with a large hoard of 10,000 bronze stycas (HER: 58244) discovered at St Leonard's Place in 1842 and dating to the late ninth-century AD.

An extensive Middle Saxon settlement (10-Settlement, HER: 1510414) was also discovered at Fishergate, occupied from 700-850 AD. It consisted of plots of land containing boundary style ditches with hall-style houses laid out in a manner suggesting a deliberately planned settlement (York Archaeological Trust 2021, 8-9). A small Saxon agricultural settlement (11-Settlement, HER: 1510412) was discovered in advance of developments of York university with sub-oval pits

containing animal bone alongside mixed Roman and Early Saxon pottery and a large shallow depression (Spall 2008, 5-6). A series of midden-like deposits contained a similar animal bone and pottery mixture alongside glass beads, slag and a fragment of sandstone whetstone (Spall 2008, 6).

A large Anglo-Saxon cemetery (12-Cemetery: HER 58206) was discovered in 1878 (Tillott 1961, 2). Later excavations in 1965 revealed the full extent of the cemetery. A large cemetery (HER: 1239647) was also found within the boundary of York Castle during 1829.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria St Saviourgate shows strong evidence of being a landscape of continued deposition.

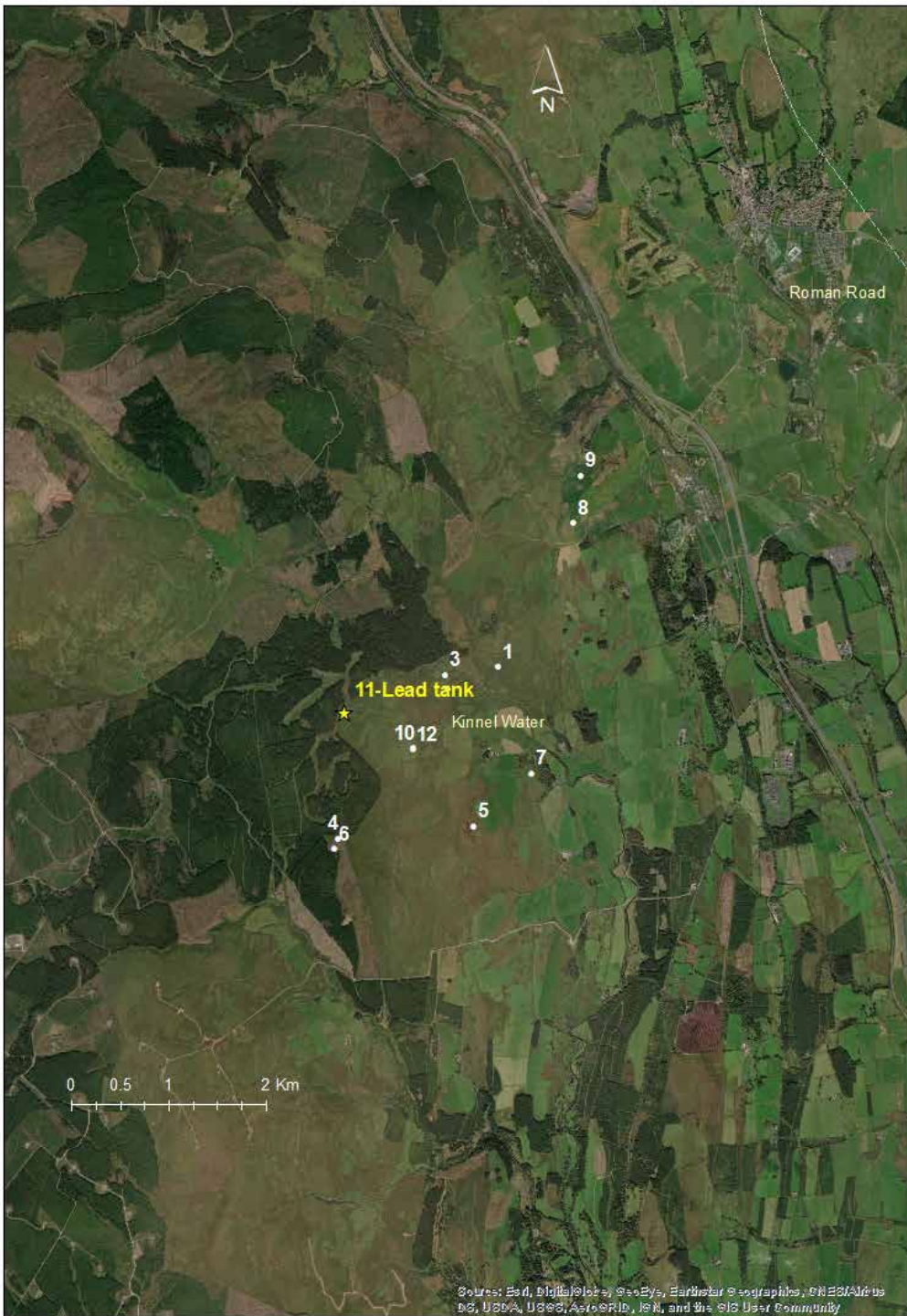
Stidriggs

Topography

Stidriggs is an area of moorland in the Dumfries and Galloway region of Scotland to the west of Beattock. Stidriggs is situated in a forestry clearing, a small water feature, flows through the area whilst the Slota Burn and Green burn also flow through the area and the Kinnel Water is to the east. The lead tank was found 0.60km from the Stidriggs Burn.

Human landscape

The lead tank was found 7.42km from the nearest Roman road and 91.46km from the nearest lead mine at Alston Moor in Cumbria.



(Figure 6.70–Stidriggs and the various findspots–Authors own)

Legend:

1-Cairnfield	5-Cairnfield	9-Settlement
2-Cairnfield	6-Cairnfield	10-Buildings
3-Settlement	7-Fort	11-Lead tank
4-Cairnfield	8-Fort	12-Occupation

Finds within 5km of the lead tank

	Canmore
Prehistoric	92
Bronze and Iron Ages	11
Roman	7
Anglo-Saxon/Early Medieval	3
Medieval/Post Medieval	49
Unknown or Other	185
Total	347

Prehistoric

Evidence of burial practices included cairnfields near the Eye Burn River (1-Cairnfield, Canmore: 87595 and 2-Cairnfield, Canmore: 87596) with 30 small cairns (3-Settlement, Canmore: 87594)). Further evidence of burial practices is visible with another cairnfield (4-Cairnfield). The cairn was a turf-covered burial mound measuring 8m and 1.2m high (Scott-Elliot 1967, 108; RCAHMS 1997a, 294). Robbing of some of the stones meant it was heavily damaged as it is 0.2m high and 10m in diameter (RCAHMS 1997, 294). The cairnfield (5-Cairnfield, Canmore: 48431) was found near the Eye Burn with several groups of small cairns alongside field banks and small rectangular structures. These varied from 4-6m in diameter and were about 1m high (RCAHMS 1997, 290). Other evidence of occupation includes another cairnfield (6-Cairnfield, Canmore: 66347) and a fort (7-Fort, Canmore: 66344) consisting of a roughly oval site measuring 75m by 60m on a rocky knoll. A later settlement, roughly oval and measuring 45m by 40m, was found near a burnt mound (Canmore: 73736).

Another fort and unenclosed settlement were discovered at Beattock Hill (8-Fort, Canmore: 48414), containing a stone-walled roundhouse and another possible roundhouse (RCAHMS 1997). The unenclosed settlement contained the remains of three roundhouses. Two were side by side whilst the other was 35m south. Two later structures were between these roundhouses, including a horseshoe-shaped structure and a small sub-rectangular building. The features at this site match another fort in Beattock Hill (9-Settlement, Canmore: 48402). This was a roughly oval settlement measuring 40m by 25m, enclosed by a stone wall with two stone-built circular buildings enclosed within (RCAHMS 1977). These were visible alongside a series of clearance cairns (Canmore: 48395) that formed part of the south edge of the distribution of small cairns in this area (McEwen 1975, 18; RCAHMS 1997, 290).

Bronze and Iron Ages

No depositions from this period qualified for inclusion.

Roman

The buildings at Fauld Burn (10-Buildings, Canmore: 66360) were a mixture of enclosures with a rectangular structure adjacent to the entrance (RCAHMS 1992; *ibid.* 1997, 233, 315). There were four phases of settlement activity, the earliest being two scooped settlements with evidence

of hut circles. Another scooped settlement with a stone wall was six metres north-east. This had been heavily robbed out, with both the scooped settlements subsumed by a later, larger oval enclosure measuring 48m by 39m. Two large enclosures were added on the north-east and south-west (RCAHMS 1997, 60, 68, 147). Similarities to other scooped settlements in Eastern Dumfries and Galloway provided a tentative Iron Age/Roman date.

Anglo-Saxon/Early Medieval

The lead tank (11-Lead tank, Canmore: 89407) and the occupation at Fauld Burn (12-Occupation, Canmore: 81032) also show continued use of the landscape.



(Figure 6.71 Lead tank and tool hoard found at Stidriggs, Dumfries & Galloway Council)

The tank was found in 1995 by an Army Ordnance Clearance Team 750mm deep in peat containing a hoard of iron tools. This was west of the settlement at Eye Burn and north-west of the occupation at Fauld Burn, suggesting it could be linked to activities in those areas. The tank was damaged with at least two repairs made to the base and lead patches are clearly visible from the underside. This occupation at Fauld Burn was another mixture of enclosures and buildings, believed to date to the Medieval period with a series of secondary interior features (RCAHMS 1997, 223, 315). There is evidence for at least two field clearance cairns, overlain by a wall that bisects the middle of the settlement.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Stidriggs provides weak evidence of being a landscape of continued deposition since the only artefacts in the area are the lead tank and tool hoard.

Thompson

Topography

Thompson is a village in Norfolk, located amongst acres of woodland. The village is north of the River Wissey and west of the River Thet. The lead tank was found 1.57km from the River Thet.

Human landscape

Thompson is a relatively secluded village in Norfolk, with the nearest town being Watton. The town is believed to have Danish origins as it is recorded in the Danelaw. Thompson is listed as Tomesteda and Tomestuna in the Domesday Book. The lead tank was found 0.60km from the nearest Roman road and 172.47km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.72—Thompson and the various findspots—Authors own)

Legend:

- | | |
|-----------------|-----------------|
| 1 - Mixed finds | 4 - Bowl barrow |
| 2 - Barrows | 5 - Villa |
| 3 - Bowl barrow | 6 - Lead tank |

Finds within 5km of the lead tank

Norfolk HER 421 results

	Historic Environment Records	Portable Antiquities Scheme
Prehistoric	20	4
Bronze and Iron Ages	17	244
Roman	12	267
Anglo-Saxon/Early Medieval	4	65
Medieval/Post Medieval	36	370
Unknown or Other	25	7
Total	114	957

Prehistoric

A series of 40 Mesolithic flints (1-Mixed finds, NHER Number: 8935) were uncovered at a sand quarry at Sparrow Hill alongside a small quantity of Roman pottery and an Early Saxon square headed brooch. (Wymer and Bonsall 1977, 210).

Bronze and Iron Ages

A possible 'lake dwelling' was discovered during draining of the Mickle Mere in 1856. This revealed red deer horns (some sawn off) alongside erect oak piles 1-2m below the surface (Munro 1890, 455-7). Clarke later described these as an artificial island and mentioned large quantities of deer, ox and pig bones besides a bronze axe (Clarke 1960, 84). A series of barrows have been found across the area, such as a group of four barrows at Sparrow Hill (2-Barrows, NHER: 4055) as well as a bowl barrow at Standford Battle Training Area (3-Bowl barrow, NHER: 7373) and another in a dense area of woodland (4-Bowl barrow, HER: 385795).

Roman

Evidence for a possible villa (5-Villa, HER: 383165) consisted of a tessellated pavement discovered in 1856 besides a series of scattered coins (Scott 1993, 135).



(Figure 6.73 Lead tank found at Thompson, Norfolk County Council)

The lead tank (6-Lead tank, PAS: NMS-4CEB66), was discovered near woods by a metal detector in 2012 and was 150mm long, 95mm wide, 7mm thick and decorated with two intersecting moulded cabled ribs. The three sides had been fairly neatly cut, one was irregular with multiple cut and hack marks. This is similar to deliberate fragmentation marks to the Bishop Norton (Lincolnshire), Brough and East Stoke (Nottinghamshire) tanks as well as the example discovered at Preshute.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria Thompson provides weak evidence of being a landscape of continued deposition.

Trowbridge

Topography

Trowbridge is the county town of Wiltshire located in the River Biss which flows through the town where it joins the Lambrok Stream to the town's north and joins the River Avon near Staverton. Part of the Avon Green Belt is northwest of the town. The lead tank was found 1.65km from Semington Brook that feeds into the River Avon.

Human landscape

Trowbridge is a market town with the Kennet and Avon canal to its north playing an important role in its development through coal transportation. Trowbridge was a settlement in Domesday Book, in the hundred of Whorwellsdown and the county of Wiltshire. The lead tank was found 12.01km from the nearest Roman road and 40.12km from the nearest lead mine at Chewton Mendip in Somerset.



(Figure 6.74–Trowbridge and the various findspots–Authors own)

Legend:

- | | |
|------------|---------------|
| 1 - Barrow | 4 - Villa |
| 2 - Finds | 5 - Hoard |
| 3 - Pits | 6 - Lead tank |

Finds within 5km of the lead tank

Wiltshire and Swindon HER 928 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	11	1
Bronze and Iron Ages	38	14
Roman	34	145
Anglo-Saxon/Early Medieval	2	6
Medieval/Post Medieval	133	155
Unknown or Other	17	6
Total	235	327

Prehistoric

A Neolithic barrow (1-Barrow, HER: 211877) was discovered at Tinhead measuring 63m long and 3m high and surrounded by Kinnes Type A ditches. Excavations in 1864 reportedly found human remains and black pottery believed to be Windmill Hill ware (Grinsell 1957, 140).

Bronze and Iron Ages

A series of mixed finds (2-Finds, HER: 898797) were recovered from Brounkers Court Farm, including fragments of socketed axes and a knife alongside flint and oolic tempered pottery and a bowl (Wiltshire Archaeology Natural History Magazine 1982, 160). Bronze Age material was recovered from Erlestoke Detention Centre including a furrowed bowl and a situlate jar with finger-tip decorations (Wiltshire Archaeological and Natural History Magazine 1987, 140).

An evaluation at Earlestone Sands Golf Course revealed a series of pits (3-Pits, HER: 899122) that contained Early Iron Age pottery overlain by an Iron Age inhumation. Roman pottery was concentrated in the topsoil of these features whilst field working discovered Late Bronze Age pottery in the surrounding area (Wiltshire Archaeological and Natural History Magazine 1992, 80).

Roman

Roman occupation is visible with a villa site (4-Villa, HER: 211726), a building (Building, HER: 211795), occupation debris (HER: 867372) and finds (HER: 898915) at Brounkers Court Farm. The villa was a mixture of material at Lower Baynton Farm, with geophysical surveys in 1995 in an area of Roman building materials (including tesserae and flue tiles) revealing two buildings interpreted as a corridor villa (Scott 1993, 201). The building was a possible first century building comprised of the foundations of a large timber building with a nearby extended burial in a shallow grave. North of these was a two metres deep v-shaped ditch containing Later Iron pottery whilst large quantities of Roman coarse and Samian ware were recovered from across the excavation area (Wiltshire Archaeological and Natural History Magazine 1987, 140). The occupation debris at Lower Baynton Farm was a mixture of 11 chalk/limestone tesserae and five lead fragments (Wiltshire Archaeology Nature Magazine 1986 242). The finds at Brounkers Court Farm consisted of mixed third to fourth-century coins and brooches besides pottery and

a broad range of metalwork (Wiltshire Archaeology Nature Magazine 1984, 132; *ibid.* 1984, 256). Brooches at the site included a divided bow brooch, fragment of a Langton Down type brooch and a bow brooch.

Evidence of deliberate depositions is visible with at least three large coin hoards and the lead tank. A large coin hoard found in an urn (5-Hoard, HER: 211732) in a field called the 'Sand' in 1695. These were mainly third century AD with a series of human skeletons and building-foundations recorded in the area (Wiltshire Archaeology Nature Magazine 1950, 433). Further coins were found in this area whilst a Roman coffin was found in an enclosure called the 'Crate' on the 'Sands' in 1843. Another coin hoard (HER: 211748) was uncovered at Baynton House in 1830, with 365 fourth-century bronze antoniani in a broken pot (Gray 1908, 132-45).



(Figure 6.75 Lead tank found at Trowbridge, Wiltshire, Wiltshire and Swindon History Centre)

The Lead tank (6-Lead tank) was discovered by a metal detector in a field in 2019 and the tank was buried intact and contained a series of pewter plates and cups, with similarities to pewter finds to the well at the Walbrook Mithraeum and those at Icklingham (Suffolk) and Preshute (Wiltshire). This indicated deliberate abandonment, with the intact burial of the tank like those from Burwell (Cambridgeshire), Enford (Wiltshire) and Icklingham.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria Trowbridge provides weak evidence of being a landscape of continued deposition.

Trudoxhill

Topography

Trudoxhill is a village and civil parish in the Mendip region of Somerset. Postlebury Wood, a large and relatively undisturbed woodland first documented in the twelfth century, is south of the village. The Marston Brook, a small river connected to the lake Marston Pond, is north of the village. The lead tank was found 0.02km from a small stream south of the village.

Human landscape

Trudoxhill is southwest of Marston Bigot and east of Cloford Common. Marston [Bigot] was a settlement in Domesday Book, in the hundred of Frome and the county of Somerset is a village close to Trudoxhill. The lead tank was found 1.51km from the nearest road and 21.33km from the nearest lead mine at Chewton Mendip.



(Figure 6.76–Trudoxhill and the various findspots–Authors own)

Legend:

- | | |
|-----------|---------------|
| 1 - Hoard | 4 - Lead tank |
| 2 - Cave | 5 - Hoard |
| 3 - Villa | 6 - Coins |

Finds within 5Km of the lead tank

Somerset Historic Environment Record 226 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	8	36
Bronze and Iron Ages	12	12
Roman	8	163
Anglo-Saxon/Early Medieval	1	2
Medieval/Post Medieval	68	75
Unknown or Other	9	12
Total	106	300

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

A large coin hoard (1-Hoard, HER: 202790, PAS: IARCH-461BFD) with over 250 gold and silver Dubronnic coins along with Claudian issues was found at Well Down Farm in 1860. Ploughing discovered the hoard in an urn at 'Eleven Acre Field' (Evans 1864, 104, 140-9; Robertson 2000, 9).

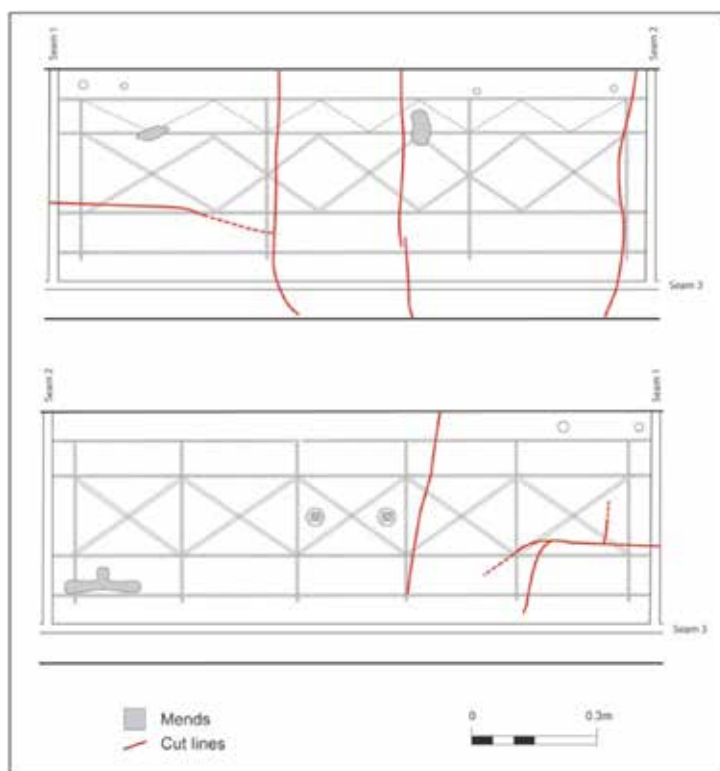
Roman

A cave on the north bank of Asham Wood (2-Cave, HER: 202949, PAS: IARCH-FC5878) contained coin counterfeiting material comprised of over 200 coins, flans and rods alongside pottery, a Saxon iron pin and later material (Robertson 2000). These items were found in recorded excavations from 1950 and 1965-1970 (Barrett and Boon 1972, 61-82; Branigan and Dearne 1991, 147). A corridor villa (3-Villa, HER: 1006188, PAS: IARCH-705DB6) was uncovered by excavations at Whatley Combe in 1958. Excavations revealed at buildings ranged on at least three sides of a square, with a triclinium at the west end of the villa with a mosaic pavement protected by a stone building erected on the Roman foundations. There was a bath suite at the east end of the building range, with coins indicated the villa was constructed in AD300, partially destroyed in AD350 and occupied until AD370 (Scott 1993, 170). A semi-circular masonry structured was revealed near a spring 152.4m south-east of the villa, which led to its interpretation as a nymphaeum. The most distinctive Roman period find was a lead tank (4-Lead tank, PAS: SOM-D21663), discovered in 2017 by a metal detectorist in a highly fragmented state in a pit near a river.



(Figure 6.77 Lead tank found at Trudoxhill, Somerset, Somerset Historic Environment Record)

The tank was formed of a base sheet and sides formed of two sheets with a flat circular base, estimated as c.800-900mm in diameter and the base sheet varied between 17mm and 7.5mm thick. The tank was decorated with cabled bands with broad zig-zags and one central cell had two cast bosses.



(Figure 6.78 Drawing of the two sides of the tank, to scale, with the cuts, areas to be refitted and ancient repairs indicated. Drawing by RMA Trevarthen Somerset Archaeology and Natural History)

Cuts on the tank in several places indicated it was fragmented into a least five pieces. Most of these cuts were extremely ragged, suggesting that a bladed weapon like an axe was used rather than shears. These pieces were folded together and placed with a lead spout in the pit, providing parallels to the examples found at Flawborough (Nottinghamshire) and Ludford (Lincolnshire).

A series of coin hoard also show deliberate deposition, such as hoard of 52,503 third-century bronze coins (5-Hoard, PAS: SOM-5B9453) known as the Frome hoard (Moorhead, Booth and Bland 2012). This was contained in a large pot with a black burnished ware bowl inverted to form a lid, with the hoard believed to be a communal offering to the gods. Earlier activities in 1811 had discovered 111 fourth-century bronze coins (6-Coins, HER; 24891, PAS: IARCH-172943) at Witham Friary during field drainage, with the coins found in a round hole covered by a flat stone 30cm below the surface. A collection of 146 fourth-century siliquae (7-Hoard, PAS: SOM-6E89B0 and SOM-111833) were found by metal detecting in 2010 and 2011 on cultivated farmland in the same field as the Frome hoard. The coins were dispersed across 40m square of topsoil at the entrance to the field, with the coins being silver siliquae with 18% of these showing variations of clipping and the latest coin dating to AD395.

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from this period met the criteria for inclusion.

Analysis

Based upon the criteria Trudoxhill provides moderate evidence of being a landscape of continued deposition.

Walbrook

Topography

Walbrook is a city ward and minor street in London, named after the subterranean River Walbrook one of the 'lost' rivers of London that played a major role in the Roman settlement of Londinium. The Walbrook Valley, a wooded valley, was at the centre of Roman London, with the river dividing the city into two hills with Ludgate Hill to its west and Cornhill to its east before flowing into the River Thames. The lead tank was found 0.35km from the river.

Human landscape

The Walbrook tank was discovered in the north area of Roman Londinium, supposedly founded in AD48 following the initial invasion and conquest of AD43 (MOLA 2017, 9). The tank was found in connection with the Walbrook Mithraeum, a temple on the north bank of the river. London was a settlement in Domesday Book, in the hundred of Ossulstone. The tank was found 0.11km from the nearest Roman road which ran east-west through Roman London and 180.50km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.79–Walbrook, London and the various findspots–Authors own)

Legend:

1-Axe	6-Hoard	11-Hoard	16-Settlement
2-Axehead	7-Skeletons	12-Hoard	17-Sword
3-Metalwork	8-Radiates	13-Lead tank/Mithraeum	18-Sword
4-Helmet	9-Coin hoard	14-Hoard	19-Axe
5-Potins	10-Coins	15-Bronzes	

Finds within 2km of the lead tank

Greater London HER 10000 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	23	71
Bronze and Iron Ages	6	24
Roman	512	985
Anglo-Saxon/Early Medieval	20	47
Medieval/Post Medieval	868	4256
Unknown or Other	651	60
Total	2080	5443

Prehistoric

A Neolithic flint axe with worn edges and a worn butt (1-Axe, HER: 405406) was discovered in the Thames near Waterloo Bridge whilst a polished stone axehead with its edge broken off (2-Axehead, HER: 405407) was recovered from the Thames.

Bronze Age and Iron Ages

A socketed axe and bronze ring (3-Metalwork, HER: 966968) were found on the bed of the River Thames opposite Somerset House before 1859. One of the most distinctive Iron Age finds was the Waterloo Helmet (4-Helmet, HER: 1031706), a Late Iron Age bronze ceremonial horned helmet decorated in La Tene style repousse decoration. The helmet was discovered in 1868 after it was dredged from the bed of the River Thames near Waterloo Bridge, with the helmet believed to be a votive deposition similar to the Battersea and Witham Shields (Harding 2007, 18). A large hoard of bronze potins (5-Potins, PAS: IARCH-5DB7CD) was reportedly discovered in a package under the bed of the canal in St James' Park in 1822 (de Jersey 2014), although Haselgrove noted the hoard was found during excavations in 1827 (1980, 280-1).

Roman

Evidence of Roman London is visible through excavations that have discovered the town's basilica (HER: 1146371), the basilica and forum discovered at Leadenhall Market (405257), a potential palace of the governor (HER: 405249), a bath house (HER: 405240), an amphitheatre beneath Guildhall Yard (HER: 405115), religious buildings with the Mithraeum (HER: 404539) and a temple (HER: 1460760) at the Old Bailey. Extensive settlement evidence for the Roman period (HER: 1145975) is visible across London as well as Southwark (HER: 404843) whilst numerous mixed inhumation and cremation cemeteries (HER: 404738, 963077, 963934, 963084,

405201, 962975, 1303329, 957560, 957583, 963080, 966429, 962959, 963139, 964223) show continued funerary activities. Excavations by MOLA from 2010–2014 at the Bloomberg site uncovered over 14,000 artefacts including a large assembly of tools (2017, 9). These included woodworking tools, waste from leather and metalworking as seen with finds such as crucibles (MOLA 2017, 36–7), suggesting these industries were active at the Bloomberg site. Multiple coins hoards have been discovered across London, such as small collections of first to third century gold and silver aureii at Well-Street in 1848, at 30 Plantation Place in 2000 (PAS: IARCH-75F2D6) and more first-century coins were found at Lloyd's Bank site (PAS: IARCH-ED4EA0) and Watling Court in Watling Street (PAS: IARCH-E454D5). Similar depositional patterns are visible with a series of 32 barbarous radiates crammed into a small hole overlying the foundations of an earlier Roman building (PAS: IARCH-ED4EA0) found in 1952 at Lime Street (Merrifield 1955, 113; Davies 1992, 214; Robertson 2000, 194–5).

A much larger hoard of 591 third century radiates was found in 1882 at Lime Street (6-Hoard, PAS: IARCH-292F5F), with about 400 Roman denarii in a coarse black urn with a mixture a mixture of pottery and pavement fragments, fused glass and charcoal in the nearby vicinity of the urn (Robertson 2000, 101). A matching collection of 554 brass coins was found alongside two skeletons at Grove Street in 1864 (7-Skeletons, PAS: IARCH-E6FAC9), with the coins contained in an earthen olla between the skeletons (Robertson 2000, 140). A similarly large hoard of 700 third century radiates (8-Radiates, PAS: ARCH-F7D9CD) was uncovered in a carved stone urn near Lincoln's Inn square in 1752 alongside a possible altar with a cylindrical hollow centre (Robertson 2000, 144).

Later Roman activity is also visible with fourth-century hoards, such as a collection of 134 mid-fourth-century coins uncovered in a pot at Cooper's Row in 1989 (9-Coin hoard, PAS: IARCH-4FA4D8). A larger hoard of 241 late fourth-century coins (10-Coins, PAS: IARCH-CFDB1C) was uncovered during excavations of the Billingsgate Roman Baths in 1975 (Goodburn 1977, 350). The coins were found in a stone lined pit, believed to be a possible urinal, with the coins thrown into these without a container (Robertson 2000, 385). A large hoard of 700 Constantinian nummi (11-Hoard, PAS: IARCH-85F4B9) was found at Tavistock Square in 1924, with the coins reportedly found within a lead box 2.1m below the surface (Mattingly 1925, 398; Robertson 2000, 274). The largest coin hoard (12-Hoard, PAS: IARCH-849060) consisted of 1,900 late fourth-century copper nummi discovered in a grey earthware vase at Surrey Commercial Docks (Robertson 2000, 385). The vase was uncovered during excavations of a warehouse in 1867 1.5m below the surface in the base of an alluvial deposit overlying a 1.2m thick layer of silty sand on top of a gravel layer.

The Mithraeum and Draper's Garden (13-Lead tank/Mithraeum, HER: MLO13325 and 22-Hoard, HER: ELO14310) add to the debates over 'ritual' vs 'mundane' activities. Both are in the Walbrook Valley, with the well containing the lead tank found near the Mithraeum indicating links to the site's activities. The lead tank was found in 2017 and was 360mm high; the rim was 19mm thick, the wall was 5.5–8mm and was decorated with relief cast cable.



(Figure 6.80 Fragments of Lead Tank discovered in the well to the north of the Walbrook Mithraeum, used with permission of MOLA and Michael Marshall)

The finds in the well including pewter vessels, fragmented pieces of the lead tank and cattle skulls suggested this was associated with the site's abandonment in the fourth century. The Mithraeum deposition patterns have parallels with the well at the nearby site of Draper's Garden (14-Hoard, HER: 405373). The site contained pottery, animal bone, wood and leather assemblages alongside over 1000 'registered' finds including iron and copper-alloy artefacts recovered from the Walbrook silts. A late fourth-century well at the site contained a hoard of over 20 bronze, pewter and iron vessels (Gerrard 2009, 163-4), with identical structuring of the layers to those visible in the well at the Walbrook Mithraeum and similar vessels to those found at Allerton-Mauleverer (Yorkshire) and Burwell (Cambridgeshire). The vessels were recovered near the base of the well whilst an incomplete skeleton of a juvenile red deer was just above this collection (Gerrard 2009, 179). This had similarities to the Mithraeum well which contained a series of cow skulls at the base of the well below the tank fragments and pewter vessels. Further deliberate deposition was visible with a series of Roman bronzes (15-Bronzes, HER: 405374) discovered in the River Thames at London Bridge. These consisted of figurines of Apollo, Ganymede, Mercury and Jupiter, with the figures damaged and believed to be votive deposits (Morgan 1974, 85-6). A bronze head of Hadrian and a silver figure of Harpocrates were found in their vicinity.

Anglo-Saxon/Early Medieval

Evidence for Saxon occupation is visible through the site of Lundenburgh (HER: 1076280), a major urban centre within the former Roman city of Londinium. Excavations in 1985 uncovered extensive settlement remains dating back to the seventh century. The town's status was raised after Offa of Mercia fortified it and made it the main Mercian mint (HER: 1081480) in the late eighth century. The town was plundered during the Viking invasions of the ninth century and settled in 871 before being reoccupied by the Saxons following 886 AD. The settlement was established within the old Roman walls, with the walls reapplied and the ditch re-cut. Another Saxon burh was located at Southwark (16-Settlement, HER: 1074375) with these remains encircling the Roman settlement (HER: 404843).

Acts of deliberate deposition were visible with an inscribed Viking Sword (17-Sword, HER: 405035) discovered in the Thames opposite the Temple, and another inscribed sword (HER: 965877) found in the Thames opposite Somerset House (Shetelig 1940, 86). Another sword (18-Sword, HER: 965880) was discovered in the Thames near Waterloo Bridge whilst an axe (19-Axe, HER: 965877) was also recovered from the Thames opposite Somerset House.

Medieval/Post Medieval

No depositions from this period qualified for inclusion

Analysis

Based upon the criteria the Walbrook area provides strong evidence of being a landscape of continued deposition.

Walesby

Topography

Walesby is a village in the West Lindsey district of Lincolnshire on the Lincolnshire Wolds, with the village on a series of low-lying hills. The Bevercotes Beck, a small groundwater fed stream and tributary of the River Maun, runs to the east of the village. To the west of the village is the River Rase a tributary of the River Ancholme The lead tank was found 1.48km from the River Rase.

Human landscape

Walesby is north east of Market Rasen and south of Caistor, with the parish incorporating the hamlets of Risby and Otby. The Viking Way passes close to the village church All Saints'. The village is recorded in the Domesday Book as Walesbi in the hundred of Walshcroft The lead tank was found 9.80km from the nearest Roman road and 91.28km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.81–Walesby and the various findspots–Authors own)

Legend:

- | | |
|-------------------------|---------------------|
| 1 - Barrow | 5 - Lead tank |
| 2 - Cropmark enclosures | 6 - Farmstead |
| 3 - Settlement site | 7 - Settlement site |
| 4 - Villa | 8 - Cemetery |

Finds within 5km of the lead tank

Lincolnshire HER 834 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	75	30
Bronze and Iron Ages	50	97
Roman	41	1523
Anglo-Saxon/Early Medieval	4	173
Medieval/Post Medieval	49	1633
Unknown or Other	61	181
Total	280	3637

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

A round barrow (1-Barrow-HER: 351854) at Bully Hill was excavated in 1859, containing human remains including a complete skeleton, four skulls, other human remains and animal bones, charcoal and ashes and unbaked 'British' and Roman pottery (Trollope 1860, 64; Petch 1959, 3-4).

Iron Age and Roman occupation included a possible settlement at Otby Top (2-Cropmark enclosures, HER: 893042) containing mixed enclosures, linear features, and a hut circle (Jones 1988, 9). Part of a large quernstone was found, with matching remains of a further possible Iron Age or Roman enclosure on Otby Moor (3-Settlement site). It was a double-ditched 'villa-type' enclosure (Lewis and Wilson 1977, 25, 43; Jones 1988, 27), like the 'proto-villa' enclosures near Wigginton villa (Oxfordshire).

Roman

Excavators discovered similar Roman occupation material at the villa site at Walesby Top (4-Villa, HER: 351895) in 1861. The villa contained a block of enclosures, with two wings and the southern wing subdivided into 40m square regular enclosures (Jones 1988, 23). The villa contained finds dating from the second to fourth century including pottery, bricks, querns, iron implements, tiles, and coins. Ploughing in 1957 recovered second and third-century pottery alongside nine coins whilst similarly dated pottery was found in 1976 (Petch 1959, 16-17; Whitwell 1992, 86). Ploughing revealed two highly decorated pieces of lead tank in 1959 (5-Lead tank), with similar fragmentation to Bishop Norton, Bottesford, Caistor and Ludford. The tank was 0.92 m in diameter, 0.55 m deep, with a volume/capacity of 360 litres.



(Figure 6.82 Lead tank found at Walesby, The Collection, Art and Archaeology in Lincolnshire)

One fragment was decorated with six human figures within a frieze with three crescents of the right of the figural frieze, decorated with Chi Rho and vertical cable banding. Further finds at the villa included a cast bronze eagle (White 1978, 84-5) believed to be a vehicle mount through similarities to other examples from Britain dating from the second to fourth centuries (Webster 1960, 74-5; Painter 1971, 324-5; Boon 1974, 146). Other settlements in the area included the farmstead (6-Farmstead) at Walesby Hill. Further pottery scatters were used to indicate a settlement north of Otby (7-Settlement site), with artefacts including a mixture of first and second-century grog tempered jars alongside later material.

Anglo-Saxon/Early Medieval

Anglo-Saxon activity is visible with a cemetery and 23 inhumations found east of Walesby Church (8-Cemetery) in 1990. The assemblage included a mixture of adults, adolescents and children whilst grave goods, including cruciform and annular brooches, beads and spearheads, suggested a sixth-seventh century date (Leahy 1993, 41). The position of the graves suggested that the more burials existed east and west of these graves.

Medieval/Post Medieval

No depositions from this period qualified for inclusion

Analysis

Walesby provides weak evidence of being a landscape of continued deposition with a mixture of burial activities and occupation from the Neolithic to the Anglo-Saxon periods. The finds at the site show clear parallels to the others on the Lincolnshire Wolds. The lead tank has visible comparisons with the tanks from those sites, with its deliberately fragmented state and connection to the villa indicating it was abandoned following the disuse of the site.

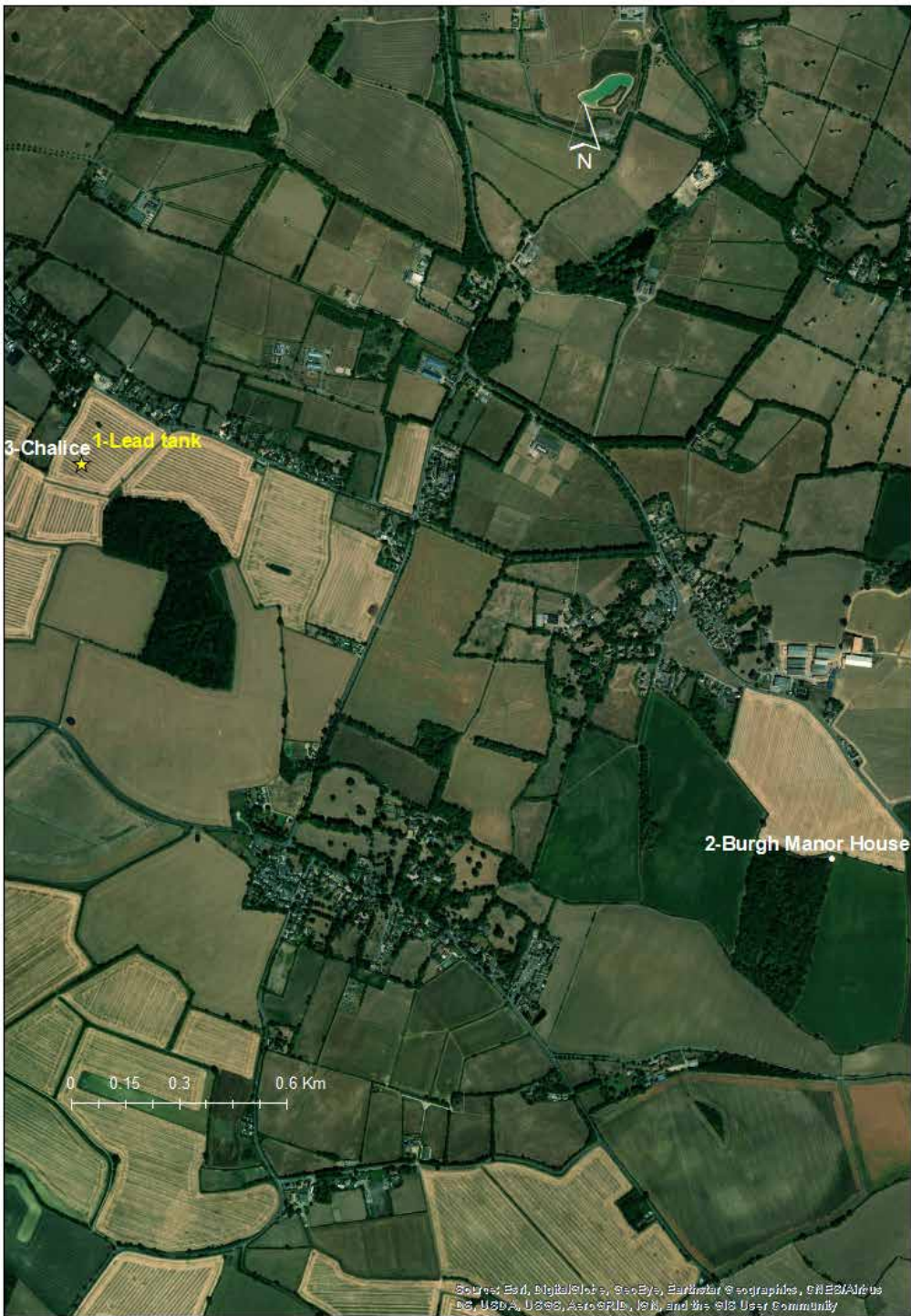
Westley Waterless

Topography

Westley Waterless is a small village in East Cambridgeshire on the chalk at Westley Bottom in the north-west of the village. The village lies on land cleared from woodland which cover the boulder clay overlying the chalk in the east part of the village. A small stream crosses the west corner of the village, with the lead tank found 2.96km from the nearest river.

Human landscape

The present village appears to have been occupied since the 10th century, with the town listed as Weslai in the Domesday Book and Westley Waterless in 1285 meaning 'westerly wood or clearing' or 'wet clearings'. The village is located near the ancient trackway known as the Icknield Way, with the lead tank uncovered 7.12km from the nearest Roman road and 166.26km from the nearest lead mine at Matlock in Derbyshire.



(Figure 6.83–Westley Waterless and the various findspots–Authors own)

Legend:

1 - Lead Tank

2 - Burgh Manor House

3 - Chalice

Finds within 5km of the lead tank

Cambridgeshire HER 441 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	7	2
Bronze and Iron Ages	22	17
Roman	8	227
Anglo-Saxon/Early Medieval	1	8
Medieval/Post Medieval	91	172
Unknown or Other	34	4
Total	163	430

Prehistoric, Bronze and Iron Ages, Roman

No depositions from these periods qualified for inclusion.

Anglo-Saxon/Early Medieval

Anglo-Saxon material in the area consisted of a lead tank (1-Lead tank, HER: 07393) discovered with a tool hoard in the field behind the School and Post Office (Leahy 2013).



(Figure 6.84–The lead tank found at Westley Waterless, Cambridge Museum of Archaeology and Anthropology)

The tank was found during draining the field behind the School and Post-Office at Westley Waterless in 1980. The tank was had a diameter of 444.5mm, a height of 279.4mm and decorated with 16 figures in relief, like inverted Runic crosses, on the outside. The tank contained a spear and bill alongside mixed metalwork with tools, a steel-yard weight, staples and hasps, a ploughshare, and iron fragments, including a possible lock (Salzman 1938, 326). Another spear was laid across the tank, indicating deliberate abandonment like the Flixborough (Lincolnshire), Garton and St Saviourgate (Yorkshire) examples. Burgh Manor House (2-Burgh Manor House, Hob Uid: 377252) a moated manorial site, possibly the site of a high-status Saxon building. It consists of a double moated site, with the main enclosure by a wet moat with unusually steep sides and an internal bank. The adjoining enclosure was encircled by a shallower dry moat, although the secondary this had been ploughed out (VCH 1948, 18-19)

Medieval/Post Medieval

Medieval activities were visible with the chalice and paten (3-Chalice, HER: 07383), inscribed with the date 1569 and a mark from that period. These were discovered in 1894, with the finders dating them between 1450-1530 (Atkinson 1896, 23). Besides the lead tank, this was the only find actually discovered in Westley Waterless itself.

Analysis

Based upon the criteria Westley Waterless provides weak evidence of being a landscape of continued deposition.

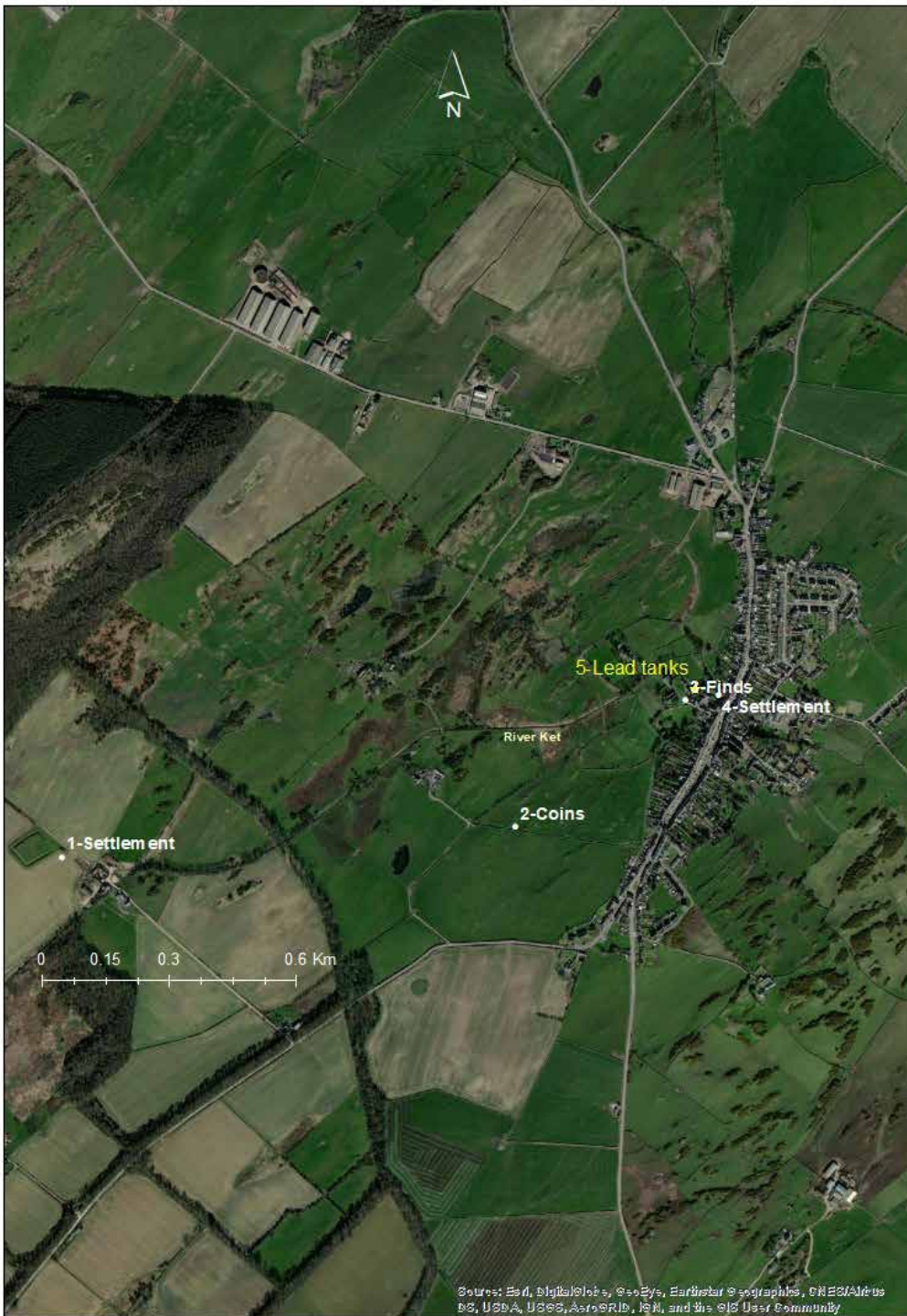
Whithorn

Topography

Whithorn is a royal burgh in the county of Wigtownshire in Dumfries and Galloway. Whithorn is located in the Machars Peninsula in southwest Scotland near the coast with its link to the sea a port known as the Isle of Whithorn. The river Ket runs through the town whilst the Stirnie Birnie Burn is east of the town. The tank was found 0.04km from the Ket.

Human landscape

Whithorn is 20km south of Wigton, with the area being the site of the earliest known Christian community in Scotland founded by St Ninian in the fifth century. The burgh thrived into the Early Medieval and Medieval periods through royal patronage, with royal connections visible in the Post Roman secular site. The lead tank was found 66.34km from the nearest Roman road and 113.79km from the nearest lead mine at Banwell.



(Figure 6.85—Whithorn, Dumfries and Galloway and the various findspots—Authors own)

Legend:

- | | |
|----------------|----------------|
| 1 - Settlement | 4 - Settlement |
| 2 - Coins | 5 - Lead tanks |
| 3 - Finds | |

Finds within 5km of the lead tank

	Canmore
Prehistoric	32
Bronze and Iron Ages	19
Roman	8
Anglo-Saxon/Early Medieval	19
Medieval/Post Medieval	16
Unknown or Other	327
Total	421

Prehistoric

No depositions from this period qualified for inclusion

Bronze and Iron Ages

Bronze Age material was found at the Iron Age site Rispain Camp (1-Settlement, Canmore: 63122). Excavations in 1877 discovered enclosures, double banks, and ditches on an isolated ridge and later excavations uncovered a possible water cistern, a stone ring, and a skull. A Middle Bronze Age axe was found during these excavations (Schmidt and Burgess 1981, 107).

Later excavations in 1978-9 at Rispain Camp discovered structures alongside carbonised seeds, animal bone, cremated human bone and charcoal (Haggarty 1978, 5; *ibid* 1979, 7; Webster and Cherry 1980, 260). Recent excavations discovered a timber-framed gateway and a series of circular houses (Armit and Raston 2003, 187; Armit and Mckenzie 2013, 181). Datable finds from these excavations included an enamelled bronze plate forming part of a bracelet, with a date from the first/second century AD.

Roman

Roman material is visible with a series of coins (2-Coins, Canmore: 63266) that were a mixture of Roman and Hiberno-Danish issues. The Roman coins included a second century sestertius and radiates (Macdonald 1924, 328; Robertson 1954, 198-9). Excavations at Whithorn Priory in 1980 discovered Roman finds (3-Finds, Canmore: 71822) comprised of imported glass, pottery, and amphorae from the second/third century AD (Hill et al. 1997, 293-6). The pottery and amphorae were produced at Lezoux in Central Gaul during Hadrianic or Antonine period whilst other pottery and glass artefacts from the Late and Post Roman periods came from Gaul and the Mediterranean.



(Figure 6.86—One of the lead tanks from Whithorn Priory, Future Museum of Scotland)

Anglo-Saxon/Early Medieval

The most extensive period of occupation dates from the Anglo-Saxon to Medieval periods at Whithorn Priory (4-Settlement, Canmore: 63298). Excavations from 1986-1991 uncovered a monastic site dating from AD 600. Excavations in 1989 revealed a series of eighth to ninth century Northumbrian ecclesiastical buildings comprised of a church, burial chapel and children's graveyard (Hill and Nicholson 1990). The burial chapel had three distinct phases, containing four burials with three of these in wooden coffins with iron fittings. The children's graveyard contained 45 burials all under ten years old. An earlier graveyard from the seventh century contained regular rows of 'lintel' graves centred around an earlier burial mound. Excavations in 1990 found underlying deposits including timber roundhouses and two rectangular timber buildings, two shrines and an extensive graveyard. The Roman finds were found alongside evidence for activities in the fifth and sixth centuries including imported amphora sherds and the timber buildings. Deposits from this period included animal bones, sherds of glass vessels, pottery, bronze pins, clay and stone moulds, bronze fish hooks, iron nails and an antler comb. More than 60 Northumbrian coins in these deposits dated them to the eighth/ninth centuries.

Excavations from 1992-1996 uncovered varied activities from the fifth/sixth centuries and the eleventh/twelfth centuries. Those excavations discovered more than 50 burials excavated in 1995 with accompanying finds suggesting inhumation in wooden coffins (Clarke 1995, 24). A further 100 burials dated from the seventh-ninth centuries, with these buried in a mixture of coffins, shrouds and stone lined-graves covered with wooden planks (Clarke 1996, 33). Excavations of another cemetery in the Glebe Field area during the 1980s uncovered a late 'Medieval' graveyard with 2000 burials dating from AD 1200-1450 arranged in rows. A further set of burials were found above the Priory Hill, referred to as the "**Bishop's burials**". These were 30 high-status burials with rich grave goods and carved and shaped sarcophagi. Mixed activities were visible with metalworking debris and the lead tanks (5-Lead tanks, Nicholson 1998) found alongside cat skulls and bones. The two lead tanks were found between 1984 and 1992 in a complete state but were crushed before their deposition, with parallels to the Newport (Shropshire) tank and some Roman examples (Beverley and Bourton-on-the-Water).

Medieval/Post Medieval

No depositions from this period qualified for inclusion

Analysis

Based upon the criteria Whithorn provides weak evidence of being a landscape of continued deposition.

Wigginton

Topography

Wigginton is a village in the Cherwell region of Oxfordshire. The village is located on the River Swere and is triangular in shape, with the Swere forming one side of the triangle. The lead tank was discovered 0.37km from the Swere.

Human landscape

The village is halfway between Banbury and Chipping Norton. Wigginton was a settlement in Domesday Book, in the hundred of Bloxham and the county of Oxfordshire. The lead tank was 9.82km from the nearest Roman road and 118.28km from the nearest lead mine at Chewton Mendip in Derbyshire.



(Figure 6.87–Wigington and the various findspots—Authors own)

Legend:

- | | |
|---------------|---------------|
| 1 - Enclosure | 5 - Villa |
| 2 - Hillfort | 6 - Finds |
| 3 - Coins | 7 - Lead tank |
| 4 - Remains | |

Finds within 5km of the lead tank

Oxfordshire Historic Environment Record 929 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	22	14
Bronze and Iron Ages	17	19
Roman	27	156
Anglo-Saxon/Early Medieval	2	4
Medieval/Post Medieval	96	77
Unknown or Other	39	2
Total	203	272

Prehistoric

No depositions from this period qualified for inclusion

Bronze and Iron Ages

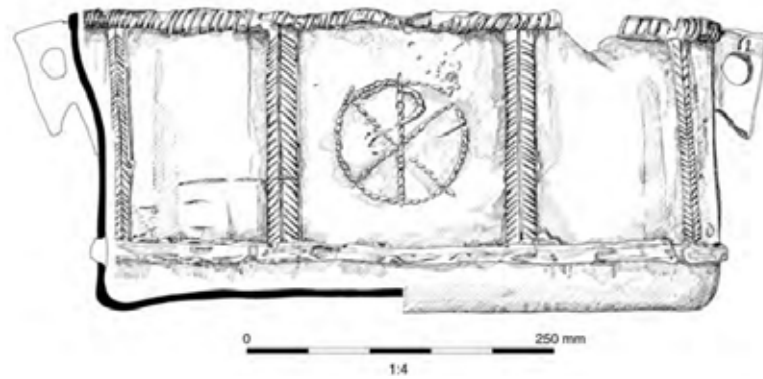
The earliest evidence of occupation at Wigginton dates to the Iron Age with an enclosure (1-Enclosure, HER: 17198) found south of a series of boundary ditches surrounding a Roman villa site. The enclosure consisted of an irregular sub-rectangular area enclosed by a series of broad ditches. Narrowing on the north side leading to the belief that it was a possible 'proto' villa through its similarity to others in Oxfordshire. A roughly circular bilavate hillfort (2-Hillfort, HER: 335064) was uncovered at Tadmarton Camp on a plateau, with defences comprised of double ramparts and a ditch alongside traces of a third outer bank and a stone revetment (Hogg 1979, 89). Excavations revealed a mixture of Late Iron Age and Roman pottery, animal bones, limestone roofing tiles and features including a squarish platform and possible foundations (Oxoniensia 1959, 38; *ibid.* 1966, 34;

Roman

A series of Roman coins were found at Tadmarton Camp whilst mixed third and fourth century bronze coins were found within Milcombe parish (3-Coins, HER: 337080). Evidence for a possible settlement (4-Remains, HER: 335061) was uncovered between Tadmarton Camp and Holywell Farm House. These consisted of foundation stones and pottery in block soil discovered in 1849 whilst a series of 12 well-preserved coins were uncovered in 1864 (Oxoniensia 1966, 155). The Roman villa (5-Villa, HER: 1617 and HER: 335107) is north of the River Swere with three sets of buildings and a courtyard, containing two substantial wings connected by a large corridor building with at least 15 rooms and passages. The first excavations in 1824 uncovered two rooms, a small skeleton and third and fourth-century coinage (VCH 1939, 309). Later excavations in 1965/6 discovered at least two phases of occupation from the second to fourth centuries (Greenfield 1967, 164). Fieldwalking recovered painted wall plaster, pottery, glass, tweezers, mixed third and fourth-century coins and other artefacts alongside tesserae, pottery, coins, hypocaust tile, animal bone and Post Medieval finds in the villa's main field (6-Finds, HER: 335126). Later excavations in 2004/5 revealed walls, interconnected tesselated walkways,

mosaics and bath-suites besides decorated wall plaster, an enamelled brooch, coins, a votive statue, and personal items (CBA 2005, 37). A re-cut ditch near the villa contained pottery sherds, animal bone, fourth-century coins, an iron oval split ring and an almost complete deer antler (CBA 2003, 82; Morris 2005, 87).

A lead tank (7-Lead tank, HER: 17196) was found in 2005 by metal detector followed by a limited excavation.



(Figure 6.88–Side view of the lead tank found at Wiggington with chi-rho symbol - Oxoniensia 2011, Oxfordshire Architectural and Historical Society)



(Figure 6.89–Photograph of side and end views of the tank - Oxoniensia 2011, Oxfordshire Architectural and Historical Society)

The tank was in a pit, 0.33m below modern ground level west-south-west of the villa's bath area. The tank was approximately 0.5m in diameter and set in an upright position in a small pit with the Chi-Rho monogram facing east (Booth 2011, 267). The layer below the tank contained pieces of burnt ironstone, with two of the larger pieces found lying on the tanks' outer edge that appeared to hold it in place. Ploughing activities 150m north-west of the villa discovered 65 Roman coins, pottery, painted plaster, glass, and tesserae, indicating either another villa site or more components of the nearby villa (Scott 1993, 163). Fieldwalking south of the villa discovered a concentration of pottery and coins alongside two small lead weights whilst a worked second-century terracotta figurine was found east of the villa. This had similarities to Venus figurines found at the sites of Stonea in Cambridgeshire and Baldock in Hertfordshire (Stead and Rigby 1968, 168; Jackson and Potter 1980, 485-7).

Anglo-Saxon/Early Medieval, Medieval/Post Medieval

No depositions from these periods qualified for inclusion.

Analysis

Based upon the criteria Wigginton provides weak evidence of being a landscape of continued deposition.

Wilbraham

Topography

Wilbraham is a village in South Cambridgeshire created from the villages of Little and Great Wilbraham. The village lies between the area of low-lying drained fens to its north and west and higher ground beyond the A11 to its east, with the village mainly being agricultural. Two brooks in the northwest corner of the village separate Great Wilbraham from Fulbourn and Little Wilbraham. The lead tank was found 1.01km from the Little Wilbraham River that feeds the River Cam.

Human landscape

The village is 11km east of Cambridge and is listed as Wilburgeham in the 10th century and Wiborham in the Domesday Book (Mills 2003). The lead tank was found 5.50km from the nearest Roman road and 160.08km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.90–Wilbraham and the various findspots–Authors own)

Legend:

1-High Street	6-Concentration	11-Lead tank
2-Enclosure	7-Roman site	12-Votive stand
3-Cemetery	8-Shrine	13-Yard surface
4-Remains	9-Finds	14-Cemetery
5-Ditches	10-Roman villa	

Finds within 5km of the lead tank

Cambridgeshire HER 724 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	14	2
Bronze and Iron Ages	44	42
Roman	11	281
Anglo Saxon/Early Medieval	5	45
Medieval/Post Medieval	140	340
Unknown or Other	58	21
Total	272	731

Prehistoric

A series of struck Mesolithic/Neolithic flints and Late Bronze Age/Early Iron Age pottery were found at the High Street (1-High Street). Excavations from 1975-6 identified a Neolithic causewayed enclosure (2-Enclosure) and finds consisted of a collection of flints Neolithic pottery and 4,240 worked flint and stone artefacts (Evans et al. 2006, 129-130).

Bronze and Iron Ages

No depositions from this period qualified for inclusion.

Roman

Roman activity is visible with a mixture of cemeteries and settlements. Resistivity surveys at the Fleam Dyke in 2002/3 discovered an Iron Age/Roman cemetery enclosure (3-Cemetery, HER: MCB17757). A child's skull found alongside a piece of bronze bracelet and two late fourth-century coins led to the belief that this was a 'peasant's hovel' placed over the line of an earlier funerary ditch (Hughes 2007). A series of Roman remains (4-Remains, HER: MCB17729) were discovered during the digging of a pipeline. The trench discovered two rectangular rooms, one with a chalk floor and flint foundations and the other with evidence of timber posts and wall-slots. A nearby circular pit was cut into a square-shaped chalk platform, with an intact Roman altar alongside a column base and extensive ironwork (Ette 1990; Ette and Hinds 1993). A series of tile and bone finds alongside a spoon and a pewter plate indicating a villa site. A series of ditches at Rookery Farm (5-Ditches, HER: MCB16852) contained fourth-century Nene Valley ware and a pit containing a late fourth-century coin (Hughes 2007). Excavations and fieldwalking uncovered more Roman finds alongside a series of Iron Age pottery, building ware and iron slag suggesting there were buildings in the vicinity (Cawse et al. 2005).

These sites were near another concentration of Roman occupation (6-Concentration), consisting of rubbish pits, a walkway, a cobbled surface and a ditch (Frend 1997). These features contained fourth-century pottery, animal bone and a scatter of 19 coins. Similar remains south of Fulbourn railway (7-Roman site, HER: 06287) consisted of a mixture of wall bases, cobbled surface, and ditches (Malim 2001). A possible workshop contained ironwork including a large chain and Roman pottery, glass, a quern stone, and coins. Other Roman activities included a

possible Roman shrine (8-Shrine, HER: 06320b) and a series of metal-detecting finds (9-Finds, HER: 05959A) found mixed pottery and artefacts deposited in a 3.75m circle around a barrow, suggesting these were votives in an area used since the Bronze Age. Pottery, a quern stone, flue tiles and first to fourth-century brooches and coins alongside Samian pottery and bones indicated Late Iron Age activities which continued into the Anglo-Saxon period (Malim 2001).

Further Roman occupation included a villa site (10-Roman villa, HER: 06279), a decorated fragment of a lead tank (11-Lead tank), an enamelled bronze stand (12-Votive stand, HER: 06269) and a yard surface (13-Yard Surface). The villa site contained pottery, a bronze cowbell, two lead weights, over 130 coins, brooch and buckle fragments alongside bracelet and finger ring fragments. The lead tank fragments were found in 1980 by a metal detector on a cobbled floor surface in woodland near the villa site, although there was no evidence of a pit or other features (Grew 1981, 341). The tank was decorated with repeated circles within zigzag. The deliberate fragmentation suggested it had been abandoned following the villa's disuse, like the Rushton (Northamptonshire) and Walesby (Lincolnshire) examples.

Anglo-Saxon/Early Medieval

Anglo-Saxon occupation is also visible with cemeteries (14-Cemetery, HER: 06330 and 20-Inhumations, HER: 06376) The cemetery had over 350 burials divided between inhumations and cremations. Associated grave goods included spearheads, a shield boss, knives, annular brooches, girdle hangers, a bronze spoon and pendant alongside numerous glass and amber beads (Lethbridge and Carter 1926, 95-104). Fieldwalking recovered over 100 sherds of Early Saxon pottery alongside cremated bone and cremated fragments of a small-long brooch (Meaney 1964, 70-1). A further series of burials were found at Fleam Dyke, near the Roman remains, with a silvered shield boss and a series of spears discovered alongside human remains (Salzman 1938, 309). The brooch finds were a mixture of fifth and sixth-century brooches discovered at Mutlow Hill and near the Fleam Dyke, suggesting these were associated with these burial activities.

Medieval/Post Medieval

No depositions from this period qualified for inclusion

Analysis

Based upon the criteria Wilbraham provides strong evidence of a landscape of continued deposition.

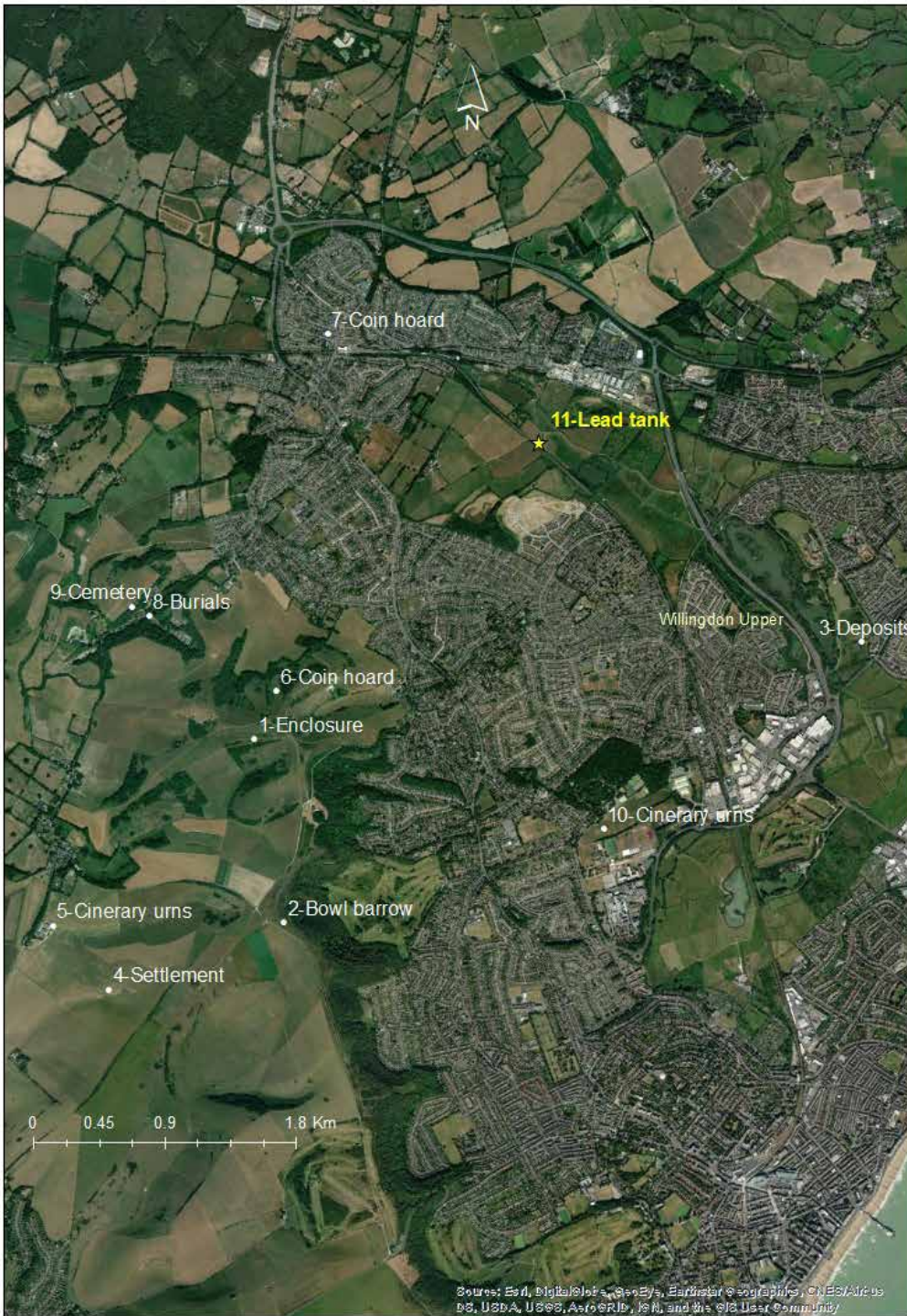
Willingdon

Topography

Willingdon is a civil parish in the Wealden district of East Sussex, being part of the built-up area of Eastbourne. The Wannock Mill Stream runs north of the village whilst the Willingdon Upper flows down to the English Channel at Eastbourne. The lead tank was found 0.29km from the nearest stream, Willingdon Upper.

Human landscape

Willingdon is located 3.2km south of Polegate and 5km northwest of Eastbourne. The Domesday Book records it as Willendone in the hundred of Willingdon. The lead tank was found 19.55km from the nearest Roman road and 210.15km from the nearest lead mine at Chewton Mendip in Somerset.



(Figure 6.91–Willingdon and the various findspots–Authors own)

Legend:

1-Enclosure	7-Coin hoard
2-Bowl barrow	8-Burials
3-Deposits	9-Cemetery
4-Settlement	10-Cinerary urn
5-Cinerary urns	11-Lead tank
6-Coin hoard	

Finds within 5km of the lead tank

East Sussex HER 1099 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	23	42
Bronze and Iron Ages	41	65
Roman	26	289
Anglo-Saxon/Early Medieval	9	58
Medieval/Post Medieval	80	653
Unknown or Other	117	61
Total	296	1168

Prehistoric

The earliest evidence of occupation dates to the Neolithic with a causewayed enclosure (1-Enclosure, HER: 408460) at Combe Hill excavated in 1949, with finds including Neolithic pottery, animal bones, numerous flint flakes and flint axes (including three found together in a ditch segment), a quern fragment and a leaf shaped arrowhead (Curwen 1929, 209-11; Musson 1950, 105-116)

Bronze and Iron Ages

A series of bowl barrows were found near Combe Hill (HER: 408468, 1212067, 408463, 1030641) as well as a large bowl barrow on Willingdon Hill (2-Bowl barrow, HER: MES521). These were a pair of bowl barrows discovered on a ridge's crest in chalk downland (Grinsell 1934, 273). Finds from the surrounding area consisted of flint axes, a mixture of flakes, scrapers, a circular flint knife and picks from the Palaeolithic, Mesolithic, Neolithic, and Bronze Age (Holloway 2012). Similar finds were discovered at Shinewater Marsh on the Willingdon Levels in 1995 (3-Deposits, HER: 1212067). Excavations discovered a timber platform with intermittent reed or rush matting layers, with similarities to Flag Fen in Cambridgeshire. Three hearths were set into the platform whilst a thick layer of debris had accumulated on this platform. It contained large quantities of stone and animal bone alongside Late Bronze Age pottery (Hogan 2007). Late Bronze Age artefacts, including mixed metalwork alongside personal effects such as bracelets, pendants, carved antler bridal pieces, lay on the platform's surface alongside 50 human skeletal bones and part of a disarticulated child burial (Hogan 2007). Similar Bronze Age remains were visible at the mixed settlement (4-Settlement) at Pocock's Field. Excavations discovered mixed remains with worked and burnt Mesolithic and Neolithic flints alongside Bronze and Iron Age, Roman, Medieval and Post Medieval remains (Wessex Archaeology 2008, 10). Surveys and excavations discovered several enclosures with hut circles and drove ways alongside pottery from the Bronze Age to Roman period alongside Medieval sherds (Wessex Archaeology 2008, 8-9). Finds surrounding this area included a high-status Roman building believed to be a villa, with ceramic building materials at Pocock's Field consisting of Roman and Medieval/Post-Medieval roof tiles.

Roman

Iron Age and Roman activities in the area included cinerary urns (5-Cinerary urns) found at Jevington Hill. These urns believed to be 'Romano-British' were embedded in a flint layer less than a metre below the surface. All but one of these was destroyed on their discovery, with the remaining urn measuring 0.23m high and created from sun-dried clay (Watford and Apperson 1882, 181). Other finds included two coin hoards (6-Coin hoard, HER: 618317 and 7-Coin hoard, HER: 971084). The first coin hoard was discovered at Combe Hill in 1980, with 144 Roman coins discovered in a small area on the hill's northern slopes (Robertson 2000, 133-4). The coins were a mixture of late second-century silver sesterii and late third-century bronze radiates. Isolated coins, including those of Vespasian, Hadrian, Salonina and Constantine I, were found 500 metres east of this area (Rudling 1986, 147; Robertson 2000, 133-4). A small bronze ring was also found near the coins, suggesting this could have been from a bag used to hold the coins on their burial. The other hoard was a small collection of third century Antoniani found in the garden of Cairn Cove, Polegate (Brodribb 1976, 332-3).

Anglo-Saxon/Early Medieval

A series of Anglo-Saxon burials were found at Cranedown (8-Burials, HER: 408575), believed to be part of a larger cemetery. These were found alongside a mixed occupation and settlement activity from the Neolithic, the Middle and Late Bronze Age and Early Iron Age. These consisted of a large hollow way and a pit containing an urned cremation burial. The Anglo-Saxon graves were cut into hard-packed chalk rubble, containing a series of human remains alongside goods including iron knives and an iron buckle, iron, and bronze pins, two scraps of iron and a blue glass bead (Welch 1983, 264, 433-4). Similar grave goods were found in an Early Saxon cemetery at the nearby Ocklynge Hill (9-Cemetery, HER: 408541, with over 100 burials accompanied by iron knives, glass cups and a bucket (Budgen 1922, 241-2; Meaney 1964, 252-3). Further burial evidence consisted of urns (10-Urns, HER: 408553) uncovered at Holly Grange. These were a cinerary urn containing small bones and with a round, unshaped base as well as other urns in the vicinity (Budgen 1925, 329). The most distinctive evidence for Anglo-Saxon activity at Willingdon was a lead tank (11-Lead tank), discovered during the creation of a railway line in the 19th century (Blair 2010, 166). The tank was 31 by 30cm at rim level, 16cm high and decorated with panels on each face with a small equal-armed cross and vertical roped lines. This example was found intact but with clear damage on the surface from a bladed item. This indicated deliberate abandonment like many of the other Anglo-Saxon examples and the Pulborough (West Sussex) tank.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Willingdon provides moderate evidence of being a landscape of continued deposition.

Willingham

Topography

Willingham is a village in South Cambridgeshire and lies just south of the River Great Ouse. The parish mainly consists of flat farmland with and the lead tanks were found 1.81km and 0.30km from the Great Ouse.

Human landscape

The area north of the present village was occupied by the second century AD whilst the Eldreth Causeway, the main route between Cambridge and Ely, runs through the east of the parish past the hillfort Belsar's Hill. The village is recorded as Wivelinghi in the hundred of Papworth in the Domesday Book. The lead tanks were found 6.75km and 7.23km from the nearest Roman road. They were located 141.44km and 141.86km from the nearest lead mine at Middleton in Derbyshire.



(Figure 6.92—Willingham and the various findspots, Authors own)

Legend:

1 - Features	7 - Settlement	13 - Remains	19 - Coin hoard
2 - Cemetery	8 - Settlement	14 - Coins and possible villa	20 - Coin hoard
3 - Barrow	9 - Features	15 - Pottery	21 - Remains
4 - Fort	10 - Pewter hoard	16 - Lead tank	22 - Settlement
5 - Features	11 - Finds	17 - Mixed finds	23 - Lead vats
6 - Remains	12 - Occupation debris	18 - Features	

Finds within 5km of the lead tank

Cambridgeshire HER 1149 results

	Historic England Research	Portable Antiquities Scheme
Prehistoric	24	0
Bronze and Iron Ages	52	18
Roman	46	369
Anglo Saxon/Early Medieval	6	11
Medieval/Post Medieval	77	294
Unknown or Other	83	13
Total	288	705

Prehistoric

No depositions from this period qualified for inclusion.

Bronze and Iron Ages

Late Bronze Age to Late Roman period remains were found at Spong Drove (1-Features, HER: MCB18533) with a mixture of pits, postholes and linear features cut into Prehistoric buried soil and overlaid by peat layers. A cremation cemetery (2-Cemetery, HER: 372147) was discovered beneath a Roman shrine at Haddenham in the Upper Delphs. Ten further cremations were discovered in the mound's ditch, with some of these in urns (Philips 1970, 206; Frere 1984, 298).

A similar barrow, Middle Fen (3-Barrow, HER:10935) consisted of cropmarks indicating several Iron Age square barrows surrounding a ring ditch near a Roman settlement (Hall 1996). A well-preserved univallate lowland fort (4-Fort, HER: 372192) was discovered at Belsar's Hill consisting of a circular earthwork with a single bank and ditch measuring 260 by 236m.

Excavations at Queenholme discovered a series of enclosures alongside two parallel ditches (5-Features, HER: 07976 and 6-Remains, HER: 05776). A mixture of first and second-century vessels, including two 'Belgic' vases, were in the ditches. Two further ditches contained Late Iron Age and Early Roman material sealed by Late Roman clay deposits. Another ditch contained pottery alongside fourth century Nene Valley ware (Middleton and Trump 1986; Silvester 1987, 43-6).

Roman

Another settlement (7-Settlement, HER: 03634) consisted of roof tiles and pottery from the second, third and fourth centuries AD (Philips 1970, 205). Large volumes of pottery were found near the West Fen settlement (8-Settlement, HER: 05877). These finds matched those on the Fen's west edge (7-Features, HER: 03638) with roof tiles discovered alongside mixed second, late third and early fourth century ceramics (Philips 1970, 205). Iron Age and Roman features at High

Street (9-Remains, HER: MCB17936) were a mixture of a segmented ditch, a four-post structure from the Iron Age and a Roman period ditch discovered under Anglo-Saxon settlement evidence (Fletcher 2008).

Metal detectorists discovered the pewter hoard (10-Pewter hoard, HER: 11499), with three pewter plates decorated with Chi-Rho monograms stacked together. Similar finds were found in a pit (11-Finds), containing mixed Roman pottery alongside bone, iron, and shell fragments (Cambridge Archaeology Field Group 1998). Matching remains were visible with the occupation debris (12-Occupation, HER: 08613) consisting of ceramic sherds alongside quern pieces, bone and burnt stone (Hall 1996). The remains at Cadwin Field (13-Remains, HER: 05563) contained mid-second to late fourth-century pottery and a grave-group with two pots. A series of coins from the West Fen drove (14-Coins and possible villa, HER: 10982) dated from the second to the fourth centuries alongside a series of stone deposits in a semi-circular formation.

Similar finds are visible with the pottery at the Stacks (15-Pottery) and the lead tank (16-Lead tank).



(Figure 6.93–The lead tank found at Willingham, Cambridge Museum of Archaeology and Anthropology)

The tank was found in 1958 by a metal detector in a field known as the Stacks. The tank was cut into four fragments and found alongside a mixture of second century and fourth-century pottery. The tank was 0.4m deep and both fragments were decorated with repeated saltires. Further evidence of deliberately abandoned artefacts consisted of the mixed finds at Hempsals (17-Mixed finds, HER: 05784), with second and third century pottery discovered alongside a ring, amber bead, several rings, and a hoard of bronze statues in a wooden box (Alfoldi 1949, 19-22; Toynbee 1962, 124; Green 1976, 18, 210; Evans 1984, 212-4).

A similar pattern of occupation and artefact deposition was discovered at Rockmill End (17-Features, HER: MCB20975), where a series of pits and ditches contained mixed first to third-century pottery besides animal bones and shells. The deliberate burial of the lead tank and 'votives' had clear parallels to a series of coin hoards at Middle Fen and near Willingham (19-Coin hoard, HER: 05883 and 20-Coin hoard). The Middle Fen hoard was ploughed up in 1881 with over 500 second century AD coins found in a single pot (Hall 1996). The other hoard

consisted of a mixture of 976 siliquae, milarensis and solidi from the third century AD. Evidence for a shrine was believed to be visible at Haddenham in the Upper Delphs (HER: 372147), with this overlying an earlier Bronze Age cremation cemetery.

Anglo-Saxon/Early Medieval

Anglo-Saxon remains are also visible at High Street (21-Remains, HER: MCB18148) and consisted of a timber-framed building with associated pits, ditches, and postholes. One of the ditches contained a broken sword and spearhead, interpreted as possible ritual activity or closing of a boundary (Fletcher 2008). An Early-Middle Saxon Settlement (22-Settlement, HER: MCB17885) was discovered with the remains of eight complete and two partial post-built halls with a clay oven/hearth (Connor and Robinson 1997). The most distinctive Anglo-Saxon finds were the lead vats (23-Lead vats, HER: 05782) discovered at Half Moon Bridge. These vats were discovered in the 1970s by a metal detector and decorated with a key-hole motif running around outer side of larger vessel. The smaller of these was inverted and placed within the large one, much like those at Flixborough (Lincolnshire), indicating deliberate abandonment of these artefacts like their earlier Roman counterpart. Willingham is unique since it is the only site where both Roman and Anglo-Saxon lead tanks have been discovered.

Medieval/Post Medieval

No depositions from this period qualified for inclusion.

Analysis

Based upon the criteria Willingham provides strong evidence of being a landscape of continued deposition.

Conclusions

Topography and Human Landscape

When analysing the environments that these lead tanks were found in, some important features were visible with the types of landscapes they were deposited in. Although many of the tanks were found in flat, arable landscapes with the tanks discovered less than one kilometre from the nearest river, some were situated on hilltop positions with access to nearby rivers and metal ores. Caistor, Flawborough, Flixborough, Garton-on-the-Wolds, Grassington, Parwich and Wigginton were particularly good examples. Those at Ashton, Bourton-on-the-Water, Caversham, East Stoke, Huntingdon, Icklingham, Oxborough, Pineham, Pulborough, Rochester and Walbrook were found in locations that served either as crossing points for major rivers or in settlements located on the edge of rivers or their tributaries. Many of these were also closely situated on major Roman roads such as the Dere Street or the Fosse Way, such as Allerton-Mauleverer, Brough, East Stoke and Parwich. This indicated that their positions aimed to take advantage of the natural landscape and resources as well as movement through it.

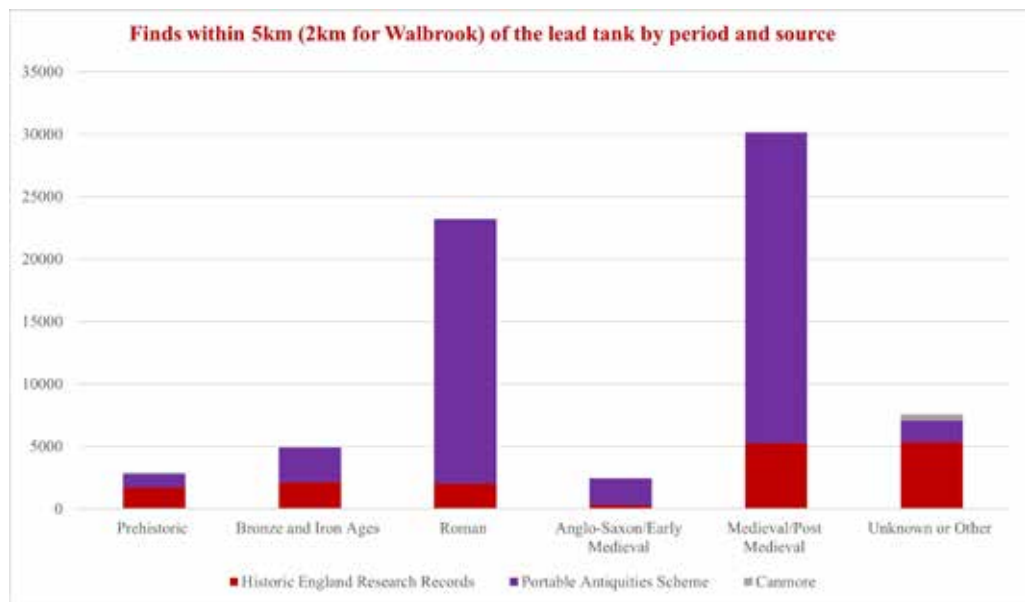
43 of the 51 sites are mentioned in the Domesday book albeit some with different place names than are in use today. A further six are sites that are close to places mentioned in the Domesday Book. As an example Perry Oaks is not mentioned in the Domesday Book the nearby village of Stanwell is mentioned. Stidriggs and Whithorn in Scotland are the only two sites with no mention in the Domesday Book and given that the Domesday Book excluded Scotland this is hardly surprising.

Total Finds

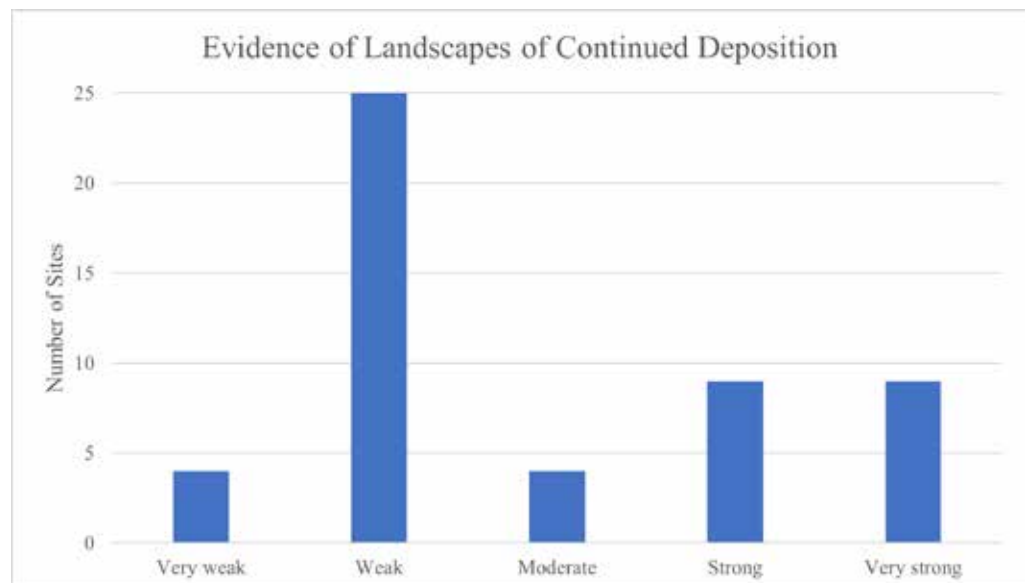
There are 51 sites across the United Kingdom containing these Roman and Anglo-Saxon/Early Medieval lead tanks, with only Willingham in Cambridge having examples from both periods. There were several sites containing more than one lead tank, with Bottesford, Garton-on-the-Wolds and Icklingham each containing three tanks and Bourton-on-the-Water, Flixborough and Whithorn each having two tanks. As seen in the table and graph below, a total of 71,526 artefacts were found within 5km of the lead tanks at these locations from the Historic English Research Records, Portable Antiquities Scheme database and Canmore database for the finds at Stidriggs and Whithorn in Scotland. The largest proportion of these were from the Medieval period which amounted to 42.3% of the total number of finds, closely followed by finds from the Roman period which constituted 32.5% of the total finds examined at these sites. The finds from other periods were significantly smaller, with the artefacts from the Anglo-Saxon/Early-Medieval period representing only 3.4% of the total finds at these areas. There are some disparities within the data as Unknown/Other represented 10.6% of the total finds. In this instance, Unknown stood for artefacts or sites which could not be assigned a period.

	Historic England Research Records	Portable Antiquities Scheme	Canmore	Total
Prehistoric	1729	1042	124	2895
Bronze and Iron Ages	2154	2766	30	4950
Roman	2015	21188	15	23218
Anglo-Saxon/Early Medieval	315	2103	22	2440
Medieval/Post Medieval	5254	24862	65	30181
Unknown or Other	5360	1700	512	7572
Total	16827	53661	768	71256

(Figure 6.94–A table showing down the number of finds per period and by source, Author's Own)



(Figure 6.95–A graph showing the number of finds per period and by source, Author's Own)



(Figure 6.96–A graph showing cases for landscapes of continued deposition by site, Author's Own)

Case	Assigned Value	Number of Sites	Percentage	Sites * Assigned Value
Very weak	1	4	7.84%	4
Weak	2	25	49.02%	50
Moderate	3	4	7.84%	12
Strong	4	9	17.65%	36
Very strong	5	9	17.65%	45
Total		51		147
Mean Value				2.88

(Figure 6.97—A table showing the percentages and mean value of evidence for landscapes of continued deposition, author's own)

Based on the parameters used in the chapter's introduction, we can see from the graph and table above that 57% of the sites showed very weak or weak evidence of being a landscape of continued deposition. Whereas 36% of the sites showed strong or very strong evidence of being a landscape of continued deposition. With 8% of the sites showing moderate evidence of being a landscape of continued deposition we can see that overall, there is a weak case of these sites showing evidence of being a landscape of continued deposition. Furthermore, if we assign a value of 1 for a weak case through to assigning a value of 5 for a strong case and multiply the number of sites by each assigned value we compute the total value is 147. If we then divide this by the number of sites we can calculate a mean value by case. The result of the calculation is 2.88, meaning that the average value for each site is between weak and moderate.

Of the sites analysed in this thesis, there were certain examples which fitted each category laid out at the start of the chapter. For instance, the locations chosen as very weak had only the burial of the lead tank as evidence of deliberate deposition. Furthermore, there were no settlements or cemeteries in the area surrounding the tank and there was no clear relationship between the lead tank and surrounding finds. Many of these were also surface scatters of material rather than deliberately deposited artefacts. At Cumwhitton, where besides the lead tank and graves there were no artefacts or associated settlements in the vicinity. In contrast, those classified as weak (the largest category) had at least one other act of deliberate deposition besides the lead tank and evidence of continued occupation and funerary patterns near the tanks. A good example of this would be Allerton Mauleverer, where only the lead tank and Goldsborough coin hoard demonstrated evidence of deliberate deposition. These actions were visible alongside settlement occupation from the Bronze Age to Roman periods but as there were less than three acts of deliberate deposition it was classified as weak. Moderate showed more patterns of deliberate deposition alongside evidence of causal loss and a noticeable lack of 'shrines' or votive' areas, with Oxborough being a particularly good example of this. The deliberate deposition of the lead tank, Bronze Age hoards and in particular the large votive bronze dirk alongside multiple surface scatters. These consisted of mixed material from the Bronze and Iron Ages, Roman and Anglo-Saxon/Early-Medieval periods, potentially indicating settlements and cemeteries from the Roman and Anglo-Saxon/Early Medieval periods. As there were more than three acts of deliberate deposition but less than five this meant that Oxborough showed moderate evidence.

For the sites classified as strong there was overwhelming evidence of continuing deliberate deposition patterns alongside funerary and settlement evidence, with some areas showing re-use of certain cemeteries and settlements by later communities. A very good example of those classified as strong is Burwell. There were more than five examples of deliberately deposited artefacts, visible through large-scale hoarding patterns from the Bronze Age and Roman periods (in particular the hoard of large fourth-century vessels). There was also continuous occupation from the Neolithic to the Anglo-Saxon/Early-Medieval period, including the re-use of the Roman settlement as an Anglo-Saxon/Early-Medieval cemetery which helped in demonstrating continued use and depositional patterns in this landscape. Finally, those classified as very strong showed similar features to strong as well as a clear focus around certain areas as receptacles of votive practice such as rivers, ditches and wells. An example of this was Rochester, where there were more than 10 examples of deliberately deposited artefacts, including continued deposition of tools and weaponry in the Medway from the Neolithic to the Anglo-Saxon/Early-Medieval. This was visible alongside large-scale hoarding patterns of Bronze Age metalwork and Roman coin hoards. Rochester also saw a use of 'votive' areas with a shrine and 'votive' pits, all of which showed intentionally buried materials. There was also evidence of continued settlement and funerary patterns, including the re-use of Roman cemeteries by later Anglo-Saxon/Early-Medieval inhabitants. All of this aided in its classification of showing very strong evidence of being a landscape of continued deposition.

As well as providing evidence for being landscapes of continued deposition, other types of landscape are visible with the sites analysed in this thesis. For instance, all the sites in Northamptonshire (Ashton, Corby and Rushton) showed strong evidence of being industrial landscapes as seen through multiple smithing complexes and pottery kilns. This likely tied in with the Nene Valley industrial landscape during the Roman period, which saw multiple iron working complexes from the Iron Age and Roman period across this area (Condrón 1997, 6; Taylor 2007). Likewise, certain landscapes showed stronger evidence for being a funerary landscape than being a landscape of continued deposition. This was visible through the re-use of barrows by later communities through additional burials and grave goods at Garton on the Wolds, Grassington, Rudston (Yorkshire) and Parwich (Derbyshire). Garton on the Wolds provided the strongest evidence for this, with multiple barrows from the Palaeolithic, Bronze, and Iron Ages as well as later re-use of the Iron Age barrows by Anglo-Saxon inhabitants near Garton station. These were not just static features in the landscape but saw re-use by later communities at these locations. Similar activities occurred with the barrows at Beverley and Riby Cross Roads, which saw reuse of the same areas by barrows from different periods, demonstrating continued use as funerary landscapes by multiple occupants. This was important for revealing what activities occurred in these locations, especially when there was evidence of additions to these graves through secondary burials or grave goods

Finally, some of the strongest sites analysed in this chapter showed evidence of being not only landscapes of continued deposition but provided very strong evidence of being 'votive' landscapes as well. Perhaps the best example of this is at Icklingham, a site classified as very strong and providing some of the strongest evidence of being a landscape of continued deposition of the 51 sites assessed in this chapter. Not only did this site have three lead tanks buried in a very intentional manner but there was conclusive evidence of very deliberate hoarding patterns visible at this site. The large coin and pewter hoards, alongside the collections of votive bronzes demonstrated similar intentional abandonment to the tanks at this site. Likewise, Wilbraham and Willingham in Cambridgeshire (also some of the strongest sites

in this thesis) were clearly shown to be 'votive' landscapes. Not only were there extensive votive deposits, as seen with large coin hoards at both sites and the chest of 'votive' statues at Willingham, but both sites also displayed 'shrine' areas. The shrine at Willingham in particular showed extensive use across the Bronze Age to Roman periods. Similarly, the Walbrook area provided extensive evidence of being a votive landscape. Not only was there the shrine at the Mithraeum but there were also large-scale hoarding patterns through the coin hoards, mixed weaponry from the Neolithic to Anglo-Saxon/Early-Medieval and bronze 'votives' deposited in the Thames. This was visible alongside the deliberate structuring of artefacts in the well of the Mithraeum and at nearby Draper's Garden, with the bronze vessels in the well at Draper's Garden showing clear similarities to those at Burwell. The actions at these sites clearly demonstrated a demarcation of certain areas and features as receptacles of continued artefact deposition, potentially marking them as 'votive' spaces over long periods of times.

Based on the available data analysed in this chapter, there is a very limited case for the sites being landscapes of continued deposition since more than 50% of the sites showed very weak or weak evidence. However, these acts were visible alongside continued re-use of these landscapes through settlements, industrial complexes, mixed hoards, and burial patterns. It also proved that these acts occurred at a variety of landscapes which demonstrated a multitude of uses. These included funerary, industrial, and votive, providing an important insight into the activities occurring across these 51 sites. These were the aspects that were the main criteria for assessing these areas, as mentioned in the Introduction and Methodology chapters.



Conclusions

Chapter Seven: Conclusions.

7.1. Introduction

This thesis aimed to assess whether the burial of the Roman and Anglo-Saxon lead tanks showed evidence of being 'landscapes of continued deposition'. As this thesis demonstrated, there have been at least 10 new examples discovered since 2012, mainly by metal detectorists across a range of both 'wet' and 'dry' contexts. A further focus upon the location of the tanks also showed their proximity to nearby rivers and roads as well as settlements in contrast with lead mines and access to lead resources. Many of the lead tanks were discovered less than 1km from rivers, Roman roads and settlements, suggesting that these factors were far more important as to why the tanks were in these environments than direct access to the necessary lead. Whilst this factor had been briefly touched upon by authors such as Thomas and Mattingly, this thesis developed this much further through the use of ArcGIS to plot not only the locations of the lead tanks but their proximity to these rivers and roads as well as their distance from the lead mines and lead sources. This was important in providing a possible understanding of how the tanks arrived at these sites and why they were clustered in specific areas of Britain, notably the East Midlands and East of England. This not only expanded known patterns visible through their distribution but also the find environments they were recovered from and their state upon deposition and associated finds.

The main aim of this thesis was to analyse the depositional patterns of both sets of lead tanks, the types of contexts, state upon deposition and additional finds. I then analysed how their burial correlated to similar patterns of artefact deposition in the areas surrounding them. As seen throughout this thesis, the analysis of the contexts and state upon deposition was essential in demonstrating the effort that went into burying/abandoning these artefacts and whether there were continued patterns of artefact abandonment visible. That was particularly visible in Chapter Six, where I analysed the lead tanks in their environments. Many of these have been used for artefact deposition from Prehistoric to Medieval, particularly rivers (with at least four of the tanks found in a river). The choice of setting for deposition has often been linked to the state of the artefacts, both of which features were a key theme of my thesis. These were also valuable for my inter-site comparisons, investigating how the tanks' burial could be seen in the broader scope of artefact deposition and interaction with the landscape at these locations. It also enabled an investigation of whether there were continuing deposition patterns from the Roman into the Anglo-Saxon/Early Medieval period with the lead tanks, of which there was definitely evidence.

Many of the newer examples were found deliberately damaged in some regard, leading to a debate about the types of deposition visible with the burial of these tanks. In this case I investigated whether it showed evidence of ritual, structured or deposition of material from everyday life through comparing the types of contexts and deliberate damage involved with the burial of both sets of tanks. Many of these acts can overlap since the boundaries between apparent ritual and domestic spheres are often blurred (Hamilton 1998, 23-38; Chadwick 2004, 103; Haynes 2013, 198). That is particularly visible with the lead tanks, mainly when their contexts and state upon deposition are analysed, particularly those found in ditches, pits, rivers and wells. The state of the tanks and their associated finds allowed for comparisons with similarly damaged items from other periods such as Bronze and Iron Age cauldrons, which demonstrated how the burial of the tanks could be compared with a much broader spectrum

of artefact deposition in Britain. The choice of artefact and the context used for burying it were important features that this thesis wished to discuss, especially as some of the newly discovered tanks contained either deliberately placed artefacts or were found alongside artefact accumulations in ditches (Pineham), pits (Trudoxhill) and wells (Walbrook). This was important for considering how the burial of the lead tanks compared to other artefact deposition acts from earlier periods like the Bronze and Iron Ages and the Roman and Anglo-Saxon period.

7.2. Methodological Analysis

Data collection from across 51 sites from the HER and PAS databases led to a broad and varied set of results with finds from across multiple periods. Whilst these data collection methods and analysis were satisfactory for providing evidence of these sites being 'landscapes of continued deposition', there were some complications along the way.

The amount of data from these sites was considerable, with over 71,000 artefacts in total. However, during the analysis stage, the site reports and HER and PAS reports had different recording and details standards. Some of the artefacts lacked detailed contextual information and accurate find coordinates. That was either because their discovery happened at earlier dates where they were not adequately recorded or metal detectorists found them. That meant that they were not always accurately recorded. As authors like Chadwick have noted, many excavation reports do not have quantified statistical data or contextual information (2004, 104). This made detailed examinations of spatial or stratigraphic information difficult through this lack of information. This thesis used a range of literature dating from the early eighteenth century to the present day. That meant that differences in excavation and recording techniques have likely provided differing levels of contextual information. It is possible to see this with the more recently discovered tanks and artefacts from the surrounding area, as these have much better contextual information through improved excavation and recording systems. Despite some of the artefacts on these sites missing information, the available data was still valuable in analysing deposition patterns at these sites and demonstrating whether the sites showed evidence of being 'landscapes of continued deposition'. Focussing on the tanks in Chapters Three, Four and Five and then investigating the types of activities at the fifty sites allowed a more detailed comparative investigation through intra and inter-site analysis as seen in Chapter Six.

7.3. Potential for future research

Whilst this thesis investigated the tanks in some new areas, other investigations could be used to further our understanding of these artefacts. One possible method for developing analysis of the lead tanks would be isotopic analysis. Whilst my thesis considered the locations of the tanks relating to access to lead resources, isotopic analysis could be used to identify the sources used to create these objects. With the newly discovered artefacts, there is now more potential to investigate the main production and distribution areas of the lead tanks. So far, only the Bottesford tank has received any possible isotopic analysis. This approach only revealed that it was not a recycled Roman lead tank or that it was not created from recycled Roman lead. As this thesis showed, many of the tanks were more than 100 kilometres from the nearest lead source. However, many of them were found in the immediate vicinity of rivers, roads or settlements, suggesting they were transported from their origin point to their final destination along the rivers and Roman roads discussed in this thesis. As many were in the East Midlands, East of

England and in Yorkshire, it is highly likely that the necessary lead for these artefacts came from Derbyshire and Wharfedale in Yorkshire, although the lead for the tanks in South West could have been provided by deposits in the Mendips. The isotopic analysis could also be used to see whether the other Anglo-Saxon/Early-Medieval tanks were recycled Roman material or whether this is evidence of a distinct artefact culture during a later period.

Likewise, a more expansive survey of the types of contexts used for burying the tanks would be useful. Whilst this thesis focussed heavily on contextualising the burial of the lead tanks within the wider landscape use of Roman and Anglo-Saxon/Early Medieval Britain, there is even more potential to develop this. For instance, with the newly discovered Mithraeum example further research could be done to contextualise the burial of the lead tanks in wells with other examples from Roman Britain and across the Empire. Whilst this thesis did take such an approach, comparing the finds in the Mithraeum well with those at the nearby site of Draper's Garden, there is potential to advance this even further. The same can be said for the tanks discovered in ditches and pits. Whilst my approach did contextualise the burial of the Roman and Anglo-Saxon/Early Medieval lead tanks, more could be done in this area. The examples I chose to compare to the lead tanks were used following selective reading and analysis, investigating similar stratigraphic sequences and deposition of artefacts. I also investigated a similar treatment of artefacts in these contexts and associated finds, particularly the wells. Again, future studies could make more of this by going even further into comparisons with well depositions from Roman Britain by looking at this feature from across the entire country. Whilst I investigated the types of sites connected to the ditches, pits and wells used for depositing the tanks, further comparative analysis on a broader scale would be useful for assessing the types of depositions these represent. This could also be achieved through comparing the British tanks with their counterparts in Europe in France, Hungary and Switzerland. Whilst Crerar briefly touched upon this aspect, a greater consideration of the find contexts of these European tanks would aid in understanding the depositional patterns for these artefacts.

7.4. Re-thinking the lead tanks and their depositional environments

The analysis of the lead tanks in this thesis has pushed the research in new directions, with the methods of investigation revealing some important patterns with both sets of lead tanks. As Section 7.2 outlined, analysing the tanks in a comparative manner provided important insights into the effort that went into burying these lead tanks and showed the potential value of these artefacts to their respective communities. Comparisons between the types of contexts they were found and the state they were found in allowed an investigation whether continued deposition patterns are visible between the Roman and Anglo-Saxon/Early Medieval lead tanks. This involved demonstrating how the use of certain features such as ditches, pits, rivers, watering holes and wells by inhabitants from both periods revealed some important similarities and variations. Whilst far more tanks were discovered in 'dry' than 'wet' environments, similar circumstances were visible with the manner of their burials, as can be seen by the tanks discovered in ditches and pits for instance. Comparing the states of the tank upon deposition revealed some similarly diverse developments as far more Roman tanks were buried in a fragmented state than their later Anglo-Saxon/Early Medieval counterparts. However, the types of damage showed noticeable similarities as both the fragmented Roman and Anglo-Saxon lead tanks in ditches showed signs of being hacked apart by bladed artefacts and then placed in groups together as seen at Pineham and Bottesford.

This comparative approach was also valuable for my 'landscapes of continued deposition approach'. This allowed me to view patterns that were visible not just on individual sites but also on an inter-site basis. Comparing the use of similar features on these sites provided important insights into the activities across these areas, allowing a discussion of region wide patterns with the 'landscapes of continued deposition' concept. It also showed how many of the sites had similar activities occurring at them across these periods. This was important for demonstrating how the burial of the lead tanks could be viewed as part of the wider deposition practices occurring in Roman and Anglo-Saxon/Early Medieval Britain, on both a regional and national basis. Cross period analysis has become increasingly common in archaeological studies, and by concentrating on the burial of the lead tanks this study was able to draw out patterns of both artefact burial and use of the landscape for these actions. This allowed an insight into possible belief systems by analysing it through the lens of 'landscapes of continued deposition' as well as assessing whether they provided evidence of 'ritual' and 'structured' deposition through the re-use of certain landscape features and how areas were used by different inhabitants at multiple points in their occupation. Excellent examples were Burwell, Icklingham, Wilbraham and Willingham. The choice of context and artefacts, with the tanks and other artefacts such as coin and metalwork hoards like pewter and tools, pottery alongside human and animal remains, were equally important for this investigation. Many of the artefacts discussed in the site reports were buried in environments where retrieval would have been difficult: ditches, pits, rivers, watering holes and wells, as seen at the sites of Caversham, Huntingdon, Rochester, Pulborough and Walbrook for instance. Many of them were either buried intact or fragmented, just like the lead tanks. This suggests rather deliberate intentions of removing them from domestic environments. It is likely that many of these activities occurred with the disuse of these areas by their populations, with the study demonstrating the continued use of these features as receptacles for possible 'ritual' activity at these 51 sites, with the sites classified as 'very strong' showing particularly overwhelming evidence of this.

7.5. Conclusions

This investigation has provided new analysis and interpretations of the lead tanks through their burial patterns and the landscapes containing them as well as their locations in Britain and access to both human and natural geographies. All of these factors were important for landscape archaeological analysis. This has identified important patterns of continued context choice and treatment of the Roman and Anglo-Saxon/Early Medieval lead tanks upon their deposition. Comparing the use of similar contexts, their state upon deposition and their associated finds provided useful insight into the continued deposition patterns for these artefacts across these periods and revealed important similarities and differences in the treatment of these items. Likewise, comparing their burial with metalwork depositions from earlier periods and similar actions from the Roman and Anglo-Saxon/Early Medieval periods allowed a much broader contextualisation of these activities. Whilst the motivations for these actions can only be guessed at, it is clear that rather substantial effort was taken to bury the tanks either in a complete or dismantled state. This investigation was designed to analyse the patterns of deposition for the tanks and see if the sites of their burial showed evidence of being 'landscapes of continued deposition'. Whilst many of the sites provided weak evidence of being landscapes of continued deposition, this thesis allowed a re-assessment of the tanks' burials as part of an ongoing process at these sites and across Britain. It also showed the types of landscapes these activities took place at with a mixture of industrial, 'ritual'/votive' and funerary landscapes visible across these 51 sites. Therefore, my main conclusion is that whilst the burial of the lead tanks in these regions provides weak evidence of landscapes of continued deposition, the burying of the tanks visible as part of a broader process of artefact burial during these periods and demonstrates important use of natural and 'human' made landscape features in artefact abandonment.

Appendices



Appendix 1

Locations of the find spots and the discovery of the Roman lead tanks

Allerton-Mauleverer						
Position	Easting	Northing	Artefact	Description	Period	
1	440000	458304	Settlement	Mixed Settlement Evidence at Flaxby	Iron Age/Roman	
2	440000	458200	Settlement	An Early Iron Age farmstead of the 7th-6th centuries BC was trial trenched during evaluation in 1994. It has a field system and track, and inhumations were discovered. It was replaced after an hiatus by a Roman farmstead in the mid 2nd to late 4th centuries.	Iron Age	
3	440700	456500	Farmstead	A Romano-British farmstead of the 1st and 2nd centuries, and 4th century, was evaluated in 1994. Features included a well, track, enclosure, ditched enclosure and pits.	Roman	
4	440500	461000	Settlement	Fifteen trenches and two test pits excavated, revealing the remains of a Roman farmstead settlement.	Roman	
5	441402	456892	Lead tank	Incomplete lead or lead alloy tank	Anglo-Saxon	
6	438433	456078	Hoard	Hoard found at Goldsbrough Church	Early Medieval	
Ashton						
Position	Easting	Northing	Artefact	Description	Period	
1	503330	287980	Settlement	A multi period settlement site and possible Bronze Age cremation cemetery. The site of a Neolithic settlement was indicated by finds of pottery, lithic implements and a possible pit. An Anglo-Saxon settlement may be indicated by a probable Grubenhaus and Anglo-Saxon pottery of 5th century date was uncovered during building work. A possible Bronze Age cremation cemetery is suggested by finds of cinerary urns.	Bronze Age	
2	505700	290100	Mounds	Two circular mounds were partially excavated at Tansor Crossroads in 1995 prior to a road improvement scheme. A third mound lay just outside the affected area and was not excavated. The mounds lie at the northern end of a spur of higher ground overlooking the valley of the Nene. They were first identified as cropmark ring ditches in the late 1970s. Mound 1 proved to be of Neolithic origin, though some possibly Mesolithic flints and some charcoal dated to the late 6th millennium BC (calibrated) hint at earlier activity. The initial phase of the monument seems to belong to the late 4th millennium BC, and comprise a rectangular enclosure at least 20 metres across defined by ditches and pit complexes, with an east-facing entrance. The interior featured some pits and postholes, and finds included sherds of Mortlake Ware.	Neolithic	

Ashton					
Position	Easting	Northing	Artefact	Description	Period
3	504387	288459	Axes	Three late Bronze Age socketed axes were found before 1948 somewhere near Oundle. They were said to have been discovered 'with about eighty other arrowheads in an earthenware jar' but this seems unlikely. The axes were examined in Birmingham City Museum in 1972. (1-3)	Bronze Age
4	504700	289250	Mixed finds	Mixed finds	Prehistoric and Roman
5	502900	290170	Villa	Roman Settlement (TL 02909017), E. of the village, on Cornbrash at 37m. above OD. A large quantity of Roman pottery, including Nene Valley and samian wares, and several fragments of hypocaust tiles have been found. Worked flints including scrapers have also been noted in the area.	Roman
6	503200	291010	Villa	Site of a large Roman villa discovered in 1736 when a mosaic was uncovered by ploughing, another mosaic was uncovered in 1798. The coin evidence suggests a 4th century AD date. Air photographs taken in the drought of 1976 show the greater part of the villa in considerable detail as parchmarks. It appears to have been unusually large, over 200m. long and some 60m. wide, and consisted of buildings arranged round two courtyards with other possible buildings to the north. A geophysical survey was carried out in 1992.	Roman
7	506600	289700	Settlement	Cropmarks of an extensive Romano British settlement with a stone scatter, 4th century coins and pottery found in 1961 and 1964. Part of the 'Tansor Grange Complex'.	Roman
8	504800	289000	Cemetery	Peripheral Cemetery of 114 burials	Roman
9	504807	289036	Blacksmith's	Blacksmith's workshop and well	Roman
10	504807	289036	Lead tanks	Lead tank	Roman
11	504713	288897	Cemetery	Cemetery with 64 burials	Roman
12	504600	289200	Cemetery	Possible cemetery	Roman
12	504600	289200	Burials	Possible burials	Roman
14	504600	289200	Coin hoard	Coin hoard	Roman
15	503300	289000	Cemetery	Early Saxon cemetery partially revealed by excavation in 1999. Nine inhumations were found, aligned north-south and east-west, and a range of grave goods was found, including bone combs, glass beads, several iron knives, and a possible amulet which was made of bone. The rest of the cemetery may extend under the houses and gardens of an earlier development.	Anglo-Saxon

Beverley					
Position	Easting	Northing	Artefact	Description	Period
1	440000	458304	Settlement	Mixed Settlement Evidence at Flaxby	Iron Age/Roman
2	440000	458200	Settlement	An Early Iron Age farmstead of the 7th-6th centuries BC was trial trenched during evaluation in 1994. It has a field system and track, and inhumations were discovered. It was replaced after an hiatus by a Roman farmstead in the mid 2nd to late 4th centuries.	Iron Age
3	440700	456500	Farmstead	A Romano-British farmstead of the 1st and 2nd centuries, and 4th century, was evaluated in 1994. Features included a well, track, enclosure, ditched enclosure and pits.	Roman
4	440500	461000	Settlement	Fifteen trenches and two test pits excavated, revealing the remains of a Roman farmstead settlement.	Roman
5	441402	456892	Lead tank	Incomplete lead or lead alloy tank	Anglo-Saxon
6	438433	456078	Hoard	Hoard found at Goldsborough Church	Early Medieval
7	503850	439670	Human remains and finds	Human remains and finds	Medieval
	501123	439371	Settlement	Earthwork remains of a sub-rectangular enclosure representing a Romano-British enclosed settlement. The enclosure is partly visible as earthworks on 2010 environment Agency lidar.	Roman
Bishop Norton					
Position	Easting	Northing	Artefact	Description	Period
1	497700	392500	Building site	Building site and assorted cropmarks	Roman
2	500400	392200	Cropmarks	Cropmarks of a potential building	Roman
3	498230	390930	Building Remains and Finds	Romano-British material found at Cliff Farm, Glenthams includes pottery of 1st to 4th century date, roof tiles and stone found in 1954.	Roman
4	501760	392000	Settlement	Probable Romano-British settlement consisting of conjoined and overlapping enclosures, boundaries, and a pit seen as cropmarks.	Roman
5	500160	392660	Lead Tank	Lead tank and pottery	Roman
Bottesford					
Position	Easting	Northing	Artefact	Description	Period
1	490189	407732	Soil layer	Buried soil layer	Early Bronze Age
2	490750	407280	Coin hoard	Coinage hoard of 169 denarii	Roman
3	489900	406900	Coin moulds	Coin moulds and brooches	Roman
4	490232	407748	Pottery	Ditches with 3rd century pottery	Roman
5	490070	407260	Occupation site	Occupation site	Roman
6	489957	406951	Pottery	Pottery and tile fragments	Romano-British
7	489890	407290	Pottery	Roman and Anglian pottery found in the Bottesford area in 1951.	Roman
8	489500	406500	Brooch	A cruciform and annular brooch	Anglo-Saxon
9	489837	406934	Lead tank	Lead tank fragments	Anglo-Saxon
Bourton on the Water					
Position	Easting	Northing	Artefact	Description	Period
1	417300	220800	Salmonsbury Camp	Salmonsbury Camp	Iron Age
2	417300	220800	Burials	Burials	Bronze Age

Bourton on the Water					
Position	Easting	Northing	Artefact	Description	Period
3	416650	220946	Settlement	Settlement	Iron Age/Roman/ Anglo-Saxon
4	417150	220470	Remains	Remains inside and outside Salmonsbury	Roman
5	417250	220570	Skeletons and urn	Five skeletons and a cremation urn	Romano-British
6	416210	220980	Lead tank	Lead tank at Lansdown	Roman
7	417250	220560	Burials	Burials Southwest of Burghfield Salmonsbury Camp	Roman
8	416100	221000	Settlement	Settlement in Bourton Town Area	Roman
9	416100	221050	Settlement	Settlement	Roman
10	415730	220630	Hoard	Hoard	Roman
11	417000	220000	Burials	Burials within Salmonsbury	Anglo-Saxon
Brough					
Position	Easting	Northing	Artefact	Description	Period
1	484400	359300	Settlement	Settlement	Iron Age
2	483800	358400	Town of Crococalana	Town of Crococalana	Roman
3	483790	358730	Settlement Evidence	Settlement Evidence	Roman
4	481050	359150	Roman camp	Holme Roman Temporary Camp	Roman
5	484030	358430	Lead coffin	Lead coffin with 2nd and 3rd century pottery	Roman
6	483700	358400	Lead tank	Lead Tank fragment in a field east of the A46	Roman
7	483800	358900	Settlement	Settlement	Anglo-Saxon
Burwell					
Position	Easting	Northing	Artefact	Description	Period
1	557003	267498	Settlement	Probable settlement at Hallard's Fen	Neolithic
2	558901	266000	Hoard	Hoard at St Mary's churchyard	Late Bronze Age
3	559199	266499	Settlement	Settlement remains at Newmarket Road	Late Bronze Age
4	559401	266795	Cremation	Cremation burials	Bronze Age
5	559100	266396	Settlement	Settlement remains at Newmarket Road	Iron Age
6	559099	265795	Site	Mixed period features and metalworking site at Isaacson Road	Bronze Age-Iron Age
7	559001	266504	Settlement	Probable settlement North of Burwell Church	Roman
8	560303	269296	Finds	Metal detecting finds at High Ness Farm	Roman
9	561210	267590	Villa	Exning Roman Villa	Prehistoric and Roman
10	558402	267498	Hoard	Metalwork hoard	Roman
11	558702	265804	Lead tank	Lead tank	Roman
12	559001	266504	Cemetery	Cemetery	Anglo-Saxon
Caistor					
Position	Easting	Northing	Artefact	Description	Period
1	511200	401000	Urn and pottery	Urn and pottery, Navigation Lane, Caistor	Bronze Age
2	510700	402000	Four urns	Remains of four urns	Early Bronze Age
3	510900	401100	Features	Features on land at Caistor Grammar School	Roman
4	510400	400600	Possible Fort	Cropmark of a regular, rectangular, or possibly square, double-ditched enclosure with rounded corners, seen on Paul Everson aerial photographs of 1976. Possibly the remains of a Roman fort or cam	Roman
5	511700	401450	Artefacts	Artefact cluster at the rear of Bank Lane	Late Anglo-Saxon
6	511600	401200	Lead tank	Lead tank at Caistor Churchyard	Roman

Caistor					
Position	Easting	Northing	Artefact	Description	Period
7	511800	401400	Cemetery	Possible cemetery on land at 16 High Street, Caistor	Roman to Anglo-Saxon
8	511270	400870	Cemetery	6th century AD inhumation with grave goods, found in the garden of 'Tree Tops', 35, Nettleton Road. This may be part of the cemetery TA10SW1.	Anglo-Saxon
9	511000	403100	Cemetery	Cemetery at Fonaby	Anglo-Saxon
Caversham					
Position	Easting	Northing	Artefact	Description	Period
1	470609	176100	Axes	200 Acheulian axes	Prehistoric
2	471000	175000	Axes	Tranchet axes in Caversham gravel pit	Prehistoric
3	470900	175100	Axes	Hand-axes from pit at Priest's Hill	Prehistoric
4	472400	175200	Handaxes	Hand-axe and mammoth tooth in-situ	Prehistoric
5	471500	174400	Finds	Finds in the River Thames at Caversham	Prehistoric
6	471700	174100	Artefacts	Neolithic artefacts dredged from the River Thames at Reading included: a perforated hammer head; a ground, fine-grained light-grey stone axe with butt ground flat obliquely to axis and no sign of wear; a ground epidiorite axe showing no signs of wear; two polished stone axes; a ground flint axe, dark ochre showing little signs of wear and another polished flint axe	Neolithic to Late Bronze Age
7	470600	176000	Pit and finds	Pit and prehistoric finds at former Church of Our Lady	Neolithic to Late Bronze Age
8	471500	174400	Spearhead	Bronze spearhead in the River Thames	Bronze Age
9	471500	174400	Vessel	Drinking vessel recovered from the River Thames	Late Neolithic/ Early Bronze Age
10	472000	174000	Axehead	Flanged axehead from the foundation of Caversham Lock	Early Bronze Age
11	471000	174700	Axehead	Bronze axehead and a 'flanged celt' from the River Thames	Bronze Age
12	471100	174500	Axehead	Axehead found in the River Thames at Caversham Bridge	Romano-British
13	472800	174000	Lead tank	Lead tank	Late Roman
14	472800	174100	Well	Well at Deans Farm	Late Roman
15	471750	172080	Hoard	Findspot of two Roman coin hoards. A. A hoard of 50 siliquae found in Feb. 1895 in a pot from the side of a gravel pit between Milman and Swainstone Roads, Whitley. Eleven coins from Julian II to Arcadius (AD 360-408), and fragments of the pot are in Reading Museum (Acc. No 15:48). B. A hoard of about a hundred and twenty coins in a glazed thumb pot of New Forest ware found in a gravel pit, or while excavating the foundations for a house, in Milman Road, Whitley in December 1895. One solidus, 49 siliquae and the beaker are in Reading Museum; the coins are from Constantius II to Honorius (AD 337-423). (Acc. No. 16:48). At least 47 other coins from hoard B were retained by the builder, Mr. Swain, but these have been lost.	Roman

Caversham					
Position	Easting	Northing	Artefact	Description	Period
16	473600	173800	Cemetery	A Saxon cemetery recorded during the widening of the Great Western Railway at Early in 1891. It was situated 50 feet above river level, 630 feet south of the River Thames, between the railway bridge over the Kennet and the brick kilns, southeast of the Dreadnought Public House. Excavations recorded either 13 or 14 inhumations, five were inhumation burials, all aligned east-west. One was crouched, the others supine. Grave goods were present in all the graves and included brooches, spearheads, knives and buckles. The other burials were cremations - often placed within urns. One contained fragments of a burnt bone comb. The grave goods infer an early Saxon (late 5th- to early 7th century) date.	Anglo-Saxon/ Medieval
17	471520	173900	Inhumation	A ninth cemetery inhumation accompanied by a sword and a horse were recovered from ballast pits 100 yards east of the old engine sheds at Reading station in 1831. The sword pommel is thought to be an advanced Scandinavian 'Gripping Beast' style of the 8th century. Its worn condition and advanced style accord with a date of interment soon after 800 AD.	Anglo-Saxon/ Medieval
18	471300	176700	Occupation Site	A possible Romano British occupation site dating from the 1st to the 4th century consisting of pits and ditches with finds of pottery, coins, hob nails, an Iron knife, a brooch, a horse bit and animal bones.	Roman
Corby					
Position	Easting	Northing	Artefact	Description	Period
1	485000	289000	Settlement	Settlement found in West Corby	Iron Age/Medieval
2	487200	290000	Occupation	Probable Iron Age settlement consisting of ditches and pits with coarse pottery. Traces of Roman occupation consisting of a semi circle of burnt wood and stones, possibly indicating a hut site with 2nd to 4th century Romano British pottery.	Iron Age
3	486700	289700	Industrial Activity	Possible Iron Age to Romano British iron smelting site located on Lodge Park Building Estate.	Iron Age
4	484400	292100	Possible Villa	Fieldwalking produced a compact stone scatter associated with tile, tesserae, slate and Roman pottery; probably a Roman villa site.	Roman
5	484300	290140	Industrial Site	Roman industrial site identified in Cottingham 1961-3. Features include two corn drying ovens and a possible iron working site. Roman pottery and coins also recovered. The site dates from the 1st to the 4th century. The site has also been interpreted as a possible villa.	Roman
6	487770	289300	Settlement	Finds of Roman pottery and a figurine suggest a possible settlement.	Roman
7	486000	287000	Settlement	Settlement around Beanfield Estate	Roman

Corby					
Position	Easting	Northing	Artefact	Description	Period
8	484400	292200	Settlement	An Anglo-Saxon settlement probably founded in the late 5th to early 6th centuries. The settlement was also mentioned in a document dating to around AD 700, and again in a document relating to Edward the Confessor.	Anglo-Saxon
9	485212	290381	Lead tank	Lead tank	Roman
Cumwhitton					
Position	Easting	Northing	Artefact	Description	Period
1	350330	552500	Brooches	Two cast copper alloy 'domed' oval brooches	Early Medieval
2	350300	552500	Pin Head	Fragmentary copper-alloy gilded pin head	Early Medieval
3	350330	552500	Burial ground	Four burials of a 10th century Viking burial ground at Towntoot Farm	Early Medieval
4	351564	550784	Lead tank	Lead tank	Anglo Saxon
	346458	546902	Roman Signal Station	Site of a Roman signal station, no visible remains. Excavation uncovered a rectangular fortlet, 65ft x 56ft defended by a stone wall 6ft thick. There were no traces of building foundations.	Roman
	353010	557860	Roman quarry	Roman quarry on the West bank of the River Gelt with Roman inscription and altar cut by Roman quarrymen whilst repairing Hadrian's Wall during the early 3rd century.	Roman
	344165	551782	Temporary Camp	Cropmarks of a Roman temporary camp. The site of a small camp lies 300 m ENE of the Golden Fleece and 5 km SE of Carlisle (Luguvalium) at about 70 m above OD. It is situated on the gentle NW-facing slope of a broad NE to SW ridge, immediately overlooking the point at which an unnamed tributary joins the River Petteril. The most significant views seem to have been to the W and NW up the Petteril Valley, since ridges obscure long-distance sight lines in other directions. The Roman road from Carlisle to Old Penrith (Voreda), which passes about 450 m SW of the site, is also within view.	Roman
East Goscote					
Position	Easting	Northing	Artefact	Description	Period
1	465080	313450	Settlement	Mixed settlement east of Rearsby Lodge Farm during Rearsby Bypass	Neolithic/Bronze Age
2	463700	313900	Flint	112 pieces of flint discovered at Beedle's Quarry	Paleolithic, Mesolithic and Neolithic
3	463700	313900	Pottery	Beehive quern and pottery discovered at Beedle's Quarry	Roman
4	463640	314890	Settlement	Mixed period site west of North's Lodge	Bronze Age/Iron Age
5	465920	314610	Iron Age site	Site east of allotment gardens, Rearsby Bypass	Iron Age
6	464800	312880	Late Iron Age site	Site East of Queniborough Brook, south of Rearsby Bypass	Late Iron Age
7	464700	312700	Roman site	Site north of Coppice Lane	Roman
8	464290	314280	Roman site	Site north of Lodge Farm	Roman

East Goscote					
Position	Easting	Northing	Artefact	Description	Period
9	465970	314770	Farmstead	Excavation in 2004 recorded a Roman farmstead consisting of two possible structures and various ditches, pits etc. There was a waterhole and evidence for cattle (shorthorns). Large quantities of Roman pottery and other finds were recovered, including an unusual ceramic figurine of a lion.	Roman
10	464000	315000	Hoard	A Roman coin hoard was found at Thruslington in 1950, the coins were mostly 4th century AD including an URBS ROMA issue.	Roman
11	463100	314100	Lead tank	Damaged Lead Tank	Anglo-Saxon
12	463900	313400	Pottery	Mixed pottery found at the Old Ordnance Factory	Anglo-Saxon
13	464800	314400	Remains	Mixed remains at Mill Road	Anglo-Saxon/ Medieval
East Stoke					
Position	Easting	Northing	Artefact	Description	Period
1	475000	350700	Sword blade	Bronze sword blade found in the River Trent at Gawburn Nip	Late Bronze Age
2	475906	350478	Ad Pontem fort	Site of Ad Pontem Roman Fort	Roman
3	476000	348500	Villa	Romano British occupation site, consisting of pottery, tile fragments, tegulae and tesserae, was found. Scott lists this site as a possible Roman villa.	Roman
4	474100	349700	Occupation site	Roman occupation site consisting of stone wall foundations, Roman pottery and iron objects were found during the laying of gas pipes at the corner of Stoke Wood. Scott lists this site as a possible Roman villa.	Roman
5	475906	350478	Lead tank	Lead tank panel found on the site of East Stoke	Roman
Enford					
Position	Easting	Northing	Artefact	Description	Period
1	412950	151670	Bowl barrow	Bowl barrow (Grinsell's Enford 1)	Bronze Age
2	417220	152020	Bell barrow	Twin bell barrow (Grinsell's 6)	Bronze
3	416240	150390	Barrow	A round barrow, excavations located pottery and an inhumation	Bronze Age
4	414600	153250	Midden	East Chisenbury Midden and Settlement	Bronze/Iron Age
5	416704	153131	Lidbury Camp	Lidbury Camp Hillfort	Iron Age
6	415190	153870	Chisenbury Camp	Chisenbury Camp Hillfort	Iron Age
7	411640	153880	Casterley Camp	Casterley Camp Enclosures	Iron Age/Roman

Enford					
Position	Easting	Northing	Artefact	Description	Period
8	411200	151750	Settlement	A Romano British settlement, with possible Iron Age origins, which is situated at Compton Down, on a chalk spur above Water Dean Bottom. Remains comprise depressions and hollows, perhaps representing 12 huts, within a slight bank and ditch, which cuts of the promontory of the spur. This latter feature may be Iron Age and has similarities with prehistoric promontory forts. There is a causewayed entrance through the bank and ditch.	Roman
9	413200	152000	Pit	Pit containing mixed material to west of the A345 road	Roman
10	413600	151900	Lead tank	Lead Tank found Between the River Avon and the A345 road	Roman
Felixstowe					
Position	Easting	Northing	Artefact	Description	Period
1	629126	234952	Hoard	Founder's Hoard' discovered prior to 1885 found in a pot	Bronze Age
2	629666	234652	Metalwork	Two basal looped spearheads & socketed axe	Bronze Age
3	629500	234200	Hoard	Bronze Hoard found in the first railway cutting near Felixstowe	Late Bronze Age
4	631776	235632	Urn	Collared urn found in coprolite diggings at The Park	Bronze Age
5	632330	236160	Burial	Beaker fragments and human remains	Bronze Age
6	631880	235430	Pottery	Quantity of relatively unabraded pottery & worked flints including a broken barbed and tanged arrowhead	Early Bronze Age
7	628640	235490	Occupation	Mixed occupation at Brackenbury Battery	Late Bronze Age/Iron Age/Roman/Saxon
8	631000	235000	Fort	Walton Castle Saxon Shore fort	Roman and Early Saxon
9	631726	235552	Burial ground	Burial ground and occupation site in The Park	Roman
10	631226	235052	Occupation	Numerous finds at Foxgrove Gardens	Roman
11	631126	234952	Occupation	Hearth and well with cremated burials	Roman
12	631966	235412	Cemetery	Possible cemetery site	Roman
13	631126	234952	Statuette	Bronze statuette of eagle, bronze statuette of baby (Hercules), colour coated beaker	Roman
14	630126	234952	Brooches	Cruciform brooches and associated finds	Anglo-Saxon
15	631890	235610	Finds	Extensive finds in side of trench dug during road straightening operations near Brackenbury Barracks	Roman
16	630126	234952	Lead Tank	A possible Anglo Saxon leaden vessel 31 ins in circumference, 6 ins high and with a foliage pattern, was found at Felixstowe in 1878 and from traces of iron was thought to have had an iron handle or cover, or both. It is similar to a vessel found at Rochester, Kent, both of which are ascribed by Roach-Smith (2) to the 10th century or earlier. by Roach-Smith (2) to the 10th century or earlier.	Anglo-Saxon

Flawborough					
Position	Easting	Northing	Artefact	Description	Period
1	478900	342900	Settlement features	Settlement features	Roman
2	478000	343100	Lead tank	Lead tank	Roman
3	479280	343750	Coin hoard	A coin hoard of 19 silver shillings and sixpence of Elizabeth I, James I and Charles I.	Post-Medieval
Flixborough					
Position	Easting	Northing	Artefact	Description	Period
1	487812	414500	Bronze weapons	Bronze weapons found near Flixborough	Bronze Age
2	487666	414562	Cinerary urn	Cinerary urn containing a cremation at Flixborough sand quarry	Middle Bronze Age
3	487558	414614	Cremation	Cremation burial and pottery	Roman
4	488700	414000	Occupation area	Occupation area including a bronze stand	Romano-British
5	488660	413900	Settlement	A Romano-British settlement site was uncovered when Normanby Park Steelworks were built; pottery, greywares and samian, brooches, a bronze stand, a coin and base of a crucible were recovered; prehistoric flint implements were also found.	Roman
6	487072	414200	Inhumations	11 inhumations found during sand extraction	Anglo-Saxon
7	489050	414444	Occupation site	Extensive occupation site	Anglo-Saxon
8	487161	414253	Lead tanks	Two lead tanks	Anglo-Saxon
Garton					
Position	Easting	Northing	Artefact	Description	Period
1	497810	457730	Barrow	Garton Slack Round Barrow (80)	Neolithic/ Bronze Age
2	497900	457500	Barrow	Garton Slack Round Barrow (81)	Neolithic
3	495200	460100	Chariot burial	Garton Slack Chariot Burial	Iron Age
4	500100	457700	Settlements	Settlement Site	Iron Age to Anglo-Saxon
5	495100	460450	Mixed occupation	Mixed occupation at Garton Slack	Neolithic- Romano-British
6	497555	459675	Lead tanks	Findspot of three lead buckets found with associated pieces of iron work	Anglo-Saxon
7	495600	461800	Cemetery	Cemetery Site extending along the rampart of Double Dyke intrenchment	Anglo-Saxon
8	497850	457850	Cemetery	Garton I Burial West of Garton Station	Anglo-Saxon
9	495655	461855	Barrow	Garton Slack Round Barrow (M37)	Anglo-Saxon
10	498675	457755	Cemetery	Partially excavated cemetery known as Garton II	Anglo-Saxon
11	497864	457941	Cropmarks	Cropmarks of a Barrow Cemetery with later burials	Iron Age and Anglo-Saxon
Grassington					
Position	Easting	Northing	Artefact	Description	Period
1	400400	465200	Cairn and beaker burial	Cairn and beaker burial at High Close	Early Bronze Age
2	399500	466300	Cairn	Turf covered stone cairn at the north end of Lea Green	Early Bronze Age/Iron Age
3	399800	466200	Enclosure	Enclosure Site	Iron Age

Grassington					
Position	Easting	Northing	Artefact	Description	Period
4	399400	465000	Grass Wood settlement	Grass Wood Settlement	Iron Age
5	399600	466100	Settlement	Settlement at Lea Green	Iron Age to Roman
6	399600	466300	Lead tank	Cast lead-alloy tank	Anglo-Saxon
7	399600	466300	Metalwork	Mixed metalwork found at Lea Green	Anglo-Scandinavian
8	398000	465000	Lead workings	Probable Roman lead workings at Grassington.	Roman
Huntingdon					
Position	Easting	Northing	Artefact	Description	Period
1	525550	270920	Complex	A Neolithic cursus monument, running roughly northeast-southwest. Only one terminal, the northeastern, is known. To the southwest the cropmarks are lost beneath Godmanchester. Circa 90 metres wide, at its northeastern end the cursus terminates against the southwestern side of the Neolithic trapezoidal enclosure TL 27 SE 80.	Neolithic
2	525603	272398	Remains	Mixed remains	Bronze Age/ Anglo-Saxon
3	523900	271500	Remains	Mixed Remains at Pathfinder House	Iron Age/Roman
4	522300	272200	Features	Archaeological evaluation of the site of a new school in Hinchbrooke Park Road (2000) revealed features including a group of 3 pits, one of which contained a horse's skull, placed on top of a collection of flint cobbles and then overlain by a layer of pottery. These were interpreted as being of early Bronze age date. Also found were Iron Age ditches and two phases of medieval/post-medieval ridge and furrow.	Iron Age
5	523899	271298	Remains	Remains at Watersmeet	Late Iron Age/ Roman
6	523903	271398	Cemetery	Cremation burials	Roman
7	523899	271298	Villa	Villa at Mill Common	Roman
8	525700	271300	Villa	Roman villa and bath house, excavated in 1963 and 1968-9. The villa appears to have originally been an aisled barn with corn drying ovens and later converted into living quarters, these phases were dated to the 2nd century AD. In the 4th century AD another building was erected on the east end of this building. There are enclosures associated with these buildings extending to the south-west. The villa may have been occupied into the sub-Roman period. Excavations in 1990 showed that the enclosures and trackways were laid out in the second century AD and during the 3rd century AD some of the ditches were filled and buildings erected. Neolithic, Bronze Age and Iron Age pottery was recovered from this site. The site lies in an area of gravel extraction.	Roman

Huntingdon					
Position	Easting	Northing	Artefact	Description	Period
9	525300	270500	Remains	Roman burials were found when digging foundations east of Godmanchester. Excavation uncovered 9 inhumations, one in a cist, 1st to 2nd century pottery and tiles, part of an Anglo Saxon cinerary urn, and Medieval pottery and tiles. Further burials and finds, including pots with cremated bones, have been found since. The scale of finds indicates an eastward extension of the Roman town.	Roman
10	523800	270300	Durovigutum	The site of Godmanchester Roman town, controlling the river crossing of Ermine Street and the junctions of two minor roads. A fort was built nearby shortly after the Roman invasion of AD 43 and covered about 2.4 hectares. It was defended by twin ditches with associated timber and earth rampart. These defences were not completed before the fort was dismantled, indicating only a very short occupation.	Roman
11	523480	270080	Hoard	3rd to 4th century Roman coins found.	Roman
12	524794	272011	Lead Tank	Lead Tank found in the River Ouse	Roman
13	525100	269400	Coin hoard	36 coins from a scattered hoard deposited c 390 AD, from an inhumation cemetery in London Road. Valens, Valentinian I and II, Gratian, Theodosius I, Arcadius, Theodora, Constantinopolis, Constantine II, Constans. 9 unidentified. As reported on Cambridgeshire HER - from Longsands Museum - no further details	Roman
14	525300	270500	Cemetery	Roman burials were found when digging foundations east of Godmanchester. Excavation uncovered 9 inhumations, one in a cist, 1st to 2nd century pottery and tiles, part of an Anglo Saxon cinerary urn, and Medieval pottery and tiles. Further burials and finds, including pots with cremated bones, have been found since. The scale of finds indicates an eastward extension of the Roman town.	Roman
15	524780	270340	Grubenhau	A possible Anglo-Saxon settlement. An Anglo Saxon Grubenhau, pits and a wattle lined well were found in excavations in 1974. The site is in a built up area.	Anglo-Saxon
16	525000	272000	Burials	Early Medieval inhumations, probably part of an inhumation cemetery, found near Hartford vicarage in 1870. The inhumations were found in association with a cinerary urn, charred deposits, iron and bronze brooches, one probably 5th century in date, and a flint axe. A number of urns had been found previously in this and an adjacent field. Several Roman coins, a millstone, and a prehistoric axe were found in the immediate vicinity.	Early Medieval
17	523203	272405	Mixed remains	Mixed remains at Stukeley Road	Medieval and undated
18	525400	272605	Coin hoard	Coin hoard	Medieval

Icklingham					
Position	Easting	Northing	Artefact	Description	Period
1	579100	271900	Pit	Weaterhill Farm Gravel Pit	Paleolithic
2	579000	270000	Artefacts	A total of 1515 Neolithic stone implements, including axes, picks, blades and arrow-heads from Lackford are in the Sturge collection in the British Museum. One of these objects is a Palaeolithic implement, probably a handaxe, and is probably the "triangular stone knife" exhibited by AL Armstrong in 1915.	Neolithic
3	578130	272330	Hoard	Hoard of bronze socketed axes	Bronze Age
4	578060	272040	Villa	Horselands Field; Roman Villa Southwest of Weaterhill Farm	Roman
5	578370	272170	Lead tank	Lead cistern with Chi-Rho symbols between A and W	Roman
6	578280	271930	Lead tank	Lead tank with Chi-Rho symbols containing iron door fittings	Roman
7	578600	274600	Hoard	Pewter hoard	Roman
8	578200	274200	Hoard	Pewter hoard	Roman
9	580480	274420	Scatter	Artefact scatter involving coins, metalwork and pottery	Roman
10	578100	274300	Hoard	Coin hoard of 1064 coins	Roman
11	578200	274200	Hoard	Coin Hoard	Roman
12	578000	274000	Hoard	Silver Coin Hoard	Roman
13	577960	271990	Figurine	Bronze Figurine	Roman
14	578000	274000	Figurines	Bronze Hercules and Mercury Figurines	Roman
15	578000	274000	Lead cistern	Lead Tank with A and found in 1726	Roman
16	577482	272479	Cemetery	Roman and Anglo-Saxon pottery from Michell's Hill Anglo-Saxon cemetery.	Anglo-Saxon
17	577590	271450	Cemetery	Extensive early Pagan Anglo-Saxon cremation cemetery. Most of the urns had associated weapons or farming implements which had been melted to varying degrees. Some had personal ornaments, but all of the implements had been broken prior to deposition. Many of the urns had been deliberately holed. The cemetery was set out over Romano-British enclosed fields. There was also evidence of two Romano-British buildings which had burial vaults. These were placed in a rectangular enclosure, possibly a mortuary enclosure.	Anglo-Saxon
18	579100	271300	Settlement	An excavation to the west of West Stow Saxon village in 1978-9 located several Iron Age and Roman ditches, pits and post-holes, and two Saxon Grubenhauer.	Anglo-Saxon
Ireby					
Position	Easting	Northing	Artefact	Description	Period
1	326000	536000	Burial urn	Burial urn and associated finds	Bronze Age
2	325690	538550	Bowl barrow	Bowl barrow on Aughtertree Fell	Bronze Age
3	326080	538140	Bowl barrow	Bowl barrow on Aughtertree Fell	Bronze Age
4	326400	538110	Settlement and enclosures	Settlement and enclosures on Aughtertree Fell	Roman
5	323800	539000	Lead tank	Lead Tank found 350m west of Ireby Village	Roman

Kenilworth					
Position	Easting	Northing	Artefact	Description	Period
1	427700	271400	Settlement	Possible settlement located 200m north-west of the Common	Roman
2	427000	272000	Coin hoard	Findspot of a Roman coin hoard uncovered by a metal detector on farmland near Kenilworth in 1992-3. It consisted of 42 denarii ranging in date from Vespasian to Septimus Severus, AD 69-207. An early 3rd century hoard.	Roman
3	427000	273000	Lead tank	Lead tank found in field	Roman
4	427800	272400	Medieval occupation	Medieval occupation at 15 Clinton Lane Castle Green	Medieval
5	428100	270600	Mixed Metalwork	Various metal objects including part of a bronze jug or bowl found 800m west of the football ground Bulkington	Post-Medieval
Ludford					
Position	Easting	Northing	Artefact	Description	Period
1	521100	389300	Settlements & Cemetery	Settlement evidence	Late Iron Age
2	525940	386640	Settlement	A large late Iron Age and/or Roman settlement is visible as cropmarks on air photographs. The settlement is rectilinear in plan, comprising networks of adjoining and compartmented rectangular enclosures flanking a central trackway, which extends approximately south-west to north-east. The cropmarks suggest multi-phased activity, with additional enclosure elements extending to the west.	Iron Age/Roman
3	518700	388500	Five ditches	Five Ditches Galley Hill containing pottery and metalworking debris	Roman
4	521500	389200	Coins	22 coins dating from Valerian II to Constans and a bronze ornament	Roman
5	520900	389400	Coins	Coins near Ludford Grange	Roman
6	521100	389400	Coins	Several 3rd-4th century coins and further 9 bronze coins	Roman
7	524410	388500	Lead tank	Lead tank found in a pit	Roman
Mavis Enderby					
Position	Easting	Northing	Artefact	Description	Period
1	535500	367700	Roman site	Site Northwest of Northfield Farm	Roman
2	535718	366689	Lead tank	Large, incomplete and crumpled lead tank	Anglo-Saxon
3	535810	363900	Urn Cemetery	Hall Hill. Anglo-Saxon cremation cemetery, no grave goods identified. Artefacts from a range of periods have also been found from the Palaeolithic to Saxon periods, and include a Mesolithic chipping floor and Late Iron Age/Romano-British timber building.	Anglo-Saxon

Newport					
Position	Easting	Northing	Artefact	Description	Period
1	376000	321000	Bronze artefacts	A quantity of Bronze Age bronzes, including palstaves and fragments of rapiers or swords, was found circa 1800 at Oulton. The whereabouts of these items is unknown.	Bronze Age
2	374291	320055	Pottery and metalwork	Findspot of pottery and metalwork, Edgmond Road	Roman
3	376100	321800	Hoard	Hoard of 68 bronze radiates in poor condition	Roman
4	374038	319923	Pottery and metalwork	Concentration of pottery and metalwork at Edgmond Road	Medieval
5	375400	321492	Lead tank	Complete but crushed/flattened lead tank	Anglo Saxon
	374635	318956	Occupation Site	Anglo-Saxon settlement of Plesc.	Anglo Saxon
North Lincoln					
Position	Easting	Northing	Artefact	Description	Period
1	497000	371000	Metalwork	Eleven bronze celts from the river Witham, near Lincoln, were exhibited in the museum of the Institute at Lincoln.	Bronze Age
2	495900	376000	Hoard	De Jersey (2014): "A scattered hoard recovered over several days in July 1997. The field was repeatedly dragged and ploughed in an attempt to find more coins; little precise detail is available on the position of the coins, but they seem to have been scattered along a line of forty metres or more (BMHF; Riddle 1998). Fifteen staters were declared to the Coroner and eventually acquired by Lincoln Museum, but there is convincing evidence to suggest that the hoard contained between two and three times as many coins, since a further twenty-four linked to this findspot have appeared in the trade."	Iron Age
3	498139	376195	Hoard		Iron Age
4	497610	371980	Basilica	The site of the Roman basilica on the south side of the forum has been located by excavation.	Roman
5	496150	374760	Villa	Site of a possible Roman villa at Burton. A small area of tessellated pavement, about a yard square, was found on August 16th 1910 during the construction of a reservoir. It is now in Lincoln Museum. A water-pipe and some wall plaster fragments were also found. Roman pottery has also been reported from the area. Note that this record appears to encompass two separate entries in Scott's gazetteer of villas.	Roman

North Lincoln					
Position	Easting	Northing	Artefact	Description	Period
6	496340	374620	Cemetery	Twelve stone coffins and three coffins of burnt clay were found in an oval grave containing numerous human bones in a quarry at Burton Hill Top between 1864 and 1870. All are believed to be of Roman date. More recently, but prior to 1966, stone slabs were observed in an electricity cable trench on the east side of Burton Road. These too may be of Roman date. Scott has included both sets of finds in her gazetteer of Roman villas, presumably regarding the stone slabs as building debris. Clearly the presence of a villa is, on the evidence available, highly conjectural.	Roman
7	500200	372100	Burials	There have been various Roman burial finds in the ironstone mines, Greetwell. [Ironstone mines are published at approximately TF 00007223 on O.S. 6", 1938-46] (1)	Roman
8	497880	371500	Burials	Roman burials, a possible early Medieval pottery kiln, and a Medieval road surface were identified during excavations in Cathedral Street in 1994. The kiln site was indicated by wasters dating to the mid-late 10th century. The cemetery lies outside the east side of the lower town walls.	Roman
9	497620	371820	Coins	Robertson 2000, 11 no. 53:"From a drain trench outside the National Provincial Bank, Castle Hill, Lincoln, comes a small hoard of eleven bronze Roman coins, now in the museum [i.e. Lincoln Museum]. Only three of the eleven coins were of the normal senatorial coinage, the remainder being imitations of Claudius coins, executed with a varying degree of success. From the description given by the workmen of the finding of the coins it is clear that they were all found together, and perhaps represent the contents of a dropped purse. The find was made immediately on the west side of the main north-south street in the Roman city (Ermine Street)." The coins were 3 dup., 7 Asses and 1 unidentifiable AE. Dup. Asses AE Claudius 1(b.) 6(b.) Nero 1 Vespasian 1 uncertain 13 7 1 (AD 72-3) (AD 71) D.F. Petch, in Repts., Papers, Lincs. Archit. and Arch. Soc., 7, 2 (1958), 104, 106, types One of the copies may have had a prototype in the Lugdunum altar coinage of Tiberius. In Lincoln City and County Museum, 10 coins (46.57) Examined, 1978 (ASR), the uncertain coin not being seen."	Roman
10	498070	375970	Coins	Treasure reference 2017 T912: a hoard of 28 late Roman copper alloy nummi.	Roman
11	498010	375847	Hoard	Treasure reference 2017 T913: seven late Roman copper alloy nummi. These coins are an addenda to 2016 T356: a hoard of 33 late Roman copper-alloy nummi. The hoard therefore now stands at 40 coins.	Roman
12	498010	375847	Hoard		Roman
13	497870	372680	Hoard		Roman
14	498000	374000	Lead tank	Lead tank fragment discovered in the ground	Roman

Oxborough					
Position	Easting	Northing	Artefact	Description	Period
1	574000	300000	Dirk	Ceremonial bronze dirk which was vertical in the ground	Early Bronze Age
2	571050	299470	Weapons	Bronze spearhead & iron sword from River Wissey	Bronze Age
3	570000	299000	Hoard	Bronze hoard comprising 2 swords, 3 spearheads, a chape and a halberd found on the bank of the River Wissey by 1873.	Bronze Age
4	570640	299630	Torcs	Hoard of 6 bronze torcs found near Stoke Ferry	Bronze Age
5	574455	303480	Possible Cemetery	Possible Cemetery and mixed finds	Roman and Medieval
6	573070	295840	Villa	A stone building with three rooms, one with hypocaust, one tiled, one with a concrete floor. A collection of third to fourth century coins were also recovered. This may be a Roman villa.	Roman
7	572170	299460	Bottle and bowl	Pear shaped bottle and bowl found in banks of River Wissey	Roman
8	573000	299000	Lead tank	Lead Tank believed to have been found in River Wissey along with 1st, 3rd and 4th century coins	Roman
Parwich					
Position	Easting	Northing	Artefact	Description	Period
1	418300	357400	Barrow	Round Barrow	Bronze Age
2	418400	357500	Barrow	Barrow on Parwich Moor	Bronze Age
3	418790	355000	Coin hoard	Hoard of 261 coins	Roman
4	418750	355600	Coin hoard	Hoard of 71 denarii along with a 'military' weapon and urn	Roman
5	418781	354980	Coin hoard	Hoard of 80 small brass coins from the Late Roman Emperors	Roman
6	417849	356022	Lead tank	Lead tank	Roman
7	419994	356895	Settlement	A Roman settlement was excavated at Roystone Grange between 1988 and 1992. The remains have been interpreted as a farmstead which may have been part of a small village. The farmhouse remains consist of a platform terrace with a revetment wall on the downslope, excavations revealed post holes. The other remains include buildings and a field system. Scheduled. Remains of the Roman field system and settlement are visible as earthworks on air photographs. Some remnants of the field system appear to be still extant on Google.Earth.com 2000 imagery (accessed on 26th January 2010).	Roman

Parwich					
Position	Easting	Northing	Artefact	Description	Period
8	420145	356622	Farmstead	Roman lead workings. A Roman farmstead complex with house platforms, an enclosed field system and a stock pen. The central building was an aisled timber hall and dated from the late 2nd to the 4th century. Two Roman inhumations were also found. Medieval Cistercian grange with 12th to 14th century pottery and possible Dairy pens. Possible remains of the Roman field system are also visible as earthworks on air photographs. The features appear to be no longer extant on Google.Earth.com 2000 imagery (accessed on 26th January 2010).	Roman
9	421890	354770	Settlement	The extensive remains of a Romano-British period settlement and field system, visible as lynchets, terraces, embankments, platforms and orthostatic boulder walls. The settlement stands on gently sloping ground at the foot of a dolomitic limestone outcrop known as Rainster Rocks.	Roman
10	415910	353580	Barrow	An Anglo Saxon barrow, originally containing a primary 7th century inhumation accompanied by grave goods including a bead necklace, knives and a box. Residual prehistoric flint implements were recovered from the mound material. Scheduled.	Anglo Saxon
11	419097	355311	Lead mine	Post medieval lead workings consisting of rakes, spoil heaps and pits are visible as earthworks on air photographs. Most of the features are no longer extant or have been destroyed by modern quarrying	Post Medieval
12	420145	356622	Lead workings	Roman lead workings.	Roman
Perry Oaks					
Position	Easting	Northing	Artefact	Description	Period
1	505450	174310	Cursus	Neolithic Cursus from Stanwell to Bigley Ditch visible as a cropmark and mapped from APs. Excavated as part of the Heathrow Terminal 5 excavations by Framework Archaeology 1996-1999 and 2002 onwards. The excavation revealed the nature and extent of the Cursus (C1) and a further 4 Cursuses (C2-5) in the vicinity.	Neolithic
2	505650	176300	Ring-ditch	Causewayed ring-ditch found during expansion at Heathrow	Early Bronze-Age
3	505124	176757	Mixed activities	Mixed activity uncovered at Heathrow Airport car park	Middle Bronze Age
4	505860	176230	Mixed activities	Mixed activity at Wessex Road	Middle Bronze Age
5	508640	176830	Gully	Gully at Newall Road/Netley Road	Bronze Age/Iron Age
6	508450	176580	Settlement	Iron Age settlement site, incorporating a 3rd century BC rectangular plan building interpreted as a temple inspired by Classical architecture, unique in Britain	Iron Age

Perry Oaks					
Position	Easting	Northing	Artefact	Description	Period
7	505600	176510	Settlement	Iron Age and Roman settlement evidence discovered at Heathrow in 1969 during work associated with an extension to runway 1. Features mainly comprised pits, post holes and traces of ditches. Finds mainly comprised pottery, but animal remains and some iron and bronze objects were also present. Some flints of Neolithic or Bronze Age date appeared to be associated with a length of ditch.	Iron Age/Roman
8	505446	175827	Occupation	Occupation at Perry Oaks Sludge Works	Palaeolithic to Post-Medieval
9	505592	175553	Lead tank	Lead tank found in a watering hole	Roman
Pineham					
Position	Easting	Northing	Artefact	Description	Period
1	473620	259230	Enclosure	The site of a Neolithic causewayed enclosure at Briar Hill. The site lies on the gentle north facing slope of the Nene Valley, the river itself lying 700 metres to the north. It was discovered during aerial survey in 1972 and excavated in 1974 to 1978 in advance of housing development. The cropmarks were interpreted and transcribed by RCHME in 1995 as part of the Industry and Enclosure in the Neolithic Project. The enclosure itself comprises two main concentric ditch circuits of interrupted ditch lying between 15 and 28 metres apart. The outer enclosure measures circa 200 metres by 190 metres, covering an area of about 3 hectares.	Neolithic
2	471351	258388	Pits	Pits	Bronze Age
3	471367	258359	Cemetery	Cremation Cemetery	Bronze Age
4	471081	258113	Burials	Cremation Burials	Roman
5	471042	258176	Burial	Cremation Burial	Roman
6	471300	258500	Settlement	Settlement evidence at Pineham	Iron Age
7	471400	260200	Enclosure	Enclosure, Pits and Possible Hearth	Iron Age
8	470963	260677	Settlement	Settlement at Upton Lodge	Iron Age/Roman
9	471400	258500	Evaluation	Archaeological evaluation at Pineham Barn	Iron Age-Roman
10	473800	258350	Hillfort	The earthwork remains of a major Iron Age hillfort occupied from the 4th to 1st centuries BC and retaining evidence for rampart construction and intensive occupation of the interior. This is the type-site for the 'beehive' type quern.	Iron Age
11	471600	258700	Settlement	Multi-Phase Settlement at Pineham	Roman
12	471714	258644	Lead tank	Lead Tank found in a settlement ditch at Pineham	Roman
13	473870	258350	Cemetery	Romano-British or Early Medieval inhumation cemetery present on Hunsbury Hillfort. A report of Saxon inhumations found in 1855 is thought to refer to the vicinity of Hunsbury. In 1953, 2 post-Roman burials were found in a bank in the hillfort.	Roman

Pincham					
Position	Easting	Northing	Artefact	Description	Period
14	472909	260507	Settlement	Roman settlement lay on either side of the Weedon Road. The precise or even general nature of the settlement at Duston will probably never be known since detailed archaeological records were not made during the period of ironstone quarrying. It would appear, however, that the settlement covered at least 20 acres. The evidence certainly points to fairly extensive settlement before AD 60 and at least some occupation before AD 43.	Roman
15	468380	259900	Villa	Site of a 2nd-4th century AD Roman villa uncovered in the 1840s when a mosaic was found; it was partly excavated in 1966 when a cistern was uncovered and animal remains, two cleft ox skulls and hooves, were found possibly indicating the site of a shrine.	Roman
16	471392	260316	Settlement	Intensely occupied settlement at Northampton Sands	Iron Age- Early Middle Saxon
17	473600	259200	Grubenhäuser	The site of a Saxon settlement, possibly 6th century in date; it consisted of Grubenhäuser, a palisaded trench and various finds.	Early Saxon
18	472700	260400	Cemetery	Anglo-Saxon cemetery, mainly inhumation, found half mile west of the Weedon Road RB site (SP 76 SW 4). Finds of spear-heads, knives, shield bosses, necklaces and saucer and square-headed brooches in Northampton.	Anglo-Saxon
19	475000	260300	Royal Palace	Saxon royal palace complex with a possible minster church, cemetery and chapel was identified during excavations to the east of St Peter's Church, Northampton. The original palace was a timber hall comprising a main hall with annexes at the east and west ends. The building had an overall length of 29.7 metres and a width of 8.6 metres. It was possibly constructed during the mid 8th century.	Anglo-Saxon

Preshute					
Position	Easting	Northing	Artefact	Description	Period
1	414700	171300	Bowl barrow	Manton bowl barrow	Bronze Age
2	411420	171270	Barrow	Bronze Age bowl barrow, listed by Grinsell as Avebury 64a. Excavated by Merewether in 1849, who described the mound as being set within a circle of stones. Within the barrow he found quantities of pottery, charcoal and animal bones. The mound is now somewhat denuded, and while several stones remain, only two are upright.	Bronze Age
3	414660	167810	Burials	A crouched male inhumation accompanied by a flint dagger and a Beaker, and the partial remains of a second individual, were found at Lockeridge in 1919. Another skeleton was reportedly found at approximately the same location some months earlier.	Bronze Age
4	414700	174200	Enclosures	A Bronze Age enclosure excavated as part of the Marlborough Downs Project 1977-9. Excavations identified two phases of activity: an episode associated with Beaker pottery, and a more substantial phase of enclosed settlement in the Middle Bronze Age. Some terracing, presumably platforms for structures, was observed, in some cases associated with the use of sarsens. The enclosure is visible on air photographs.	Bronze Age
5	417200	167100	Hoard	A founder's hoard of nine looped socketed axes was found by Ernest Pile, a labourer, in the middle of a field near Manton Copse (SU 170670), Preshute in 1914. (1)]	Late Bronze Age
6	413100	170500	Settlement	Excavations of a 'Celtic' field system and rectangular enclosure revealed that the field system overlay an enclosed settlement occupied from the Iron Age into the Roman, 2nd century AD, period; neither the enclosure nor the hut circles are now visible on the surface. This settlement was levelled, presumably in the Roman period, to make way for the field system. A Bronze Age flexed child inhumation with a beaker was found as well as a ring-headed pin and a miniature bronze axe. Roman finds included a manicure set and brooches.	Bronze Age
7	419510	167860	Coins	A pot containing a considerable number of coins, mostly British (very small silver coins of Epaticcus, and some uninscribed alloyed gold), with one Roman coin of Tiberius (AD 14-37), was found about 1856, by men digging clay for a brickfield at the top of Salisbury Hill. The coins were dispersed amongst Marlborough College boys. A late Iron Age or early Roman coin hoard.	Iron Age/Roman

Preshute					
Position	Easting	Northing	Artefact	Description	Period
8	413120	170090	Settlement	Small settlement of Romano-British date integrated within the field system SU 17 SW 104. Initially identified as earthwork traces of hut platforms, excavations suggested the former presence of both stone-footed and timber buildings. Finds including coins suggested a probable date somewhere in the 3rd to 4th centuries AD, although one pit contained two second century coins. Ordnance Survey field investigation in 1974 and more recent RCHME aerial survey failed to identify the surface remains of any hut platforms.	Roman
9	415950	171080	Tool hoard	A hoard of 18 iron tools	Roman
10	415920	171010	Lead tank	Incomplete panel of a decorated Roman lead tank found in a field	Roman
11	415920	170930	Vessels	12 Pewter vessels found close to two burials	Roman
12	415920	170930	Hoard	Hoard of 15 silver siliquae	Roman
13	416090	171260	Coin hoard	Coinage hoard of 465 radiates 3rd century emperors from Valerian I to Tetricus II	Roman
14	418530	168050	Coins	A hoard of at least 531AE coins, ranging from Licinius (AD 308-24) to Constantine II (AD 337-40), in mint condition, was found in 1890, buried in an earthen pot on Grantham Hill.	Roman
Pulborough					
Position	Easting	Northing	Artefact	Description	Period
1	505650	119140	Evaluation	Archaeological evaluation and watching brief carried out on Land to the North of the Glebelands Estate,	Prehistoric, Bronze Age, Iron Age and Roman
2	507200	117800	Mounds	Two remarkable mounds upon an elevated part of Nutbourne Common (Common centred TQ 072178) within 20 paces of each other; the southernmost measuring 90, and the northern 80 feet diameter, and were perfectly circular". In 1818 or 1819, a section was cut through the larger one but nothing was found. The second was examined in 1833 or 1834, and was found to be a circular platform with a central depression, the "mound" being surrounded by a circle of stones about 4ft wide. Both the "mound" and stone circle had corresponding "entrances" on the eastern side. Some coarse potsherds and a fragment of quern or millstone were found. By 1857, one mound had been levelled, and the other was heading for a similar fate.	Prehistoric
3	505900	119950	Palstaves	Palstaves	Bronze Age
4	504700	114600	Barrows	Bronze age barrow cemetery consisting of 10 bowl barrows situated on a low sandstone hill in the sussex weald . The barrows range in size from 16-27m in diameter and up to 2m high.	Bronze age
5	506100	118300	Mixed finds	Mixed finds at Marehill	Iron Age

Pulborough					
Position	Easting	Northing	Artefact	Description	Period
6	506870	120100	Urn	A counter-sunk handled urn found at the Borough Farm Roman villa	Iron Age
7	506870	120100	Villa	Villa at Borough Farm	Roman
8	502740	118500	Urns	Iron Age and Roman urns have been found at Stopham since 1865 indicating the site of a possible cemetery.	Iron Age and Roman
9	506360	118970	Foundations	Foundations of two buildings discovered at Homestreet Farm	Roman
10	506470	117560	Bath house	Roman bath-house, extant from c120 to c375 AD, and possible site of a villa. Associated Roman industrial site, pottery kilns, metal working and tanning. Some Beaker pottery and a barbed and tanged arrowhead found.	Roman
11	506400	119500	Lead pigs	Four lead pigs of Domitian found in 1824 on Broomer's Hill. They were mined near Matlock in Derbyshire where ingots with the same inscriptions have been found.	Roman
12	506060	118180	Coin hoard	Coin hoard with over 1300 coins and bronze vessel	Roman
13	506850	116120	Coin hoard	A hoard of 1,800 Roman coins of the 3rd and 4th centuries, found in 1855; it contained coins of Gallienus, the Tetrici, Claudius Gothicus, Constantius, Constantine I, Constantine II and Constans I. It was deposited c350 AD.	Roman
14	506060	118180	Coin hoard	A hoard of 1559 Roman radiates found in 1983 by children in spoil from the recutting of a drain. The hoard was found in (or in association with) a bronze strainer and is currently on display at Worthing Museum.	Roman
15	505000	118200	Statuette	A bronze statuette of Hercules found in the left bank of the Arun	Roman
16	504631	117745	Lead tank	Lead Tank discovered in the flood-plains of the River Arun	Roman
17	502970	117400	Cemetery	Romano-British cremation cemetery was found at Hardham in 1863; the cremations were contained in urns or amphora, put in boxes and placed in well like shafts. A coin of Hadrian was found in one burial, other finds include animal remains, pottery, an iron nail and a bone pin.	Roman
18	506620	118990	Mausoleum	Roman mausoleum of the cart-wheel type, rare in Britannia but with continental analogies. The monument has been partly levelled by past ploughing and survives as a low, circular mound circa 19 metres in diameter and 0.2 metres high. Excavations in 1815 and 1817 revealed the mausoleum to have been constructed over a circular chamber, surviving in the form of buried, mortared-brick footings. Blocks of squared tufa originating from Italy were also used in the construction.	Roman

Riby Cross Roads					
Position	Easting	Northing	Artefact	Description	Period
1	516480	406830	Hoard	Hoard of 15,000-20,000 coins in an urn at Riby Wold Farm.	Roman
2	517700	408300	Possible villa	Possible villa site 400-500 m west of Riby Cross Roads	Roman
3	518600	407900	Cemetery	Early Medieval inhumation cemetery at Riby Park, probably of 7th century date. Grave goods include pottery, knife, brooch and beads.	Anglo-Saxon
4	518600	408200	Rural settlement	Substantial Rural Settlement with Numerous Field and Enclosure Ditches.	Middle Anglo-Saxon Period
5	518600	408200	Lead tank	Lead tank at Riby Cross Roads Settlement.	Anglo-Saxon
6	518400	407100	Settlement remains	Shrunken Settlement Remains	Medieval
Rochester					
Position	Easting	Northing	Artefact	Description	Period
1	577300	168800	Flints	Lower Palaeolithic implements found including around 40 handaxes, 1 levallois core and a miscellaneous object found in St Georges Road on Head or Thanet Sand geology.	Lower Palaeolithic
2	573000	168000	Hoard	Bronze hoard found late 19th century at Stoke near Rochester.	Bronze Age
3	574260	168520	Settlement	Evidence for Iron Age and Roman settlement under Rochester Cathedral. Excavations in 1990 in the angle between the West side of the North transept and the North nave wall revealed two 1st century AD pits with Belgic pottery. The interpretation of the Roman deposits suggests that the area was open ground peripheral to the main Roman settlement.	Iron Age/Roman
4	574270	168680	Pit	Iron Age pit containing coin moulds and coins. A Roman building and part of Watling Street were recorded and Medieval and post-Medieval pottery was also recovered.	Iron Age
5	574270	168630	Mint	Excavations in 1961-2 at 50-54 High Street, Rochester, uncovered, beneath Clavian deposits, postholes of a large structure which may have been a mint dated to circa AD10 Associated were pieces of Belgic coin moulds,slag, coins, brooches, etc.and a gravel trackway and ditches. Tin money of both classes was found in some quantity.	Iron Age
6	575540	166390	Coffin	Lead Coffin Burial	Roman
7	575761	168451	Coffin	Lead Coffin Burial	Roman
8	574130	168390	Coffins	Lead coffins burials at Love Lane	Roman
9	572600	168100	Urns	Urns found in what was identified as a 'cist' or 'grave'.	Roman
10	572220	169420	Urns	Urns and pottery	Roman
11	573000	168000	Coins	A Roman coin hoard was found near Rochester in c.1890. It contained Theodosian coins and possibly later ones as well. Possibly a late 4th century hoard.	Roman
12	574320	168700	Inhumation	Wallbank and inhumation	Roman

Rochester					
Position	Easting	Northing	Artefact	Description	Period
13	574489	168203	Burials	Burials found during groundworks at 178-184 High Street.	Roman
14	572000	168000	Cemetery	A Roman burial ground was discovered in 1853, during the building of houses in Cage Lane, Strood, on the north-east side of the London road. A number of skeletons were found buried in trenches with pottery, three Roman coins, charcoal, oyster shells and a puddingstone quern.	Roman
15	576320	167790	Cemetery	Roman inhumation cemetery discovered at The Brook near Slickett's Hill. Eleven inhumations were found with Castor ware and some Samian pottery.	Roman
16	573590	169320	Pits	Pits at Strood	Roman
17	573000	169000	'Ritual Pits'	About twelve Roman ritual pits were found here containing Samian pottery, beakers, coins, rings, knives, nails, bone pins, a human skeleton, animal bones and oyster shells.	Roman
18	575050	171400	Temple	Late 1st century enclosed settlement containing a small double-square structure of chalk interpreted as a temple or shrine of 'Romano-Celtic' type, later converted to agricultural use in the mid 3rd century, revealed by excavation.	Roman
19	574940	169240	Villa	The site of a Roman villa was discovered in 1887-9 during excavations for chalk. A Bronze Age looped axe, Iron Age coin and a Roman bronze Cupid were recovered from the works. Coloured wall plaster, flue and roof tiles indicate a high status building.	Roman
20	576110	168320	Villa	Site of Roman buildings found in 1779 and reinvestigated between 1800-10; the foundations of three rooms, associated with large quantities of painted wall plaster and broken tiles, Roman pottery, including Samian (f.37), fragments of glass and four coins (Claudius, Vespasian, Domitian, Faustina), were discovered in 1779 during the cutting of the ditch of Amherst's Redoubt, Chatham. Inurned cremations of uncertain date were also found. Listed as the possible site of a Roman villa.	Roman
21	574428	168378	Lead tank	Lead tank found in River Medway	Roman
22	574800	168700	Swords	Two bronze swords were found at Limehouse Reach.	Roman
23	574660	168070	Cemetery	Anglo Saxon inhumation cemetery found during construction work in 1852 at Star Hill, Eastgate. Grave goods including spearheads, buckles brooches beads and a Roman pin were recovered.	Anglo-Saxon
24	574100	168000	Cemetery	Cemetery at Saxonbury House	Anglo-Saxon

Rochester					
Position	Easting	Northing	Artefact	Description	Period
25	576150	168350	Burial ground	Late 5th or early 6th century Anglo-Saxon inhumation cemetery, possibly situated within barrow excavated during construction of the Chatham Lines from 1779. Fourteen barrows were excavated and found to contain inhumations accompanied by grave goods including swords, shields, spearheads, brooches and beads. Most of the finds are in the Ashmolean Museum.	Anglo-Saxon

Rudston					
Position	Easting	Northing	Artefact	Description	Period
1	510800	466200	Occupation	Neolithic occupation site; excavated hollow containing a hearth, pottery and flint implements.	Neolithic
2	511200	466300	Occupation site	Neolithic - Late Bronze Age occupation site; Neolithic pits, pottery and flint implements, Late Bronze Age pottery, flint and jet implements and a possible structure indicated by post-holes.	Neolithic
3	507580	467790	Barrow	Neolithic long barrow excavated circa 1860 by Greenwell. Greenwell described the monument as consisting of two long mounds joined together and forming a V-shaped structure. The excavation of the north mound revealed a crematorium area with disarticulated human bones, a possible secondary cremation burial and Anglo-Saxon pottery. No burials were recovered from the southern mound. The site of the long barrow was established using aerial photography and ground survey in 1970, when the north mound survived to a height of three feet. The southern "mound" is actually part of the linear earthwork TA 06 NE 22.	Neolithic

Rudston					
Position	Easting	Northing	Artefact	Description	Period
4	509520	465600	Barrows	Two Bronze Age round barrows visible as cropmark ring ditches. Excavated in 1870, by Greenwell who numbered them 64 and 65 (see TA 06 NE 53 for number 65) . Number 64 survived in 1963 as a rise of circa 1ft with a diameter of 65ft. Aerial photographs show cropmarks of a double ring ditch with 80ft and 110ft diameters respectively. At the time of Greenwell's excavations the barrow was 70ft in diameter, 2.5ft high and was composed of earth, except for a point near the centre where it consisted of chalk which formed a smaller mound enclosed within the larger. This inner mound was about 18ft in diameter, 1.5ft high and covering a central grave. The grave contained a disturbed male skeleton with much charcoal and an undisturbed inhumation, also male, with more charcoal and the remains of some wood. Behind the head was a small flint knife, 1.5in long, and surrounding the head and neck were some flint flakes. South of the centre of the mound, about 1ft above the surface was a secondary inhumation of a middle aged female. The body of the mound also contained two beaker fragments, a bone pin and bone and flint implements.	Bronze Age
5	507000	465500	Cemetery	Square Barrow cemetery running along a north-south slack from TA 068661 to TA 071 652. Supposedly over 2000 burials. (1).	Iron Age
6	508940	466710	Villa	A 3rd/4th century courtyard villa of which parts of the east and south ranges are shown on Plan I. In the east range are mosaic floors and a small bath house (Plan II) (5). Just north of the modern road, finds of two mosaic floors and Roman building define the line of the north range (7). Other notable finds are roof tiles and painted wall plaster (2); coins extend from Domitian (81-96) to Constantine I (306-37) (4). Under the villa three sides of a 1st/2nd century ditched and stockaded rectangular enclosure were found with the east side below the bath house; together with traces of a timber gateway and timber buildings (4). Iron Age ditches and circular huts underlay the site (3 & 6). (2-9)	Roman
7	508940	466710	Lead tank	Lead Tank found in a settlement ditch at Pineham.	Roman

Rudston					
Position	Easting	Northing	Artefact	Description	Period
8	508990	463600	Villa	The extensive cropmark remains of parts of the 4th century AD Roman villa along with the contemporary and earlier Iron Age enclosures (probably a settlement) described by the previous authorities were seen centred at TA 0901 6344 and mapped from aerial photographs. To the south of these (centred at TA 0914 6301) the further cropmark remains of Iron Age or Roman enclosures and trackways were also mapped from aerial photographs. Of particular note was an incomplete D-shaped enclosure with an inner circular feature and annex to the north seen centred at TA 0901 6307. Some of these features were mapped as part of the the Yorkshire Wolds NMP with additions made from recent English Heritage aerial photographs.	Roman
9	508600	465100	Villa	Cropmarks on Tuft Hill of a Roman villa with an Iron Age/Romano-British settlement visible to the south.	Roman
10	510950	464830	Settlement	The pits and ditches of a Romano-British settlement were cut by a gas pipe-line.	Roman
11	506200	464300	Cemetery	Inhumation cemetery either Anglo-Saxon or Medieval in date identified on the site of the Methodist Chapel in 1819. Additional burials have been found during construction work in 1928, 1976 and 1989.	Anglo-Saxon
12	507780	465960	Cemetery	Anglo-Saxon inhumation cemetery dating to the 5th-6th century found at Kilham. It was first recorded in 1814 and excavated in 1824 and 1953. The cemetery comprised several inhumations accompanied by grave goods including brooches, buckles, beads, a perforated Roman coin. Weapons included spearheads, lanceheads and shield bosses. Some of the finds are in York Museum.	Anglo-Saxon
Rushton					
Position	Easting	Northing	Artefact	Description	Period
1	487900	281600	Settlement	Settlement at Rushton Landfill	Iron Age
2	487400	281300	Settlement	Iron Age and Roman settlement with finds of coins, skeletons, possible granaries and a ditched trackway. Two Bronze Age or Iron Age pits.	Iron Age
3	484900	283100	Lead tank	Lead tank found in Roman bathhouse	Roman
4	484920	283120	Bath house	Bath house	Roman
5	484919	283175	Villa	White Gates villa	Roman
6	484701	281467	Cremation	Cremation	Roman
7	485500	281599	Well and burial	Well and burial	Roman
8	484940	283130	Burials	Burials	Anglo-Saxon
9	485329	283059	Burials	Inhumation burials	Anglo-Saxon

Rushton					
Position	Easting	Northing	Artefact	Description	Period
10	487600	283500	Settlement	The site of an Early Medieval (Late Saxon) and 14th century settlement. Excavated evidence included Late Saxon pits, and part of post built and sill beam based buildings.	Early Medieval
Stidriggs					
Position	Easting	Northing	Artefact	Description	Period
1	305790	600580	Cairnfield	Cairnfield at Eye Burn	Unknown
2	305270	600350	Cairnfield	Cairnfield at Eye Burn	Unknown
3	305247	600498	Settlement	Settlement at Eye Burn	Unknown
4	304140	598810	Cairnfeild	Cairn 60m n of long cairn	Unknown
5	305534	598938	Cairnfield	Cairnfield at Little Knockilsine Hill	Unknown
6	304100	598700	Cairnfield	Cairnfield at Broadshaw Rig	Bronze Age
7	306137	599481	Fort	Fort and settlement 400m east of Stidriggs	Iron Age/Roman
8	306569	602060	Fort	Fort and settlement at Beattock Hill	Unknown
9	306644	602552	Settlement	Settlement at Beattock Hill	Unknown
10	304909	599743	Buildings	Building and enclosure at Fauld Burn	Unknown
11	304200	600100	Lead tank	Lead tank and tools found at Stidriggs	Anglo-Saxon
12	304910	599730	Occupation	Occupation at Fauld Burn	Unknown
St Saviourgate					
Position	Easting	Northing	Artefact	Description	Period
1	459600	451700	Finds	Miscellaneous prehistoric finds from York, including Neolithic stone and flint implements, Early Bronze Age beakers, a range of Bronze Age bronze implements including a hoard of socketed axes, Iron Age material including coins, as well as some Iron Age situlae and fibulae said to come from in or near York.	Prehistoric
2	460600	451895	Occupation	Mixed occupation discovered at St Saviourgate through excavations by MAP in 1997	Roman to Modern
3	461001	451900	Coin hoard	Hoard of 200 denarii found at Foss Island	Roman
4	460100	452000	Coin hoard	Hoard of 35 denarii found in the Praetentura of the legionary fortress	Roman
5	460201	451800	Coin hoard	Hoard of 700 coins found in a found in a 'wooden box' at New Street	Roman
6	462420	450790	Coin hoard	A hoard of 2880 Roman bronze coins in a jar dating from after 350 A.D. found in 1966 during building work.	Roman
7	460568	451894	Lead tank	Lead tank and associated metalwork from 9 St Saviourgate	Anglo Saxon
8	460620	451884	Excavations	Excavations at land adjacent to St Saviour's Church	Anglo-Scandinavian to Post-Medieval
9	460420	451860	Occupation	Occupation at 16–22 Coppergate	Roman to Anglo-Scandinavian
10	460690	451010	Settlement	Excavations in Fishergate adjacent to Blue Bridge Lane have located evidence of Middle Saxon settlement. The alignment of cess pits suggests that this area was densely populated.	Anglo Saxon

St Saviourgate					
Position	Easting	Northing	Artefact	Description	Period
11	462350	450850	Settlement	Small scale excavations in advance of development at the North campus of York University in 2002 located a Saxon agricultural settlement on a morainic ridge. A small rural farming community occupied the closest upland to the Roman city from circa 550–700.	Anglo Saxon
12	461050	452920	Cemetery	A large number of Anglian burials of mid 5th. cent. date and among the earliest of their kind, were found at Heworth in 1878, about 40 restored urns being exhibited in the Yorkshire Museum.	Anglo Saxon
Thompson					
Position	Easting	Northing	Artefact	Description	Period
1	590800	297100	Mixed finds	Multi-period finds were recovered from a sand quarry at Sparrow Hill. They include over 40 Mesolithic worked flints, a small amount of Roman pottery and an Early Saxon brooch. In 1956 a large section of Merton Hall (NHER 8956) was damaged by fire and from 1956 onwards building rubble from the damaged sections was dumped into the quarry. By 1982 the quarry had been fully infilled.	Mesolithic, Roman and Medieval
2	590730	297160	Barrows	A group of four Bronze Age barrows survives at Sparrow Hill. One of the barrows was excavated before 1909, but which is uncertain.	Bronze Age
3	591100	294060	Bowl barrow	The remains of a Bronze Age bowl barrow standing about 1.5m high on open heathland. It is on land within the Stanford Battle Training Area and has been a little damaged by trench-digging.	Bronze Age
4	590160	296580	Bowl barrow	A Bowl barrow measuring overall 24.0m in diameter with a maximum height of 1.7m is situated in dense woodland. There is a faint trace of a ditch (now surveyable) and signs of disturbance at the centre. No surface finds were made.	Bronze Age
5	589890	298900	Villa	The possible site of a Roman building or villa is indicated by a scatter of finds including coins and a red tessellated floor.	Roman
6	590700	296650	Lead tank	Lead tank	Roman

Trowbridge

Position	Easting	Northing	Artefact	Description	Period
1	393890	152390	Barrow	A long barrow at Tinhead, 210 feet long, 70 feet wide and 12 feet high, orientated ENE/WSW. It is on arable land and the side ditches were just visible in 1936. Excavated by J Thurnam in 1864, who stated that it had been rifled before but he found traces of human remains at the east end with sherds of coarse black pottery nearby, probably Windmill Hill ware. The sherds are in the British Museum: Acc No 1873. 12-19, 194. Planted with trees. It is named 'Long Barrow' on the Tithe Map. (2-4)	Neolithic
2	396405	154389	Finds	Bronze Age finds including pottery and a fragment of a socketed axe	Bronze Age
3	395800	153800	Pits	Limited excavations located Iron Age pits and an inhumation, plus Roman pottery. Fieldwalking located Late Bronze Age pottery.	Iron Age
4	393800	155250	Villa	Roman villa at Lower Baynton Farm. Geophysical survey in 1995 of an area where Roman building material, including flue tile and tesserae had been found, revealed the plans of two buildings which can be interpreted as a corridor villa.	Roman
5	396000	153800	Coin hoard	Roman coin-hoard, in an urn, was found in a field called 'The Sand' in 1695. There are two near-contemporary references to the finding of the hoard (1-2) which mentions coins of Gordianus, Tacitus, Postumus, Hadrian, etc. Human skeletons and building-foundations are recorded as having been found and there was a local tradition of a 'lost' or 'moved' village.	Roman
6	394416	155535	Lead tank	Lead tank and associated pewter found in a field	Roman

Trudoxhill					
Position	Easting	Northing	Artefact	Description	Period
1	371700	145140	Hoard	Robertson 2000, 9 no. 37."It was on the 15th. of October last that two men, ploughing in a field known as the Eleven Acres, and forming a portion of West Down Farm in the parish of Nunney, broke open a small urn, and thus brought to light the hoard of coins I am now about to describe.. The urn was so shattered by the first finders, and the fragments so dispersed, that only a few small pieces could be recovered, and nothing can now be learned as to its form, except that it was circular, with the sides sloping outwards, and having an exterior diameter of about four and half inches at its base..A small bow-shaped fibula in bronzewas found upon the spot, but it is uncertain whether it formed part of the contents of the urn or no."The coins passed into various hands, but Sir John Evans succeeded in examining 250: 10 gold coins of the Dobunni, 232 silver coins of the Dobunni, 4 Roman den., and 4 second brass:AV AR AEAncient British: Dobunni 10 232Roman: Republic 2Julius Caesar 1Agrippa (?) 1Gaius 1Claudius 1Antonia 2 (b.)10 236 4(Sir) John Evans, in NC, 1861, 1-17, 133, types, and descriptions of the Ancient British coins, most of the silver being uninscribed, and the rest, and the gold, being inscribed.VCH Somerset, I (1911), 365, gave the nos. of the Roman coins, wrongly, as 5 den., and 5 "middle brass".Cp. D. Allen, Problems of the Iron Age in Southern Britain (1961), 249, 252-4Many coins of the Dobunni, and the den. of Julius Caesar in Dept. of Coins and Medals, BM (BM Register of Coin Accessions, 1919-2-13-1448) Many more coins of the Dobunni in Ashmolean Museum, Oxford, and in Fitzwilliam Museum, Cambridge"	Roman
2	370400	144400	Cave	A long tunnel-like cave with its main entrance in a cliff high up on the north bank of Asham Wood ravine. A smaller second entrance is located above the ravine. Romano-British coin counterfeiting material was discovered in 1971 within the cave and at its entrance. It comprised around 200 coins, flans and rods, plus Roman pottery, possible Neolithic and Iron Age sherds, a Saxon iron pin and later material. The deposits proved to have been considerably disturbed by unrecorded excavations and animal disturbance. Recorded excavations occurred in 1950 and 1965-70. Finds and archive from the latter are in Bristol City Museum and the museum of the University of Bristol Speleological Society.	Roman
3	374326	146993	Villa	Whatley Combe Roman villa	Roman
4	374559	143564	Lead tank	Lead Tank	Roman

Trudoxhill

Position	Easting	Northing	Artefact	Description	Period
5	374620	142000	Hoard	52498 radiates and 5 denarii to Carausius in a pot. Details from coroner's report to be updated. NC 2011.Treasure numbers associated with this hoard: 2010 T272Other PAS records associated with this hoard: SOM-5B9453	Roman
6	374300	141800	Coins	Details from PastScape: "111 Roman coins were found at Witham Friary when draining a field belonging to Mr James Croom. They were well preserved, about the sizes of shillings and sixpences, and all but one were found in a round hole covered by a flat stone, about 12 inches below the surface. Some pieces of Roman ware were found at the same time...The collection was dispersed, but six siliquae, Julian II - Magnus Maximus (AD 360-388), were bought by J W Singer, the Frome brass founder, and are now in Somerset County Museum. Taunton Museum supposedly have no record of these coins, but the Ashmolean Museum have a bronze fibula with Roman coins of c. A.D. 390, at Witham, in 1867. A late 4th century hoard."	Roman
7	374600	141900	Coin Hoard	Treasure case 2010 T278: Hoard of Siliqua, acquired by the Museum of Somerset61 AR siliquae and 1 half-siliqua to AD 395Circumstances of discovery The hoard was found by Mr. D. Crisp on 9th April 2010 whilst metal-detecting on recently cultivated pasture. It was found in the same field as the large radiate hoard known as the Frome hoard. The coins were dispersed in an area of topsoil about 40 metres square, at the entrance to the field. A twisted piece of wire reported as being found with the coins was found to be modern.Description of the find The find consisted of sixty-one silver siliquae (a number of which were fragmentary) and an anonymous silver half-siliqua of Trier. A number of the coins survived only as fragments, and some appear to have been damaged by ploughing, as their broken edges looked fresh. The latest coin is that of Eugenius (no. 41), issued before 395. The half-siliqua is undated but thought to date to the 390s AD. This end date is relatively unusual for British siliqua hoards, which more commonly end with the period 395-402. The fact that few of the siliquae in this hoard are clipped (c.18%) and then only lightly clipped ('clipping factor 1') supports this earlier date for the deposition of the hoard, clipping being thought to be indicative of the later circulation of these types beyond the 380s.A full catalogue is available on request.See also addendum 2011 T233, SOM-111833.	Roman

Wallbrook					
Position	Easting	Northing	Artefact	Description	Period
1	530800	180560	Axe	A Neolithic flint axe was found in the Thames near Waterloo Bridge. It is in the Museum of London (accession number 0.221).	Neolithic
2	534000	180000	Axehead	Neolithic polished stone axehead found in the River Thames at Wapping. The find is in London Museum, accession number A 16571.	Neolithic
3	530800	180650	Metalwork	Socketed celt and bronze ring from the bed of the Thames opposite Somerset House found before 1859.	Bronze Age
4	530800	180600	Helmet	Iron Age helmet found in the River Thames near Waterloo Bridge	Iron Age
5	529600	179800	Potins	De Jersey (2014):"This was apparently a large hoard of flat linear cast bronze, of which only a few coins survive. The earliest published records seem to be Akerman (1837, 222, pl. 1.2), who illustrates one coin from "a parcel discovered under the bed of the canal in St. James' Park about ten years since", then in the collection of Edmund Spencer, and Fairholt (1854, 185), who comments that the coins "were discovered by workmen when digging the ornamental canal in St. James's Park". Haselgrove (1987, 280-1 no. 34) notes that the hoard was found during excavations "to form a sewer for the new palace in St James' Park, 15 September 1827", but does not provide a source for this quotation. Given the precision of the date and the prominence of the location, it may be worth examining newspaper accounts of the period for further information; there appears to be nothing relevant in the online Times archive for the last four months of 1827, although for the day before the hoard's discovery, 14 September, there is a short report on the progress of the works in the Park. The Morning Chronicle for the same period has several articles discussing the works, including (on 8 October 1827) a plan, but no information on the hoard.No more than seventeen of the coins can now be identified, and six of these are recorded only by drawings (Allen 1971, 139 n.38: contemporary drawings in the possession of Nicholas Rhodes, nos 1-2, 5-7 and 15 in the list below). There may also have been some confusion with the Brentford hoard of 1864; no. 9, for example, which has appeared in the trade with the provenance of "St James Park hoard, London, 1864", is perhaps more likely to be from Brentford than St James's Park."	Iron Age
6	533100	181000	Hoard	Hoard of 591 Denarii at Lime Street	Roman
7	532050	180110	Skeletons	2 skeletons and an urn containing 554 brass coins at Grove Street, Southwark	Roman

Wallbrook

Position	Easting	Northing	Artefact	Description	Period
8	532050	180110	Radiates	Robertson 2000, 144 no. 642:"Mr. Gunston announced that on May 1 there were discovered, in digging a trench at the corner of Grove-street, Southwark, two skeletons; and between them the remains of an earthen olla which had been filled with small brass coins, five hundred and fifty-four of which he had secured; which consisted entirely of rude imitations of the imperial money of the second half of the third century, some bearing the busts and names of Victorinus, Tetricus I and II, and Claudius Gothicus. It is difficult to decide who are intended by the profiles on many of these pieces, the legends being as uncouth as the lineaments."-JBAA, XX (1864), 339 A large number of coins from this find which were exhibited to the Numismatic Society by Mr. Gunston were "nearly all of Tetricus I. and II., and of Victorinus, or barbarous imitations of the coins of those Emperors..Mr. Cecil Brent also exhibited about thirty coins of the same class, and from the same find."-NC, 1865, Proc., 4"	Roman
9	533520	180830	Coin hoard	Hoard of 134 Constantinian coins at Coopers Row	Roman
10	536100	178900	Coins	Robertson 2000, 385 no. 1563:"21 March 1867"Mr. J.F. Neck exhibited a portion of a vase of grey earthenware, found at the Surrey Commercial Docks, and which contained 1900 copper coins of the age of Theodosius and Arcadius."NC 1867, Proc., 6In a letter, June 1957, Dr. C.M. Kraay, Heberden Coin Room, Ashmolean Museum, Oxford, stated that when examining a large number of coins from Aylesbury Museum he found 28 Theodosian small bronze coins in an envelope stamped "Surrey Commercial Dock Co., 106 Fenchurch St.", with the note:"Portion of vase containing about 1900 Roman coins found in excavating foundations of warehouse Feb. 1867. The vase was 5 feet below the surface or 11 1/2 feet under THW (Thames High-water) mark at the bottom of alluvial deposit overlying a thickness of four feet of silty sand on top of gravel."The 28 coins were very worn, but were mostly of the VICTORIA AVGGG type. The only coins on which the emperors' names could be identified were:AETheodosius 2 Arcadius IHonorius 14(SALVS REIPUBLICAE)28 coins in Bucks. County Museum, Aylesbury"	Roman

Wallbrook					
Position	Easting	Northing	Artefact	Description	Period
11	530200	182000	Hoard	Robertson 2000, 274 no. 1145:"Workmen, excavating the site of a new hotel in Tavistock Square, Bloomsbury, in November, 1924, brought to light a hoard of some 700 Roman copper coins. No trace remains of the box (of tin?) in which they were said to have been found. The coins themselves, with the exception of quite a few which were given away in small lots, have been submitted to the British Museum for examination."The coins examined were folles or small AE:AEConstantine I 308 Licinius I 12Crispus 113Constantine II, Caes. 148Constantius II, Caes. 46Helena 26 (before AD 337)Fausta 12Constantinopolis 2667-H. Mattingly, in NC, 1925, 398f., types, mints-JRS, XIV (1924), 229f., said that the hoard was found at a depth of 7 feet, and was contained in a lead box, and added, on the authority of Mr. Mattingly, that the hoard included a base den. of Lucius Verus, and a billon ant. of Claudius II.113 coins in Dept. of Coins and Medals, BM, presented by H. Knott (BM Register of Coin Accessions, Jan. 1925)"	Roman
12	533100	180600	Hoard	Robertson 2000, 385 no. 1562:"During the excavation of the Billingsgate bath-house:"Earlier baths connected with a possibly industrial use of the site have now been found. Finds include 200 late coins (some forming a scattered hoard) down to Arcadius and Honorius."Britannia, VII (1976), 350"	Roman
13	532549	181002	Lead tank/ Mithraeum	Lead tank	Roman
14	532876	181422	Hoard	Hoard at Draper's Garden well	Roman
15	532800	180500	Bronzes	A group of Roman bronze figures representing Apollo, Ganymede, Mercury and Jupiter were found in the River Thames at London Bridge. The figures were damaged and were possibly votive. Other finds from the area included a bronze head of Hadrian and a silver figure of Harpocrates.	Roman
16	531700	180400	Settlement	Anglo Saxon burh at Southwark, (Suthriganageweorce), probably on the dry ridge leading to the site of London Bridge. First mentioned in the Burghal Hideage, it was probably founded in the last quarter of the 9th century encircling the area of known Roman settlement.	Anglo-Saxon
17	531250	180680	Sword	A Viking sword of PETERSEN'S type 2, and probably dating within the second half of the 10th cent., was found in LONDON many years ago in the THAMES opposite THE TEMPLE. Inscriptions occur on both faces of the blade, one of which includes the name INGELRII.	Viking
18	530800	180600	Sword	Viking sword from the River Thames, off Waterloo Bridge	Viking
19	530800	180650	Axe	Viking axe from the River Thames opposite Somerset House	Viking

Walesby					
Position	Easting	Northing	Artefact	Description	Period
1	517270	392270	Barrow	Bronze Age round barrow, excavated in 1859, when human remains, animal bones and pottery were said to have been found, all that remains is a slight tree covered mound	Bronze Age
2	511000	393100	Cropmark enclosures	Cropmark enclosures and hut circle	Bronze Age
3	511100	393100	Settlement site	Settlement site South of Claxby	Roman
4	514600	392400	Villa	Villa site at Walesby Top	Roman
5	514700	392400	Lead Tank	Lead tank found whilst ploughing	Roman
6	514700	393300	Farmstead	Farmstead and trackway	Romano-British
7	514100	394900	Settlement site	Settlement site, North of Otby	Romano-British
8	514000	392400	Cemetery	Cemetery, East of Walesby Church	Anglo-Saxon
Westly Waterless					
Position	Easting	Northing	Artefact	Description	Period
1	562001	256003	Lead tank	Lead tank and tool hoard	Anglo-Saxon
2	564100	254900	Burgh Manor House	Moated manorial site, possibly the site of a high status Saxon building. Double moated site, though the secondary enclosure to the west has been ploughed out. The main enclosure is surrounded by a wet moat with unusually steep sides and an internal bank. The adjoining enclosure was encircled by a shallower dry moat.	Anglo-Saxon
3	562001	256003	Chalice	Chalice and paten	Medieval
4	561870	258110	Settlement	Cropmarks and soilmarks of rectangular fields and enclosures indicate the site of a Romano British settlement.	Roman
Whithorn					
Position	Easting	Northing	Artefact	Description	Period
1	242930	539928	Settlement	Settlement at Rispain Camp	Iron Age
2	244000	540000	Coins	Coins found in Whithorn	Roman and Hiberno-Danish

Whithorn					
Position	Easting	Northing	Artefact	Description	Period
3	244400	540300	Finds	A number of Roman finds were recovered in the excavation of the early medieval phases of this site. These comprised sherds of glass, pottery (both coarse ware and samian) and amphorae all largely belonging to the second or third centuries AD. The samian wares are of Central Gaulish production, originating in Lezoux, dating to either the Hadrianic or Antonine period. The coarse wares and amphorae follow a similar pattern, belonging to the second century, where identifiable. There were twenty-five glass fragments studied, of these at least fifteen could be certainly ascribed as Roman and the sample ranged in date from the first century AD to the fourth century AD. The sample comprised sherds of window glass, parts of glass bangles and vessel fragments. Some other potentially Roman finds are described in further sections of chapter 10 of the excavation report	Roman
4	244477	540313	Settlement	Settlement at Bruce Street Whithorn	Early Medieval
5	244423	540326	Lead tanks	Lead tanks found at Whithorn Priory	Anglo Saxon
Wigginton					
Position	Easting	Northing	Artefact	Description	Period
1	436349	234704	Enclosure	Occupation site with mixed activities	Iron Age/Roman
2	438900	235500	Hillfort	A probably Iron Age multivallate hillfort covering an area of about five acres. The defences consist of double ramparts and ditch, with traces of a third outer bank visible both on the ground and on aerial photographs. The inner rampart is in good condition, whilst the outer rampart is largely ploughed out. A stone revetment has been revealed by digging. Excavations and finds at Tadmarton Camp have revealed Late Iron Age/Roman finds and some structural features.	Iron Age
3	441000	234000	Coins	Roman bronze coins of Claudius II and Constantine II, Magentius, Domitian and Maximum have been found within the parish of Milcombe.	Roman
4	439090	235580	Remains	Roman remains including foundation stones, pottery and coins were found in 1849 and 1864.	Roman
5	439329	233455	Villa	A Roman C2nd-C4th AD winged corridor villa, first reported in 1824, was also partially excavated in the 1960's and in 2005. The north and east wings of the villa have shown as cropmarks on aerial photographs. The site is also known from an extensive surface scatter of roman material, including tesserae and tiles.	Roman

Wigginton					
Position	Easting	Northing	Artefact	Description	Period
6	439200	233600	Finds	Surface finds of Roman coins, pottery, painted wall plaster, glass and tesserae may indicate the site of a Roman villa or possibly another component of the nearby villa	Roman
7	439300	233505	Lead tank	Lead tank found southwest of villa	Roman
Wilbraham					
Position	Easting	Northing	Artefact	Description	Period
1	554700	257200	High Street	Residual finds at High Street, Great Wilbraham	Prehistoric
2	553900	257800	Enclosure	Causewayed Enclosure	Neolithic
3	553700	256600	Cemetery	Cemetery enclosure excavated in 2002-3	Iron Age / Roman
4	555700	257500	Remains	Remains at Great Wilbraham	Roman
5	553800	256700	Ditches	Ditches at Rookery Farm, Great Wilbraham	Roman
6	553800	256900	Concentration	Concentration of Romano-British occupation	2nd-4th century Roman
7	552200	256700	Roman site	Site South of railway, Fulbourn	Roman
8	554700	254400	Shrine	Possible Shrine at Mutlow Hill	Roman
9	553600	256200	Finds	Metal Detecting finds consisting of coins, brooches and pottery	1st-4th century Roman
10	555800	255700	Roman villa	Villa site at Great Wilbraham	Roman
11	555000	257000	Lead tank	Part of a decorated lead tank found lying 10cm above a cobbled floor	4th-century Roman
12	554600	257200	Votive stand	Bronze enamelled votive stand	Roman
13	553900	256800	Yard surface	Yard surface at Rookery Farm	2nd-4th century Roman
14	556000	257700	Cemetery	Cemetery at Streetway Hill, Little Wilbraham	Anglo-Saxon
Willingdon					
Position	Easting	Northing	Artefact	Description	Period
1	557500	102220	Enclosure	The Neolithic causewayed enclosure on Combe Hill survives as well-preserved earthworks. The enclosure was surveyed by RCHME in 1995 as part of the Industry and Enclosure in the Neolithic Project. The enclosure is located conspicuously on the crest of the scarp slope of the South Downs, occupying a slight saddle. The earthworks consist of an almost complete inner circuit, broken only at the steep scarp to the north, and an outer circuit visible to the east and west but vestigial to the south, with possible cross-ridge dykes beyond it.	Neolithic
2	557700	100960	Bowl barrow	Bowl Barrow on Willingdon Hill	Bronze Age
3	561667	102887	Deposits	Waterlogged deposits at Shinewater Marsh	Late Bronze Age
4	556499	100500	Settlement	Mixed settlement remains with extensive occupation evidence	Bronze Age, Iron Age and Roman
5	556116	100937	Cinerary urns	Several probable RB cinerary urns were found during flint-digging at the foot of Jevington Hill	Roman

Willingdon					
Position	Easting	Northing	Artefact	Description	Period
6	557650	102550	Coin hoard	Hoard of 144 coins found on the northern slopes of Combe Hill	Roman
7	558000	105000	Coin hoard	A small hoard of 3rd century antoniniani which was found in garden of Cairn Cove, Polegate, Sussex, according to the accessions register. Accompanying notes confirm that there were no associated finds.	Roman
8	556776	103067	Burials	Collection of burials on CraneDown possibly indicating a larger cemetery	Anglo-Saxon
9	556660	103130	Cemetery	Pagan Anglo-Saxon inhumation cemetery found and excavated on Crane Down in 1965.	Anglo-Saxon
10	559900	101600	Cinerary urns	A small Anglo-Saxon cinerary urn was dug up a few years ago in the garden of Holly Grange, Hampden Park, near the SW entrance of the Eastbourne Corporation Park. It contained small bones, and a special feature of it is a round unshaped base. Other urns were found at the time but only fragments were recovered.	Anglo-Saxon
11	559451	104255	Lead tank	Lead tank found during a railway cutting	Anglo-Saxon
	560271	100551	Settlement	A multi-period settlement site at Pockocks Field	Mesolithic, Neolithic, Bronze Age, Iron Age, Roman, late medieval and post-medieval.
Willingham					
Position	Easting	Northing	Artefact	Description	Period
1	541800	271400	Features	Mixed features at Sprong Drove	Late Bronze Age-Romano-British
2	540900	273700	Cemetery	Romano-British shrine overlying Bronze Age cremation cemetery, excavated and subsequently mapped from APs. The mound, central burial area and a substantial segment of the ditch have been removed. Finds included a concentration of collared urn fragments, a funerary pyre with human bone and timbers, two secondary inhumation burials and ten cremations.	Roman
3	540400	271800	Barrow	Barrow at Middle Fen	Iron Age
4	542310	270290	Fort	Well-preserved probable Iron Age univallate lowland fort, possibly reused in the earlier part of the Mediaeval period	Iron Age
5	541700	271400	Features	Features at Queenholme	Late Iron Age
6	541700	271500	Remains	Remains at Queenholme	Romano-British
7	539900	272200	Settlement	Settlement site	Roman
8	540100	272200	Settlement	West Fen Settlement	Roman
9	539700	271800	Features	Remains 500 m along the fen edge	Roman
10	540400	271200	Pewter hoard	Pewter hoard at Earith Road	Roman
11	541000	269300	Finds	Finds at 168 Rampton Road	Roman

Willingham					
Position	Easting	Northing	Artefact	Description	Period
12	540400	271300	Occupation debris	Occupation debris	Roman
13	541000	269200	Remains	Remains at Cadwin Field	Roman
14	539700	272000	Coins and possible villa	Coins and possible villa	Roman
15	542100	270900	Pottery	Pottery found in the Stacks North	Roman
16	542150	270900	Lead tank	Lead Tank found in between both fields	4th-century Roman
17	543600	270600	Mixed finds	Mixed finds at Hempsals	Roman
18	540900	270700	Features	Features at Rockmill End	1st-3rd century Roman
19	540400	271870	Coin hoard	Coin hoard found at Middle Fen	Roman
20	540000	270000	Coin hoard	Coin hoard near Willingham	Roman
21	540300	270300	Remains	Remains at the High Street	Anglo-Saxon
22	540400	270200	Settlement	Settlement discovered prior to residential development	Saxon
23	543400	271900	Lead vats	Lead Vats at Half Moon Bridge	Saxo-Norman

Appendix 2

Decorations on the Roman lead tanks

	Location	How was the tank discovered?	Decoration	Chi-Rho
1	Ashton	In a well.	Cable banding. Zigzag.	Yes
1	Ashton	In a well.	One fragment with a saltire surrounded by four circles. Other fragment undecorated.	No
2	Beverley	Recovered from a watering hole measuring c. 8m x 7.50m and 1.80m deep.	None	No
3	Bishop Norton	Found in a field east of Bishop Norton through ploughing.	Foliage frieze beneath inscription. Inscription: DO FECIT FELIX. Tank may be polygonal	No
4	Bourton-on-the-Water	Found in a courtyard, associated with a well. Precise location unknown.	Repeated saltire. Five raised discs in the shape of a 'T'. Inscription: C ATIDI QSI.	No
4	Bourton-on-the-Water	Found in a courtyard, associated with a well. Precise location unknown.	Repeated saltire. Six raised discs in the shape of an inverted 'T'.	No
5	Brough	Found in a field near the Roman town of Crococalana.	Repeated saltire. Cable banding. Diagonal lines.	No
6	Burwell	Discovered by metal detector in a field.	Circles within a zigzag. Row of raised discs below rim.	No
7	Caistor	Discovered at Caistor Churchyard 'in a drain beneath the road running on the western side of the churchyard.'	Tank is square. Human figures framed within rectangles, probably two on each side with foliage bands between them. Inscription: CVNOBARRVS FECIT VIVAS.	No
8	Caversham	In a well.	Cable banding. Repeated saltire.	Yes
9	East Stoke	Unknown, found through ploughing.	Frieze of latticework. Two human figures in long robes with raised arms either side of inscription. Inscription: VTERE EELIX.	Yes
10	Enford	Found by mechanical digger in a field 0.46 m below modern ground level.	Unknown	Unknown
11	Flawborough	In a pit at the intersection of ditches.	Four figures in short tunics with arms raised, beneath inscription. Inscription: VTERE EELIX, within a frieze with tendril designs.	Yes
12	Huntingdon	In the River Ouse.	Repeated saltire with circles between arms.	No
13	Icklingham	Found whilst ploughing in a field.	Cable banding. Raised dots. Single '^' shaped motif.	No
13	Icklingham	Found in the Northeast side Horselands Field 140 meters from a Roman villa	Cable banding. Raised discs.	Yes
13	Icklingham	Found in Horselands Field close to the site of the apsidal building ('church') and the inhumation cemetery.	Cable banding. Raised discs.	Yes
14	Ireby	Found in a field 350 metres west of Ireby village through ploughing.	Cable banding. Repeated circles.	No
15	Kenilworth	Unknown.	Zigzag.	No
16	Ludford	Buried in an oval pit only just big enough to hold the fragments, found through metal detecting.	One fragment with cable banding. Other fragment undecorated.	No
17	North Lincoln	Found whilst dog walking by the finder on grass north of the Ermine Estate.	Decorated with cable moulding and inscribed with 'MELEDOFECITFELIX' above a repeating scroll pattern	No
18	Oxborough	Adjacent to the river Wissey by a mechanical digger.	Repeated double cross pattée within a circle, separated by vertical lattice bands	No
19	Parwich	In a field.	None	No

	Location	How was the tank discovered?	Decoration	Chi-Rho
20	Perry Oaks	In a large pit/waterhole.	Repeated saltire.	No
21	Pineham	Excavated in a a short section of a ditch forming the southern boundary of the enclosure.	Simple geometric pattern, comprising of plain and cable horizontal and vertical banding and zigzags	No
22	Preshute	Discovered in a field by metal detector	Raised oval sections forming a Phallic motif and applied cable bands.	No
23	Pulborough	In the flood plains of the river Arun by mechanical digger.	Cable patterning. Large saltire next to chi-rho.	Yes
24	Rochester	In the River Medway.	Flanges divide sides into twelve irregular panels. Foliage design 'not unlike Roman work'.	No
25	Rudston	Found near a villa by metal detectorists	None	No
26	Rushton	In a ditch near a bath house.	Repeated Saltire, Repeated circles	No
27	Thompson	Found by metal detector near woods.	Two intersecting moulded cabled ribs and an area of roughly crosshatched scratched lines	No
28	Trowbridge	Found by metal detector on farmer's field.	Repeated lines and circles	No
29	Trudoxhill	Clay pit on grassland near a small stream on raised a high raised bank and not physically within the water.	Cabled bands and broad zigzags, one central cell has two cast bosses.	No
30	Walbrook	Well associated with Walbrook Mithraeum.	Relief cast cable decoration,	No
31	Walesby	Discovered in a field through ploughing.	One fragment with six human figures within a frieze. Three crescents right of figural frieze. Other fragment with vertical cable banding	Yes
32	Wigginton	In a pit, 0.33m below modern ground level (metal detector followed by a limited excavation).	Vertical cable banding.	Yes
33	Wilbraham	Located by metal detector and excavated 10cm above a cobbled surface.	Repeated circles within zigzag.	No
34	Willingham	In a field known as the Stacks.	Both fragments with repeated saltires.	No

Appendix 3

State of preservation and signs of deliberate damage of the Roman lead tanks

	Location	State of Preservation	Deliberate Damage
1	Ashton	Complete and undamaged.	No
2	Ashton	Two fragments. Deliberately cut. One fragment also folded.	Yes
3	Beverley	Complete but deliberately squashed	Yes
4	Bishop Norton	Two fragments. Right edge of side fragment has been 'roughly hacked'	Yes
5	Bourton-on-the-Water	Complete but flattened	Yes
6	Bourton-on-the-Water	Complete but flattened	Yes
7	Brough	One large fragment. Deliberately and carefully cut	Yes
8	Burwell	Complete and undamaged.	No
9	Caistor	Three deliberately cut fragments rolled together	Yes
10	Caversham	Badly damaged. Side deliberately cut from base and was badly damaged by fire.	Yes
11	East Stoke	One fragment. Deliberately cut.	Yes
12	Enford	Damaged by mechanical digger.	No
13	Flawborough	Complete, but cut in two halves. Damaged in the form of 'knocks, scratches, random circular punch marks and possible graffiti, with both sides bent and folded inwards'.	Yes
14	Huntingdon	Complete and undamaged.	No
15	Icklingham	Complete and undamaged.	No
16	Icklingham	Complete and undamaged.	No
17	Icklingham	Complete and undamaged.	No
18	Ireby	Complete, Lugs are distorted, possibly from being used to lift/ drag the tank	No
19	Kenilworth	One fragment, deliberately cut and torn.	Yes
20	Ludford	Two fragments. Deliberately cut with a chisel and torn.	Yes
21	North Lincoln	Fragment with signs of having been deliberately chopped into pieces on three sides and is curve	Yes
22	Oxborough	Complete and undamaged.	No
23	Parwich	Complete but damaged	No
24	Perry Oaks	Fragmentary. Deliberately damaged: axe used to hack base into at least two pieces. Sides twisted until they tore. Base and side folded together.	Yes
25	Pineham	Four fragments consisting of two base pieces and two side pieces laid out in two groups 2 metres apart across the ditch	Yes
26	Preshute	Three large fragments deliberately cut, one of which had a pick mark, before being rolled together.	Yes
27	Pulborough	One fragment. Deliberately and carefully cut. Damaged by mechanical digger	Yes
28	Rochester	Unknown	Unknown
29	Rudston	Fragmented	No
30	Rushden	Sides complete but cut vertically and folded. Base missing	Yes
31	Thompson	Sub-rectangular fragment with no original edge, and although three sides have been fairly neatly cut, one is irregular with multiple cut and hack marks	Yes
32	Trowbridge	Complete and undamaged.	No
33	Trudoxhill	Deliberately cut into a least 5 pieces done by a heavy blade with the pieces then folded together and compressed	Yes
34	Walbrook Mithraeum	Large fragment with evidence for destruction: Right edge has been cut with at least four large relatively smooth cuts while left/bottom edge is much more ragged, representing significantly more cuts	Yes
35	Walesby	Two fragments. Deliberately and carefully cut.	Yes
36	Wigginton	Complete. Damaged by ploughing.	No
37	Wilbraham	One fragment. Report does not specify whether it was deliberately cut.	Unknown
38	Willingham	Four fragments. Deliberately cut.	Yes

Appendix 4

The state and evidence for deliberate damage on the Anglo-Saxon/Early Medieval lead tanks

	Location	Description	State on Retrieval	Deliberate Damage
1	Allerton-Mauleverer	Around 50% of the vat or tank is present. None of the sides are complete. The base is incomplete with several holes and repair marks. The base now has a ripple effect.	Fragmented	Yes
2	Bottesford	1-Base of a tank found folded in half after the sides had been cut off. 2- Base of a tank found folded in half after the sides had been cut off. 3-Purposefully flattened walls of another lead vessel that had been partially cut and then torn of its base.	Fragmented (All three tanks)	Yes (All three tanks)
3	Corby	Several fragments. Most of the base and a little under half of the wall survive together in a single piece, and there are numerous fragments of varying size; in total it is about two-thirds complete.	Fragmented	Yes
4	Cumwhitton	It is bent and ripped in places, but mainly complete.	Complete	No
5	East Goscote	Has a split running almost its length and on the opposite side, next to the handle projection, there are a series of hack marks which suggest an attempt at cutting up the object. As well as this obvious damage, the vessel is battered and has several small holes, suggesting it was very well worn and possibly due to be recycled at the time of deposition.	Fragmented	Yes
6	Felixstowe	Unknown	Unknown	Unknown
7	Flixborough	Both tanks were complete and undamaged.	Complete (Both tanks)	No (Both tanks)
8	Garton on the Wolds	Two tanks were complete and undamaged. One tank was complete with sooting and holes in base where the lead had melted.	Complete (All three tanks)	No (All three tanks)
9	Grassington	Almost complete with a handle missing.	Complete	No
10	Mavis Enderby	Compressed and with several holes in the base.	Fragmented	Yes
11	Newport	Complete but crushed/flattened which opened the seams and created irregular tears in the base and side walls.	Complete	Yes
12	Riby Cross Roads	Complete but with the sides folded to overlap in the centre.	Complete	Yes
13	St Saviourgate York	Complete	Complete	No
14	Stidriggs	Damaged with at least two repairs made to the base and lead patches are clearly visible from the underside.	Fragmented	Yes
15	Westley Waterless	Complete but with evidence of internal and external sooting.	Complete	No
16	Whithorn	Both tanks were complete but flattened.	Complete (Both tanks)	Yes (Both tanks)

	Location	Description	State on Retrieval	Deliberate Damage
17	Willingdon	Complete but with a deliberately plugged hole on the base alongside several dents and scrapes and two slash cuts on one of the panels.	Complete	Yes
18	Willingham	Both tanks were complete but damaged.	Complete (Both Tanks)	No (Both tanks)



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& References

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