THE TOPOGRAPHIC SETTING OF BRONZE AGE METALWORK DEPOSITS IN NORTH EAST ENGLAND

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ABSTRACT

This thesis considers the relationship between Bronze Age metalwork deposits and topography in north-east England. Through a critical examination of the metalwork record for the region, the first time all Bronze Age metalwork finds from north-east England have been catalogued and analysed together, depositional patterns are demonstrated to be highly contingent on topography. Structured by means of a multi-scale approach that adopts the river catchment as the basic unit of study, a number of novel methodological approaches are applied to the dataset, such as the use of metal detecting records from the Portable Antiquities Scheme database to assess potential biases in the metalwork record (chapter 4), and a GIS based Monte Carlo simulation to characterise the distribution of find-spots of different types of metalwork deposit within a generic river catchment area (chapter 5).

A number of associations identified between certain types of metalwork deposits and topographic features are consistent with overarching conventions that operated across Bronze Age Britain, such as the prevalence of Late Bronze Age swords from rivers and river valleys. However, the presence of discrete and more nuanced patterns within distinct topographic zones demonstrates the existence of unique depositional histories based on localised geographies of experience. A case study focusing on one such pattern - a discrete grouping of martial metalwork deposits from north Northumberland, is used to explore the potential significance of metalwork deposition within both a social and cosmological landscape. Deposition has commonly been interpreted as a ritual activity that took place in peripheral locations that were removed from daily life. This thesis provides an alternative perspective by considering how the places where metalwork deposition took place may have been linked to other activities and routines that were central to Bronze Age life.

CONTENTS

LIST OF ILLUSTRATIONS AND PHOTOGRAPHS

LIST OF TABLES

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Introduction

1.1 An Early Bronze Age axe hoard from Newbiggin-by-the-Sea

On the 9th September 2000 a large stone monolith was erected on Church Point, a coastal headland at Newbiggin-by-the-Sea in Northumberland. The monolith marks the spot where members of the local community buried a time capsule containing 'mementoes of 20th century life, in poems, pictures and in writing, created by children from Newbiggin' (inscription on plaque). By coincidence, the community chose a location for the time capsule where, 4000 years earlier, a small collection of bronze flat axes were purposefully placed in the ground no more than 150m away from the modern monolith - the appearance of which uncannily resembles a prehistoric standing stone (Fig 1.1).

Fig. 1.1 – Photographs showing the immediate landscape setting of the time capsule monument on Church Point. Photographs by Richard Poyer.

Based on information from Canon Greenwell, an eminent 19th-century archaeologist and antiquities collector, OGS Crawford notes that in around the year 1869, four or five axes were found together 'just outside the entrance to the churchyard at Newbiggin', in Woodhorn parish (1912, 309). Two axes survive from this hoard which can be placed within the Brithdir

metalworking assemblage, 2150 – 2000BC, a Migdale axe and a typologically similar Killaha axe which Schmidt and Burgess believe to be a genuine Irish import (1981, 33-35). Whilst Crawford's description does not categorically pin-point the find-spot on Church Point, there is a strong suggestion that he is referring to the oldest, biggest and only church in Newbiggin with a large, traditional churchyard – the Church of St Bartholomew on Church Point. Given the relative scarcity of similar Migdale axes from Northumberland, with only nine definitive examples, it is also surely highly significant that in 1990 another Migdale flat axe was found on the beach below the cliffs at Church Point (Fig. 1.2). This axe is presumed to have fallen from the headland, disturbed as a result of construction work.

Fig. 1.2 – Type Migdale flat axe found on the beach at Newbiggin-by-the-Sea in 1990. © Tyne & Wear Archives & Museums and Society of Antiquaries of Newcastle upon Tyne.

Both the Bronze Age hoard and modern stone monolith with associated time capsule are sited a short distance from another significant local landmark, the Church of St Bartholomew, whose fabric can be traced back as far as the 13th century, although an earlier Anglo-Saxon chapel may have stood on the site. On visiting Newbiggin it is easy to appreciate why this location was chosen as the site for these monuments. The headland is a striking and impressive feature in the local landscape. The promontory juts out into the North Sea at the northern end of Newbiggin bay, at

an elevation sufficient to provide expansive views back across the bay and coastline to the south. The construction of the modern stone monolith, next to the medieval church, stands testament to the appeal this place holds for people, both today and in the past.

That Church Point was selected as the place to deposit two hoards of objects some 4,000 years apart is remarkable. The choice of this location as the site for the modern hoard and monument reflects particular roles that the headland plays in the lives of the Newbiggin community. Although not visible from much of the town, the headland is a key element in the geography of Newbiggin, elevated above the majority of the settlement at the north end of the bay. The main commercial street through the town gradually rises up and terminates on top of the headland in front of the church. The tip of the headland is a comparatively undeveloped, open, natural space close to the urban centre of Newbiggin.

Fig. 1.3 – Photograph looking north from the sea-front at Newbiggin towards Church Point. The time capsule monument is visible on the headland to the right of the Maritime Centre – the white building with a grey roof. Photograph by Richard Poyer.

It is a striking location that shows off many of the best aspects of the town - panoramic coastal views across the sweeping sandy bay, the imposing 13th century church, and the new Maritime Centre, whose size and modern architectural style is in stark contrast to its predecessor, the unassuming Heritage Visitor Centre which stood on the same spot (Fig 1.3). These various attractions make the headland a popular place for both locals and tourists to visit, and this was undoubtedly an important factor behind the siting of the modern hoard, the location of which is marked by such a conspicuous monument. The positioning, scale and permanence of the monument were clearly designed to make a statement that expresses the sense of attachment, belonging and pride that local people feel for their home town.

The motivations for the siting of the millennium hoard on Church Point are easily accessible and comprehensible to us, but how can we hope to understand the social processes that led to the Bronze Age axes being buried on the headland some 4,000 years earlier? What common ground, other than the spatial association, might exist between the modern and Bronze Age hoards? Did a community residing near to or on the headland select it as a suitable location to bury this impressive collection of bronze axes due to a particular role or status the place held within the group's cultural geography? Was the headland principally a local place for local people, or did its significance extend across a wider area? I have already noted how the aesthetic qualities of the landscape that make the headland a popular place to visit today are universal, and as such appeal to both locals and visitors alike. If the headland was significant due to its topographic characteristics - boundaries such as those between land and sea can be imbued with particular cosmological meaning in certain societies (Bradley 2000, Cowie 2004, 252) - then the siting of the hoard on the headland might not necessarily reflect the particular importance of this place to a local population. Instead, it could express a more general understanding people had of the significance of this type of place. It may therefore be the case that the headland made only a fleeting and, or sporadic appearance in the lives of the individuals who deposited the axes. Whilst

it is impossible to provide definitive answers to these questions in relation to individual metalwork finds, this PhD aims to explore these ideas more broadly by examining the influence topography had on structuring depositional activity across north-east England at a range of geographic scales.

1.2 The silent majority: the significance of single finds

Although difficult to interpret, the potential influence that topography had on Bronze Age depositional behaviour appears evident in cases such as the Newbiggin hoard, where striking topographic features or locales appear to have been selected for the deposition of significant collections or individual pieces of metalwork. Trevor Cowie has highlighted a number of examples from Scotland where Early Bronze Axes have been found in distinctive topographic settings, including hoards from coastal headlands at Port Murray on the Aryshire coast, where five axes and an armlet were found in a cleft in a rock face, and Colleonard, Banffshire, where eight axes were found inside a pottery vessel (2004, 250:259-60). There is evidence that both of these deposits were located in the near vicinity of prehistoric monuments. The Port Murray find-spot is 150m from a standing stone, whilst the Colleonard hoard is believed to have been located close to a stone circle.

In the title of his paper Cowie asks the question, 'Special places for special axes?' (2004, 247). It is easy to comprehend why a location such as Church Point may have been a viewed as a special place during the Bronze Age as the headland re-currently appears as a significant place in people's lives. The physical qualities of this landscape – the intersection of land and sea and the panoramic views afforded across the immediate bay and coastline to the south, appear to have resonated with people across many millennia. However, when you consider the Bronze Age metalwork record for north-east England in its entirety, it is clear that few metalwork finds are from locations as topographically distinctive as Church Point. On the contrary, many find-spots are

from locales that could be considered to be relatively undistinguished in comparison. Furthermore, single objects - which are often in a fragmented condition - represent the great majority of find-spots. Of the 918 individual metalwork find-spots from non-burial contexts included in this study, single finds account for 89%, whilst hoards represent just 11%[1]. This begs the question, if the impressive collection of flat axes from Church Point represents a 'special place for special axes', how should the hundreds of single finds of common metalwork types from undistinguished topographic settings be interpreted?

Throughout the twentieth century it was convention to interpret the vast majority of single finds as casual losses or objects discarded at the end of their practical use life. Exceptions were made for a few niche categories of finds such as the large number of Late Bronze Age swords that have been recovered from major rivers, as only ritual or religious motivations could explain why people purposefully gave up such valuable objects on a permanent basis (Bradley 1998). However, in keeping with the idea that many finds represented lost or cast away objects, the vast majority of finds that make up the metalwork record – single objects from terrestrial locations - have generally been labelled as stray finds. This interpretation was in part influenced by the fact that very few metalwork finds were known to have been associated with contemporary archaeological features such as settlements or, from the Middle Bronze Age onwards, burials. The location of an individual stray find in the landscape was therefore interpreted as the result of chance circumstances - an axe breaks and is discarded in the place where it is being used - as opposed to the outcome of purposeful actions whereby an axe fragment is selected for deposition in a particular location. This interpretation was in keeping with the belief that the Bronze Age people valued bronze primarily for its practical utilitarian and economic value as a commodity. In addition

[1] Some metalwork deposits recorded as single finds in the study may have been deposited as part of hoards. The circumstances in which discoveries are made are not always conducive to identifying associations, for instance, surface finds following ploughing. Ploughing also has the potential to disperse hoards across a wider area.

to single stray finds, the various different types of metalwork hoards are also explained neatly within this scheme, for example; collections of damaged or fragmented objects are interpreted as the belongings of a metal smith that have been stored prior to being recycled, whilst complete objects are interpreted as the stock of a merchant or trader (Evans 1881, 459).

Single finds were often incorporated into regional Bronze Age studies, but the significance given to these finds was generally limited to their geographical distributions, which were taken as indicators of Bronze Age settlement patterns and trade routes. Such an approach is present in a number of studies with a focus on north-east England - West Yorkshire (Raistrick 1929, Manby 1986), Yorkshire (Elgee 1933), Vale of York (Radley 1974), East Yorkshire (Manby 1980), North Yorkshire (Spratt 1984), River Wear catchment (Young 1984), Northumberland, Durham and Cumbria (Annable 1987).

More than being 'stray' finds, Needham and Burgess suggest that 'the number of pieces which can be regarded as truly 'single' and 'unaccompanied' finds is tiny' (1980, 439). They put forward the use of a different name for such objects, namely 'of no known context' (439), to reflect the fact that metalwork could be deposited along with objects made from other materials, such as pottery and bone, which are more perishable than bronze and thus may not survive in the archaeological record, and are likely to be less noticeable in the ground than bronze at the moment of discovery, as well as being less interesting to the finder. However, in summing up the motivations behind the deposition of genuine single finds, they do conclude that accidental loss is much more likely to occur with single finds in contrast to hoards.

The simplistic, binary nature of this interpretive framework based on the distinction between ritual and utilitarian deposits – the latter including casual loses and discarded objects - has now been largely discredited. Central to this is the recognition that far from being random, the deposition of

metalwork was highly selective. As knowledge of the contexts associated with metalwork deposits has expanded and developed, the theoretical frameworks on which interpretations of depositional behaviour are built have also moved on. Barrett and Needham opened up the debate by questioning how the traditional method of interpreting metalwork deposits failed to fully account for the different social processes that could have led to the creation of the metalwork record (1988, 138). For instance, analysis of a sword fragment may reveal that it was purposefully broken prior to deposition, but it reveals nothing about the motivations behind the act of breaking the sword. More recently, Joanna Brück has attacked the foundations on which the binary interpretation was based by questioning the way in which it imposes a modern, capitalist world view on Bronze Age society (2006, 75). Brück highlights how the traditional narrative of founder's and merchant's hoards is wholly conditioned by what the archaeologists perceived to be rational human actions based on the prevailing social and economic conditions of the late nineteenth and twentieth centuries. It is wrong to simply assume that actions which appear rational or irrational to us today were regarded in similar terms during the Bronze Age.

More direct links to the archaeological evidence are provided by the discourse on the potential significance of fragmentation and enchainment within Bronze Age society. These offer an alternative means by which to interpret the large number of artefacts that appear to have been purposefully fragmented prior to deposition. Brück (2006) highlights how different types of object from Bronze Age mortuary contexts in Britain, including bronze, stone, jet and pottery can all display signs of purposeful fragmentation. A significant proportion of the metalwork finds from north-east England are fragments of larger objects. These include single finds as well as fragments of objects within hoards. In the later it is common to find single or multiple fragments from an individual object, but the fragments do not often constitute the whole object. Nebelsick (2000), has shown that patterns of fragmentation in scrap hoards are not consistent with objects being subdivided to facilitate recycling, but actually reveal unnecessary levels of violence and

destruction. It appears that objects were purposefully broken, and then the various pieces took separate paths (Bradley 2013, 136). Chapman (2000) and (Brück 2006, 91) have suggested that the fragmentation of an object and the dispersal of the pieces between individuals may have been an important means by which social relationships during the Bronze Age, and earlier prehistory, were created and maintained. Such a process may have required the deposition of part of the object at the point of fragmentation and/or dispersal, or as Chapman suggests, upon a specific change in the nature of the relationship between the participating parties (2000, 6).

In light of these developments, it now seems increasingly likely that a large percentage of the finds that form the metalwork record, including fragments of single objects, were purposefully selected for deposition, and the approach adopted in this thesis is based on this assumption. Furthermore, far from being random, the places selected for metalwork deposition were chosen specifically because they had cultural significance for the individuals participating in the depositional act. A small axe fragment from what appears to be a mundane topographic setting was potentially as meaningful to the person/s who deposited it, as a group of lavish artefacts from a prominent rock outcrop, mountain pass or coastal headland.

1.3 The study of Bronze Age metalwork in north-east England

Whilst there is no shortage of studies examining Bronze Age metalwork from north-east England, consideration of the topographic or landscape setting of find-spots rarely appears as a central theme. As previously noted, many studies have focused on patterns in the distributions of metalwork finds, as a means of mapping changing settlement and land-use patterns over time. The distributions of different types of artefact are also used to infer regional, inter-regional and continental trade routes. Significance is given to certain topographic features in these interpretations, such as the York moraine, a ridge of high ground that transects the low lying Vale

of York between the Pennines and the Yorkshire Wolds, but its importance is limited to its potential role as a natural route-way along which metalwork was traded (Raistrick 1929, 365; Elgee 1933, 69).

The analysis of metalwork distributions also plays a significant role in a second category of that are predominantly concerned with the detailed typological classification of different types of object. All the main classes of artefact are covered by the Prähistoriche Bronzefunde series, which follows a common structure based around the classification of objects within a typo-chronological framework – daggers (Gerloff 1975), axes (Schmidt & Burgess 1981), dirks and rapiers (Burgess & Gerloff 1981), swords (Colquhoun & Burgess 1988) and spearheads (Davis 2012). An earlier study by Burgess also classified five Middle to Late Bronze Age metalworking traditions for northern England, based on a number of distinctive types of objects whose core distributions are located within the region (1968). In these studies the distribution of objects is considered significant primarily as evidence for where particular metalworking traditions and types of objects are likely to have originated and where their influence spread. A number of these studies do however consider the association of metalwork finds with one particular topographic setting in greater detail, by comparing the ratio of finds from dry land with those from wet contexts.

The topographic setting of some metalwork finds-spots has been considered on an ad hoc basis in publications that have focused on striking historic finds, such as the Heathery Burn cave hoard (Harding 2007), and more recent discoveries made during archaeological investigations such as the Ewart Park sword from Houghall Farm, Co. Durham (Gwilt 1996) and the Late Bronze Age socketed axe hoard from Jillywoods, Cottingham, East Yorkshire (Diamond et al 2001). By far the most systematic attempt to consider the significance of the topographic setting of metalwork find-spots is provided by Roberts and Ottaway (2003). They apply macro use-wear analysis to a small sample of Late Bronze Age socketed axes from East Yorkshire and south-east Scotland, to

explore the relationship between the use history of the axes and the broad topographic setting of their find-spots.

Bronze Age metalwork from north-east England is therefore well represented in both metalwork specific studies and regional histories based on synthesis of Bronze Age material, but, the dataset has not been examined systematically for over 25 years and an approach that critically examines specific aspects of the topographic setting of find-spots has never been attempted. Not only have recent theoretical developments led scholars to re-evaluate the way metalwork deposits are interpreted, the number of metalwork finds recorded within the study area has substantially increased since the 1980s, due to the rise in popularity of metal detecting as a hobby, and the important role the Portable Antiquities Scheme has played in promoting the systematic recording of metal detector finds and their find-spots. In light of these significant developments, there is great scope to look again at the Bronze metalwork record for north-east England from a fresh perspective.

1.4 North-east England: the physical landscape

For the purpose of this study north-east England is interpreted as an area including the counties of Northumberland – bounded by the river Tweed in the north - Durham, East and North Yorkshire – excluding the area which falls within the catchment of the river Ribble - and parts of south and west Yorkshire which fall within the catchment of the River Aire. The southern watersheds of the Aire and Ouse catchments along with the River Humber define the southern boundary (Fig 1.4). Within this area the physical landscape comprises a diverse patchwork of distinct topographic zones and features. The Countryside Commission have identified 41 character areas 'with a distinctive natural and man-made landscape' that fall within the study area (Aalen 2006, 18), but, at a broader scale, the landscape of north-east England is characterised by a sequence of three

zones – uplands, leading to an upland fringe, leading to lowlands – as you move from west to east.

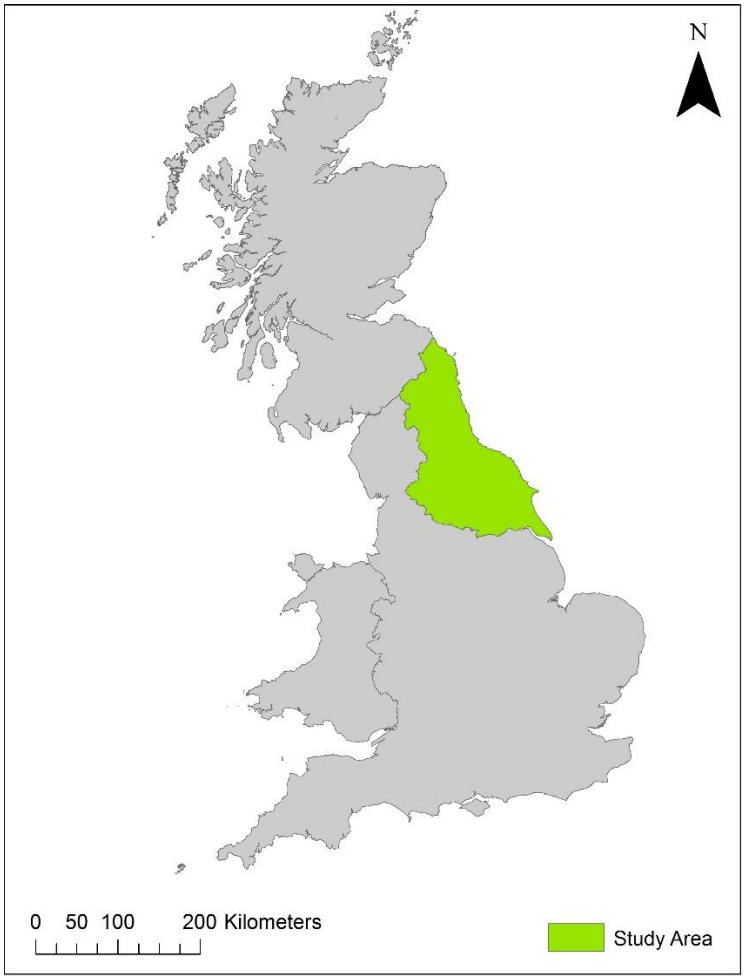


Fig 1.4 – The location of the study area.

1.4.1 Western uplands

The western part of the study area is characterised by an upland zone which extends almost uninterrupted from the Aire catchment in the south to the Tweed in the north. Making up the Pennine range of hills, this long spine of high ground incorporates the northern fringe of the Southern Pennines – the Aire catchment, the Yorkshire Dales - the Wharfe, Nidd, Ure and Swale catchments and the North Pennines - the Tees and Wear catchments. Rising up from the Airedale

Gap, this prominent east-west watershed does not dip below 300m OD, and frequently rises to significantly higher altitudes, reaching 893m AOD on Cross Fell, the highest point in the study area. To the north of Cross Fell the watershed remains consistently above 550m OD before it steadily descends to the Tyne Gap, maintaining a high point a little over 130m AOD. The land gradually rises again to the north of the River South Tyne with the watershed between the Tyne catchment and the south-westerly and northerly draining tributaries of the Esk and Teviot catchments ranging between 400-600m AOD on the fell tops. At the northern end of the study area the ground rises further at the Cheviot Massif, gaining a high point of 815m AOD on The Cheviot itself. A number of corridors of lower ground transect the upland spine – the Tyne Gap, the Stainmore Pass and the Aire Gap - providing natural east-west routeways.

It is from the central upland spine that many of the major watercourses in north-east England rise, flowing predominantly in an easterly direction before discharging into the North Sea. In the north of the study area the principal river catchments from the Tees to the Coquet constitute self-contained units from their source to coastal mouth. The Breamish/Till catchment is the notable exception, its principal river rising high in the Cheviots and flowing along a northerly course between the granite Cheviot uplands to the west and fell sandstone hills to the east before joining the River Tweed and its easterly path to the North Sea. In the south of the study area many of the principal rivers also flow in an easterly or south-easterly direction from their source high in the Pennine uplands, but combine together across the Vale of York in the River Ouse, forming a single large drainage basin.

1.4.2 Northern coastal plain / lowlands

The western upland zone is adjoined to the east by a belt of lowlands that extend along its entire length. In the far north of the study area this zone takes the form of a coastal plain which descends

gently from the watershed of the fell sandstone hills to the coast. To the north of the River Aln the close proximity of the fell sandstone ridge to the coastline produces a narrow plain containing only minor watercourses, but south of the River Coquet, the sandstone ridge lies further inland creating a wide, relatively flat plain that is cut by the valleys of the Rivers Wansbeck, Blyth and Tyne.

South of the River Wear the coastal plain rises up to an elevated plateau formed from underlying magnesium limestone which partitions the primary belt of lowland along the course of the lower Wear valley from the North Sea. The southern end of the limestone plateau terminates close to the watershed of the Wear and Tees catchments, and from this point a considerably more expansive area of lowland opens out across the lower Tees valley to the east and west. The open, spacious character of the lowlands across the Tees valley is lost further south as the lowland belt is confined to a much narrower corridor of land, hemmed in by the uplands of the Pennines and North York Moors to the west and east respectively.

To the south of the Tees-Swale watershed the gentle undulations of the Vale of Mowbray give wat to the significantly flatter and expansive Vale of York. To the west the vale is bounded by a long ridge of till covered magnesium limestone which gives way to the upland moor fringe of the Pennines further west, and to the east by the Howardian hills and chalk Wolds, the latter of which rise steeply from the vale edge to heights of 200-250m AOD. In addition to the numerous principal rivers that are a key feature of the vale – the Swale, Ure, Ouse, Nidd, Wharfe, Aire, and Derwent, two low ridges formed of glacial moraine – the York and Escrick moraines - transect the vale on an east-west alignment, linking the magnesium limestone ridge and chalk Wolds. The flat plain continues to the south of the Escrick moraine as the Humberhead Levels, which extends east to the foot of the Wolds and south beyond the River Humber, which marks the southern boundary of the study area.

1.4.3 Eastern uplands, Wolds and Holderness

The general trend that extends across the study with an upland zone giving way to upland fringe followed by a lowland zone bordering the North Sea as you move from west to east is interrupted in the south eastern part of the study area. South of the Tees valley lowlands and to the west of the Vales of Mowbray and York, lies an extensive upland area formed of sandstone and siltstones, the North York Moors, with a maximum altitude just above 450m OD. In the northern part of the moors the principal valley of the River Esk is aligned on an east-west axis, with the river draining in an easterly direction before discarding into the North Sea which directly borders the upland zone along much of its length. However, the majority of the major valleys are aligned on a predominantly north-south axis and drain south from a central watershed into the Vale of Pickering where they join the River Derwent.

The Vale of Pickering is a roughly elliptical shaped lowland plain that is bordered to the south by the northern escarpments of the Howardian Hills and Chalk Wolds. The River Derwent that rises in the eastern moors flows across the centre of the vale in a westerly direction before shifting south towards the Vale of York, which it enters via the Kirkham Gorge, a steep sided valley cut between the Howardian Hills and Chalk Wolds.

The northern and western escarpments of the Chalk Wolds rise sharply from the respective edges of the Vales of Pickering and York. Within the study area the chalk outcrop of the Wolds extends northwards from the River Humber in a relatively narrow belt which widens further north as the chalk trends in an east north-easterly direction towards the North Sea coastline. The Wolds landscape is characterised by smooth, rolling hills, interspersed by deeply cut valleys that are often dry or partially dry. The valleys are generally small, but a defining feature of the northern Wolds is the more substantial Great Wold Valley, the principal valley of the Gypsey Race, an

intermittent chalk stream that runs for 25km in a predominantly easterly direction before entering the North Sea.

In the far south-east corner of the study area the arching Chalk Wolds enclose the substantial lowland zone of Holderness that is bounded by the North Sea to the east and the Humber Estuary to the south. Much of the area is within the catchment of the River Hull, which flows in a southerly direction draining the western Wold and central lowland parts of the region. A low ridge of glacial till deposits approximately 20m AOD forms the eastern watershed of the Hull catchment, creating a narrow, gently sloping coastal plain drained by numerous small watercourses.

1.5 The Bronze Age in north-east England

Throughout the Bronze Age the amount of metalwork in circulation across north-east England appears to have been significantly less than in other parts of the British Isles, but evidence of the extent and scale of Bronze Age life in the region is clearly visible through many other aspects of the archaeological record. As this thesis will illustrate, bronze, the metal alloy after which the period from approximately 2500-700BC is named, undoubtedly played a significant role in Bronze Age society, but the period is also defined by other seismic socio-cultural changes. One such trend which is clearly articulated through the monument record for the study area, is a shift in concern from predominantly ritual, ceremonial landscapes of the Early Bronze Age, to more domestic, agricultural landscapes of the Middle and Late Bronze Age.

As in the case elsewhere in Britain, a defining feature of the Early Bronze Age landscape of north-east England is the presence of many monuments and features associated with the burial of the dead – burial cairns, round barrows and flat cist burials – and numerous other monument types whose specific functions are more ambiguous, but were almost certainly associated with activities

of a ritual and ceremonial nature – stone and post alignments, stone circles, timber circles, ring cairns and henges. Burial mounds are distributed widely across the north-east of England occurring in both upland and lowland zones. The distribution maps suggest a preference towards upland locations (Fowler 2013, 177), with the monument being densely distributed in a number of core areas – the Cheviot uplands, the North Yorkshire Moor uplands and on the Yorkshire Wolds (Vyner 2000, 105). It must be noted that the monuments located in the upland zone have benefited from preferential preservation, with many earthen barrows in intermediate and lowland areas being destroyed by ploughing, with only the cropmarks of ring ditches on aerial photographs attesting to their existence. In a number of areas burial and ritual monuments cluster together creating wider ceremonial landscapes, such as along the Millfield Plain in the catchment of the River Till in northern Northumberland.

In contrast to the wealth of burial and ritual monuments, definitive evidence for actual Early Bronze Age settlements in the north-east of England is more scarce, and as with the so called 'ritual' monuments, in undoubtedly biased in favour of the upland zone. In the Cheviot uplands for example there is a wealth of evidence for settlement, in particular small clusters of roundhouses set within irregular fields and paddocks such as at Standrop Rigg, Houseledge, and unenclosed houses such as at Linhope Burn and Lookout Plantation, which probably have origins in the later Early Bronze Age. Another feature associated with agriculture, clearance cairnfields, which are abundant in the Cheviot uplands and North Pennines, also have Early Bronze Age origins.

In contrast to the Early Bronze Age, very little evidence of mortuary practice of any form is present in the archaeological record from the Middle Bronze Age onwards. The construction of burial mounds all but ceases as does the use of flat cist burials. The shift away from constructing monuments for the dead is also mirrored by the apparent declining role that the various ritual and ceremonial monuments played in the later Bronze Age landscape. The construction of new ritual

and ceremonial monuments, and the modification of existing examples ceased from the Middle Bronze Age onwards. It is interesting that at a time when long standing burial traditions are abandoned and ritual and ceremonial monuments cease to function as they once did, the archaeological evidence displays a growing concern with domestic and agricultural architecture. Whilst many cairnfields and some upland settlements may have origins in the later Early Bronze Age, it is likely that many of the roundhouses and associated field systems in the Cheviot uplands date to the Middle Bronze Age. In the Late Bronze Age we see the emergence of simple wooden palisades which often enclose a small number of roundhouses. These primarily occur in the Cheviot uplands such as at Mid Hill and High Knowles, but they are also found across the study area with other examples being Eston Nabb on the Eston Hills overlooking the lower Tees valley and at Grimthorpe on the Yorkshire Wolds.

Although numerous examples of roundhouses set within field systems are known from the uplands of north-east England, at present no large scale settlements similar to those which are numerous in the lowlands of southern Britain have been identified in the lowland areas of north-east England. The preferential preservation of upstanding earthworks in the upland areas of the study area clearly skew the picture of Bronze Age settlement in the region. The absence of metalwork from upland zones where evidence of settlement is most prevalent and the more general ad hoc nature of settlement evidence across much of north-east England, makes it difficult to analyse the relationships between metalwork find-spots, settlements and the agricultural landscape in a detailed, systematic and meaningful way.

1.6 Depositional histories and narratives

This thesis is based on the underlying premise that the majority of finds that constitute the metalwork record are the result of selective deposition. Far from being random, both the contents

of deposits and the locations they were placed in the landscape, were the products of thoughtful, rational actions. It is evident from depositional patterns that certain contexts or places in the landscape were favoured as locations for particular types of metalwork deposits. Certain metalwork types display particularly strong associations with individual topographic features, as demonstrated by the relationship between swords and major watercourses. The influence of topography on depositional activity also operated at broader geographic scales. Yates and Bradley (2010b) have demonstrated the influence of the river catchment as a structuring element in the distribution of Middle and Late Bronze Age hoards in south-east England. They identify 11 areas, the majority of which are defined by the catchment of a main river and its tributaries, in which the locations of the metalwork deposits display distinctive characteristics. Whilst the find-spots display subtle differences at a local level, across the whole region the find-spots display a dendritic pattern, favouring locations close to the courses of the main rivers and their tributaries.

Yates and Bradley do not compare the contents of metalwork deposits from the different catchments, but they do note how the absence of weapons in this region contrasts markedly with the large number of swords discovered in the Thames valley to the north. Jan Harding has noted how the great topographic contrasts of northern England and southern Scotland 'serve to fragment [the region] into a complex patchwork of what could be interpreted archaeologically as partly self-contained traditions or local sequences (2000, 9). Some of these traditions are evident in the distributions of particular types of Bronze Age metalwork.

Drawing on Yates and Bradley's (2010b) observation regarding the significance of the river catchment as a structuring element behind metalwork distributions in south-east England, and Harding's observation that the diverse topography of northern England played an important role in the evolution of discrete traditions in different areas, the thesis examines the role that the varied physical environment of north-east England played in shaping the distinctive trajectories of

depositional histories in individual river catchments and across wider topographic zones. Instead of focusing on associations between metalwork deposits and individual topographic features, the topographic zonation of different types of metalwork deposit across the landscape is explored as a means of addressing the following key aims:

- To examine the role that topography played in structuring depositional behaviour across north-east England at a range of scales.
- To examine the role of metalwork deposition in marking significant places within a social and cosmological landscape.
- To examine the relationship between metalwork deposition and aspects of everyday life.

1.6.1 Deposition in a social and cosmological landscape

> 'We can begin to think of these deposits as marking out the social landscape – routes, special places/zones, boundaries of various kinds. In this perspective they are a cultural map, one representing beliefs and social behaviour at that time'. (Stuart Needham 2007, 285)

Needham has suggested that metalwork distributions reflect a cultural map, with find-spots marking important places in the social landscape. As the places where metalwork was deposited held special meaning to Bronze Age people, a detailed contextual analysis of metalwork deposits, examining both the nature of the objects and the topographic setting of the find-spots, should make it possible draw conclusions about the significance of those places and the metalwork deposited to Bronze Age people. Whilst we may have no knowledge of specific events or potentially transient natural features - trees, pools or even boulders that could have been pivotal

in forming and shaping the cultural significance of particular places, the fundamental topography within which metalwork deposition occurred, what Tilley has termed 'the bones of the land' (1994, 73), remains for the most part, largely unchanged to this day. Providing metalwork finds are well provenanced, it is therefore possible to explore the physical landscapes within which deposition took place.

The theoretical approach adopted in this study is influenced by the work of David Fontijn (2002), who has examined the meaning of Bronze Age metalwork deposition in the southern Netherlands. Particular thought it given to the role that metalwork deposition played in marking significant places in the social and cosmological landscape.

> 'The distribution of various kinds of bronze deposit, though seemingly divorced from settlements, are just as instrumental a part of the social landscape as are zones of food production or places of residence, burial or periodic gathering'. (Stuart Needham 2007, 284).

The above quote by Stuart Needham illustrates one of the defining characteristics of the landscape setting of Bronze Age metalwork deposits, they rarely appear in direct association with settlements. Fontijn (2002, 264-66) suggests numerous ways that metalwork deposition could have played an important role in the social landscape, but he argues that deposition was fundamentally a ritual process that was separate from daily life. Such an interpretation is clearly heavily influenced by the perceived peripheral nature of depositional activity. Whilst metalwork deposition appears to have been an activity that was often spatially distant from settlements, it does not automatically follow however, that it was separate from daily life. Bronze Age life was not solely defined by the house, farmyard and fields. In addition to examining the role of

metalwork deposition in marking important places in the social and cosmological landscape, this research also considers how those places, and depositional activity in general, may have been associated with aspects of daily life.

1.6.2 Nested scales of analysis

As depositional behaviour appears to have been influenced by topography at a number of different scales, the metalwork record is analysed via a series of nested geographic and topographic scales. The initial stages are designed to identify broad patterns in the metalwork record and assess potential biases in the dataset. The topographic setting of metalwork deposits is examined using a number of methods. A Monte Carlo analysis is employed to characterise the location of different metalwork deposit types across a generic river catchment and to examine the spatial relationship between metalwork find-spots and watercourses. A traditional distributional analysis is then employed with the aim of identifying depositional patterns that have a strong geographic or topographic dimension. One such pattern is then interrogated in greater detail through a more detailed landscape approach, which characterises the topographic setting of the find-spots within a particular topographic zone through primary fieldwork.

The research starts with a detailed examination of how the metalwork record for the study area has been formed and continues to evolve, in order to obtain a comprehensive understanding of the dataset. This analysis forms the basis for assessing the extent to which the metalwork record represents an accurate picture of actual Bronze Age depositional behaviour. The distributions of historic finds are compared with those of more recent discoveries made by metal detectorists as a means of identifying possible biases in the metalwork record.

The next scale of analysis examines the relationship between metalwork deposits and topography, based on the river catchment as the primary unit of study. A number of different methods are applied to the dataset to identify relationships between the locations of different types of metalwork deposits and two prominent topographic features – watercourses and watersheds. Spatial analytical techniques are used to examine how deposition is structured within and between the principal river catchments in north-east England. This is followed by a more traditional distributional analysis of metalwork deposit types utilising ArcGIS, to compare and contrast the depositional histories of individual river catchments.

The final scale of analysis, based on a detailed case study of metalwork deposits from north-west Northumberland, examines the potential significance of deposition within a social and cosmological landscape. Bronze Age life and social networks operated at a range of geographical scales, and attempts are made to examine how different types of relationship may have been articulated through contrasting depositional patterns. Particular consideration is given to how different types of deposit and their distinct topographic settings may represent contrasting scales of social connectedness. Drawing on other strands of archaeological evidence, the act of metalwork deposition is situated within a wider narrative of Late Bronze Age life in the upland zone.

The place of landscape in British metalwork studies

2.1 Introduction

Evidence of metalwork deposition has long been used to argue that certain natural places and metalwork types, held special significance for Bronze Age people. During the nineteenth-century, the Danish archaeologist Jens Worsaee (1886, in Levy 1982, 39-41) linked the prevalence of Bronze Age hoards in Denmark from a number of specific landscape contexts including lakes, rivers, and large boulders, to historic and ethnographic evidence of objects being offered to gods associated with these distinct natural places. As well as the influence of historic and ethnographic analogy, Worsaee's interpretations were also based on empirical evidence, incorporating a number of ideas that appear in current approaches to metalwork studies:

- Depositional patterns – certain artefacts only appear in particular contexts such as bogs or graves and/or, are often in pairs or multiples of pairs.
- Metalwork condition – objects that appear to have been purposefully broken and those which are constructed in a fragile manner have no utilitarian purpose.
- Cross context comparison – objects can share similar qualities to those from burials such as being fragmented, burnt or wrapped in material.

Such interpretations found little favour with the leading contemporary British antiquarian, John Evans, whose interests lay squarely with the objects themselves. Evans (1881) focused on constructing artefact typologies and chronologies by tracking the evolution of different artefact types. Although Evans was open to the possibility that some hoards may have been deposited for ritual reasons, such as the Danish material discussed by Worsaee, he believed that the British and Danish hoards displayed quite different characteristics (1881, 457). However, this is not to

say that the condition and patterning of objects within hoards was considered unimportant to Evans. Evans was reluctant to accept that metalwork from non-burial contexts may have been deposited for ritual purposes due the belief that the value of bronze lay solely in its practical uses and its ability to be traded as a commodity. As a result, practical interpretations for hoards and single finds prevailed over less worldly ritual ones, and patterns in the metalwork record were interpreted along the lines of a supply chain model. Metalwork hoards were therefore classified as either the material belonging to a metal smith – founder's hoards, consisting of damaged and fragmented objects as well as bronze ingots; the material belonging to a trader – merchants' hoards, consisting of complete objects; or as personal belongings - objects buried for safe keeping (1881, 459). In this interpretive scheme the landscape setting of metalwork find-spots was not considered important.

Throughout the twentieth-century, studies of British metalwork continued to focus primarily on the development of increasingly nuanced object typologies, exemplified by the Prähistoriche Bronzefunde series. In fact, aspects of Evan's interpretation have had great longevity in the British Isles. As recently as the 1990s, studies continued to classify certain types of hoard as the belongings of smiths or merchants based on the contents and condition of the artefacts (Bradley 1998). Based on the metalwork evidence from northern East Anglia, Pendleton (1992 & 2001) goes as far as arguing that all metalwork finds dating to the Late Bronze Age were discarded for solely profane reasons. Pendleton aside, whilst utilitarian interpretations continued to play a significant role in interpretations of metalwork deposition, during the last quarter of the twentieth century there was also growing recognition amongst British archaeologists that certain types of metalwork hoard, including single finds, may have been deposited for less worldly reasons (Needham and Burgess 1980, Needham 1988, Bradley 1982 and 1998).

This chapter will discuss how these changes have come about. Whilst the focus is to track the growing role of a landscape perspective in British metalwork studies, it is necessary to acknowledge that these developments by no means occurred within a vacuum, independent of external influences. Alternative approaches form north-west Europe have influenced the British perspective and the discussion will therefore consider the most influential aspects of this research too.

2.2 Wet 'ritual' versus Dry 'utilitarian'

The contrasting emphasis placed on the landscape context of metalwork deposits in different areas of northern Europe can in part be explained by contrasts in the general landscape characteristics of these different regions. In Denmark for instance, a large number of bronze artefacts are known to have been deposited in watery locations such as streams and bogs. Historic and ethnographic analogy shows that watery places can have significant religious and spiritual associations for various cultures and communities, and these have proved a source for inspiration when interpreting Bronze Age metalwork finds (Levy 1982, 67). Furthermore, due to the physical characteristics of these types of place, it was assumed that artefacts deposited in rivers and bogs were not supposed to be retrieved due to practical considerations. The primary motivation for depositing artefacts in various wet contexts was therefore interpreted along ritual lines (Levy 1982).

In Britain, although large numbers of artefacts, particularly weapons, were known to have been deposited in rivers and were interpreted as deliberate deposits representing ritual activity, (Barrett and Bradley 1980, 263), the vast majority of metalwork comes from dry land locations. In general, this material continued to be interpreted in practical terms, either as broken artefacts collected to

be recycled or exchanged over long distances, or complete artefacts being stored prior to exchange (1980, 260). The landscape context of these deposits was therefore only important in its broadest sense; dry land locations allowed hoards to be retrieved easily, whilst river deposits were intended for perpetuity.

Given this different emphasis of approach between regions, it is not surprising that the first study to consider the different landscape contexts of finds in a systematic way focused on Bronze Age Denmark (Levy 1982). Levy's study is particularly noteworthy as it was the first attempt to distinguish between ritual and non-ritual hoards, on the basis that each has a distinctive set of characteristics relating to their landscape context and contents (Table 2.1). Although a general distinction is drawn between hoards from wet 'ritual' and dry 'utilitarian' locations it is noteworthy that Levy argues that some hoards from dry land locations may also be ritual in nature. The means by which Levy distinguishes between different landscape contexts to catergorise ritual and non-ritual hoards is however problematic.

Characteristic	***Ritual***	***Non-Ritual***
Context	Wet – bog Dry – buried at depth, under stone, grove (woodland), natural mound	Dry – shallow burial, next to stone
Content		
Type	Weapon or Ornament	Tool, Raw Material
Condition	Complete	Fragmented
Association	Food, Pottery	None
Arrangement	Inside vessel, Ordering	None

Table *2.1 – A summary of the characteristics Levy employs to classify Bronze Age hoards from Denmark*

Levy's study is not one of Bronze Age metalwork per se, but of the changing nature of economic, social and ritual organizations in Bronze Age Denmark, based on interpretations of the changing patterns of ritual deposition of metalwork. The construction of a strict division between ritual and non-ritual deposits is therefore a tool which allows comparisons of the changing distribution of the two separate hoard types over space and time. However, by creating two strictly standardised hoard types, Levy is unable to consider the more nuanced characteristics of individual hoards (1982, 94). The significance of this becomes apparent when considering the theoretical basis for Levy's distinction between ritual and utilitarian deposits.

David Fontijn (2002, 18), raises a number of criticisms of Levy's approach, in particular the use of historic and ethnographic analogy to distinguish between ritual and utilitarian hoards. The ritual criteria employed by Levy are based on behaviour and social practices that are all present in the ethnographic and historic record. For example, ritual deposits are limited to a number of special landscape contexts that are; 'specially protected, or forbidden to segments of the population' and 'away from ordinary living space', (Levy 1982, 61). According to Levy the different contexts listed in figure one meet these particular conventions. However as Bradley has noted, the ethnographic and historic evidence does not set out criteria for non-ritual deposits (Bradley 1998, 12). These hoards are therefore classified as non-ritual solely on the basis that they do not display ritual characteristics.

This approach is problematic for numerous reasons. By shoe-horning all deposits into a binary ritual / utilitarian scheme, the many nuances that are present in the metalwork record are masked. In fact, many hoards do not neatly match all of the criteria for one particular category. The strict adherence to the binary classification actually leads to a number of contradictions when

interpreting the material. For example, hoards of fragmented tools are considered to be collections of scrap material, a non-ritual interpretation, yet the ethnographic evidence that Levy draws on supports the idea that the purposeful fragmentation of objects was a ritual process. Levy therefore ignores the ethnographic evidence which informs her ritual interpretation, because there is an accepted rational and practical explanation for hoards of broken objects.

The difficulties also extend to the landscape context of deposits. Artefacts from shallow, dry land locations are interpreted in non-ritual terms as they are easily accessible and can therefore be retrieved. However, just because a deposit may have been physically easy to retrieve, it does not automatically follow that these particular locations were free from conventions which governed access, one of the ritual criteria Levy applies to the landscape context of hoards. Furthermore, due to the limited nature of settlement evidence in Bronze Age Denmark, it is unwise to make assumptions regarding the relationship between the locations of hoards and settlements. According to the criteria, ritual hoards should be located 'away from ordinary living space' (1982, 61), but the lack of detailed contextual information makes it impossible to distinguish between ritual and non-ritual hoard types on this basis. The absence of metalwork from excavated settlement sites does not automatically imply that metalwork deposition was distant from these settlements.

The broad temporal and spatial approach employed by Levy was common to a number of studies of Bronze Age metalwork during the 1980s and 1990s (Bradley 1987, 1998). Bradley argues that a long term approach makes it possible to identify 'periods of change in the character and composition of intentional deposits, even when we lack the information needed to distinguish between stores and votive finds' (1987, 352). For Bradley this approach benefits from the fact

that it 'over-ride(s) the more local peculiarities exhibited by this evidence' (1987, 360). The need to circumnavigate a section of the metalwork record, because many deposits do not neatly fit into either a ritual or utilitarian category, is similar to the issues faced by Levy. Whilst Levy forces all metalwork deposits into two heavily standardized categories, Bradley avoids the peculiarities of the metalwork record by studying very general patterns.

By primarily focusing on the spatial distributions of different hoards and single artefact types, specific details about the landscape context of deposits are not considered important beyond the basic wet 'votive' and dry 'utilitarian' distinction. This is illustrated by Bradley's attitude towards deposits from different watery locations (1998, 9). Although he notes that wet contexts can be broken down into rivers, bogs, springs and lakes, he does not believe these distinctions are important. Metalwork finds from these different locations are therefore simply classed as 'wet' finds. Bradley does emphasise the differences between metalwork types from a number of different dry contexts such as settlements and burials, but as with finds from wet locations, the majority of deposits from terrestrial locations are classed as isolated finds under a broad dry land category. Bradley's interpretation of metalwork deposition is therefore heavily influenced by patterns in the distributions of different artefact types at a macro scale. Particular dry land contexts are not examined in any detail, instead, spatial patterns are prioritized on the basis that ritual and utilitarian deposits occupied distinct areas of the landscape in relation to each other.

2.3 More detailed contexts for metalwork

Against the prevailing dichotomy of ritual/utilitarian deposits based on the general distinction between wet-weapon-ritual and dry-tool-utilitarian, Barrett and Needham (1988) began to question and re-evaluate interpretations for metalwork deposition. Central to their approach was

a belief that current ways of interpreting metalwork deposits failed to fully account for the different social processes which could have led to the creation of the metalwork record. Barrett and Needham (1988) expressed this problem very clearly: the deposition of Bronze artefacts was a 'transformation of other processes hardly visible in the archaeological record', but 'the formal nature of that transformation may be similar for quite distinct social processes' (1988, 138). The fragmentation of a sword may therefore have been the transformation required to allow the artefact to be given as a votive deposit, but at the same time, fragmentation may also have been a necessary process to allow the sword to be melted down and recycled. For Barrett and Needham, a comprehensive understanding of metalwork deposition could only be achieved through detailed, thorough and systematic analysis, comparing the contents of deposits from a range of different contexts.

Such an approach forms the basis of Needham's study of Early Bronze Age metalwork from Britain and Ireland (1988). By detailed examination of artefact associations within hoards and graves, Needham is able to establish a more nuanced understanding of the different rules which governed the formation of these different deposits, in particular, it is apparent that certain artefact types are excluded from certain depositional contexts. Needham's study is particularly significant from a methodological perspective as he is able to identify patterning in the deposition of single finds from distinct landscape contexts. For example, Needham shows that the distributions of weapon and axe deposits from the River Thames during the Arreton, MA VI, period (1700 – 1500BC) do not match (1988, 241). The mutual exclusion of different contemporary artefacts from the same sections of the river supports the idea that particular conventions governed the deposition of particular artefact types along this stretch of the watercourse. As well as highlighting the different depositional patterns of contemporary artefacts within one context, Needham also illustrates that the particular watery context chosen for the deposition of a particular artefact type

could change over time. In Ireland for example, it appears that over the course of the Early Bronze Age axe deposits shifted from predominantly bog locations to rivers.

Although there was growing appreciation of the nuances that governed the deposition of specific artefacts in specific contexts, the range of locations explored remained rather limited and vague. Needham considers deposits from two main dry land locations, graves and hoards, as well as finds from rivers and bogs, roughly the same categories used by Bradley (1998). Needham's methodology reveals more subtle patterning, but it still considers dry land hoards as a very amorphous group. With the exception of a number of finds from special contexts, such as henge sites and natural mounds, the majority of hoards and single finds from dry land are considered to have a 'lack of context' (1988, 246).

2.4 Broadening the landscape context

Given the perceived lack of context for many terrestrial finds, it is not surprising that the first studies that considered metalwork deposition from a landscape perspective, focused on more striking natural landscape features. Bradley's 'An Archaeology of Natural Places' (2000), suggests a new approach for looking at metalwork deposits by considering the active role different places may have played in depositional practice. Whereas previous studies had stressed the significance of the objects being deposited, Bradley argues that it is also important to explore the 'biographies of the different places' where deposition took place, because certain locales may have demanded the deposition of certain artefacts (2000, 48).

Bradley's work draws heavily on existing ethnographic studies of the Saami people of northern Scandinavia to illustrate how their sacrificial practices were structured so that particular types of

offering, which included bronze artefacts, were associated with particular prominent natural places such as hills, mountains, lakes, springs and caves. Given that the motivations behind Saami sacrificial practices are so well understood, Bradley views Saami sacrificial practices as 'a source of ideas..., to be investigated entirely in terms of archaeological evidence', (2000, 47). Such an approach is applicable to Flag Fen in the English Fenlands where excavations have uncovered hundreds of bronze objects in situ, from both wet and dry locations, thus providing unprecedented levels of contextual detail for metalwork deposition. Bradley highlights a number of subtle patterns in the relationships between different bronze and non-metal artefacts and the specific locations where they were deposited. Flag Fen therefore represents a microcosm of depositional practices that had been previously recognised on a much broader scale; the selective deposition of particular types of artefact in specific places.

Drawing on the work of Bradley, Trevor Cowie (2004) advances the argument that certain natural places may have had special meaning to Bronze Age people by examining the landscape context of a number of Early Bronze Age axe deposits from Scotland. Cowie adopts a new approach by making field visits to each metalwork find-spot to observe first-hand the precise topographic setting of each deposit. By considering both the detailed and wider landscape setting of each find, as well as certain qualities of the artefacts themselves, Cowie considers how the act of deposition at each location may have been significant to Bronze Age people.

The strength of this approach, which lies in the ability to study detailed contextual information of accurately provenanced finds, is also central to its limitations. The general lack of well provenanced finds makes it difficult to investigate the landscape context of many metalwork deposits in detail. Cowie is able to single out 14 metalwork deposits from the whole of Scotland,

a country with a diverse range of natural features and topography, to illustrate the relationships between special axes and striking natural places. Therefore, although the study is important in defining a new approach to investigating metalwork find-spots in the field and exploring how different landscapes may have played an active role in depositional practices, by considering just a small sample of finds, only a selective narrative of metalwork deposition is revealed. Cowie himself recognises the potential of a more comprehensive approach to metalwork studies and he suggests that a greater understanding of metalwork deposition can be achieved through the detailed analysis of the context and distribution of finds on a regional scale (2004, 261). Such an approach has been adopted in contrasting styles by a number of recent studies (Fontijn 2002; Yates and Bradley 2010a/b).

2.5 The physical properties of landscape

As greater significance has been placed on the active role that landscape played in depositional practice, archaeologists have started to consider the characteristics of different landscape features in much greater detail. A particular focus has been placed on the distinct physical qualities of different watery contexts. In Britain, Yates and Bradley (2010a) have shown that in the English Fenlands, specific artefact types are associated with particular types of water. Whilst individual swords and rapiers were predominantly deposited in the main river channels, weapon hoards and ornaments are more common in areas of still water away from the main rivers.

Adopting a more theoretical approach, Fontijn (2002), draws particular attention to contrasts between bogs and rivers in the southern Netherlands. He argues that the deposition of metalwork in these differing watery contexts was governed by very different cultural conventions which were linked to the general properties of these distinct places. For example, bogs are seen as insular

places, where communities would be cut off from one another. The deposition of metalwork is therefore interpreted as an inward looking practice, to define and maintain social relationships within individual communities. Conversely, rivers can be viewed as prominent natural barriers in the landscape, which may be known to many people in the surrounding area. This perhaps makes them suitable locations for displays of competitive consumption, highly visible acts of deposition which serve to define and reinforce physical and social boundaries between different communities who occupy distinct territories on either side of these natural barriers.

More recently, Mullin (2012), has applied these ideas to the metalwork from British rivers to highlight an east, west divide. Although metalwork finds are plentiful from rivers which discharge into the North Sea, in the west of the country, bogs appear to have been favoured as a location for deposition over rivers. For Mullin, these different depositional conventions represent the presence of 'different kinds of social organization' in these different regions (2012, 53). Poyer (2010) highlights a similar pattern of deposition on a regional scale in north-east England. Here, riverine deposits of weapons are concentrated in the lower reaches of rivers, whilst further inland, weapons deposits favour bog or dry land settings often not far from nearby watercourses. Instead of considering the broad characteristics of these natural features within the wider landscape, Poyer considers the different depositional practices in relation to the fundamental physical qualities of different watery contexts. Whilst both bogs and rivers in their lower stretches can appear dark, muddy and deep, the same rivers in their middle and upper sections may be shallow and clear. For Poyer, these different depositional practices might therefore be related to beliefs associated with the tangible; what can be seen, and the intangible; what is hidden from view.

Adopting a slightly different approach, Becker (2008) considers the different physical characteristics of bogs and rivers from the point of view of the permanence of deposition. Based on the contrasting characteristics of ornament and weapon deposits from Ireland, Becker suggests that the potential to retrieve specific types of object could have played a role in the selection of appropriate locations for these deposits. Whilst weapons are predominantly found in rivers, a location from which artefacts are unlikely to have been retrieved, high status ornaments are commonly found in bogs and dry land settings. Both the prevalence of ornaments towards the edges of bogs, as well as evidence that deposits from relatively shallow, still water may have been marked in some way, support the idea that metalwork placed in bogs could have been retrieved (Becker 2008, 13; Needham 2001, 290). Becker therefore argues that the physical qualities of bogs allowed them to have a dual role; artefacts may be placed into a bog as a votive offering, but without the intention of giving them up for perpetuity. The bog has symbolic significance linked to its physical qualities, but these qualities also allow it to act as a practical barrier and container, hiding the artefact from view until its retrieval is required (2008, 15).

Finally, Fay Stevens, has explored how the elemental world may have played an important role in shaping 'both social action and social practice in the Bronze Age', represented through peoples' different interactions with metalwork (2008, 240). Stevens views the deposition of metalwork from the perspective of 'elemental interplay', the interaction of shared elemental qualities present in both the metalwork and the locales in which it was deposited. For example, both water and metal can share similar appearances, being shiny and reflective, and both can also exist in different states, liquid and solid. One facet of the deposition of bronze objects in rivers might therefore have been the act of returning the metalwork to a liquid state, an important stage in the production process of bronze artefacts in which water would have played an important role. In a similar vein, bronze artefacts deposited under rocks or within rock fissures may 'reference the mineral source

of raw materials used in the production of the metalwork' (2008, 247). These ideas also resonate with those of Fontijn, who suggests that the deposition of particular artefact types such as bronze axes may have been linked to 'notions of reciprocal relations with the land' (2002, 269). Fontijn observes that many axes in the southern Netherlands were deposited in natural, uncultivated places, leading him to suggest that having been used as implements to impose control over the natural world, convention demanded that they were returned to nature at the end of their use lives.

Dwelling and deposition: defining the theoretical basis

3.1 Introduction

The preceding chapter outlined the development of approaches to metalwork studies from a landscape perspective. This work has culminated in a number of pioneering studies which attempt to contextualize the locations of metalwork deposits within the contemporary Bronze Age landscape (Fontijn 2002, Yates & Bradley 2010a/b). Whilst Yates and Bradley's studies are informative from a methodological perspective as they illustrate the effectiveness of applying a range of fieldwork techniques to examine and characterise individual find-spot locations, Fontijn's analysis of Bronze Age metalwork deposition in the southern Netherlands stands out for its ambitious theoretical approach. The theoretical and methodological approach adopted in this thesis draws on elements of these studies.

This chapter will discuss and outline the theoretical foundations on which my research is based. To provide an historical context for my research, the first section will consider the key theoretical developments in metalwork studies, which have seen interpretations of metalwork objects radically shift from being commodities valued for their utilitarian and exchange value, to highly meaningful cultural objects central to the workings of Bronze Age society. The second section will discuss the specific theoretical basis of the thesis which seeks to move away from interpretations of deposition as a primarily 'ritual' activity which is separate from daily life, by considering how deposition may have been linked to other 'routine' activities of Bronze Age life.

3.2 In search of meaning

In his study of Bronze Age metalwork deposition in the Southern Netherlands, Fontijn (2002), seeks to move beyond the traditional and restrictive way of interpreting and labeling metalwork deposits as either ritual or profane (Levy 1982, Bradley 1998). Instead, Fontijn asserts that the identification and detailed examination of structured patterns of permanent deposition, what Needham termed 'selective deposition' (1988), will provide an insight into the different meanings Bronze Age people attached to the objects and places involved in metalwork deposition. This is possible because the act of deposition is considered by Fontijn to be the final stage of an object's life history, a life during which different objects accrue varied and specific meanings. The belief that bronze objects were imbued with special meanings is central to Fontijn's approach as it is the special meaning that different objects had that led to them being deposited in a selective manner.

The repetition of distinct forms of depositional practice over both space and time, have left an indelible imprint in the archaeological record which can be identified by detailed analysis. The repetitive nature of Bronze Age depositional behaviour is significant, as it implies that the deposition of metalwork was governed by established, and apparently enduring, cultural rules. The specific meanings that different objects and places had to Bronze Age people must therefore be an embodiment of these cultural rules and conventions. Therefore, whilst the reasons behind individual depositional events can only ever be cause for speculation, Fontijn's approach presents a means by which to explore a bigger picture, by considering the values and beliefs Bronze Age people held towards the world. Although the practice of selective deposition strongly supports the idea that different objects and places were imbued with varied meanings, it does not explain why this situation prevailed during the Bronze Age. In order to understand why selective

deposition occurred, the social and economic conditions that allowed metal objects to gain significance greater than their practical use value alone need to be considered.

3.3 Gifts and Commodities

Central to our understanding of how inanimate bronze objects could be imbued with different meanings lies in the fundamental differences between commodities and gifts and their respective forms of exchange. Whilst commodity exchange can be explained as relationships between things, gift exchange represents relationships between people (Gregory 1982). During a commodity exchange transaction, the items involved have an equal exchange value. Such transaction might therefore be considered neutral as neither party becomes indebted to the other and the participants are not obliged to engage in further exchange transactions in the future should they not wish to do so. Such transactions can also be considered to be neutral in the sense that the items exchanged are primarily important to the parties involved because of their exchange value. There is therefore no deep sense of attachment between the participant and object.

The mechanisms of gift exchange are very different. Instead of being inanimate or neutral, objects in societies where gift giving is the common form of exchange are imbued with meaning. Objects, like people, can also have their own cultural biographies (Koptyoff 1986). The act of gift giving therefore has the effect of interweaving person and object biographies together. Objects received as a gift will already have accrued specific meanings during the course of their life. Individual object biographies are likely to be closely connected with the person or persons who most recently possessed them and as such objects can be seen to be inalienable, the gift giver retaining a form of possession over the object. Given the potential for inextricable relationships to exist between

objects and people, ‘acts of giving and receiving locate the person in a web of social relationships that defines identity’, (Brück 2006, 76).

As well as a tool for producing and shaping social relationships, objects are also important because they define personal identities and social roles. People are afforded a particular identity and status based on the objects that they possess. A young male adult might therefore become a warrior at a designated time when they receive the trappings that represent a particular martial identity. The act of gift giving can therefore be seen to serve the dual purpose of affording an individual a particular personal identity, whilst simultaneously incorporating the individual into a wider network of social relationships with their own specific identities.

3.4 Exchange in the Bronze Age

Aspects of circulation and exchange have always played an important role in Bronze Age metalwork studies. On a practical level natural sources of tin and copper are rare in northern Europe and thus the mechanisms by which natural ores or objects moved over long distances have often been of interest to archaeologists. Early models of exchange were very much rooted within a contemporary, capitalist world view, which led to bronze objects being viewed as commodities that could be traded for other items with equivalent exchange values. As I have previously noted, in Britain this led archaeologists to favour practical and utilitarian interpretations for metalwork deposits - different types of hoards simply reflected collections of metalwork at different stages of a commodity exchange network.

An important paradigm shift came about in the 1970s when archaeologists began to recognise that bronze objects may have predominantly circulated by means of gift exchange, instead of as commodities (Rowlands 1976). This new model had significant implications for both how objects may have been perceived by Bronze Age people and subsequently, the reasons for why they were deposited. Rowlands interpreted the exchange of bronze metalwork in the context of a prestige goods economy (1980, 20). This model assumes a society where people vied for influence and power by acquiring prestigious and even exotic objects at the expense of their rivals. However, just as it was important to acquire such items, the deposition of metalwork might also be seen as an integral part of creating and maintaining influence in such a system (Bradley 1982, 1998).

Drawing on the work of Gregory (1980), Bradley suggests that permanent metalwork deposition may have been a means by which people overcame the inefficiencies and inherent uncertainties involved in gift exchange. Competitive gift exchange which creates obligations between people via the exchange of gifts is potentially very unstable. Although it may be possible to gain influence by giving gifts, this can easily be neutralized or reversed as debts are created when gifts are reciprocated. The volatile nature of this form of exchange means that it is difficult for any one person to maintain influence over others for any length of time. Gregory suggests that these problems can be overcome by participating in a different form of gift giving. Instead of the see-saw conditions created by the exchange of gifts between people, by giving gifts to the gods instead, it is possible to create and maintain a more lasting and stable position of authority as gifts are not reciprocated This form of exchange can be seen to have numerous other advantages:

- It has the potential to take a lavish form as the gift giver can demonstrate to competitors that they are powerful enough to give up prestige objects permanently.

- Each depositional event takes objects out of circulation. This increases the value of circulating objects but decreases the number of objects available to competitors wishing to participate in similar events.
- There may have been perceived benefits of offering gifts to the gods.

For Bradley, this particular mechanism of gift exchange represents a plausible interpretation for a number of depositional patterns visible in the Bronze Age metalwork record. For example, the widespread phenomenon of weapon deposition in watery contexts is a prime candidate for this form of exchange as important objects are purposefully and permanently taken out of circulation.

Rowland's model of gift exchange based on the circulation of prestige goods has been criticized from a number of angles. Barrett and Needham argue that the characteristic features expected of such a model, the 'political accumulation' of agricultural resources and widespread votive deposition of metalwork, are not present in the archaeology of southern Britain (1988, 135). Based on evidence from two Bronze Age settlement sites on the Sussex downland, Itford Hill and Blackpatch, Barrett and Needham argue that there is no evidence for the accumulation of agricultural resources during the Middle and Late Bronze Age and lavish metalwork deposits from this area are also relatively few.

Barrett and Needham's critique has in turn recently been countered by Sharples (2010) who argues that the absence of evidence for agricultural surplus and elaborate metalwork deposition is not at odds with Rowland's prestige goods model. Whereas Rowland's interpretation stresses the diverse roles that different areas might have played within the exchange system, Barrett and Needham's interpretation is consistent with greater social and geographical homogeneity. Sharples notes that Rowland's interpretation would view the Sussex downlands as being

peripheral to core areas, such as the Thames Valley or the south coast. Whilst people living in the Thames Valley were able to acquire substantial amounts of elaborate metalwork and compete for political authority through the competitive consumption of this material, the practice was less pronounced in areas peripheral to this such as the Sussex downlands. The potential dependence this area had on the Thames Valley and the surrounding coastal regions for the procurement of metalwork may explain why there is no evidence for agricultural accumulation as surplus resources were swiftly exchanged for non-exotic metalwork items. Sharples therefore suggests that it is the peripheral nature of this area in relation to core areas that could procure prestige metalwork from the continent that may explain the relevant absence of metalwork (2010, 102).

Another critique of Rowland's model is provided by Fontijn who questions the functionalist nature of the prestige goods model (2002, 6). Fontijn argues that competitive consumption in the form of ritual deposition may have served a socio-political function but this fails to explain why the practice was structured in such a complex, selective manner. The apparent selective nature of deposition suggests that the practice was governed by a range of cultural rules and thus it is too simplistic to understand metalwork deposition simply and solely as an act of competitive consumption.

Joanna Brück also critiques the prestige goods model along similar lines arguing that 'models of Bronze Age exchange continue to impose aspects of capitalist economics onto the past' (2006, 75). This is due to a misconception that views objects circulating in a gift exchange economy as if they are commodities. In the prestige goods model, although objects pass between people as gifts, their value is measured solely by their status as prestige objects. This particular gift exchange model therefore implies that bronze objects were important solely because they

afforded their owners prestige, and thus the ability to compete with rivals for power and authority. Consequently, although objects may circulate as gifts, they are seen to have the fundamental characteristics of commodities. For Brück, this is a reductionist interpretation of Bronze Age gift exchange, which fails to acknowledge the true complexity of the process (2006, 75).

The socio-political function of gift exchange during the Bronze Age is clearly still open for debate, however, it is not necessarily the case that the selective deposition of bronze metalwork was exclusive to only one of the models discussed previously. Metalwork may have been deposited for many reasons and thus the potential multi functionality of deposition must be acknowledged. Rowland's prestige goods model supposes that bronze objects were primarily valued for their function as tools of political competition. Whilst some acts of deposition may have served a socio-political function, other factors such as social complexity of gift exchange relations and the apparent selective nature of depositional practices need to be considered.

Although it is now generally agreed that gift exchange was the prevalent form of exchange during the Bronze Age, the role that commodity exchange may have played is less clear. Metalwork studies have attempted to distinguish between gifts and commodities based on the contents and context of deposits (Levy 1982, Bradley 1998), however, these approaches have been questioned on a number of levels (Barrett and Needham 1988, Needham 2008). Needham believes that 'it is now clear that to place gift-giving and commodity exchange in diametrical opposition is a distortion of a more complex system', (2008, 314). Needham suggests that people may have engaged in a diverse range of transactions to achieve specific goals. These might include the exchange of a gift for a commodity depending on the position and perception of the participants involved. On a more fundamental level it is not necessarily the case that certain objects were

commodities whilst others were gifts, it is quite possible that individual bronze objects may have been both commodities and gifts at different stages of their lives.

3.5 Deposition as exchange

Although bronze objects may have circulated as commodities during particular stages of their life, at the point of deposition many objects appear to have accrued specific meanings which led to them being deposited in a selective manner. Given the manner by which the lives of objects can become inextricably interweaved with those of individual people and communities in gift giving societies, the act of giving up objects from the living domain was potentially a highly meaningful event.

Stuart Needham has recently discussed the deposition of bronze objects in the context of 'otherworld exchange' (2008, 315). Although he acknowledges that competitive consumption may have been a minor factor behind some depositional activity, he believes that the 'underpinning rationale was probably exchange with otherworld spirits', with objects 'overtly moving from one context of possession to another', (2008, 315). David Fontijn has taken this argument further suggesting that the deposition of bronze objects in the southern Netherlands might have represented a 'definite form of exchange', (2002, 271). This is based on the view that deposition was intended to be permanent, signalling the end of the life-cycle of an object. In contrast, Needham is more inclined to view deposition as a more flexible practice, suggesting that there was not necessarily an embargo on retrieving objects that were deposited as gifts to the otherworld. Therefore, although it cannot be proved as retrieval would leave no trace in the archaeological record, an object's life in the living domain did not necessarily end once it was deposited.

Regardless of the intended permanence of deposition, both Needham and Fontijn agree on the importance of studying the practice of bronze metalwork deposition. Needham considers otherworld exchange to be 'a form of exchange which is crucial to our understanding of the workings of the given society', (2008, 315). Fontijn too recognises the potential that metalwork deposition has to add depth to our understanding of Bronze Age life. For Fontijn, the deposition of metalwork was a product of different 'fields of discourse', (2002, 277) as defined by Barrett (1994), with different depositional customs reflecting a patchwork of separate ideologies.

3.6 Dwelling and deposition: core versus periphery

The key to understanding metalwork deposition lies in our ability to identify and interpret the numerous different forms of context associated with the practice and how their interactions represent specific and different meanings. This can clearly only be achieved by studying in detail those contexts that are archaeologically visible. For example, it is possible to consider the landscape context; where and how objects are deposited, how find-spots relate to features of both the natural and built cultural landscape and whether the objects were placed in the ground in a structured or patterned manner. It is also possible to comment on the context of an object's life before deposition, the context of production and use, an approach that is integral to Fontijn's methodology (2002). If selective deposition is evidence that different objects had varied meanings, Fontijn argues that full life biographies of individual objects need to be studied as this meaning is likely to be the result of the entire life-path of an object (2002, 21). Therefore, as well as studying evidence of deposition, it is also important to study evidence of production, use and circulation.

Whilst Fontijn's study examines the pre depositional life-history of objects in great detail, the landscape context of deposition is based on very broad landscape characterisations. This limitation, which is noted by Fontijn (2002, 282), is addressed by Yates and Bradley who apply a range of fieldwork techniques to characterise the detailed natural and cultural landscape setting of over 100 find-spots in southern Britain (2010b). However, although this approach reveals a number of associations between metalwork deposits and particular natural and cultural landscape features, by considering the deposits as a homogenous group, it prevents more subtle depositional conventions relating to different artefact types and their life-histories from being explored. There is clearly great potential for a more comprehensive landscape approach drawing on the strengths of these studies - detailed field work to accurately contextualise find-spot locations, combined with in-depth analysis of different metalwork deposit types and the artefacts' life histories.

If we are to understand what the act of metalwork deposition meant to Bronze Age people it is important that we can characterise the depositional locations of metalwork deposits as accurately as possible, so that associations with both natural and cultural landscape features can be examined. How these associations and patterns are then interpreted is dependent on our understanding of how Bronze Age people inhabited that landscape. Fontijn addresses this question by adopting a dwelling perspective that distinguishes between 'core' settled zones, and 'peripheral' uncultivated land. It is a widely observed phenomenon that bronze metalwork was rarely deposited on settlement sites, either within houses or their associated farmyards, and thus it is easy to see why this is an attractive approach. The fact that metalwork is absent from these locations, which are often the focus of extensive archaeological excavations, represents a form of selective deposition. If bronze objects were only valued for their practical and economic value, then we might expect to find discarded items during excavation. However, the general exclusion

of objects from domestic sites supports the idea that particular cultural conventions restricted the deposition of metalwork to areas away from the house and farmyard.

The notion that metalwork deposition was peripheral to domestic sites has clear implications for how we perceive the practice in relation to daily routines. David Fontijn has suggested that the absence of metalwork finds from the direct vicinity of settlement sites in the southern Netherlands is perhaps due to the fact that the practice of metalwork deposition was 'deliberately severed from daily reality', (2002, 275). Such an assumption implies that Bronze Age life rarely spread beyond the outer most field boundaries, but was instead confined to a domesticated and cultivated core zone. This is perhaps a logical position to take based on the archaeological evidence. Whilst aspects of daily life are clearly visible in the archaeology of homesteads, farmyards and field boundaries, as David Fields notes, 'land use beyond the fields is invariably thought of as an invisible component of the archaeological landscape', (2008, 214).

Fontijn sets out to 'integrate Bronze Age finds in the wider picture of land-use, structuration and perception' (2002, 3). Although this is a thoughtful new way of approaching the material, I believe that Fontijn's application of a dwelling perspective to the evidence of metalwork deposition is problematic. Fontijn contrasts the imaginary landscapes of natural, uncultivated places where the act of metalwork deposition would leave no traces, except in the memory of those present, with the phenomenological structured landscapes of houses and fields that were part and parcel of everyday life. By adopting a dwelling perspective that emphasises the importance of settlements and field systems as central to daily life, it is logical to interpret metalwork deposition as a practice that was remote and peripheral to this as it appears to have been spatially distant. However, although people may have frequented certain locales to deposit metalwork only occasionally, we

should not automatically assume that this was the only activity that took place in these locations. Instead of working under the assumption that metalwork deposition was a practice that only took place in peripheral, uncultivated, and remote locations, it is perhaps worth considering what other activities might have brought people into areas where metalwork was deposited. How we conceptualise the relationships between supposedly core and peripheral areas is clearly crucial to our understanding of Bronze Age life and our interpretations of metalwork deposits.

3.7 Scales of Mobility

Martin Locock (2001) has noted how models of Late Bronze Age land-use in southern England have emphasised the distinction between core areas, consisting of a homestead and surrounding fields, and peripheral areas beyond the field boundaries (Yates 1999). Although not explicit, the distinction is clearly visible in Yates' survey of Middle and Late Bronze Age agriculture and settlement in the Thames Valley. Yates notes that although extensive archaeological excavations and evaluations have taken place across the region, Bronze Age settlements and field systems are concentrated in a number of core areas. Archaeological evidence for settlement activity is therefore largely absent for the majority of the Thames Valley.

In his study Yates incorporates evidence of metalwork deposits found in the vicinity of field and settlements, observing that metalwork deposits are commonly found in locations that border the centres of farming and occupation. For Yates, both fields and metalwork deposits therefore appear to fulfil a similar function, they 'reinforce boundaries, in effect dividing up a working landscape', (2001, 78). It is important to note that Yates is not concerned with Bronze Age metalwork per se; but with metalwork deposits that have a direct spatial association with field boundaries and settlements of a broadly contemporary date. If areas of Middle and Late Bronze

Age land division in the Thames Valley were restricted to a limited number of relatively compact areas, it begs the question of what, if anything, was occurring in the extensive areas between these pockets of intensively settled land.

In their recent study of metalwork deposition in south-east England, Yates and Bradley (2010b) categorise the find-spots of over 100 metalwork hoards. Their study reveals a number of distinct associations between metalwork deposits and a range of both topographic features and those of the built cultural landscape such as burnt mounds and field boundaries. As Yates observed in the Thames Valley, metalwork could be deposited at or beyond field boundaries not far from settlements, but additionally, many find-spots appear to be most strongly associated with features of the natural landscape. It therefore appears that metalwork was deposited in a diverse range of locations across the landscape in south-east England, and at a range of distances from contemporary settlements.

Locock (2001, 126-127) has noted that by focusing on models of permanent subsistence agriculture, it is easy to undervalue the significance that other areas of the landscape may have had during the Bronze Age. Excavations at Cabot Park on the Avon Levels have revealed a Late Bronze Age landscape that appears to have been extensively exploited in many different ways. A wide range of activities were associated with five distinct landscape zones – the estuary, an intertidal zone, the saltmarsh-edge, and the bedrock margin and bedrock ridge. The absence of evidence for permanent settlement and only limited space for arable cultivation contrasts sharply with the accepted picture of Middle to Late Bronze Age settlement and land-use recognised elsewhere in southern Britain. For Locock the evidence suggests a 'complex pattern of exploitation across the topographic zones; whose use was interdependent', (2001, 127).

Therefore, instead of residing in a fixed location all year round, people may have moved between various locales to utilize the different resources available in each place.

With the above example in mind, it is necessary to question how widespread the phenomenon of large scale permanent settlement incorporating linear field divisions was in Middle and Late Bronze Age Britain. Although such models are well known throughout Britain in both upland and lowland settings – Dartmoor (Fleming 1988), the Thames Valley (Yates 1999), Wessex (McOmish 2005), Yorkshire Dales (Horne and MacLeod 1995) - there are many regions where they appear to be completely absent. Willy Kitchen has suggested that 'different responses to social and/or environmental stresses in the Later Bronze Age led to the physical demarcation of pasture land in only certain regions of the country', (2001, 118). It is therefore possible that a more mobile way of life persisted into the late second millennium BC in many parts of Britain, a prospect which has implications for how we understand metalwork deposition from a landscape perspective. In particular, it is necessary to question the nature of core and peripheral places in the landscape for a society where people may have associated with numerous different locales, for varying degrees of time.

3.8 Dwelling and ritual

A key element of Fontijn's study is his attempt to move beyond the traditional and restrictive way of interpreting and labeling metalwork deposits as either ritual or profane. Instead, drawing on the work of Joanna Brück (1999), Fontijn approaches the material from a wholly empirical and neutral perspective to explore the meaning of deposition. Based on evidence from ethnographic case studies, Brück notes that societies do not always distinguish between ritual and secular activities, in fact, 'ritual can be seen to be an integrated part of daily life', (1999, 319). The absence

of a distinction between these two sets of activities can extend to the perceived benefits of participating in both forms of action. For example, in order to grow crops it is necessary to plant seeds at a precise time of year, a practical activity, yet hypothetically, for Bronze Age people it may have been equally important to also carry out a range of associated symbolic activities. Whilst we would understand these actions to have no bearing on the outcome of the harvest, for Bronze Age people these actions might be seen to be as important as the act of sowing the seeds, they are all effective forms of action with a tangible outcome. Therefore, instead of viewing Bronze Age society from our own modern historically located rationality, with a tradition of labelling all prehistoric activity that we cannot understand as ritual, there is potential to examine what the actions of Bronze Age people tell us about Bronze Age rationalities.

The deposition of metalwork is one sphere of activity that is ideally suited to this approach as it allows us to move beyond the problematic ritual / utilitarian dichotomy that has been a central theme of metalwork studies in the past. Instead of imposing our own pre-conceived ideas of what constituted effective action for Bronze Age people, we can explore the cultural attitudes that made different forms of selective deposition a logical activity. Fontijn's work on metalwork deposition in the Southern Netherlands illustrates the potential of this approach.

Fontijn however is reluctant to relinquish the term ritual all together but instead retains it to describe deposition as a practice that was separate from other more mundane elements of everyday life. Fontijn maintains that he 'does not dismiss or prioritise a certain interpretation of bronze finds from the outset', (2002, 38). I would suggest however that such a position is not compatible with his decision to retain the word 'ritual' to distinguish deposition from more mundane activities, and in using the term this way he does in fact prioritise an interpretation. As

I have previously noted, the absence of finds from within occupation sites leads Fontijn to suggest that deposition was ‘deliberately severed from daily reality’, (2002, 275), an interpretation that clearly correlates with his idea of deposition as a ritual practice that was distinct from everyday activities.

It was not necessarily the case however, that Bronze Age people imposed a spatial distinction between ritual, and domestic, everyday landscapes. Johnston (2008, 274) provides a number of examples where supposedly Bronze Age ritual landscapes appear to have also been the focus for mundane, domestic activities. Recent excavations at Must Farm in Cambridgeshire have shown that a range of different activities occurred along a 150m stretch of river during the Middle and Late Bronze Age (Knight 2012). Here the deposition of bronze weapons including rapiers, swords and spears occurred in the same areas where a number of fish weirs and traps were positioned in the river. A particularly striking feature is the large number of dug out log boats that appear to have been purposefully deposited in the river, scuttled by the removal of their transom boards. It seems likely that the river fulfilled an important range of functions such as a transport and communications route, a source for food and raw materials, as well as being a suitable location for the deposition of metalwork and boats. The evidence from Must Farm therefore appears inconsistent with the notion of metalwork deposition as a peripheral, isolated activity, separate from daily life.

In common with Fontijn, I believe that Bronze Age metalwork deposits represent a great source of evidence for examining how the landscape was structured and perceived by Bronze Age people. However, in order to realise the full potential of this approach, I would argue that the practice of deposition needs to be considered in relation to the full range of other activities that

may have been associated with the locations where deposition took place. Land-use beyond core settlement sites has often been acknowledged in Bronze Age landscape studies but these rarely incorporate evidence of metalwork deposits. Given that the vast majority of metalwork finds are not directly sited within houses or field systems, but instead come from locations which are more often described as lacking a context, this is perhaps surprising. Instead of being problematic, I would argue that the very fact that so many metalwork find-spots appear to lack a specific context, means that they are ideally suited to an approach that seeks to examine the nature of Bronze Age attitudes and beliefs towards the natural world.

By adopting an approach that endeavours to reveal the cultural logic behind selective deposition, I believe that it is beneficial to steer clear of the term 'ritual' which has many complex and different meanings. I am reluctant to impose any one meaning of the concept to the study as we are clearly in no position to know which, if any, of these interpretations was relevant to Bronze Age life. Simply applying the term in a vague, undefined manner, contributes little to our understanding of selective deposition. Fontijn retains the word ritual to describe the deposition of metalwork as reflecting separate fields of discourse. Whilst I believe this interpretation is relevant to the numerous distinct forms that the selective deposition of metalwork could take – for instance, the deposition of a sword in a river is likely to reflect quite different values and beliefs than the deposition of an axe on dry land - it is less clear if the practice as a whole should be viewed as a separate field of discourse, dislocated from everyday life. In particular it is necessary to exercise caution when making such direct links on spatial grounds, as Fontijn does. I would argue that a dwelling perspective that distinguishes between a core, settled zone where every day, mundane activities took place and a peripheral or remote, uncultivated zone where ritual activities occurred represents a wholly inadequate and overly simplistic model which may not be applicable to Bronze Age life across large parts of Britain.

Due to find-spots often lacking a specific context, there is a tendency to view metalwork deposition as an activity that took place in isolation of other practices. Fontijn's model suggests that people travelled from a core, settled place to carry out acts of deposition in pre-selected locations that were often in peripheral locations. Although it is evident that certain topographic locations were definitely the correct type of place to deposit certain objects, I believe that the core-periphery model employed by Fontijn is overly reductive. Instead of considering a dwelling perspective with its rigid distinction between core and peripheral areas, I advocate an approach that seeks to place the act of metalwork deposition within a dynamic, inhabited landscape, acknowledging that metalwork deposition existed alongside many other activities that were central to Bronze Age life. Different places in the landscape may have been visited more frequently than others, and the length of time spent at these places may also have varied. In south-east Britain, Yates and Bradley have identified a number of hoards that 'were in remote locations well outside the area settled all year' (Bradley 2013, 125), but other metalwork deposits were 'deposited outside settlements of the same date' (2013, 136). The physical act of depositing metalwork may have been a short lived event, but different acts of deposition may have been associated with other activities that had different temporal scales. Such an approach must therefore acknowledge the possible temporality of activities associated with Bronze Age life and the places these activities brought people into contact with. Metalwork may have been deposited in a 'peripheral' location during the movement of livestock or when undertaking activities associated with wet land areas such as wildfowling or the harvesting of water reeds for thatching, or it could be deposited in 'core' locations during the more regular rhythms and activities of daily life around the homestead and fields.

In advocating this approach I am not suggesting that spatial relationship between metalwork deposits and features of the built cultural landscape such as settlements and field systems are

not important. As already discussed, in certain areas of Britain, such as the Thames valley, many metalwork deposits appear to have been located either in, or just beyond, Bronze Age field boundaries, and Yates has suggested that metalwork deposition played a role in structuring boundaries within the social landscape (2001, 78). Unfortunately, evidence of Bronze Age settlement across north-east England is patchy and displays a distinct bias towards upland locations where environmental and historical land use factors have resulted in the preservation of Bronze Age roundhouses, cairn fields and filed systems, but have not been conducive to the discovery of buried metalwork. It is therefore difficult to recreate detailed plans of contemporary large scale Bronze Age landscapes, such has been possible elsewhere in Britain, limiting the potential to draw meaningful conclusions about the relationship between the siting of settlements and metalwork find-spots.

Methodology

4.1 Introduction

In the previous chapter I argued that Fontijn's exploration of the role of deposition in relation to the routines of daily life imposed an unnecessarily rigid distinction between 'core' settled and 'peripheral' uncultivated locations. I believe that there is scope to employ a more fluid model of landscape inhabitation to the study of metalwork deposition, acknowledging the potential mobility associated with routines of Bronze Age life. As Thomas reminds us, 'it is salutary to remember that people do not spend their entire lives on a single settlement site and that their *routine activities may be dispersed over a wide area, linking a variety of different kinds of locales',* (2008, 301, italics my emphasis).

A dwelling perspective that acknowledges a whole range of land use practices that were carried out across the full extent of the landscape, allows relationships between depositional practices, and other activities that created and shaped cultural meaning in these places to be explored. Whilst the majority of metalwork find-spots may lack an obvious context in the sense that they are not associated with a settlement or burial for example, they all have a topographic context which may have made these locations significant for a host of reasons – local, regional or inter regional route-ways, physical or liminal boundaries, sacred or ceremonial places or locations where activities essential to Bronze Age life were carried out.

4.2 Linking theory and method: effecting and affecting landscapes

"To experience a landscape is to be active within it, since it is by means of such activity that landscape affects and influences us – the nature of the place determines what is possible within that place" (Malpas 2011,14).

The approach I advocate is possible because routines of movement and land-use are intrinsically linked to the natural landscape which comprises a diverse patchwork of different topographic features with distinct physical properties. The qualities that different topographic features afford, shape the nature of activities that can be carried out in different parts of the landscape. Many of the ways in which topography can directly influence human activity are obvious. For example, relief, the three dimensional characteristics of the lands surface, is a crucial element in determining the nature of agricultural activities that can be successfully practised. Land over a certain altitude might not be suitable for arable farming due to a number of reasons, such as unfavourable climatic conditions and / or the absence of suitably flat terrain and fertile, well-draining soils. However, these same conditions can make this land ideally suited for other agricultural regimes such as the provision of seasonal pasture. Historic land-use patterns in the Cheviot uplands of Northumberland provide an excellent example of this. Archaeological and palaeoenvironmental evidence demonstrates the presence of both pastoral and arable agriculture being practiced at altitudes up to 250m AOD during the Bronze Age, but the cooler, wetter climate today limits farming activity to seasonal upland grazing (Young 2004).

Just as patterns of mobility may on one level be influenced by the need to access diffuse resources, the precise trajectory of movement in terms of the pathways and route-ways taken might also be influenced by topography. Valleys or ridges might act as natural route-ways, their enduring and unchanging nature allowing journeys to be made and retraced time and time again.

Research undertaken by Richard Bradley and Ruth Saunders suggests that the locations of rock art carvings in central Northumberland mark a natural route-way along a major valley system which links the lowlands in the south of the region to the upland valleys to the north (1997, 81-89). Bradley and Saunders have shown that a network of sites, located on prominent high ground along the edge of the valleys, display high levels of intervisibility with one another in comparison to a random sample of localised points in the vicinity. It is perhaps significant that the network of intervisible rock art sites appear to converge on the Millfield Basin, which contains an extensive complex of predominantly Early Bronze Age henge and stone circle monuments, which may be roughly contemporary with the rock carvings. The proposed existence of prehistoric route way is particularly interesting, as the find-spots of a number of impressive Late Bronze Age martial deposits are located along its general course.

In contrast to acting as natural route ways, topographic features can also play a role in restricting or impeding movement. The courses of rivers and streams may provide a means of navigation, but wide, marshy or deep rivers may simultaneously act as boundaries, limiting movement in certain directions. Other watery bodies such as bogs, marshes and meres might also restrict and channel movement in a similar way. The nature of these constraints will have been conditioned by the composition of the groups using the landscape: for instance, travelling with cattle would affect the character of the ground and the obstacles that could be crossed.

Fontijn suggests that the contrasting topographic settings of different metalwork types in the Midden-Limburg area of the southern Netherlands, with swords favouring major rivers and axes and spearheads bogs, reflect different roles that these features played in the social landscape (2002, 263). As prominent shared features, large rivers have the potential to mark boundaries

between groups, and as such, acts of metalwork deposition may have been in part for the attention of groups living on opposing sides of the river. The axe and spearhead deposits are concentrated in a number of areas around the edges of the bog, suggesting to Fontijn that like rivers, this prominent feature was also shared by different groups. However, given the open and expansive nature of the bog area, and the dispersed distribution of the metalwork finds in a number of the discrete pockets, it appears less likely that deposition within this topographic zone was undertaken with an external audience in mind. Drawing on the work of Fontijn, David Mullin (2012a) has noted how the paucity of Bronze Age metalwork finds from the River Severn in western Britain, contrasts with the relative wealth of single finds from non-riverine wet contexts within the catchment of the same river. If these contrasting distributions truly reflect genuine Bronze Age depositional patterns, it appears that bogs were favoured as a depositional location over the areas principal river. For Mullin, this pattern suggests an absence of pressure on different social groups to clearly define their differences through metalwork deposition. Instead, metalwork may have been deposited 'as a means of reinforcing *within-group* bonds, small-scale deposition within the secretive, disorientating landscape of the bog being central to the manipulation of group identity and organisation' (2012a, 54).

The discussion above has highlighted a number of ways in which topography has the potential to determine human actions in a very practical way. Different topographic features afford a range of resources to be utilised, whilst watercourses, valleys and ridges can provide an important means of navigation and define boundaries between social groups. However, whilst the need to obtain and produce valuable resources essential for daily life must have been a primary concern for Bronze Age people, the way they related to and understood different places in the landscape were not solely linked to utilitarian considerations. Whilst Malpas's statement that, 'the nature of the place determines what is possible within that place', (2011, 14), can be interpreted in a

practical sense, in the way humans utilise resources and affect the landscape, Malpas suggests that human relations with the landscape are perhaps as much to do with the ways in which the landscape affects us.

Christopher Tilley has written widely on the ways in which features of the natural landscape may have affected and influenced prehistoric people in the Britain Isles (1994, 1996, 2004). Tilley notes that 'a fundamental part of the daily experience in non-industrial societies is the physical and biological experience of the landscape – earth, water, stone, high places and low places, the wind, rain, sun, stars and sky', (2004, 26). It is through experiencing these different elements by being active within the landscape that prehistoric people made sense of the world they inhabited. The distinct nature of different topographic features meant that different locales could be imbued with different meanings and cultural significance. For instance, whilst rivers can play an important structuring role in the landscape from a practical perspective – defining route-ways or boundaries, during prehistory they also appear to have played an important structuring role from a symbolic and cosmological perspective. In his study of prehistoric monument construction on Bodmin Moor, Tilley argues that watery features such as streams and marshes were important in demarcating scared space in the landscape (1996, 169). However, whilst the sacred area is defined by natural boundaries, the streams themselves are not physically impenetrable barriers, but might instead represent liminal boundaries between scared and secular areas. The belief that wet places were perceived as cosmological boundaries, linking different worlds, is a common theme in discussions of Bronze Age metalwork deposition (Bradley 2000, Fontijn 2002).

This section had outlined some of the fundamental ways in which topography and environment could influence Bronze Age life. It is worth reiterating that the potential to explore the significance

of the topographic setting of Bronze Age metalwork deposits is possible, because the fundamental aspects of topography have changed little in the past 4000 years. The qualities that certain characteristics of the physical landscapes afford us today, may have been just as true in the past. For example, the natural routeway through the north-west uplands of Northumberland that appears to have been marked by a series of prehistoric rock art sites, was in part used by the Romans for the Devil's Causeway, an important road linking Hadrian's Wall and Berwick. The modern A697 runs parallel to the course of the rock art sites along the fell sandstone uplands, although the road keeps to the lower ground along the edge of the valley floors.

4.3 Nested scales of analysis

The use of a different geographic scales of analysis is central to addressing the principle aim of the research – examining the role metalwork deposition played in defining and structuring places and landscapes in people's cultural geographies. To do this it is necessary to consider how deposition may have been linked with a range of scales of movement associated with different activities and land use practices. One way to do this is by looking for patterns in depositional practices over a wide area and at a range of scales.

Whilst the research will address specific questions particular to each scale of analysis, it is essential to work back and forth between the scales to achieve a thorough understanding of depositional practices. For example, analysis of broad spatial distributions might highlight a concentration of a specific artefact type in a particular region or broad topographic zone, perhaps suggesting a localised depositional phenomenon. However, more detailed topographic analysis might reveal that across the entire study area the find-spots of this artefact share similar characteristics suggesting that more widespread conventions governed the practice of deposition.

Therefore, whilst a particular depositional convention might be widespread, more localised factors might have led to the prevalence of the practice in a certain area. Conversely, a particular artefact type may be widely distributed, but the specific character of the depositional circumstances for that artefact type may show local variation.

For example, in two separate areas of Northumberland, the river valleys of the sandstone uplands of central and northern Northumberland and the lower Tyne valley, Late Bronze Age swords were deposited in two distinct ways. In the former, swords were deposited on the valley sides, whilst in the Tyne valley the same types of sword were deposited in the river Tyne itself. These contrasting forms of deposition in two areas 45km apart can be observed through analysis at a broad regional scale. However, whilst this scale of analysis can identify spatial and general topographic trends, an interpretation of depositional practices based solely on this scale would fail to acknowledge the varied nature of depositional locations within the central and northern river valleys. Within this area, swords have been recovered from a variety of locations – under a large stone on the side of a prominent hill, from a small stream, from the slopes of a prominent hill overlooking the entrance to an upland valley, from within a grassy knoll above a floodplain, at the base of a prominent spur and from either side of a prominent spur overlooking the southern entrance to the Millfield Plain where the river Till turns through 90 degrees from a northerly to westerly course.

4.3.1 The Formation Process

Before attempting to identify patterns in the metalwork record it is first necessary to acknowledge that there is a distinction between the reality of Bronze Age metalwork depositional practices and the patterns of metalwork retrieval that have created and continue to mould the metalwork record as new finds come to light. The picture we have of depositional activity today is one that has

been shaped by a large range of environmental and anthropogenic factors over the past 2,700 years (Table 5.1). These factors have created biases in the way bronze metalwork has been retrieved and recorded, and therefore it cannot be taken for granted that the archaeological record reflects a truly representative sample of Bronze Age depositional activity. Whilst we cannot realistically hope to reconstruct a comprehensive picture of the full extent of metalwork deposition during the Bronze Age, it is possible to identify potential biases within the record. This process is an important first step in the study, as it is crucial to try to establish whether observed depositional patterns are real or merely a product of biases in the formation process.

4.3.2i River catchment characterisation through GIS analysis

Systematic analysis of the topographic setting of metalwork deposits is complicated by the unique nature of individual find-spot locations. Whilst it is easy to provide descriptions of find-spot locales, the sheer variability of potential topographic contexts makes it hard to analyse and communicate the precise nature of depositional trends in a rigorous, concise and clear manner. For example, based on a sample of 100 hoards, Yates and Bradley suggest that there is a strong association between the location of Middle and Late Bronze Age metalwork deposits and fresh watercourses and sources in the South-East of England (2010b, 66). However, whilst the association between Bronze Age metalwork and water is a well-documented one, it would be wrong to automatically assume that there is a significant relationship between the two based on intuition alone. Although the evidence provided by Yates and Bradley forms a convincing argument, it is not impossible that the observed trends would be replicated had the same analysis been carried out on 100 randomly generated points within the same area.

In order to quantify depositional trends and patterns in a thorough manner it is necessary to condense and translate the infinitely variable nature of find-spot locations into a more simplistic, standardised classification system. Whilst such a fully integrated statistical approach that accounts for every topographic variable is beyond the scope of this research, a methodology that focuses on a few key topographic features is achievable. The potential significance of water and watercourses as a key structuring element of the prehistoric landscape has been discussed earlier in this chapter. Watery contexts were clearly a favoured destination for metalwork deposits, whilst the close association between water and metalwork find-spots appears to extend to certain terrestrial deposits too (Yates & Bradley 2010b). Analysis at scale two therefore examines the relationship between the find-spots of a number of the most prevalent deposit types (single axes/spearheads/side-arms and hoards containing side-arms) and a range of different types of watercourse within the river catchments where the find-spots are located. The strength of this approach is that in addition to examining the relationship between metalwork and watercourses, it indirectly allows us to explore the siting of different metalwork deposit types within a wider topographic setting as defined by the river catchment area.

The approach addresses Yates and Bradley's assertion that there is scope to examine the contents of deposits in greater detail as, 'it seems possible that the selection of particular items for inclusion in these hoards was influenced by their locations in the prehistoric landscape', (2010b, 66). If the find-spots of different deposit types have quite distinct associations with particular types of watercourse, either within an individual river catchment system or on a reoccurring basis across a wider area, it adds weight to the argument that different topographic and environmental features may have been influential in determining the location of different types of deposit. Given that many of the significant associations that metalwork find-spots are believed to have with different topographic features are based purely on anecdotal evidence it would be

desirable to adopt an approach which utilises statistical analysis to determine whether observed associations between metalwork deposits and topographic features, in this case different sizes of watercourse, reflect more than just chance occurrences. One approach that it suitable for analysing spatial relationships between archaeological datasets and different topographic and environment features is a Monte Carlo Simulation.

Monte Carlo Simulation

A Monte Carlo Simulation is simple statistical technique that can be used with archaeological datasets to demonstrate if significant relationships exist between topographic and environmental features and the location of archaeological sites or finds (Vanacker et al 2001). The technique works by comparing the relationship between an archaeological dataset and a topographic or environmental variable, with those of a simulated population within the same area. The simulated population works on the basis that 'a random sample of individuals from a population will show some correspondence to the population parameters, and thus the latter can be estimated from the sample' (Conolly & Lake 2006, 161). As a single random sample is not necessarily representative of the background population within a defined area, a number of simulated samples are required to produce a more accurate picture of the population parameters. If the observed relationship between a particular archaeological dataset and a topographic variable is consistent with that of the simulated population, it suggests that there is no significant relationship between the archaeological dataset and the topographic variable. However, if the observed values for the archaeological sample are at the margins of those for the simulated population, it is more likely that the siting of the archaeological dataset in relation to the topographic variable is significant. The Monte Carlo technique therefore makes it possible to provide supporting evidence for or against observed depositional patterns based on anecdotal evidence.

A robust Monte Carlo Simulation requires a large sample population, as a more representative and stable picture of the background population emerges as the number of simulations increases. Connolly and Lake suggest 1,000 simulations of 1,000 random points, 1,000,000 samples in total, as a common starting point, although they stress that this can be reduced if the number of samples exceeds the total population (2006, 161). When used to study archaeological datasets, the total number of samples employed has often been well below this level. In studying the relationship between Mesolithic sites and a number of topographic and environmental variables in Northeast Belgium, Vanacker et el (2001) base their conclusions on 100 simulations of eight random points, a total of 800 samples. Lake and Woodman's (2000) view shed analysis of Mesolithic sites on Islay utilises 100 samples from 30 locations, a total of 3,000 samples. The application of GIS with the datasets used in this study allows for significant automation of the process which should facilitate the use of a large number of simulations. However, the theoretical underpinning of the river catchment as the basic unit of study imposes certain limitations. The automated process measures the distance to the nearest watercourse ignoring catchment boundaries. As the measurements need to be to the nearest watercourse within the catchment area, maintaining the integrity of this approach required that all samples to be manually checked, and where necessary corrected. As a result of this constraint, the analysis is based on just 20 simulations of 50 random points, 1,000 samples in total. As it is not clear if this sampling method has produced a population sufficiently representative and robust enough for statistical analysis, an approach that examines general trends between the archaeological dataset and the simulated population is preferred.

Whilst it has not been possible to undertake a full Monte Carlo Simulation, key aspects of the technique have been utilised to help characterise particular aspects of the topographic setting of metalwork find-spots in a more thorough manner than has previously been achieved. The analysis is based on 20 simulations of 50 random points within the principal catchments across

the study area. By measuring the distance from the simulated points to the nearest watercourse of varying size, the basic attributes of the combined river catchments for north-east England are characterised. Similar measurements were taken for a sample of well provenanced metalwork find-spots and averages of the observed values were compared with the median values for the simulated population. These results have been plotted on a series of graphs (Figs 6.1-9). If the distribution of a particular deposit type displays significant divergence from the median value for the simulated population, it raises the possibility that particular zones within river catchments may have been favoured or even avoided as suitable depositional locales. It is important to make the point that although the position of a metalwork deposits distribution curve in relation to the simulated population may also hint at the existence of a significant association between that deposit type and a particular type of watercourse, it does not necessarily follow that those watercourses were a primary factor in the creation of the observed pattern (Attwell and Fletcher 1987). Many other variables, some of which may be specific to particular landscape zones where different sized watercourses are located might also have been influential.

Critique of datasets and method

The morphology of watercourses varies greatly and it would be easy for the analysis to become overly complicated and unwieldy by incorporating a large number of hydrological variables. As a result the approximate distance between the metalwork find-spots and simulated random points, and the following four categories of watercourse were measured and recorded:

- Nearest principal watercourse – the main river in each catchment
- Nearest watercourse over 25km in length
- Nearest watercourse over 10km in length
- Nearest watercourse

The analysis utilises hydrology data from the Environmental Agency with all measurements carried out automatically in ArcGIS. The distance to the nearest relevant watercourse within the river catchment where each find-spot is located was measured in a straight line from the find-spot to the closest point on the watercourse. The integrity of the river catchment as the primary unit of study is maintained throughout the analysis with all measurements taken to the nearest watercourse in the catchment within which the find-spot is located.

By using watercourse length as a general proxy for size, the methodology does not factor in the changing character of rivers and streams, and the valleys within which they are situated, along their course. A find-spot might be located 200m from a principal river, but if this is towards the source of the watercourse then there may be many other similar sized watercourses in the near vicinity. As such it may be a less prominent individual feature of the landscape in the upper section of the catchment in comparison to the lower section.

Statistical spatial analysis ideally requires the locations of the archaeological dataset to be accurately sited and should be undertaken in areas that are well surveyed, with the aim of ensuring that most sites are represented. Whilst such an objective might be achievable with certain types of prehistoric archaeology from north-east England – features such as in situ rock art sites are well recorded and firmly fixed in the landscape, the metalwork record is not such an obvious candidate. The majority of the deposits included in the analysis are singe finds from unsecure contexts, with many being recovered from the plough zone horizon, and thus most find-spots will not truly reflect the precise point of deposition. In addition to this, the location of many of the find-spots are only recorded to a 100m^2 area.

The issue of spatial accuracy is one that also extends to the topographic or environmental variables that are used in the study. In order to study spatial relationships, it is important that the associations that exist between metalwork find-spots and the modern landscape, are the same as when the metalwork was deposited. The principal watercourses and larger tributaries will not have migrated substantially from their Bronze Age courses. The greatest uncertainty surrounds smaller watercourses in low lying areas that would have been wet land zones prior to land improvement. Whilst the Environmental Agency has mapped minor overland water bodies to a relatively comprehensive level, a quick comparison of these watercourses against OS mapping at 1:25,000 revealed that many of the smallest watercourses are not included in the Environmental Agency data, including many drainage ditches. Whilst some man made watercourses may be incorporated in the data, the criteria employed by the Environment Agency goes some way to ensuring that the more substantial minor tributaries selected for inclusion in the data, are likely to have been those that were present in the Bronze Age landscape too.

As it is unfeasible to ground proof topographic associations within the sample population, it is necessary to acknowledge the limitations of both the archaeological and environmental datasets, and apply a methodology that mitigates against them. By aiming to identify broad patterns across north-east England as opposed to the characteristics of individual river catchments or specific topographic zones, a large, and potentially representative sample of metalwork deposits can be studied. Furthermore, the methodology does not try to impose unrealistic levels of precision. Whilst exact distances were measured in GIS, these were translated into a number of distance ranges to the watercourses - <250m, <500m, <1000m, <2000m and <4000m. This approach mitigates against some of the inaccuracies that may exist in relation to the locations of specific watercourses and metalwork find-spots, whilst still affording the opportunity to examine spatial relationships.

Contextualising find-spot location within the catchment area

The measurement of proximity to watercourse can hint at variations between the preferred locations of different types of deposit within a generic river catchment area, but such interpretations are based on assumptions about the distribution of sampled finds and the characteristics of the river catchments that are overly simplistic. By including numerous catchments in the study, the Monte Carlo Simulation masks the topographic characteristics specific to individual river catchments. Drainage basins have different profiles and cross sections in their upper, piedmont and lower sections, and the characteristics of these vary between catchments. If a certain type of deposit is predominantly found in upland zones or is distributed within a small number of catchments that share unique characteristics, this could influence the nature of the spatial association the find-spots of these deposits have with certain types of watercourse. For instance, deposits spread across a narrow upland valley are bound to display a closer association with the principal river, than deposits spread across a wide lowland valley. Comparisons of the datasets based solely on proximity to the principal watercourse could result in incorrect inferences about the zonation of deposits across the catchment areas.

To address this issue, the second part of the analysis seeks to contextualise the position of each find-spot within the principal river catchment in which they are located. To achieve this aim, an additional measurement to the nearest principal watershed was taken, and the location of the find-spot within the catchment was calculated based on its position relative to both the principal watercourse and nearest principal watershed. These results can be used in conjunction with the Monte Carlo Simulation to support or refute evidence for the presence of relationships between metalwork deposits and watercourses, in addition to inferences about the zonation of deposits across the catchment area.

4.3.2ii River catchment depositional histories

This section will examine depositional patterns based on the river catchment as the primary unit of study. The analysis will attempt to characterise the nature of metalwork deposits within the principal river catchments by considering the composition of the metalwork record for individual river catchments.

At a geographic scale recovery patterns can confidently be interpreted as reflecting real Bronze Age depositional trends if biases in the formation process can be ruled out as a major contributing factor in the creation of the patterns. One way to achieve this is by identifying discrete distributions of metalwork deposits that stand out for their shared typological and/or temporal nature as well as the geographic and/or topographic characteristics of their find-spots. From a topographic perspective, associations between different deposit types and particular natural landscape features can be examined.

All metalwork deposits from within each of the major river catchment systems within the study area were analysed and depositional trends within individual river catchments, between different river catchments and amongst adjoining catchment systems that form larger distinct geographic or topographic zones will been identified.

Distribution maps were created in ArcGIS to examine the spatial distributions of different deposit types in relation to both each other and a range of topographic and geological zones. Chronological distinctions are based on the division of the Bronze Age into three periods, the Chalcolithic and Early Bronze Age (2500-1500BC), Middle Bronze Age (1500-1140BC) and Late

Bronze Age (1140-800BC), to examine changing patterns of depositional activity over time. The GIS data was used to calculate basic statistics to show the proportion of different deposit types from the various river catchments and topographic zones.

4.3.3 Case Study: martial metalwork deposition in north-west Northumberland

Building on the research carried out at scales one and two, this final stage of analysis will seek to establish a more detailed understanding of the siting of metalwork find-spots within their local topographies. In order to obtain a more nuanced picture of depositional narratives within individual catchments and wider topographic zones it is necessary to understand the specific nature of individual find-spots, and to consider how these locales relate to the wider landscape. At a fundamental level, it is hard to obtain an accurate and realistic picture and feel for the topography of a particular location from map representations alone. Whilst OS maps provide sufficient detail for broad landscape characterisation, subtle topographic variations which may appear obvious in the field are often not represented. A detailed understanding can only be gained by establishing an intimate knowledge of the general find-spot locales, which is best achieved by visiting sites first hand. Such a methodology has been applied in a number of British metalwork studies (Dunkin 2001; Cowie 2004; Yates and Bradley 2010b; Mullin 2012b).

Field visits were made to all accessible find-spots within a specified catchment area. Although a substantial amount of information can be gleaned about the topographic setting of find-spots from two-dimensional maps, it is necessary to experience the locations first-hand in order to gain a comprehensive understanding of siting within the local topography. In particular the field visits might reveal subtle topographical variations that are not apparent on maps or aerial photographs.

4.4 Introducing the dataset

One of the principle factors that influences the approaches that can be utilised when researching metalwork deposition from a landscape perspective is the level of contextual information available for metalwork find-spots. Whilst antiquarian interest in bronze metalwork during the nineteenth-century, coupled with a steady flow of new discoveries throughout the twentieth-century, has ensured a wealth of material to study, more often than not, information relating to where objects were found has lacked detail. Museum catalogues commonly attribute finds to individual villages, towns or parishes, a level of detail sufficient for broad distributional analysis of metalwork deposits, but wholly insufficient for more fine-grained landscape approaches. An object provenanced to an individual village or township may conceivably have been placed in one of many contrasting topographic and geological zones that lie within that settlements catchment area. As the resolution of a find-spots provenance decreases further, to parish level for instance, the potential the find-spot offers to a landscape study also diminishes, as a larger area provides even greater topographic variability.

In England and Wales this situation is starting to change. The establishment of the Portable Antiquities Scheme in 1997 has played a crucial role in facilitating new approaches to metalwork studies, as fresh discoveries are increasingly recorded in finer detail. It is largely a result of this new evidence, that studies such as those by Yates and Bradley (2010b) have been able to characterise the locations of metalwork deposits at a more detailed topographic scale, revealing more nuanced rules that structured depositional practices in terrestrial locations. For the purpose of this research a comprehensive catalogue of metalwork deposits recovered from the study area was compiled from a variety of sources, primarily, published typological studies of individual objects - axes (Schmidt and Burgess 1981), spearheads (Davis 2012), swords (Burgess and Colquhoun 1988), dirks and rapiers (Burgess and Gerloff 1981), records held by the county HERs

(Historic Environment Record), Museum records and the Portable Antiquities Scheme database. In addition to these key sources, museum catalogues and articles devoted to the study of specific individual finds and hoards, which regularly appear in regional academic journals, were also consulted. The British tradition for typological metalwork studies has provided a wealth of research to draw upon and thus much of the information concerning the typology and condition of the metalwork deposits within the study area was collated from existing publications.

Of the main sources consulted, the Portable Antiquities Scheme (PAS hereafter), is particularly worthy of further discussion. Of the 926 find-spots in the study area, 242 (26%) are from the PAS database. The database predominantly comprises metalwork discovered over the past 15 years by metal detectorists, who have been encouraged to record find-spot locations to the highest levels of precision they can achieve. In addition to being generally well provenanced in comparison with historic recording standards, the finds are examined and recorded by finds liaison officers, who are small-finds experts, and therefore detailed descriptions and colour photographs exist for many of the objects, which are accessible online.

Unfortunately it has not been possible to examine PAS metalwork finds in person, a time consuming task given the volume of finds and the fact that majority are in the personal possession of the original finders. Whilst the online PAS database it an extremely valuable resource, a significant proportion of the finds from north-east England are misidentified, an understandable situation given, for example, the subtle nuances of Burgess and Schmidt's many axe typologies, and therefore additional work was required to determine more detailed typologies. I have attempted a more detailed categorisation of PAS finds for which only a general identification is provided by the find liaison officers. This task which was not always straightforward from the

description and images available online and thus a confidence rating is provided for the identification of each find in the appendix.

4.4.1 Criteria for inclusion

As previously noted, the level of detail recorded for metalwork finds can vary greatly, and thus a set of minimum requirements was applied to each find, to asses if they could be included in the study. These basic criteria are outlined in Table 4.1.

Scale of analysis	Location criteria	Object type
One Formation Process (Chapter Five)	Find-spots provenanced to at least parish level.	All Bronze Age metalwork finds
Two River Catchment Characterisation (Chapters Six and Seven)	Monte Carlo Simulation Find-spots that are accurate to at least a six figure NGR (i.e. accurate to a 100m square area). Finds whose locations can be pin-pointed to a clearly defined area. Depositional Histories Find-spots provenanced to at least parish level.	Axes Spearheads Side-arms
Three Case Study (Chapter Eight)	Find-spots that are accurate to at least a six figure NGR (i.e. accurate to a 100m square area). Finds whose locations can be pin-pointed to a clearly defined area.	Deposits containing Ewart Park swords

Table 4.1 – Minimum criteria for the inclusion of metalwork finds at each scale of analysis.

To enable the examination of depositional trends between different object and hoard types, only finds that have been confidently identified as belonging to one of a broad group of major artefact types have been included, namely, axes, spearheads, side-arms, shields, other tools and ornaments. All metalwork deposits are included in the analysis at scale one (chapter five), which considers the influence of various formation processes in shaping the metalwork record, but only the three main classes of artefact – axes, spearheads and side-arms - are considered in detail at scale two, when the character of depositional activity is examined based on the river catchment

as an important topographic unit (chapters six and seven). Tools other than axes such as chisels, gouges, awls and hammers are excluded from the analysis for a number of reasons. The total number of tool finds is small in comparison to axes and their distributions display a clear preference for the southern half of the study area. The comparatively small sample and restricted distribution, both of which appear likely to be the product of biases in the formation process for reasons that will be discussed at length in the following chapter, limit the potential of the dataset for the types of analysis undertaken at scale two.

In order to consider temporal and spatial patterns in depositional activity, it is important that the typologies of artefacts within the three main groups - axe, spearhead and side-arm - are sufficiently detailed to position single finds and hoards within the chronology of metalworking assemblages illustrated in Figure 4.1. Whilst it has not been possible to accurately identify every object, most are attributed a specific type or group based on the following typological frameworks - daggers (Gerloff 1975), axes (Schmidt & Burgess 1981), dirks and rapiers (Burgess & Gerloff 1981), swords (Colquhoun & Burgess 1988) and spearheads (Davis 2012). A substantial number of finds have been excluded from the study due to uncertainty over their provenance or identification, a full list of which is provided in Appendix 1.2.

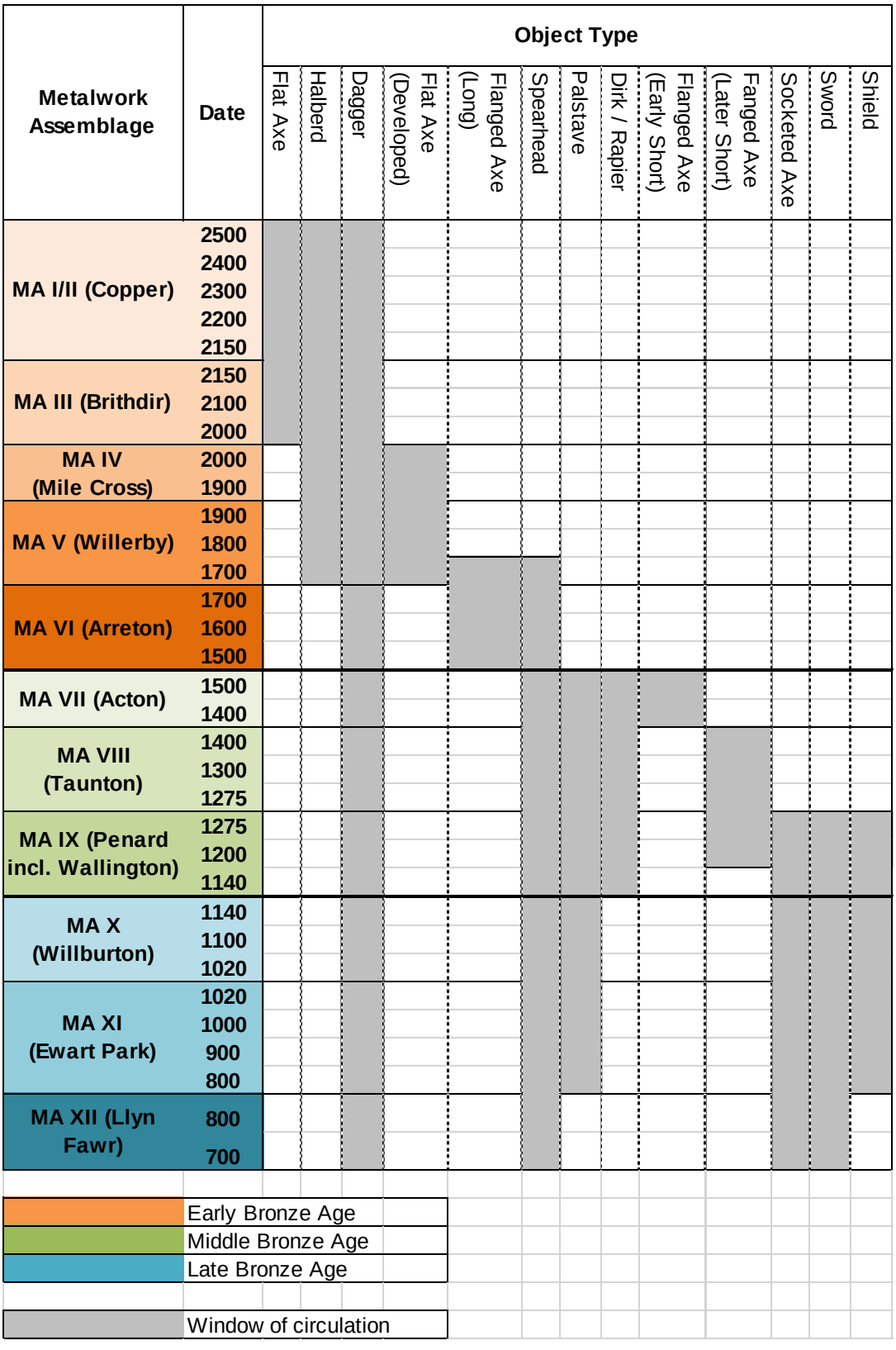


Fig 4.1 – Metalworking assemblages and key artefact types in circulation during the British Bronze Age.

It is not my intention to include an extended discussion on how the chronologies for these different groups of object are derived. The broad timeline is based on an extensive catalogue of research undertaken by numerous Bronze Age scholars, incorporating both meticulous typological studies to create relative chronologies, exemplified by the Prähistoriche Bronzefunde series, and absolute dating from C14 analysis. The central reference point for the study is Needham's metalworking assemblage chronology (1996), which was refined by the Oxford Radiocarbon Accelerator Programme, providing an independent dating for British Bronze Age metalwork (Needham et al 1997).

4.4.2 The Wallington debate

It is important to note that carbon dating does not provide a panacea for the dating of individual metalwork deposits, and even the detail of metalwork chronologies remains a hotly debated topic. This is particularly the case for the distinct nature of the metalwork from northern England, with two heavyweights in the field of bronze metalwork studies, Colin Burgess and Stuart Needham, disagreeing on the dating of the Wallington metalwork tradition, the name given by Burgess to deposits consisting of a suite of artefacts that are found almost exclusively in northern England. Whilst Burgess aligns Wallington metalwork with the Wilburton phase, Needham positions it alongside the preceding Penard tradition (Burgess 1968, 1995 & 2012; Needham 1990, 1997). Unfortunately, Wallington metalwork was not included in the Oxford Radiocarbon Accelerator Programme which drew heavily on finds from southern Britain, and as such, these two different narratives are based solely on contrasting interpretations of the relative chronologies of key artefact types. Given that Wallington metalwork is so infrequently associated with either Penard or Wilburton material in hoards, this task is far from straightforward.

Burgess (2012, 149) acknowledges the presence of artefact types with Penard origins within the Wallington tradition, such as group IV rapiers, straight-based basel-looped spearheads and transitional palstaves, but crucially, he cannot reconcile the relatively large numbers of advanced socketed axes that are a key aspect of the Wallington tradition, as having anything to do with their more primitive Penard counterparts. In fact, Burgess states that the socketed axes with multiple mouth-mouldings that are typical of the Wallington traditional are more advanced than the majority of axes associated with the Wilburton phase. Hoards containing both Wallington and Wilburton metalwork types are pretty scarce in the metalwork record, but Burgess identifies an overlap between Wallington and Wilburton by the presence of late palstaves alongside axes with multiple mouth mouldings in a number of deposits from north-east England, at Shelf, Roundhay and Skidby West.

Responding to Burgess, Needham (1990, 265) does not focus on the perceived 'advanced' nature of the socketed axes, but instead notes that outside of north-east England, axes with multiple mouth-mouldings occur in both Penard and Willburton associations, thus providing little assistance with relative dating. Needham is also keen to downplay the significance of the late Palstaves that appear in two of the Wallington hoards, noting that their resemblance to the associated transitional palstaves of types Shelf and Roundhay, suggest that they appeared early on in the late palstave sequence. These two late palstaves are notable for the fact that they are unfinished, a feature common to most type Silesden palstaves, implying that they may have had a relatively short life cycle from production to deposition. If these hoards were curated over a short period of time as suggested by Needham (1990, 265), it seems likely that they date from the early second half of the twelfth century BC – the late Penard and Penard-Wilburton transition, as opposed to the second half the eleventh-century BC as opined by Schmidt and Burgess (1981, 162).

The number of hoards containing Wallington metalwork is relatively small, and only one find from north-east England, a hoard of mixed artefacts from Skidy West in East Yorkshire, provides a direct association between archetypal Wallington and Wilburton objects (Burgess 2012). In finding a home for Wallington metalwork, there is no reason why the reality perhaps lies somewhere between the two interpretations, with the production, circulation and deposition of Wallington metalwork straddling both phases. Wallington metalworking was a distinctly northern tradition that had little in common with Wilburton metalwork, which is found predominantly in southern England. It may be tempting to place Wallington alongside Wilburton as it fills what would otherwise be a temporal void in the metalwork record for northern England resulting from the dearth of Wilburton finds. However, broad distribution patterns alone cannot be used to argue for the contemporaneity of Wallington and Wilburton. It is highly probable that rates of depositional activity were not uniform, but would have fluctuated between different regions and over time depending on the combination of a complex series of factors (Needham 2001, 282-7). The north of England is not unique for its scarcity of Wilburton metalwork. Needham (1990, 265) notes how the find-spot distributions of metalwork belonging to this phase cluster in a number of regional pockets avoiding large areas of the country. Considered in this wider context, it seems possible that a range of factors may have asserted a supra-regional influence on depositional activity during the second half of the twelfth-century BC and across much of eleventh-century BC, which manifested itself in reduced levels of permanent deposition across much of the country. The large void created in the metalwork record for north-east England when placing Wallington alongside Penard, is therefore not necessarily problematic.

The available evidence does not categorically rule out the possibility that Wallington and Wilburton were largely contemporaneous, but, neither does it support it. For the purpose of this study, Wallington metalwork has been placed in the Penard phase, the last period of the Middle Bronze

Age in the tripartite system. The origins of most of the principal object types are firmly rooted within the Penard metalworking tradition, and the current paucity of Wallington associations with archetypal Wilburton metalwork is insufficient to suggest that there was a significant degree of overlap between the two. The argument Burgess provides for the presence of Middle Bronze Age metalwork types in Wallington hoards is easily challenged. He suggests that 'it is entirely possible that these archaic weapons seen in Wallington contexts were parade heirlooms from an earlier age, and not products of Wallington craftsmen' (2012, 151). The flaw with this argument is that the basic principle can equally work in the opposite direction, with the novel socketed axes with multiple mouth-mouldings being deposited with later Wilburton material. This could be the case with the Wilburton hoards from Skidby West, Nettleham and Guilsfield.

4.4.3 Interpretive approach to metalwork types and hoards

In its approach to the metalwork, the study does not suppose an *a priori* interpretation of the use-life of different artefacts based solely on their general typology. A spearhead is an object with inherent martial connotations, but not all spearheads were necessarily designed to be used in conflict. Spearheads can be multi-functional, fulfilling roles in a number of fields such as hunting, martial conflict or purely symbolic display. There is a great degree of variety in Bronze Age spearhead design, and differences in shape and size would have dictated the function that individual spearheads were most suited too (Bruno 2012, 115).

Such considerations are particularly pertinent to the interpretations of hoards, where multiple, and often different metalwork types with contrasting use-lives have been curated together for deposition in a single place. Any attempt to interpret the social processes behind the curation and deposition of hoards must acknowledge the nature of all associated artefacts, both metal and non-metal. Whilst certain metalwork deposits contain martial artefacts, for instance, the

Wallington hoard from Northumberland includes fragments of three rapier blades, the overall composition of the hoard – 15 axes, 7 spearheads, 3 to 4 rapier/dirk blades and 3 armlets, is not obviously martial in nature. In comparison, the contemporary Shildon Lough hoard which contains a complete rapier and the blade of a large protected-opening spearhead, is more readily interpreted as a personal hoard, the martial belongings of a single individual (Burgess 1968, 28).

Barret and Needham's important observation that different deposits can appear identical in the archaeological record even though they are the product of quite different social processes has already been mentioned (1988, 138). Barret and Needham focus on the act of object fragmentation, but, the observation can equally be extended to the landscape setting of metalwork find-spots too. For example, a large hoard of mixed and fragmented objects found in a major valley linking different regions, could represent a deposit made by an itinerant metal smith. The Late Bronze Age mixed hoard from Gilmonby in County Durham which lies just to the east of the Stainmore Pass, an important east-west routeway, has been interpreted in this way (Coggins and Tylecote 1983).

However, whilst the makeup of the Gilmonby deposit is typical of a founder's hoard, it does not necessarily follow that this hoard was deposited by a metal smith. The diverse nature of the hoard could be explained by the local population accumulating these objects as they were brought through the area, possibly via the Stainmore Pass. A number of hoards discovered more recently in north-east England contain a similarly diverse range of socketed axes and it is entirely possible that these objects were collected and curated into the hoard because they differed from more familiar local axe types. The valley may have operated as a natural routeway, but as a significant topographical feature in the local landscape it may also have represented a central point, or

area of common ground, for numerous different groups from the surrounding landscape. The Gilmonby hoard contains bronze ingots, objects which are closely associated with metalworking, but it appears that these artefacts may have formed a discrete deposit, separate from the other objects.

Interpreting the social processes behind metalwork deposition directly from the archaeological record is fraught with difficulties. The narratives surrounding how and why particular collections of artefacts were curated prior to their deposition, or for the many artefacts that were deposited alone, are likely to have been very different. The factors which determined whether a certain landscape context was a suitable place for a metalwork deposit are an intrinsic aspect of these narratives. An itinerant smith would not have the same close attachment to a particular landscape as the groups whose lives revolved around these same locales on a daily basis, but adherence to cultural conventions could have led both to deposit metalwork of a similar nature in locations with similar characteristics. It is difficult to comprehend why any single deposit was selected and placed in a particular location and a definitive understanding of the varied social processes behind metalwork deposition may always remain elusive. However, a detailed understanding of the nature of the contents of metalwork deposits and the landscape context of their find-spots, along with an appreciation of similarities and differences with other finds from the local vicinity and further afield, provides the opportunity to draw informed interpretations about the role metalwork deposition played in marking places of importance in both the social and cosmological landscape. These issues can be explored by approaching the metalwork record with a range of questions in mind. Are deposits located in central places – on prominent hills or at the confluence of valleys, or are they in locations that could have operated as natural route ways or boundaries. Alternatively, do some deposits have the appearance of being tucked away in the landscape, in locations that may have held particular significance to local populations? What specific

topographic features are deposits associated with and what is the nature of the relationship? For instance, were deposits placed in, or near to, sources of water, and what different types of watery context are deposits associated with. The case study in chapter nine which focuses on Late Bronze Age deposits containing Ewart Park swords in north-west Northumberland examines such questions.

4.5 Object condition: examining fragmentation patterns

In chapter two I discussed how Fontijn approaches his study of Bronze Age metalwork from the perspective of the life histories of metalwork objects. Whilst a fully contextualised study of Bronze Age metalwork which examines all aspects of an objects life history from production, use-life, through to deposition in fine detail offers great potential, the practicalities of such an all-encompassing approach are beyond the scope of this research. However, as such methodologies can produce a considerably richer and more nuanced understanding of depositional behaviour, it is important to incorporate these elements into the study where possible. Whilst I have not carried out new primary research on the artefacts themselves, there is potential to draw on published research on the production and use-wear of objects within the study area in a piecemeal fashion. For example, Ben Roberts and Barbara Ottaway have explored the significance of socketed axes in eastern Yorkshire based on use-wear analysis (2003). Furthermore, a more general examination of the condition of different artefacts at the point of deposition can be applied to a large proportion of the dataset quite easily, simply by reference to photographs and illustrations.

From a practical perspective, object condition is much easier to assess than issues relating to the production and use of objects, which would require the direct application of a range of analytical

techniques to a large number of metalwork finds. In contrast, information relating to the nature of breaks and damage to objects can be gleaned relatively easily, either from research previously undertaken on finds from the study area, or by simply looking at an illustration, photograph or detailed description of an artefact. By collating information on the nature of fragmented and damaged artefacts it is possible to explore patterns of fragmentation amongst and between different artefact types. We might expect some artefacts to break through intensive use over time or because they have structural weaknesses, but re-occurring patterns of fragmentation and damage to a particular artefact type are more likely to reflect purposeful acts of destruction. Whilst post-depositional factors such as ploughing or corrosion are undoubtedly responsible for a degree of object fragmentation within the archaeological record, by their very nature, such processes are more likely to result in random patterns of fragmentation.

The contrasting condition of metalwork deposits is particularly relevant to a landscape approach as fragmentation patterns have been shown to have strong topographic and geographic dimensions. Some of the most distinctive trends have been noted amongst bladed side-arms. Yates and Bradley have shown that in the English Fenlands, deposits of complete swords and weapon hoards are primarily located within contrasting wet contexts, whilst fragments of these same artefacts, particularly swords, are more commonly found as single finds in terrestrial locations (2010a, 412-413). Becker has noted a similar pattern in Ireland, with an added dimension that swords in mixed hoards from dry-land contexts are predominantly represented by single fragments from individual swords (2012, 254).

In addition to the topographic contrast between wet and dry contexts, the distributions of complete and fragmented side-arms can also occupy distinct spatial or geographic zones. Bradley notes

how the core distributions of single Middle Bronze Age dirks and rapiers and Late Bronze Age swords in Britain, which are predominantly from riverine or other wet contexts, are effectively enclosed by the distributions of dry-land hoards which contain the same artefacts in a fragmented condition (1998, 125-126). It appears that there are particular topographic contexts and spatial or geographic zones where we might expect to find complete objects, and contrasting contexts and areas where we might find fragments of the same artefact types.

This part of my research will therefore aim to examine how metalwork deposits from north-east England relate to the key trends identified in other regions. Does the material fit in with depositional conventions identified elsewhere in Britain and further afield or is there evidence of more local, regionalised practices, and if so, what form do these take? Given that different artefact types appear to have been treated in the same way in many different regions, we might expect to observe a degree of continuity amongst the metalwork record for the study area. If so, it will be important to examine how these trends are articulated locally, within the distinct geography of north-east England.

Getting to grips with the metalwork record

'The distribution of bronze age metalwork is more useful as a guide to subsequent agricultural practices in East Anglia than it is as a guide to Bronze Age distributions'. (Pendleton 1992, 340)

5.1 Introduction

This conclusion drawn by Colin Pendleton following his comprehensive examination of Bronze Age metalwork distributions in East Anglia neatly encapsulates one of the main predicaments encountered when studying the distribution of Bronze Age metalwork deposits, namely, do our carefully plotted distribution maps reflect post Bronze Age land-use practices, or are we observing genuine Bronze Age depositional patterns? The implications of Pendleton's conclusion for this research are significant. Interpretations of depositional patterns as reliable representations of purposeful Bronze Age actions can only be attempted when we can be sure that the observed patterns are not unduly influenced by post-depositional processes. Pendleton argues that the biases in the metalwork record for East Anglia are such that many previous studies which have failed to fully acknowledge the limitations of the available evidence are of little value.

When Pendleton is quoted in metalwork studies, it is usually as an aside, to highlight the fact that practical and utilitarian interpretations for metalwork hoards and single finds remain remarkably resilient (Yates & Bradley 2010a, 408; Barber 2001, 162). This is slightly unfortunate as this headline grabbing conclusion overshadows a meticulous methodological approach designed to answer the most fundamental questions about the nature of biases in the metalwork record.

Pendleton's work is important for highlighting how a failure to consider such biases can result in interpretations of Bronze Age society that are potentially flawed from the outset.

Central to Pendleton's work is the observation that the metalwork record produced solely by metal detecting can display significant contrasts with that of metalwork discovered by other means. The observation that the metalwork record might be biased in certain ways was not a new one, for instance, Needham and Burgess (1980, 438-9) suggest that 'small, broken or not readily identifiable' artefacts might be substantially under-represented in the metalwork record, but Pendleton's study is the first to examine this issue in a systematic way. Working at a time before the conception of the Portable Antiquities Scheme, Pendleton compares the distributions of Bronze Age metal detecting finds, and their type and condition, with those of artefacts discovered by chance primarily during the nineteenth and twentieth centuries, concluding that 'substantial changes in the nature of the metalwork assemblages are likely to occur as a result of systematically recording metal detected finds' (1992, 343).

The changes that Pendleton refers to relate to two key areas, object type and condition (size) and the distribution of find-spots. Pendleton's analysis shows that amongst metal detector finds, smaller complete objects and fragments represent the greatest proportion of total finds, 'Only 35% of the listed metal detector finds are complete compared to 94% of the finds listed as found between 1940 and 1970' (Pendleton 1992, 242). This confirms the bias alluded to by Needham and Burgess (1980) that in the pre-detecting metalwork record there is a preference towards comparatively large and complete objects - such items being presumably easier to spot on the ground in comparison to smaller objects and fragments, and due to the preferential curation of predominantly fine objects into antiquarian and museum collections.

With regard to find-spot distributions, Pendleton notes that metal detecting find-spots are widely dispersed across East Anglia, including from numerous areas where few pre-detecting finds are recorded. This observation is important for Pendleton because existing studies may have over emphasised the significance of certain metalwork concentrations, especially along the Fen edge, where environmental conditions precluded agricultural activity, and thus the discovery of metalwork until the nineteenth century. Conversely, in areas that have been cultivated for extended periods of history, Pendleton assumes that many metalwork deposits will have been removed from the archaeological record without the discoveries being recorded. These contrasting rates of removal and preservation have created a false picture of the frequency of depositional activity across East Anglia.

If the metalwork record is flawed as a genuine reflection of Bronze Age depositional activity due to biases in the formation process, the interpretation of more nuanced depositional patterns that combine to create the bigger picture is inherently dogged by problems. Swords survived in wetland areas that were only subject to agricultural activity from the nineteenth century, but were removed from the wider cultivated landscape over the course of many centuries of agricultural work. Pendleton's interpretation is problematic though. Whilst deposits may be underrepresented in areas that have been subject to historic cultivation, it cannot automatically be assumed that swords were amongst the material that was removed. An alternative interpretation, is that this particular depositional pattern really does reflect the influence of genuine depositional conventions. Confirmation of this could be provided by metal detecting and the systematic recording of finds. Just as metal detecting can reveal potential biases in distribution patterns, it can equally play an important corroborative role by providing new evidence that strengthens existing patterns. Swords deposits appear to favour both major rivers but also terrestrial locations on the sides of the valleys of these rivers. Metal detecting has the potential to support the

interpretation of this pattern as reflecting genuine Bronze Age depositional conventions if new sword discoveries are made within this valley zone. This would be further strengthened should swords not be discovered across the wider landscape, especially from cultivated areas where sizeable hoards are found by metal detecting.

It must be noted that metal detecting is by no mean exempt from its own biases. Just as nineteenth-century agricultural improvement work led to the discovery of large concentrations of finds when land was being drained, there are also biases in the nature of detecting patterns across the landscape at various geographic scales. Other biases result from more cynical and illegal detecting activity. However, assuming that the observations Pendleton makes about the metalwork record for East Anglia are replicated across Britain, then the continued discovery of Bronze Age objects through metal detecting should result in both the greater representation of small and fragmented objects within the metalwork record, and, a geographic expansion in the distribution of find-spots. In some areas this may dilute the striking appearance of pre-detecting metalwork concentrations, whilst in other areas new concentrations of finds previously unknown to us may be revealed. Pendleton's work shows that it is productive to consider detector and non-detector finds separately, and to compare and contrast patterns within both groups of finds. As I will illustrate in the following discussion, the non-discriminative nature of metal detecting allied with the detailed recording of finds in the PAS database, has the potential to be an extremely useful tool in helping to assess the authenticity of depositional patterns.

Pendleton's research highlights why it is important that contextual studies of Bronze Age metalwork from a landscape perspective incorporate attempts to understand the possible biases that have shaped the metalwork record for a given area. In order to assess the extent to which

recovery patterns of Bronze Age metalwork reliably reflect prehistoric depositional practices it is therefore necessary to examine the ways in which the archaeological record has been shaped by post-depositional processes. Many of the issues faced when interpreting the recovery patterns of Bronze Age metalwork have been examined in detail by Pendleton (1992) and Fontijn (2002, 44-51) and are summarised in Table 5.1.

Post-Depositional Process	***Potential Influence on Archaeological Record***
Geological and Geochemical	Sedimentation and the formation of peat may increase the depth at which metalwork deposits are buried making it more difficult to identify and access depositional locations.
	Erosion may alter the original depositional context, for example, dynamic rivers may destroy original deposition locations and some river finds may have been originally deposited in dry-land locations.
	Whilst bronze can survive in both wet and dry conditions it can corrode under specific soil conditions. The nature of this process is little understood and thus the potential impact of corrosion on the archaeological record is impossible to assess.
Anthropogenic	Historic variations in the intensity and type of land use may influence regional distribution patterns by creating false concentrations of finds, and negatively, removing artefacts from the archaeological record or by restricting the potential for discovery in the first place. Such variations are closely linked to topography and geology.
Historic and Modern Research Factors	The increase in amateur metal-detecting has led to a rapid rise in discoveries of Bronze Age metalwork over the past 20 years. Due to variations in recording standards and a lack of a detailed understanding of metal detector practices across the study area this body of material has its own unique biases.

Table 5.1 – The potential influence of post-depositional processes on the archaeological record. Based on Pendleton (1993) and Fontijn (2002, 44-51).

All of the processes listed in Table 5.1 have influenced and will continue to exert an influence on the body of Bronze Age metalwork available to study. The picture that we have of Bronze Age depositional activity in north-east England today can be viewed as a snap-shot, reflecting the outcome of thousands of years of geological and anthropogenic filtering. The present situation in this evolving process is illustrated in figure 5.1, a map showing the location of all the metalwork find-spots included in the study.

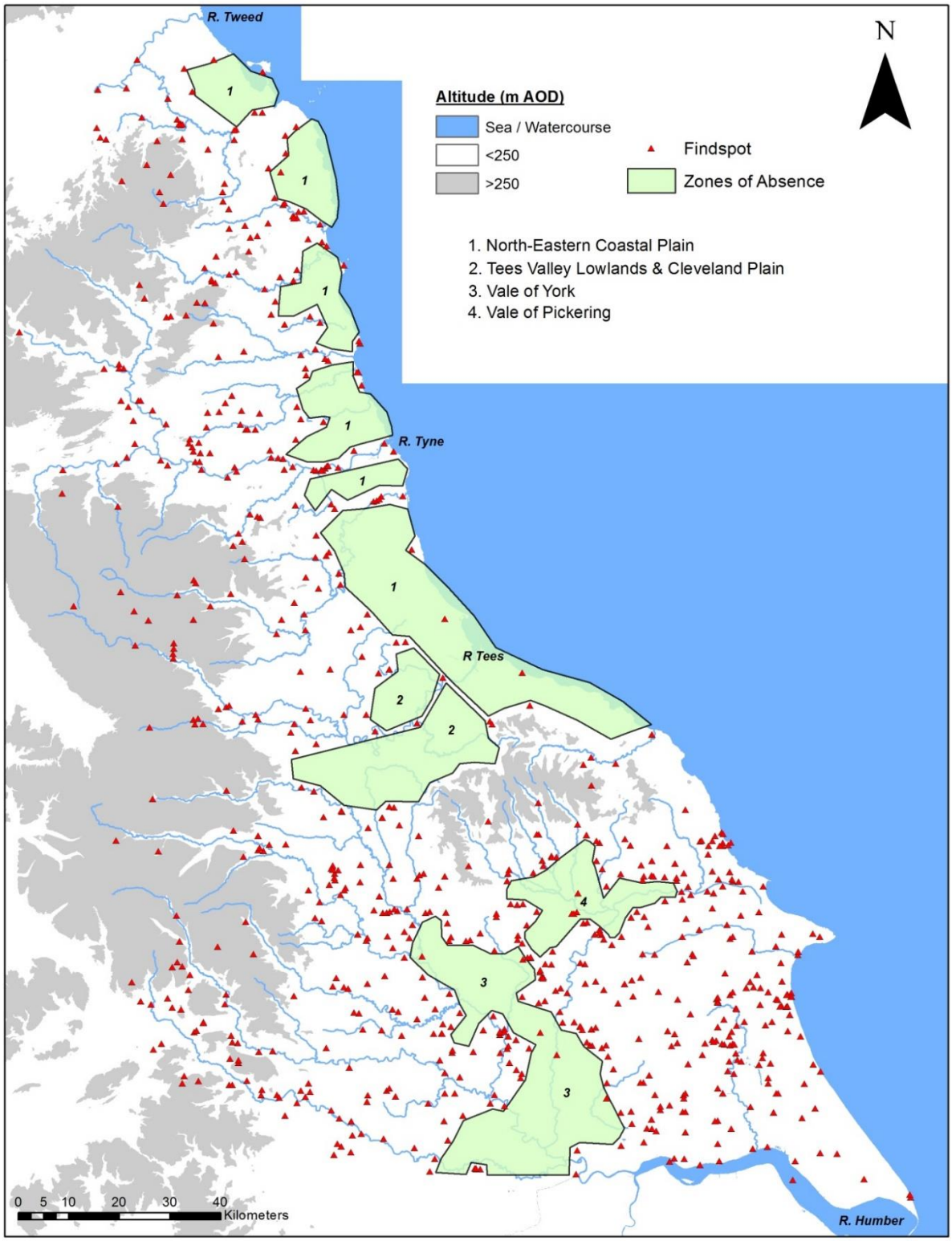


Figure 5.1 – Map showing the distribution of Bronze Age metalwork find-spots within the study area. Metalwork finds are largely absent from a number of distinctive topographic zones shaded in green. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Figure 5.1 shows that whilst metalwork find-spots are distributed widely across the full extent of north-east England, there are many small pockets of land where no finds are yet to be recorded. In addition to the numerous small blank areas, it is particularly striking that in a number of distinct geographic and topographic zones metalwork finds are all but absent from the record:

1. Northumberland and Durham Coastal Plain
2. Tees Valley Lowlands / Cleveland Plain / Northern Vale of Mowbray
3. The Vale of York and the Humberhead Levels
4. The Vale of Pickering
5. Land above 250m OD

Whilst it should be expected that research into metalwork deposition focuses on the places where metalwork has been found to only do so would be unwise. On the contrary, understanding the nature of zones of absence is central to this study as I am interested in the ways in which Bronze Age people interacted with the landscapes they inhabited. Whilst some of the absence zones identified might represent false lacunas – metalwork was deposited in these areas but has not made it into the metalwork record, others may reflect the fact that metalwork was simply not deposited in certain geographic and topographic zones. This may have been for a number of reasons. From a purely practical perspective, certain areas would have been less suitable for inhabitation than others and people may have rarely ventured into areas beyond the sphere of their daily lives. Whilst the practicalities of Bronze Age life may have imposed restrictions on patterns of inhabitation, it is also important to acknowledge the influence of cultural forces, in particular the role of selective deposition. If particular locations were culturally acceptable for the deposition of specific types of metalwork, it must follow that other locales were deemed less suitable, or even wholly unsuited for metalwork deposits. It is not necessarily the case that an

absence of metalwork equates to an absence of people. Any attempt to reconstruct Bronze Age landscape inhabitation must therefore acknowledge the potential contribution of these various factors.

5.2 The influence of metal detecting and PAS on the metalwork record

Before I discuss each of the absence zones in more detail, it is first necessary to discuss the important role metal detecting, and the systematic recording of small finds by PAS, is having on our understanding of metalwork distributions and assemblages[2]. Twenty years on from Pendleton's study, we are now in the advantageous position of being able to utilise resources such as the PAS database, and it is clear that Pendleton's claim holds much truth.

5.2.1 Metalwork distributions

In north-east England, a comparison of the distribution of Bronze Age metalwork finds recorded in the PAS database against non-metal detector finds from the last two centuries, illustrated in Figure 5.2, shows that whilst finds recorded by PAS often reinforce established distribution patterns, they have also expanded Bronze Age metalwork distributions into new areas where finds were previously unknown. It appears that metal detecting is slowly but surely evening out find-spot distributions across the study area, helping to address some of the biases present in the pre-detecting metalwork record. For example, the relatively isolated concentrations of pre-detecting finds in the south-eastern part of the Vale of York along the Wold edge, now forms part of a wider distribution of metalwork finds along the eastern vale margin.

[2] Metal detecting is a contentious activity. The following discussion aims solely to outline how well recorded metal detected finds can positively contribute to our understanding of Bronze Age society in Britain.

Whilst the benefits of being able to work with a larger, more thoroughly and systematically recorded dataset are obvious, at the same time, the role metal detecting has played in expanding find-spot distributions reminds us that in regards to Bronze Age metalwork, the archaeological record is far from static. The wealth of Bronze Age metalwork that has been recovered by metal detectorists since the PAS scheme started in 1997 hints at the potentially large numbers of artefacts that remain in the ground. The formation process of the Bronze Age metalwork record for the study area is a dynamic and rapidly evolving one, and we must therefore be conscious that in another two decades time, metalwork find-spots may spread further into some of the areas which appear blank on the distribution map at this current point in time.

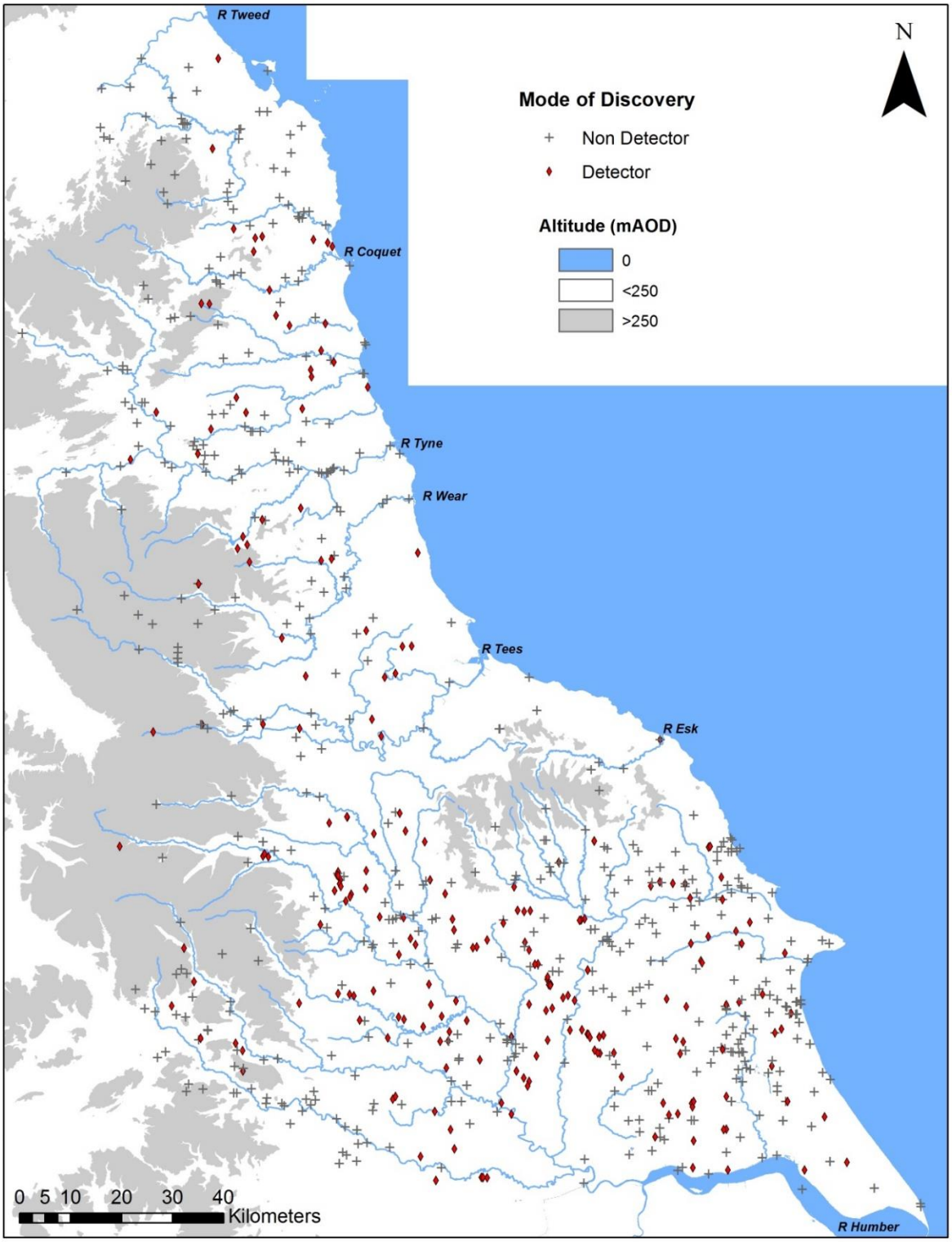


Figure 5.2 – Map showing the distributions of metal detector and non-detector finds. The two distributions generally overlap but there a number of notable areas where finds predominate from one mode of discovery. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

5.2.2 Object condition

One of the key properties of the technical process of metal detecting that makes it valuable to this study is its non-discriminatory nature. A metal detectorist searching for copper alloy artefacts will recover objects of that material regardless of their typology and when they were made. Therefore, whilst it is unlikely that many detectorists purposefully target Bronze Age finds, when present - and assuming the detectorists identifies the artefact as one worth retaining, such objects are just as likely to be recovered as the artefacts the detectorist is searching for. Furthermore, the detecting process does not discriminate between the condition and size of artefacts. Over the past 30 years metal detecting has led to the discovery, and just as importantly the subsequent identification and recording, of large quantities of both fragmented and small objects. This is in stark contrast to the nineteenth century and much of the twentieth century prior to the development of metal detecting, when predominantly only complete artefacts were curated into museum collections, with many less collectible finds presumably lost to the archaeological record forever (Needham and Burgess 1980, 438; Pendleton 1992, 240-244).

This trend is neatly highlighted by the contrasting frequencies with which complete and fragmented socketed axes are represented in the archaeological record before and after the growth in metal detecting. Of the 110 single socketed axes listed by Schmidt and Burgess (1981) that are included in this study, only three consist of small fragments, representing the butt or blade portion of an axe. By contrast, amongst the 44 single socketed axes in the study that were discovered by metal detecting, 27 are in a significantly fragmented form.

The clear underrepresentation of single axe fragments within the metalwork record which these contrasting figures imply is all the more noteworthy because this material does not consist of

random fragments, but instead displays distinct patterning. Of the 27 axe fragments, 22 consist of the blade end only, a striking proportion that is unlikely to be the product of chance. The pattern cannot be explained solely by post-depositional factors as we would not expect to observe such a great disparity between the recovery rates of different parts of socketed axes had all the axes entered the ground in a complete form, as the detecting process would not discriminate between different axe sections. Furthermore, the patina and levels of wear on the breaks of 19 of the 22 blade fragments, which are recorded in detail, are consistent with old breaks as opposed to more recent plough damage. It therefore appears that many axes entered the ground in a highly fragmented form, and that distinct parts of the axe, notably the blade end, are so disproportionately represented that the pattern is unlikely to be a chance outcome.

A convenient practical interpretation for the pattern might be that the socketed axes were broken whilst being used and the blade sections were simply discarded, whilst the hafts and sockets were retained for recycling and future use. However, if bronze was solely valued for utilitarian and economic reasons then it would have been foolhardy to leave the blade fragments on the ground when they could also have been recycled. Instead the proliferation of axe blade fragments appears to reflect the intentional selectively of a particular part of the axe for deposition. Whilst some axes may have been broken during use there is definitely reason to believe that the fragmentation process could also have been intentional. Roberts and Ottoway note that whilst the three blade fragments included in their use-wear analysis of socketed axes from south-east Scotland and East Yorkshire were all heavily used, this heavy usage alone was insufficient to cause the breaks (2003, 132).

A number of recent hoard discoveries from Yorkshire provide more convincing evidence that socketed axes were on occasions purposefully broken. A number of the socketed axes from the Cherry Burton hoard, found by a metal detectorist in East Yorkshire display evidence of purposeful damage in the form of compression and the possible application of heat (Ellis and Wilkin 2014). One of the Yorkshire type axes is particularly notable for the fact that these methods appear to have been applied to break the axe into two fragments – one consisting of the socket and upper body, and the second the lower body and blade. When the evidence of purposeful fragmentation from the Cherry Burton hoard is considered in combination with the contrasting recovery rates of single blade and socket fragments, it appears all the more likely that the purposeful removal of the blade from the body and socket of the axe and the subsequent contrasting treatment of the separate fragments, was not uncommon during the Late Bronze Age, or at the very least was considerably more prevalent than the pre-detecting metalwork record would lead us to believe.

5.2.3 Comparative artefact frequencies: non detector versus detector

If metal detecting is starting to reveal more nuanced patterns of object fragmentation, then it is also possible that it may be influencing the extent to which individual object types are represented within the metalwork record too. Within the study area this impact is clearly illustrated by the disparity in the number of single tools discovered by metal detecting that are recorded in the PAS database in comparison to those discovered by other means. Of the 32 single tools included in the study – awls, chisels, gouges, razors, hammers, sickles - 28 are metal detector finds from the PAS database. The contrasting representation of single axes, spearheads and side-arms amongst metal detector finds compared with those discovered by other means is illustrated in Figure 5.3 and Table 5.2. The analysis reveals striking differences in the construction of the metalwork record for different regions within the study area.

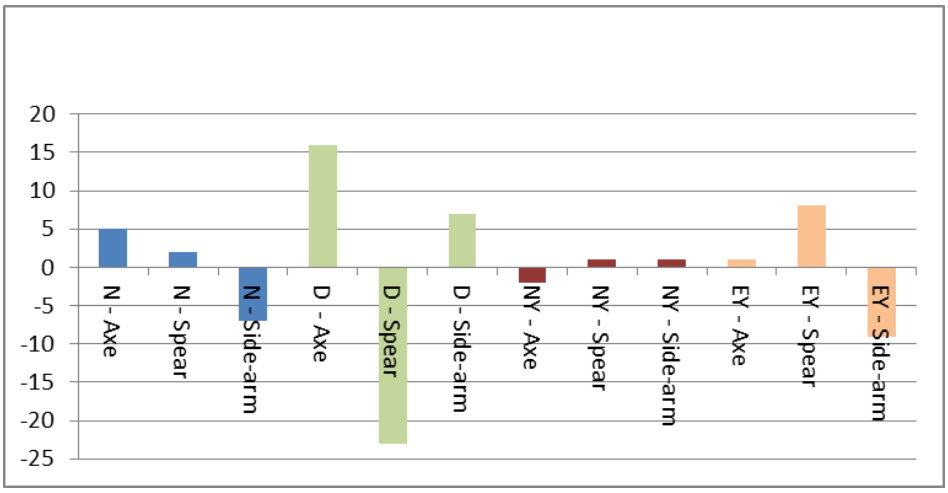


Figure 5.3 (above) & Table 5.2 (below) – Graph and table showing the percentage difference in the relative frequency of the three main artefact types found by metal detecting compared to all other methods of discovery (Blue=Northumberland, Green=Durham, Red=North Yorkshire, Orange=East Yorkshire). Absolute totals are provided in Table 5.2.

Northumberland	***Axes***	***Spears***	***Side-arms***	***Durham***	***Axes***	***Spears***	***Side-arms***
MD	15 - 63%	6 - 25%	3 - 12%	MD	9 - 69%	1 - 8%	3 - 23%
Non-MD	59 - 58%	23 - 23%	20 - 19%	Non-MD	26 - 53%	15 - 31%	8 - 16%
+/-	+5%	+2%	-7%	+/-	+16%	-23%	+7%
North Yorks	***Axes***	***Spears***	***Side-arms***	***East Yorks***	***Axes***	***Spears***	***Side-arms***
MD	77 - 71%	21 - 19%	11 - 10%	MD	16 - 76%	5 - 24%	0 - n/a
Non-MD	168 - 73%	42 - 18%	21 - 9%	Non-MD	104 - 75%	22 - 16%	13 - 9%
+/-	-2%	+1%	+1%	+/-	+1%	+8%	-9%

In Northumberland, Durham and East Yorkshire, metal detecting is recovering the three main classes of artefact at substantially different rates compared to all other methods of discovery. The negative values for side-arms in Northumberland and East Yorkshire, and spearheads in Durham, reflect the fact that these are predominantly historic finds, with very few or even no metal detecting finds contributing to their overall number. Only in North Yorkshire is there near parity between the recovery rates by metal detecting and other methods. In this area detector finds appear to support established patterns, reinforcing the frequency at which the main artefact types have been discovered historically by other means.

However, whilst the analysis suggests that there is general parity between the discovery rates for metal detecting and all other methods amongst the main classes of artefact in North Yorkshire, a more detailed examination of single axe finds reveals a quite different picture (Fig. 5.4). Amongst the non-detector finds, find-spots of single axes of Early Bronze Age date are the least common type of single axe find-spot in North Yorkshire accounting for just 15% of the total (25 of 168). Amongst the metal detector finds however the situation is reversed, Early Bronze Age axes are the most common type of single axe find, accounting for 45% of all find-spots (35 of 77). The contrasting methods and rates of recovery of metalwork from different periods suggests that features specific to Early Bronze Age axes meant that they were less likely to be discovered and/or reported in comparison to other artefact types, prior to the growth in popularity of metal detecting.

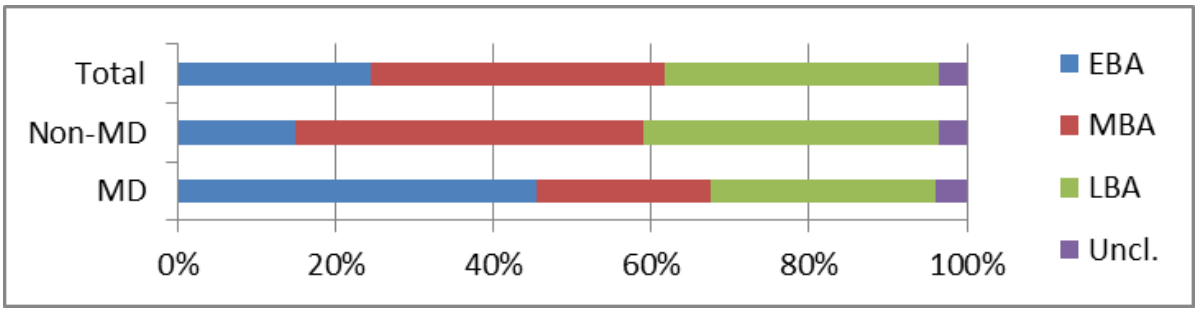


Figure 5.4 – Graph showing the percentage representation of single axes from different periods amongst detector (MD) and non-detector (Non-MD) modes of recovery in North Yorkshire.

The contrast between metal detector and non-detector axe discoveries in North Yorkshire is particularly relevant to this discussion of the formation process as it also has a strong spatial dimension. Metal detector finds account for 31% of all single axes from North Yorkshire but the contribution of each river catchment to this total varies greatly (Fig. 5.5).

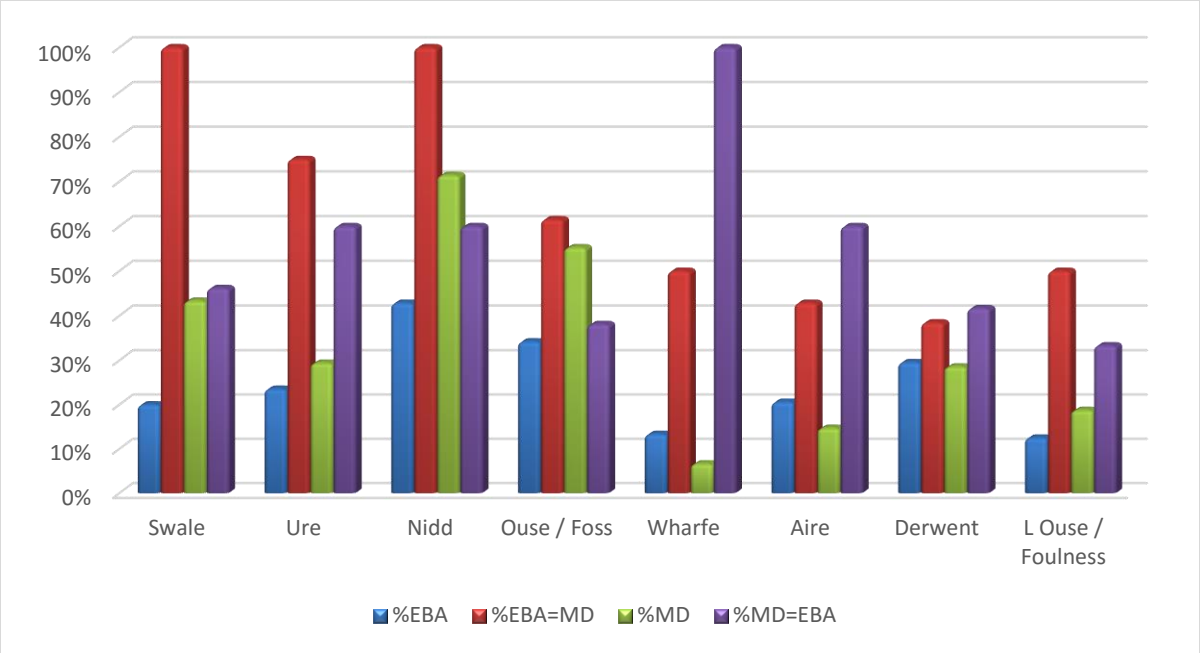


Figure 5.5 – Graph showing the relative representation of single Early Bronze Age axe finds amongst total single axe finds in the main river catchments in North Yorkshire. (KEY: %EBA - the percentage of single axes that date from the Early Bronze Age, %EBA=MD – the percentage of Early Bronze Age finds that were discovered by metal detecting, %MD – the percentage of single axe finds that were discovered by metal detecting, %MD=EBA – the percentage of metal detecting finds that date from the Early Bronze Age)

Just under a quarter of all single axes within the river Nidd catchment were discovered by metal detectorists (71%), whilst at the other extreme only 7% of single axes within the river Wharfe catchment are detector finds. These contrasts are particularly relevant because of the strong temporal element that has been noted with detector finds. Early Bronze Age axes are most numerous in percentage terms in the catchments with highest detecting recovery rates, such as the Nidd and Ouse, and least common in the catchments with low detecting recovery rates. The striking contrast between the frequency of discovery of axes from different periods by metal detectorists compared with all other means of discovery, and the spatial dimensions of these patterns, illustrates the need to exercise caution when interpreting trends relating to both the absolute numbers of finds recovered in a given area and the relative representation of different artefact types. The difficulties associated with assessing the extent to which recovery patterns

reflect Bronze Age depositional patterns can be neatly highlighted by considering the distribution of Early Bronze Age single axe finds from the Aire catchment.

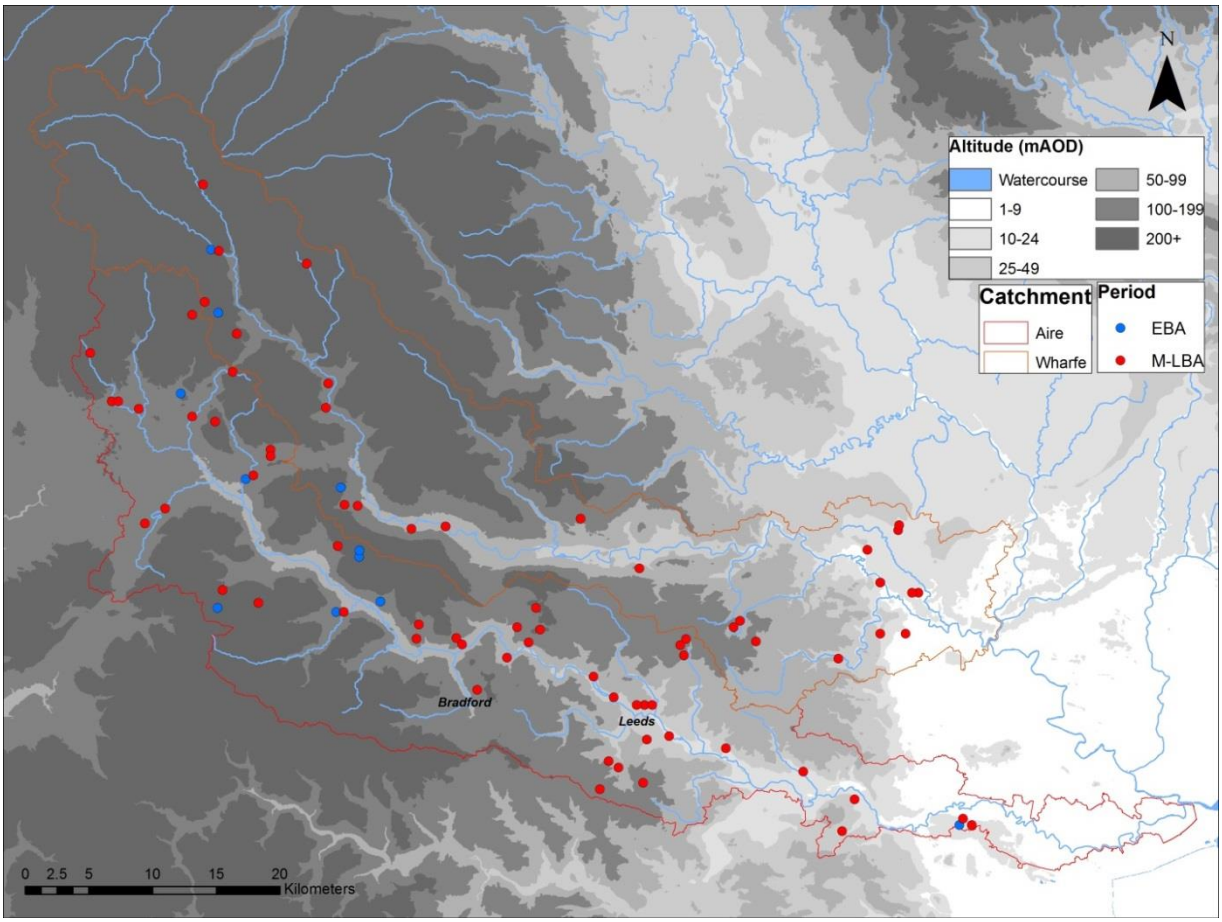


Figure 5.6 – Metalwork find-spots in the Aire and Wharfe catchments. The absence of Early Bronze Age metalwork finds from the Leeds-Bradford metropolitan area stands out. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Figure 5.6 illustrates how Early Bronze Age metalwork finds are concentrated in the predominantly rural upland zone in the west of the Aire catchment, but are absent from the heavily urbanised areas in the east. By contrast, both Middle and Late Bronze Age metalwork finds are distributed widely across the full extent of the catchment. Given that numerous Middle and Late Bronze Age metalwork finds have been discovered within the heavily urbanised zone, the

absence of Early Bronze Age metalwork might easily be interpreted as a real depositional trend. However, when the metalwork distributions are compared against the modes of discovery, an alternative interpretation seems plausible. Figure 5.6 reveals that none of the metalwork finds from the core urbanised area were found by metal detectorists. This is potentially significant given the contrasting extents by which Early Bronze Age axes are represented amongst detector (45%) and non-detector (15%) single axe finds.

If we do not accept the absence of evidence on face value, we must accept that either Early Bronze Age metalwork is present within this area but has never been found, that metalwork has been discovered but on every occasion was retained by the finders and never recorded, or conversely, that the historical significance of the metalwork was repeatedly not recognised or appreciated at the time of discovery. These are all factors which clearly did not apply to Middle and Late Bronze Age axe types. Whilst it is hard to believe that such factors could have skewed the recovery rates of different axe types so markedly, it is notable that in the predominantly rural catchments of the Swale and Nidd all of the recorded Early Bronze Age axes are metal detector finds, and they provide a significant contribution within the Ure catchment too (75%).

If the absence of evidence represents a false lacuna, the urban nature of the central Aire catchment is potentially a significant contributing factor behind this pattern. Whilst metal detecting has led to the discovery of numerous Early Bronze Age axes across rural North Yorkshire, including from catchments where no Early Bronze Age axes were recorded prior to the advent of detecting as a popular hobby, it is possible that the high levels of urbanisation within the Aire catchment has limited the potential for metal detecting to redress a similar bias.

The analysis hints at the existence of potential biases within the metalwork record for the Aire catchment, but unless discoveries of Early Bronze Age metalwork are made in the future, these interpretations will only ever be based on conjecture. Although this discussion has not resolved the primary issue of assessing the validity of the pattern, it has helped highlight why recovery patterns of metalwork should not automatically be taken at face value as representing genuine Bronze Age depositional patterns.

Improvements in the systematic recording of metal detector finds over the past two decades are undoubtedly leading to the creation of an increasingly representative record of material deposited during the Bronze Age. The picture we have of where metalwork was deposited in the landscape is more complete than ever before, whilst the large numbers of fragmented and smaller artefacts recorded by PAS show that these types were seriously underrepresented in the archaeological record prior to the growth in popularity of metal detecting. As Pendleton has done for East Anglia, existing interpretations of metalwork deposition within defined regions can now be re-evaluated by drawing on a vast body of new material that was unavailable just 30 years ago. For example, in the case of north-east England, it appears that metal detecting may be starting to alter the extent to which the three main types of artefact class - axes, spearheads and side-arms, and sub-divisions within these groups, are represented in the metalwork record at a range of different scales. Metal work discovered via metal detecting can therefore play an important role in re-affirming established patterns and interpretations, as well highlighting areas for revision and even providing new avenues for research.

5.3 Assessing the reliability of absence zones in north-east England

5.3.1 Northern coastal plain / Tees Valley lowlands and Cleveland Plain

Deposits are rare on the coastal plain from central Northumberland to the North Yorkshire Moors, and stretching inland south-westwards along the Tees Valley lowlands, Cleveland plain and northern Vale of Mowbray. The paucity of prehistoric archaeology in general on the coastal plain of Northumberland is by no means a new observation. For Burgess (1984), the scarcity of evidence for Bronze Age activity reflects the fact that communities avoided settling on the coastal plain for geological reasons. The prevailing superficial geology along much of the coastal plain consists of boulder clay drift, material that was laid down during the last glacial maximum. Burgess argues that cultivation of this land would have been difficult for people practising early arable regimes. Whilst this may have been the case, it does not automatically follow that this argument can be offered as the sole explanation for the absence of metalwork for a number of reasons.

It is a widely observed phenomenon across northern Europe that the predominant metalwork types considered in this research, axes, spears and side-arms, are rarely found directly on occupation sites (Fontijn 2001, 215-216, Yates and Bradley 2010a). The environmental and geological conditions that may have made settlement and agriculture difficult would not have physically prevented Bronze Age people accessing these areas. On the contrary, the very conditions that may have made settlement difficult might have provided other opportunities for the exploitation of resources, such as those associated with woodland and forest environments. The areas of boulder clay along the coastal plain and within the lower Tees valley and Cleveland plain represent significant tracts of land and it would seem unlikely that Bronze Age people avoided these areas entirely. In fact, metalwork deposits are commonly found on the coastal plain, but

only in distinct topographic locations, within river and stream valleys and on coastal headlands. Therefore, if we accept the distribution pattern as a representation of actual Bronze Age depositional activity, it appears that across this extensive area, particular locations were suitable for the deposition of bronze artefacts, whilst others were deemed less suitable, or even wholly unsuited as places for metalwork deposition.

The impact of agriculture - quantifying the unquantifiable?

If the conclusion above is to be accepted, it is first necessary to prove that the pattern is not singularly the result of the formation process. Of all the post-depositional processes listed in Table 5.1 which may have been influential, one in particular – the impact of anthropogenic activity, and more specifically historical variations in agricultural activity - requires further scrutiny.

Pendleton (1992) contrasts the wealth of metalwork finds that have been recovered from the fen edges in East Anglia with the paucity of finds from the adjoining clay soils. Pendleton believes this pattern is largely the result of the contrasting agricultural histories of these two zones, which has over exaggerated differences in the metalwork record between the two areas (1992, 232-40). The commencement of arable agriculture on the fen edge was a relatively recent development, commencing in the nineteenth century with extensive programmes of land drainage. This happened to coincide with the start of antiquarian interest in Bronze Age metalwork and consequently many finds are recorded from this particular zone. In contrast, Pendleton suggests that the fertile clay soils will have been farmed for over two millennia, and thus presumably many Bronze Age artefacts will have been lost to the archaeological record.

In the case of Northumberland, there is an extended history of arable agriculture across the region, most visibly evidenced by the widespread occurrence of medieval ridge and furrow in both upland and lowland areas. There is therefore reason to assume that historic rates of metalwork recovery, and consequently the rate of loss to the archaeological record across the region, is perhaps more even in comparison to East Anglia.

It is very difficult to quantify the relative amounts of metalwork that have been lost to the archaeological record through three millennia of agricultural activity in different topographic and geological zones. Metal detecting has yet to identify substantial amounts of Bronze Age metalwork within these areas, but background levels of copper alloy detector finds from any period are generally low, particularly in Northumberland (Fig. 5.7). Given that a complete skewing of the archaeological record by historic agricultural removal seems highly improbable, I would argue that the very noticeable absence of metalwork finds over such a large area with similar surface geology, probably reflects the fact that at the very least Bronze Age communities were less inclined to deposit metalwork in these core areas of boulder clay. Deposition occurred within these zones but locations within river and stream valleys and along coastal headlands appear to have been favoured.

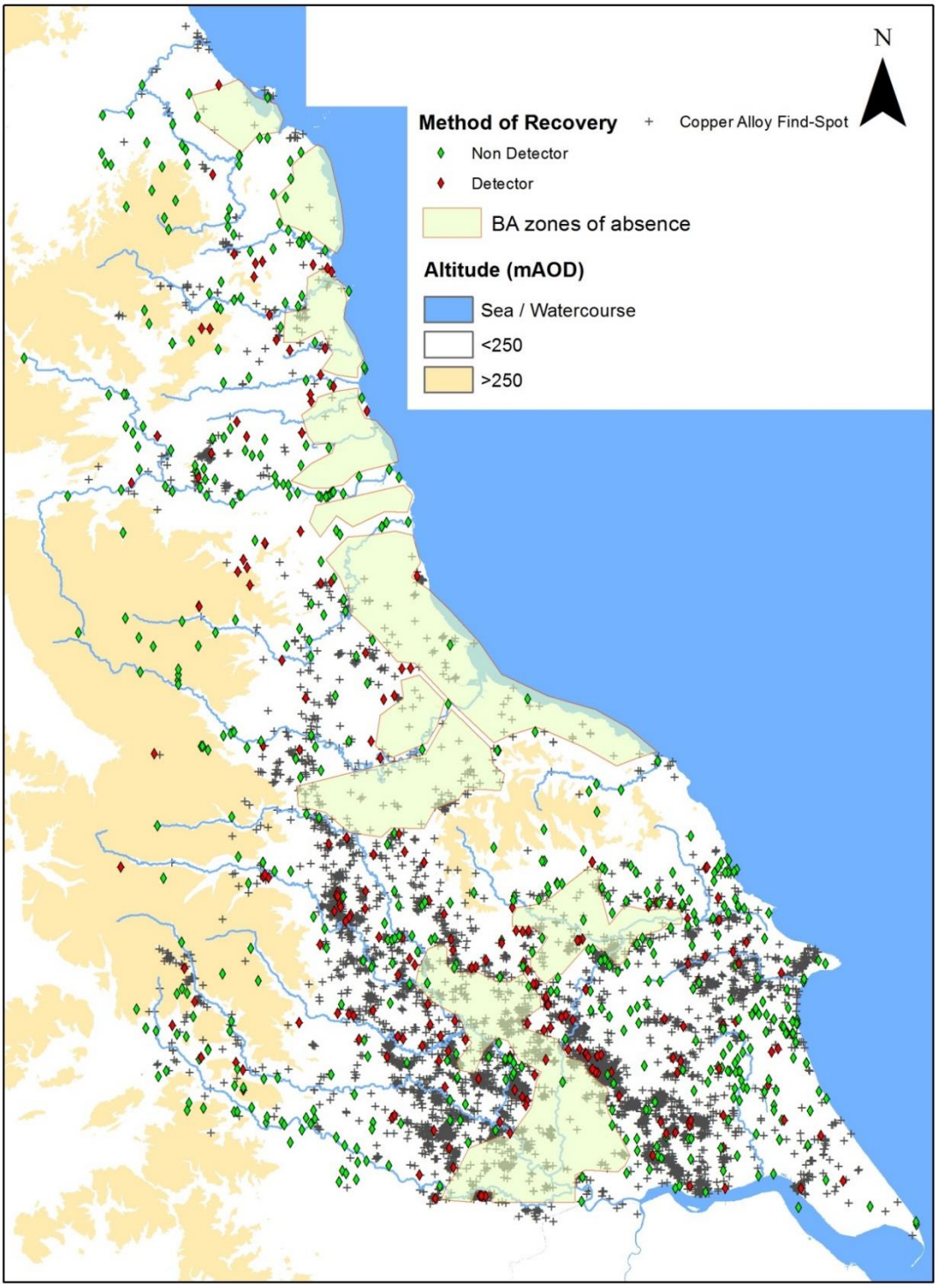


Figure 5.7 – The distribution of Bronze Age metalwork finds and all copper alloy finds from the PAS database. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

5.3.2 The Vales of York and Pickering and the Humberhead Levels

In the southern half of the study area two zones of absence which share similar characteristics stand out. Metalwork deposits are nearly wholly absent from the central areas of the Vale of York and Humberhead Levels, and the Vale of Pickering (Fig. 5.8). These two large zones of absence are particularly striking as their margins are so clearly defined. A possible explanation for this distinct boundary becomes apparent when you consider the geology of this region. When the find-spot locations are mapped against the quaternary geology for the area there is a strong correlation between the central, core areas of lacustrine clays and the areas where few metalwork finds have been recorded.

Deposition at the fringes

The pattern of metalwork deposition in relation to the lacustrine clays is not one of total avoidance, but rather deposition along the fringes of this geological zone. The large areas of lacustrine clays were laid down by a series of proglacial lakes which covered the area during and after the last glacial incursion. The extent of the lacustrine clays within the Vales of York, Pickering and the Humberhead Levels therefore reflect the maximum extent of the proglacial lakes which drained slowly away following the end of the last glaciation. The potential significance of the location of metalwork find-spots in relation to the geology of the region becomes apparent when you consider the nature of the soils that the clays have helped form. The primary soils that cover much of this area are gleys and gley podzols, both characterised by their high water content, and in the case of the later, its low fertility (Van de Noort et al 1999, 11). Whilst more recent farming techniques allow gley soils to be successfully cultivated, arable cultivation during the Bronze Age would have been considerably more difficult. As was the case with the boulder clay areas in the northern half of the study area it is necessary to consider the possibility that metalwork deposits have not been

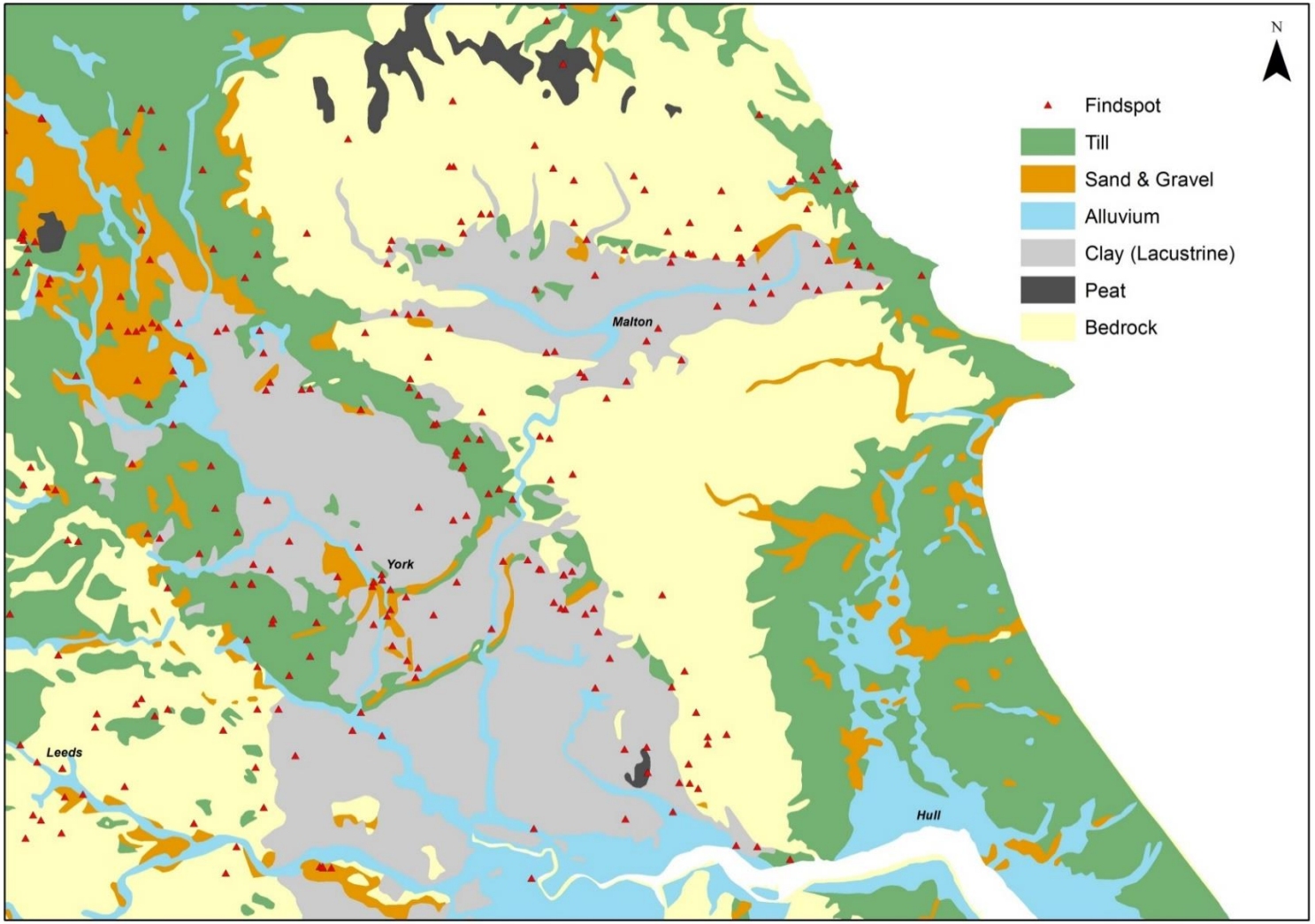


Figure 5.8 – The distribution of metalwork find-spots in relation to superficial and bedrock geology. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

recovered from this extensive zone simply because Bronze Age life rarely extended into the clay heartlands in the centre of the vales.

Before we accept this interpretation, and the authenticity of the pattern, are there any reasons to believe the picture we have has been unduly influenced by post-depositional processes? In this regard I am fortunate to be able to draw on results from the Wetlands Heritage of the Vale of York survey (Van de Noort et al 1999). Palaeoenvironmental surveys focusing on the main rivers of the vale, the Ouse, Wharf, Aire, Derwent and Foulness all show that sea-level rise during the early Holocene led to the creation of flood plain wetlands. Lillie and Gearey (1999, 75) have shown that there was great variation in the timing of wetland development across the region, and within individual river systems. Whilst some wetlands had reached their maximum by the start of the Bronze Age, others continued to expand throughout the period. Although this raises the possibility that some Bronze Age deposits may be buried under deep layers of alluvium and peat, in the context of the whole absence zone it is important not to overstate the potential impact of this masking process, as the area affected is limited to relatively narrow strips of land on either side of the main river channels.

In the far south of the study area, on the Humberhead Levels, the anthropogenic process of building up layers of alluvium or warp to extend and improve agricultural land during the nineteenth and twentieth centuries, either by dumping or through controlled tidal inundation, might also be having a masking effect (Lillie and Gearey 1999, 95-97). Similar to the floodplain wetlands, however, the affected area is limited in the context of the wider absence zone. Therefore, although these two processes may have led to the masking of some Bronze Age deposits under deep deposits of alluvium, including metalwork, this impact is primarily confined to areas adjoining the primary rivers.

Away from the floodplain wetlands, Lillie and Greary suggests that woodlands may have been the primary environmental zone from the Mesolithic right through to the Bronze Age, with 'only ephemeral evidence for a human vector in vegetation change' during this time, possibly reflecting woodland clearance for small arable plots (1999, 77). In conjunction with the distribution of metalwork finds, the picture this paints of Bronze Age inhabitation of the southern part of the Vale of York is therefore not dissimilar to that put forward for the coastal plain of Northumberland.

Bronze Age metalwork finds are recorded on the gley soils, but the find-spots are predominantly towards the fringes of these zones. Not only is this true for the extreme margins of the gley soils, on the vale edges, a similar observation can also be made for metalwork deposits that have been discovered in the vicinity of the two moraine ridges that run across the Vale of York on a south-west to north-east alignment, as well as the low sand and gravel ridges directly south of York. Locations on the fringes of the vale with more fertile and well-draining soils, as well as the isolated islands and ridges of sand blown soils, appear to have been favoured over the poorly draining gley soils and gley-podzols that cover much of this area. The fact that numerous metalwork finds have been recovered from the gleys, but almost entirely from fringe locations, implies that the absence of finds from the gley heartlands reflects a prehistoric reality. The validity of this pattern seems to be reinforced by the distributions of copper alloy finds in the PAS database (Fig. 5.7). Non Bronze Age metalwork has been recovered from a number of areas within the absence zone, particularly to the north and east of York, and within the lower Ouse catchment, but Bronze Age finds are few and far between amongst this material.

5.3.3 The Uplands – metalwork from above 250m OD

One depositional trend that can be observed across the whole of the study area relates to the altitude at which metalwork finds have been recovered. Of the 710 find-spots included in the study from Northumberland, Durham and North Yorkshire, only 35 are from land above 250m OD[3]. Based on a model that assumes equal rates of metalwork deposition and retrieval across the whole landscape, the actual frequency of find-spots above 250m OD is well below the expected total (Table 5.3). It is therefore necessary to ask if the scarcity of finds from upland locations reflects a prehistoric reality, or if the relative absence of finds is exaggerated due to biases in recovery patterns?

Altitude (m AOD)	0-99	100-199	200-299	300+	250+
Area within altitude range (%)	41.1%	23.4%	15.9%	19.6%	26.4%
% of find-spots within altitude range	65.8%	22.4%	7.9%	3.9%	5.1%
Actual / Expected	467 / 292	159 / 166	56 / 113	28 / 139	35 / 187

Table 5.3 – The actual frequency and expected frequency of metalwork find-spots within ascending altitude ranges. The expected frequency figure is calculated assuming equal deposition and retrieval rates at all altitudes i.e. uniform deposition across the full landscape, and reflects the expected number of finds based on the % land area within each altitude range. (Find-spots n.682)

The question is an intriguing one, because in contrast to the low lying areas of the study area where archaeological evidence for Bronze Age activity is largely limited to the proliferation of metalwork, there are comparatively few metalwork finds recorded from locations above 250m OD, but there is plentiful evidence that Bronze Age life extended into upland areas throughout the region in the form of funerary monuments, settlements and field systems (Annable 1987, Young 1984).

[3] I have excluded East Yorkshire from this analysis as it is predominantly a low lying county with no land above 250m OD.

The 250m AOD mark is significant as it coincides with the typical limit of enclosed farmland across all upland zones in the study area. It is logical to assume that a far greater proportion of finds will have been discovered in areas where human activity has been most intensive over the past 200 years. Many finds have been discovered at lower elevations through farming activities such as ploughing and land improvement, and during the construction of infrastructure such as railways, roads and buildings. In contrast, during the past two centuries human activity above 250m OD has been much less intensive, as both geological and environmental conditions limit potential land use. Although widely exploited, the range of activities carried out in upland areas such as animal grazing and leisure pursuits are much less likely to lead to the discovery of buried objects. The limited potential for human activity to uncover metalwork deposits in upland areas is compounded by the influence of environmental processes, such as the growth of peat. The four main upland areas within the study area, the Cheviots, North Pennines, Yorkshire Dales and Nidderdale and the North York Moors account for 62% (193,785 ha) of England's upland deep peat coverage (Shepherd 2012). Although widely exploited for grouse management, the main activity linked with this practice, the controlled burning of vegetation, is non-intrusive, and other associated practices such as gripping - the construction of drainage channels, only affect relatively small areas (Shepherd 2012). It is also worth noting that the highly mechanised techniques associated with modern forestry, another industry which is relatively widespread in the uplands of north-east England, are unconducive for the identification and retrieval of prehistoric artefacts.

Upland metalwork in PAS

Whilst historic land use patterns logically suggest that deposits from upland locations are likely to be underrepresented in the metalwork record, it is difficult to provide unequivocal proof for this. Analysis of the Portable Antiquities Scheme data highlights a number of interesting trends which are discussed in detail below, but the absence of quantitative data regarding metalwork detecting practices in different areas of the landscape precludes its direct

application to this issue. For the counties of Northumberland, Durham and North Yorkshire, PAS records 12,266 copper alloy artefacts, representing 4,853 unique provenances. A unique provenance is a find-spot which has a unique 4 to 10 figure national grid reference. Table 5.4 shows that many individual PAS records share identical provenances, either because they are items from a hoard that have been entered individually, or more commonly because a detectorist has attributed the same general find-spot to a number of separate finds. Given the inaccuracies and discrepancies in how the data is recorded, I believe a comparison of unique provenances and not total PAS records, to be the most appropriate method for assessing find-spot distributions. Although this approach is subject to its own biases, the pattern of where copper alloy objects have been found is more significant than the number of artefacts from each location.

	County	Study Area		County	Study Area	
County	Individual Records	Mapped	Unique Provenance	Bronze Age	Mapped	Unique Provenance
Northumberland	731	680	311	21	21	20
Durham	1654	1587	319	16	16	16
North Yorkshire	11094	9999	4223	129	111	101
Total	*13479*	*12266*	*4853*	*166*	*148*	*137*

Unique Provenance	Find-spots over 200 metres	Find-spots over 250 metres	Find-spots over 300 metres
Northumberland	13(1)	5(1)	2(1)
Durham	13(6)	5(1)	1
North Yorkshire	82(2)	23(1)	12(1)
Total	*108(9)*	*33(3)*	*15(2)*

Table 5.4 – Tables showing the number of copper alloy objects recorded per county in the PAS database and the prevalence of copper alloy find-spots recorded at altitudes above 200m OD. The figures in brackets in the bottom table refer to Bronze Age find-spots. The data used to collate this table was downloaded from the PAS database on 19/06/2013.

One of the more noticeable features of this data is the small number of find-spots that are situated above 200m. Of the 4,853 unique provenances, only 108 are located above this altitude (2.2%). Above 250m, the number of find-spots decreases dramatically to just 33 (0.7%), and only 15 find-spots are located above 300m. With regards to the 137 unique Bronze Age find-spots, nine are above 200m (6.6%), 3 are above 250m (2.2%) and 2 are above 300m (1.5%). Furthermore, whilst only 137 of the 4,853 unique provenances belong to Bronze Age finds (2.8%), 9 of the 108 finds from above 200m are Bronze Age in date (8.3%), a figure which rises to 9.1% over 250m (3/33) and 13.3% above 300m (2/15).

The figures therefore show that Bronze Age metalwork is comparatively well represented at altitudes above 200m OD compared to finds from other periods, a pattern which is not necessarily surprising given that following the end of the Bronze Age the north-eastern uplands were only occupied again to any great extent during the medieval period. Whilst every 1 in 12 find-spots above 200m OD are Bronze Age, below 200m OD this figure rises to 1 in 37. Unfortunately conclusions regarding the relative representation of Bronze Age metalwork finds from upland locations are much harder to draw. If we make the logical assumption that metal detectorists largely target sites below 200m OD, a not unreasonable position given the absence of find-spots above this altitude, then the presence of nine Bronze Age finds amongst the 108 find-spots from all periods is potentially quite significant.

Without a programme of purposefully targeted research, it is not possible to accurately determine the extent to which the relative absence of metalwork find-spots from upland locations reflects a prehistoric reality. Whilst our present day climate dictates that land above 250m OD has rather restricted agricultural potential this was clearly not the case during much of the Bronze Age, when land up to 400m AOD appears to have been routinely inhabited by Bronze Age communities, albeit perhaps on a seasonal basis. A consideration of the limited

means by which metalwork might be discovered in upland locations highlights the potential for the existence of significant biases in the metalwork record towards lower altitudes. It is crucial to acknowledge this point because whilst Bronze Age people appear to have selectively avoided placing metalwork in certain landscape zones, we cannot automatically assume that the relative absence of metalwork from upland locations reflects a similar process.

5.4 Riverine and stream deposition

My examination of the development of metalwork studies from a landscape perspective highlighted how throughout northern Europe archaeologists have commonly observed that weapons primarily appear in wet contexts, such as rivers, whilst tools are more frequently found in terrestrial locations. This broad trend has been the focus of increasingly detailed studies (Needham 1988, York 2002, Fontijn 2002, Yates and Bradley 2010a) resulting in more geographically and topographically localised and nuanced interpretations of selective depositional practices in riverine and other wet contexts. Watercourses are a significant topographic feature within the study area and 40 metalwork finds have provenances indicative of riverine or stream deposits. Whilst these only account for 5% of total find-spots in the study area, they constitute an important body of material.

As with metalwork finds from terrestrial locations, the pattern of watercourse finds reflects the output of a unique set of formation processes. Before attempts are made to interpret trends in depositional activity, it is necessary to consider the extent to which recovery patterns might truthfully reflect the prehistoric reality of deposition. To do this we must start by exploring the pattern of metalwork recovery from the rivers and streams in the study area (Table 5.5 and Fig. 5.9).

River System	***Total Finds***	***Artefact Type***	***Recovery Method***
Tweed	0		
Till	2 (1)	Rapier, Spearhead	
Aln	1	Spearhead	Bridge Construction
Coquet	2 (2)	Sword, Socketed Axe	
Wansbeck	0		
Blyth	2	Rapier, Spearhead	Dredging (2)
Tyne	16 (2)	5 Swords, 5 Spearheads, 3 Rapiers, Dagger, Flat Axe, Socketed Axe	Dredging (11 +2 probable), Gravel Quarrying (2)
Wear	5	2 Swords, Dirk, Spearhead, Socketed Axe	Dredging (2 +1 probable), Gravel Quarrying (1), Chance find from tidal shore (1)
Tees	3 (1)	Sword, Spearhead, Flanged Axe	Dredging (1 +1 probable)
Swale	0		
Ure	1	Sword	Fishing
Ouse	0		
Nidd	0		
Wharfe	2	2 Swords	Gravel Quarrying (2)
Aire	2	Sword, Spearhead	Gravel Quarrying, Sewer Construction
Derwent	1	Dirk	
Humber	2	Socketed Axe, Median Winged Axe	
Coastal – North Yorkshire	1 (1)	Flat Axe (D)	

Table 5.5 – List of probable riverine metalwork deposits from the study area. The figures in brackets in the Total Finds column represent the number of total finds that have provenances from minor tributaries within the primary river system listed in column one.

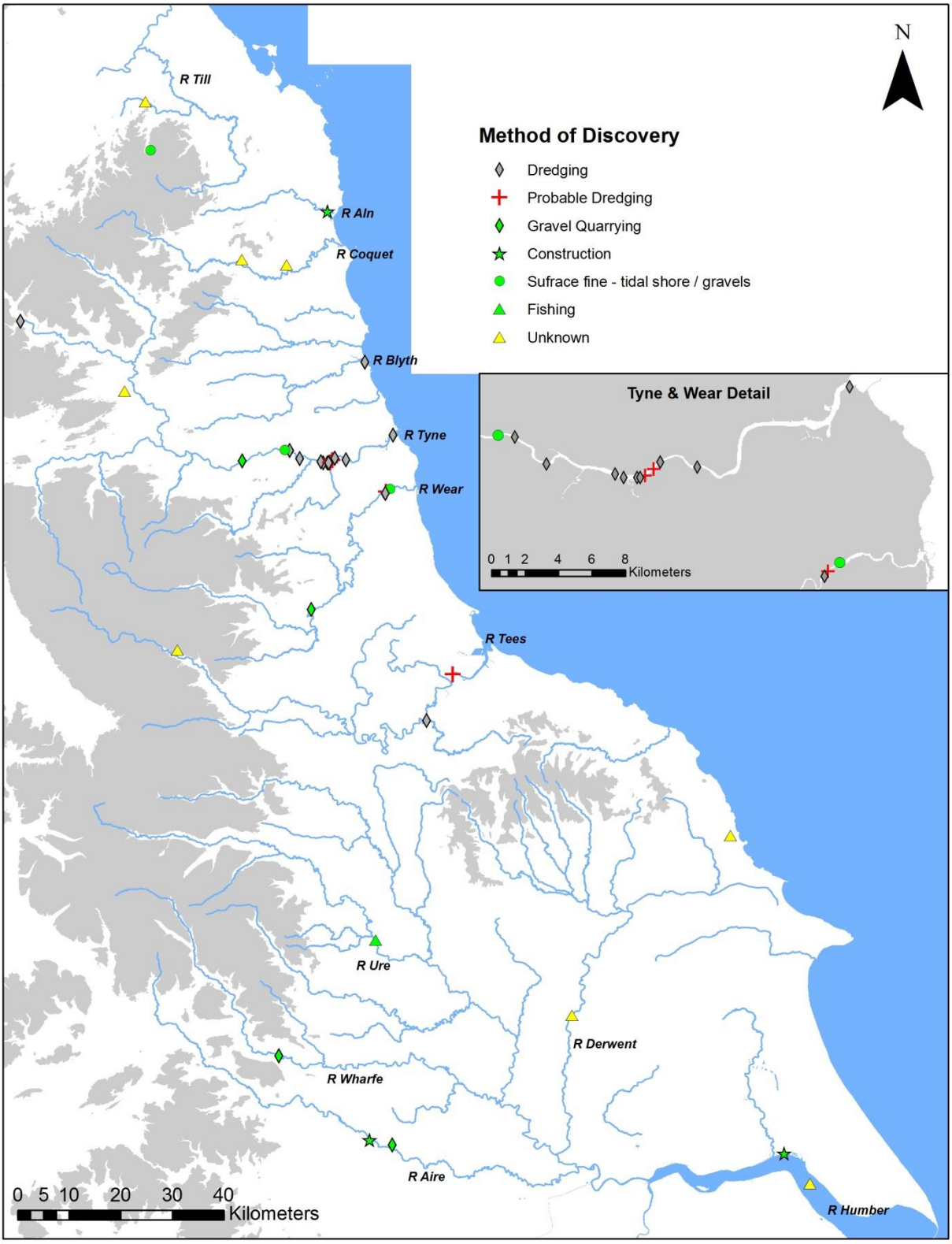


Figure 5.9 –The location and recovery method of metalwork finds with riverine and stream provenances. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

A number of key observations can be made regarding the nature of metalwork deposits from riverine contexts:

- 40% of all finds come from the River Tyne drainage system (16 of 40).
- Over 75% of the finds are from watercourses in Durham and Northumberland (31 of 40).
- The majority of the riverine finds from Northumberland and Durham come from the lower, coastal stretches of the rivers.
- Side-arms represent over half of all the artefacts recovered (21 of 40). Spearheads account for eleven of the finds, and there are eight axes.

The extent to which we can trust that the observations outlined above reflect real Bronze Age depositional trends rests on a detailed assessment of the formation process. Such a task is particularly problematic in the case of riverine deposition due to the intrinsic physical properties of water and hydrological systems in general. Although rivers are utilised in many ways, activities which are likely to disturb the river bed and lead to the recovery of buried objects are few and far between. It is hardly surprising that a large percentage of riverine metalwork in northern Europe has been discovered by the one process that impacts most significantly on river beds, namely dredging. This situation is no different in the north-east of England where 50% of the metalwork with probable watercourse provenances was discovered by dredging.

The contribution of dredging operations to the creation of the metalwork record for individual rivers has been discussed in a number of studies. When armed with knowledge of historical dredging practices it is possible to examine patterns in depositional activity along a single river (York 2002), or even compare depositional patterns within and between different rivers in the same region (Fontijn 2002). Unfortunately, a number of factors make such methods difficult to apply within the study area. Whilst it would be possible to assess the nature of historical dredging operations within each of the main rivers, it would be a time consuming, and

potentially unilluminating task. Fontijn's comparison of recovery rates from the main rivers in the southern Netherlands is possible because the rivers share a number of similar hydrological characteristics. These are working rivers used to transport large quantities of cargo and thus to ensure these transport routes remain operational dredging is a common and widespread practice. In contrast, the rivers where metalwork has been found in north-east England have great variation in morphology and use. In particular, dredging, the prime recovery method for riverine metalwork, has been limited to specific sections of only some of the rivers.

Whilst a thorough understanding of historical dredging activity would be desirable, it is not necessarily a prerequisite for assessing the impact of dredging on the creation of the metalwork record. As the main purpose of dredging is to manage the sedimentation of river channels it is an activity which is highly spatially targeted. Although dredging may be utilised as a means of flood prevention, its most common historical use which continues to the present day is to ensure that rivers remain navigable for transportation. With this in mind, by examining the distribution of metalwork finds based on recovery method, it is possible to consider how dredging patterns have influenced the distribution patterns of riverine metalwork previously identified, and assess the likely authenticity of these trends as accurate representations of Bronze Age depositional activity.

5.4.1 Metalwork from the River Tyne

That the River Tyne at Newcastle appears as a focal point for metalwork deposition may simply reflect the fact that this is the most intensively dredged section of any river in the study area. Of the 15 metalwork finds from the lower Tyne, 11 were found during dredging operations, and two others are probable dredging finds. Whilst this research has not compared relative levels of dredging in different rivers within the study in a quantitative manner, there are a number of reasons to believe that the Tyne experienced the most

intensive historical dredging when compared to the other major watercourses. Firstly, it is well documented that the Tyne underwent significant programmes of dredging through-out the nineteenth century, dramatically altering the shape of the river from a series of braided, shallow channels, which at one point were passable on foot, into the single, deep channel that exists today (Milton 2007, 11-20). Central to this need for improvement was the fact that the centre of Newcastle, and many of the industries relying on the river for transportation, is located 13.5km upstream from the Tyne's estuary with the North Sea. This geographical consideration is crucial as it is the combination of the unique geography of the lower Tyne, in conjunction with the historical development of Newcastle that has fuelled the on-going need for channel improvement and maintenance over the past 150 years.

When you consider the other primary rivers within the study area it is clear that the favourable conditions that led to the discovery of bronze metalwork from the River Tyne during the late nineteenth century were not replicated to the same extent. Metalwork has been recovered by dredging from the relatively less industrialised rivers of the Blyth, Wear and Tees, but in much smaller quantities. No metalwork finds are recorded for the Tweed, where the main quays are located directly at the mouth of the river, presumably negating the need for dredging further upstream. Elsewhere, metalwork finds are unknown from the lower Coquet, whose quayside also lies at the mouth of the river. In this instance the location of the modern day port is less significant given that the current course of the river is relatively recent, having changed dramatically in 1764 during a severe flood. A similar event altered the mouth of the Aln in 1806 and the old courses of both of these rivers are now covered by substantial dune systems.

5.4.2 The North–South Divide

The relative absence of riverine metalwork from North and East Yorkshire may be testimony to the different nature of the watercourses in the south of the study area. Whereas many of

the rivers in Northumberland and Durham flow from west to east and discharge directly into the North Sea, the main rivers in North Yorkshire are tributaries of one large river system which enters the North Sea as the River Humber. As a consequence, the only sizeable ports in the southern half of the study area are found on the River Esk at Whitby and along the River Humber and the lower course of the River Ouse. This contrasts markedly with the wealth of industrial activity along the northern coastal rivers, and the requirement for dredging associated with this.

5.4.3 Coastal, lowland bias

This pattern is consistent with the fact that dredging is likely to have been considerably more intensive in the lower stretches of the main rivers which flow into the North Sea, compared to the middle and upper stretches of the same rivers. The ports and industrial quay-sides of these rivers are located either directly on the coast (e.g. River Blyth) or can extend quite a distance inland (River Tyne at Newcastle). It is no coincidence that the distribution of dredged finds from the rivers fall within these historically industrialised zones. Whilst riverine metalwork is not unknown from further upstream, none of the finds are recorded as being recovered during dredging operations. Clearly we cannot account for variable recording rates, but given the spatial clustering of recorded finds from the lower stretches of four different rivers, the Blyth, Tyne, Wear and Tees, and the absence of dredged finds from further upstream, it is logical to conclude that historical dredging was significantly less intensive away from the coast.

5.4.4 The martial nature of riverine deposits

Against the uncertainty surrounding the spatial and geographical distributions of riverine metalwork deposits in the study area, one trend stands out as reflecting real Bronze Age selective depositional practice. In common with riverine finds throughout northern Europe, the metalwork retrieved from the rivers in north east England is of a predominantly martial nature. In isolation it might be possible to cite recovery bias as a contributing factor for this trend. For

instance, large artefacts such as swords and rapiers would be easier to spot and identify than smaller axes. However, such arguments do not stand up when you consider the trend in its wider European context. The martial nature of riverine deposits is too geographically widespread to be the product of the same recovery biases operating in multiple regions[4].

5.5 Conclusions

I started this chapter by noting Pendleton's scepticism towards Bronze Age metalwork distributions in East Anglia as truthfully reflecting the prehistoric reality of deposition. Whilst the task of reconciling patterns of Bronze Age metalwork finds with the reality of Bronze Age depositional activity is an extremely difficult one, it appears likely that many of the larger zones which appear blank on the distribution map, do truthfully represent areas where comparatively little metalwork was deposited.

1. The absence of metalwork deposits from the boulder clay areas along the north-east coastal plain and Tees Valley lowlands appears to reflect a prehistoric reality. Metalwork was deposited within these geographic areas but the find-spots favour stream and river valleys and locations overlooking the coast.
2. The absence of metalwork deposits from the central areas of the Vales of York and Pickering and the Humberhead Levels also appears to reflect a prehistoric reality. The distribution of metalwork finds from these areas demonstrates distinct spatial patterning towards geological boundaries, particularly involving the gley-soils. The very presence of metalwork finds from the gley-soils however implies that the metalwork lacuna in more central areas reflects a real Bronze Age pattern.

[4] For a more detailed discussion of the evidence and arguments for the martial nature of Bronze Age riverine metalwork deposition see Needham and Burgess (1980, 442-449).

3. Metalwork deposition appears to be underrepresented in the archaeological record in upland locations but the full extent of this bias cannot be assessed without more in depth research. It is therefore currently impossible to draw firm conclusions regarding the influence of altitude and upland places on depositional practices across the study area.
4. Metalwork finds from riverine contexts show distinct geographical and spatial patterning. The extent to which these trends reflect a prehistoric reality is however unclear. Based on anecdotal evidence, the retrieval patterns appear to mirror areas where dredging, the primary means by which metalwork has been recovered, was most intensive during the late nineteenth-century. Interpretations of depositional activity based on these patterns must therefore be tempered by the possibility that these recorded finds only constitute a small and geographically and spatially biased portion of actual Bronze Age riverine metalwork deposits.

This examination of possible biases in the metalwork record provides a crucial foundation for a more detailed analysis of depositional patterns. Whilst it has proved difficult to reach definitive conclusions, by applying a qualitative approach to try and gauge the extent to which the metalwork record is representative of the Bronze Age reality, we can derive a greater understanding of the metalwork record for the study area, and consequently, approach the interpretation of recovery patterns with greater confidence, or adopt suitable caution. Pendleton's scepticism towards the extent to which metalwork distributions and assemblages represent an accurate snap-shot of Bronze Age reality is borne out by the impact metal detecting and the systematic recording of finds is having on the metalwork record.

If the current snap-shot of metalwork distributions is accepted as a genuinely accurate representation of real Bronze Age depositional activity, the irregular distribution of finds implies that metalwork was not deposited in certain areas. As a patchwork of distinct topographic

zones, the physical landscape provided Bronze Age communities with a range of alternative environments for metalwork deposition, some of which were clearly favoured over others. Each of these different areas offered Bronze Age communities both unique affordances for practical actions as well as imposing limitations, and in many cases the absence of metalwork over such extensive areas may simply reflect the fact that through-out the Bronze Age communities avoided certain landscape zones because they were less favourable for habitation than others.

The recognition of these absence zones raises a number of interesting questions. The focus of this research is to examine the role that topography played in structuring depositional behaviour. The absence zones separate geographically and topography disparate areas, and as such could represent boundaries between different social groups. Whilst we cannot expect to discern distinct communities from depositional patterns alone, patterns in the metalwork record might reveal that some absence zones represent boundaries between distinct areas in which different types of metalwork circulated? Different contemporary forms of the same object type or the deposition of different metalwork types. Infer that patterns are the product of the depositional histories of different groups with shared experience of inhabiting a particular area. If this is the case, how do contrasting depositional histories relate to the specific topography of different areas, and how do particular depositional histories develop over the course of the Bronze Age? These questions are addressed by the next scale of analysis which examines depositional patterns in much greater detail, via a number of approaches which employ the river catchment as the principal unit of study.

Characterising depositional patterns within a generic river catchment: a GIS based approach

6.1 Introduction

As the discussion in the preceding chapter illustrates, the task of reconciling patterns of Bronze Age metalwork finds with the reality of Bronze Age depositional activity is an extremely difficult one. My analysis has shown that it would be foolhardy to place too much emphasis on interpretations of metalwork deposition based solely on comparisons of absolute numbers of finds from different areas, and consequently comparisons of relative artefact frequencies, because different areas have contrasting histories of metalwork retrieval and recording. For example, in North Yorkshire I have highlighted the role metal-detecting and the systematic recording of metalwork finds is having on the representation of single axe deposits within individual river catchments from a temporal perspective.

These uncertainties do not, however, represent an insurmountable obstacle to more detailed studies of depositional behaviour. It is possible to recognise depositional patterns at both a geographic and topographic scale provided appropriate methodologies are employed. The following discussion details the results of basic topographic analysis using GIS to characterise the relative position of find-spots of different deposit types within the principal river catchments across the study area.

6.2 Characterising a topographic variable through population simulations

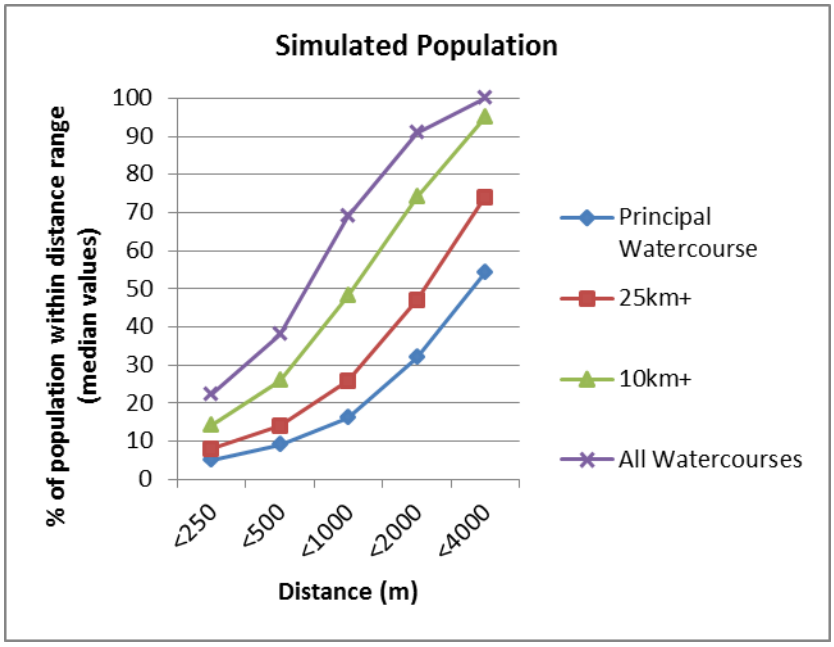


Figure 6.1 – Graph showing the relationship between the median values for the simulated population and the four categories of watercourse.

The graph in Figure 6.1 shows the relationship between the median values of the simulated population for the study area based on 20 simulations of 50 random points and the four categories of watercourse. These distribution curves illustrate the basic attributes of the combined drainage networks for the study area. The progression of the distribution curves at each level of analysis reflects the dendritic pattern of watercourses within the drainage networks. In terms of proximity to watercourses the weakest relationship exists between the simulated population and the principal rivers as these are the least numerous class of watercourse in the study area and the most widely spaced. As the number of watercourses incorporated at each level of analysis increases the relationship between the simulated population and the proximity to the nearest watercourse becomes stronger. The strongest association can be observed at level four with the inclusion of the smallest watercourses, first order streams which have no tributaries of their own.

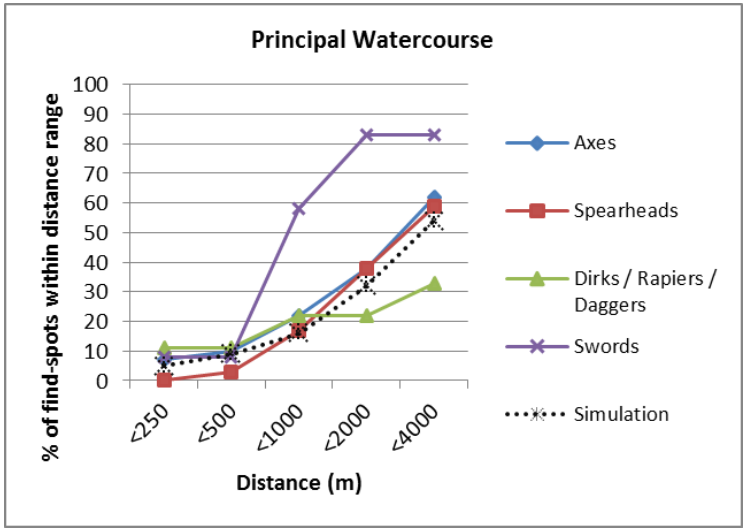
These are both the most common and closely spaced type of watercourse within a river catchment, and are predominantly located towards the margins of a drainage system.

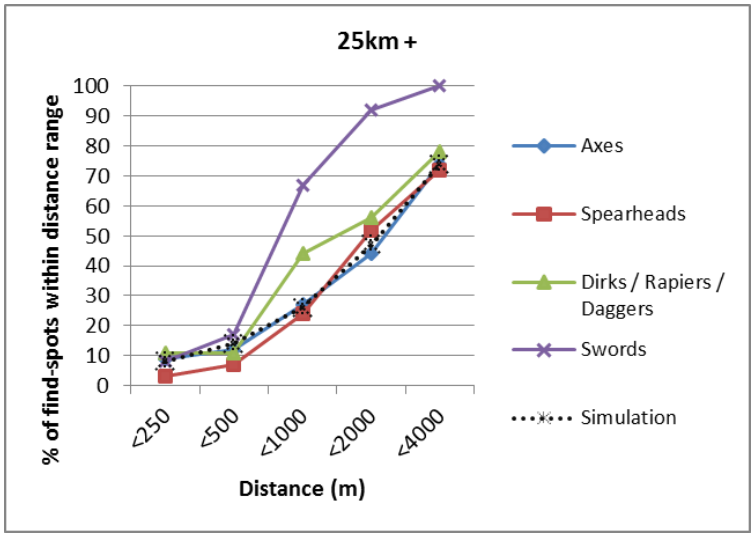
6.3 General overview

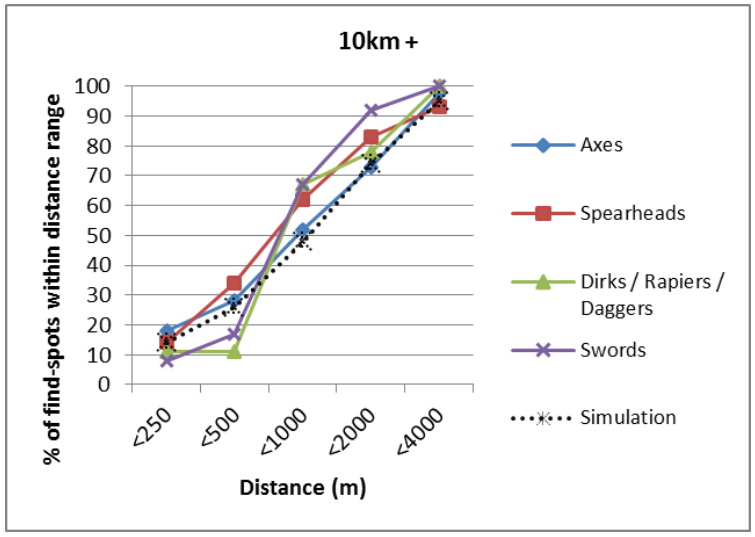
A comparison of the distribution curves in figures 6.2 to 6.5 reveals two headline trends amongst the different deposit types. The distribution curves for both single axe and spearhead find-spots broadly parallel those of the simulated population at all four levels of analysis. Whilst the curves for both deposit types display some degrees of divergence from the simulated population, the overarching similarities imply that particular spatial zones within river catchments were neither particularly favoured nor avoided for the deposition of these artefacts.

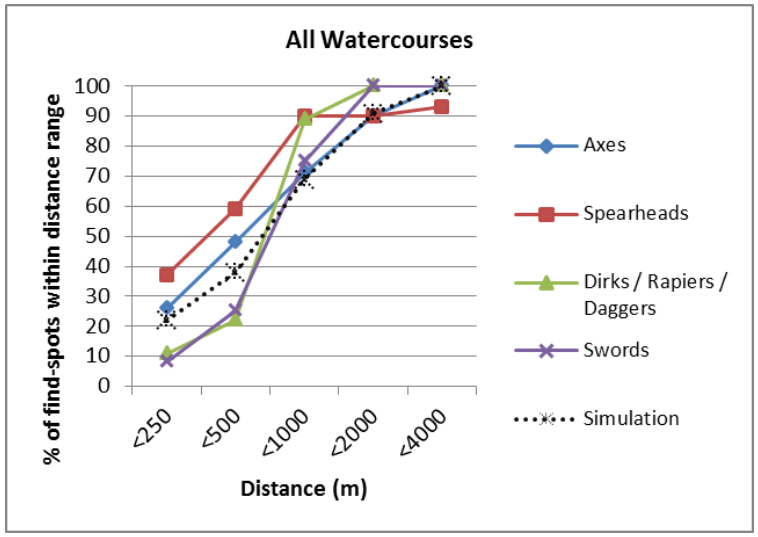
In contrast, the distribution curves for double bladed side-arms share little in common with the simulated population. The find-spots of Late Bronze Age sword deposits in-particular display an appreciably stronger association with major watercourses than we would expect if the find-spots were located at random across the landscape. Whilst this trend is not replicated for earlier side-arm types at level one, the addition of major tributaries over 25km in length sees the distribution curve start to move towards that of the Late Bronze Age swords, and this closer correlation is cemented at the final two levels of analysis.

The metalwork distributions









Figures 6.2 to 6.5 - Graphs showing the relationship between the find-spots of the main deposit types and the four categories of watercourse.

6.4 Discussion

6.4.1 Late Bronze Age swords

A comparison of the proximity of the find-spots of the main classes of metalwork deposit to principal watercourses reveals that whilst there is little to differentiate between the different types of deposit close to the major rivers, within 0.5km, substantial differences begin to appear at greater distances. The contrast is particularly strong between deposits containing swords and those of other artefact types. The find-spots of 10 of the 12 sword deposits included in the analysis are located within 2km of the principal river in their catchment (83%). The furthest find-spot is actually well within this distance range, at approximately 1.5km. This contrasts markedly with single axes and spearheads (38%). The sword distribution is particularly striking as it diverges appreciably from the distribution curve for the simulated population at distances greater than 0.5km. The find-spots of terrestrial sword deposits included in the sample clearly favour locations closer to principal rivers than the other deposit types, and the substantial divergence from the median distribution for the simulated population suggests that this pattern is unlikely to be the result of chance circumstances.

6.4.2 Early and Middle Bronze Age side-arms

In contrast to the sword deposits, the find-spots of earlier side-arm types – daggers, dirks and rapiers, display the weakest overall association with principal watercourses with only 33% of the sampled find-spots located within 4km of a principal river. It is perhaps significant however that this picture is significantly altered by the inclusion of major tributaries over 25km in length. Although not as pronounced as the sword deposits, the distribution curve for earlier side-arms diverges sharply from the simulated population curve in the 0.5-1km range, with side-arm deposits displaying a noticeably stronger association with major watercourses than the simulated

population at the <1km range. This relationship is maintained albeit with diminished strength within the <2km range.

This trend is particularly interesting as it mirrors that of later sword deposits, but to a lesser degree. Notwithstanding the significant caveat of the limited sample size, it is worth considering this trend in relation to the development of the depositional conventions associated with side-arms in Britain, which experiences a significant shift in focus as an Early Bronze Age preference for the inclusion of side-arms in burials is supplanted by a strengthening preference for riverine and bog contexts as the Bronze Age progresses (Bradley 1998, 100). In addition to the significant proportion of sword deposits from the study area that are from riverine contexts, the close proximity of terrestrial sword deposits to principal watercourses suggests that major river valleys were a focal point for the deposition of Late Bronze Age swords. The distribution curve for earlier side-arm types, the predecessors of swords, is therefore interesting in this regard as it occupies an intermediate position between the distribution of sword deposits and the simulated population. A greater percentage of Early and Middle Bronze Age side-arm find-spots occur within 1 to 2km of a major watercourse than we might expect based on the simulated population, perhaps hinting at a preference for locations on the sides of major river valleys. However, in contrast to the sword deposits, the earlier side-arm types are not restricted to this zone, with just under a quarter of the find-spots being located over 4km from the principal watercourse in their catchment.

The addition of the final two levels of watercourse to the analysis has a negligible impact on the distribution curve for sword deposits. One of the more noticeable trends is the manner in which the distribution curve begins to lag behind the simulated population within the 0.25km and 0.5km proximity ranges. It is even more noteworthy for the fact that earlier side-arm types display a

similar pattern, and because it contrasts appreciably with the distribution curves for single axes and spearheads which begin to move in the opposite direction.

The fixed nature of the distribution curve for sword deposits at these levels can perhaps be explained by two main factors. Firstly, given that the sword find-spots already have a close spatial association with major watercourses we would not necessarily expect the inclusion of tributaries over 10km in length to impact significantly on the distribution curve. For any substantial changes to occur the find-spots would need to occupy very specific locales, within the catchments of tributaries over 10k in length and no more than 0.5km from the watercourse, but also close to the confluence with a major watercourse.

The near absence of change with the inclusion of all watercourses is perhaps more surprising but can also partially be explained by the argument above. The most common and closely spaced class of watercourse, first order streams, are most likely to be located towards the margins of drainage basins. Conversely, towards the centre of the drainage network, watercourses are larger and more widely spaced. It is therefore not that surprising that the close associations the sword deposits have with major rivers are in many cases not bettered by the addition of smaller watercourses.

The nature of the watercourse dataset utilised in the study has also potentially amplified the differences between side-arms and axes and spearheads. A comparison of the data layer with OS maps at 1:25,000 shows that the GIS data is far from exhaustive with many of the smallest overland water bodies are excluded from the Environment Agency data. Whilst many small watercourses towards the margins of drainage basins are included, as they are tributaries of

larger watercourses, only the most substantial first order streams that flow directly into major watercourses are mapped. Given that both single axe and spearhead find-spots are distributed more widely across river catchments than swords, it is therefore not surprising that they display a closer association with all watercourses.

6.4.3 A genuine pattern or formation process bias

Before I move my discussion onto the next class of artefact, it is important to briefly consider if the patterns I have observed amongst side-arm find-spots, in particular those containing complete swords, have been unduly influenced by the formation process. As I have previously noted, Pendleton (1992) argues that larger, re-usable and collectable objects, are likely to have experienced the greatest levels of removal from the archaeological record as a result of arable farming practices. For Pendleton this explains why so few complete swords have been found on arable land away from the fen edges and major rivers in East Anglia. Whilst this line of thinking is quite logical, it is based on assumptions that are extremely difficult to substantiate. Pendleton suggests that because metal detecting is discovering many small and fragmented objects on arable land, the implication is that larger objects such as swords and spearheads have already been removed. However, there is no sound basis to assume that these different types of object were deposited in the same locales in the first place. Both the whole sale removal of swords from large parts of the landscape would result in a similar pattern in the metalwork record to that if they were not deposited there in the first place.

Contrary to Pendleton's interpretation, across north-east England, metal detecting actually appears to be starting to provide evidence in support of the selective nature of sword deposition from a landscape perspective. Whilst numerous sizeable hoards have been discovered by metal

detecting on agricultural land – with some located a considerable distance from the nearest major watercourse, only one complete sword deposit has been recovered. Although the metal detecting club responsible for this discovery is reluctant to divulge details of the exact find-spot, the general location provided is consistent with a position on the direct valley side of a principal river.

6.4.4 Spearheads: multiple identities

Whilst terrestrial sword deposits appear to favour locations within the valleys of major watercourses, just under two thirds of the sampled spearhead find-spots are located more than 2km from a principal river and well over a third are located over 4km away (41%). This observation is particularly interesting because in common with side-arms, spearheads – an object with clear martial connotations, are frequently found in riverine contexts across the study area and also occur exclusively alongside side-arms in a number of hoards, such as at Thrunton and Shildon Lough in Northumberland, and Harrogate in North Yorkshire.

The spearhead find-spot distribution is in fact more closely matched to that of single axes than side-arm deposits and is a broad fit with the simulated population curves for major watercourses at levels one and two. The absence of any significant divergence between the distribution curves at these levels suggests that spearheads, along with single axes, neither strongly favoured nor avoided particular spatial zones across the river catchment area. Spearheads therefore appear to have had an identity that allowed them to be deposited both in the same locations as side-arms, in the valleys of major rivers – and often in the main watercourse itself and occasionally alongside side-arms in terrestrial hoards, but also in more peripheral positions in relation to major watercourses, where complete or largely complete side-arms, in particular swords, are rarely found.

Although spearhead deposition appears to have been practised widely across a range of landscape zones it was not necessarily the case that all spearheads shared a single identity or cultural significance. Unlike swords, which have a broadly homogenous form and relatively short history of production, commencing in the late Middle Bronze Age with a zenith during the Late Bronze Age, spearheads have a much longer history of production, first appearing in the later part of the Early Bronze Age, and developed a much wider variety of distinct forms (Davis 2012). Such is the variation in spearhead design, both over time and between different contemporaneous forms, there can be little doubt that different spearheads were produced to fulfil a range of different functions, whether as weapons, hunting implements or as ceremonial or symbolic objects (Bruno 2012).

Given the potential multi-faceted role of Bronze Age spearheads it seems plausible that particular cultural values were associated with different types of spearhead. Different spearheads with different functions and associated values may have required different modes of deposition. A number of studies have highlighted how relatively large spearheads, or those with an elaborate form, are predominantly found in riverine or wet contexts (Becker 2012). Based on a comprehensive analysis of Bronze Age depositional activity in Ireland, Becker (2012, 235) has drawn attention to the contrasting nature of spearheads in Late Bronze Age hoards, with small, worn and often damaged spearheads occurring in complex deposits with many other artefact types, and larger, less-used spearheads appearing in weapon only hoards. Whilst the picture is far from black and white, the evidence hints at the existence of similar trends amongst spearhead deposits from north-east England. Whilst it is problematic to prescribe a particular cultural significance to an artefact based solely on its appearance – a particularly well-crafted implement might have quite humble proportions yet still be regarded by people as a highly valued and symbolically important object, it is striking that within each of the main classes of spearhead type,

the largest, most aesthetically impressive examples, come from either riverine contexts or weapon only hoards. Furthermore, a number of the weapon hoards appear to have been deposited in watery contexts.

Whilst large and ostentatious spearheads appear in weapon only hoards, complete spearheads are by no means restricted solely to this hoard type, appearing in 9 of the 22 other hoards that contain spearheads in the study area. Within this sub-group they show a clear bias towards hoards with a limited type of objects, appearing either in spearhead only hoards – two instances, and more strikingly, solely with Late Bronze Age axes on five occasions. In keeping with Becker's observations, levels of spearhead fragmentation are greater with the presence of increased metalwork types within a hoard, which also generally equates to a larger hoard size overall. Complete spearheads are rare in these types of deposit although their presence in hoards from Gilmonby and Eastgate in the Tees and Wear catchments show that they were not universally excluded, and it is perhaps significant that spearheads are the single most numerous artefact type in both of these hoards.

It therefore seems possible that the absence of any distinctive spatial patterning amongst the sampled spearhead find-spots in north-east England may be masking more nuanced trends relating to the diverse form and function of these artefacts. The spearhead distribution curve is in fact a representation of the specific nature of the sample, which consists predominantly of small spearhead fragments and relatively mundane complete objects. The similarities with the axe distribution curves potentially reflect the fact that, like axes, the sampled spearheads were more common, everyday objects. As such, we might expect to find these objects distributed relatively widely across the landscape as a greater percentage of the population presumably had access

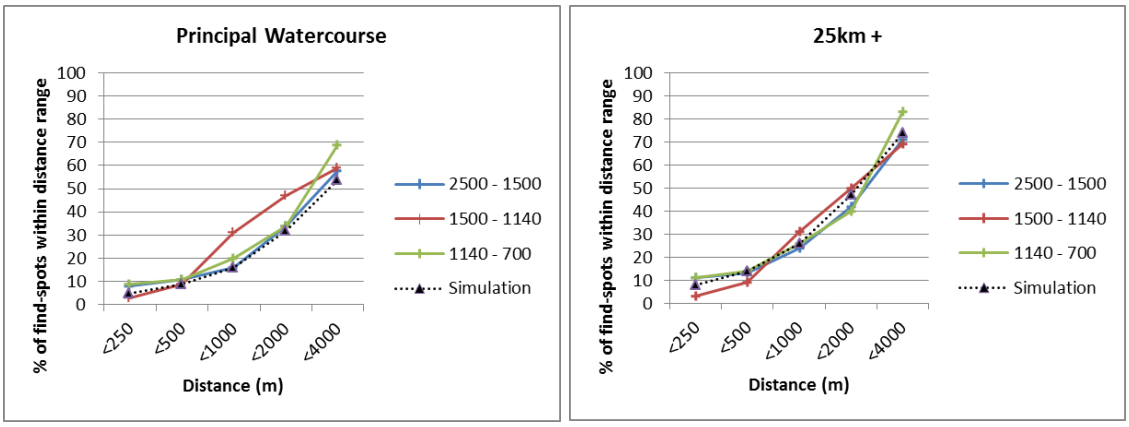
to them in comparison to larger and more ostentatious types. Furthermore, assuming these common forms played a greater role in the routines of daily life than more specialised ceremonial spearheads, they would have presumably experienced greater levels of mobility across the landscape.

Large and ostentatious spearheads are poorly represented in the sampled material, but they appear alongside complete side-arms in weapon only hoards and both metalwork types were also deposited in major watercourses. Given these shared associations, we might expect to find terrestrial swords and the most aesthetically impressive spearheads occupying the same zones within river catchments, and even similar geographic or topographic areas. Unfortunately the absence of detailed and reliable provenances for many of the spearhead deposits precludes the use of systematic topographic analysis to explore such possibilities in greater depth. However potential differences will be considered in the following chapter when the distribution of metalwork deposits within individual river catchments is considered via a more narrative approach.

6.4.5 Single axes

As already noted, the distribution curve for single axe find-spots closely parallels the simulated population at all four levels of analysis. However, just as the distribution curve for spearheads may be biased towards a particular sub-group of artefacts, the distribution curve for all single axe deposits might also be masking more subtle variations. As Burgess and Miket (1976, 8) have noted for socketed axes, even at the most fundamental level it is clear that the use of the term axe is largely one of convenience, with many axes being too small and lightweight to undertake heavy duty tasks. This observation can also be extended to both early and middle Bronze Age forms, especially as increasing numbers of diminutive examples are being discovered through

metal detecting. Unfortunately the sample sizes for the numerous different categories of axe are far too small to make detailed comparative analysis meaningful, but, by being both the most common form of artefact in the archaeological record and the only object from the main classes of deposit to be produced through-out the Bronze Age, they do offer the potential to examine temporal trends across the period, provided they are treated as a homogeneous group. By examining the distribution of axe deposits in greater chronological detail it is possible to contextualise some of the trends that have been identified amongst other deposit types. For instance, is the apparent association between Late Bronze Age swords and the valleys of major watercourses unique to this particular object type, or is this part of a broader temporal trend?



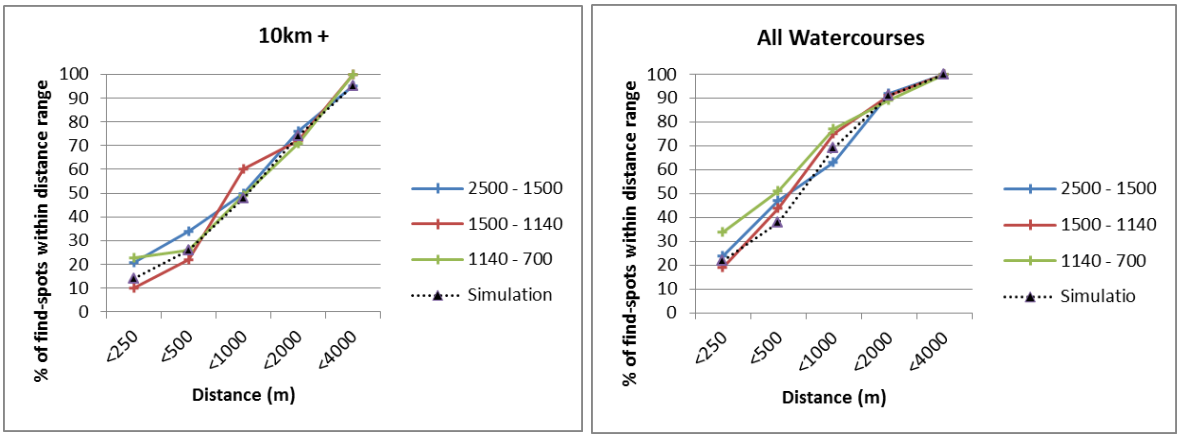
Figures 6.6 and 6.7 – Graphs showing the relationship between the find-spots of Early, Middle and Late Bronze Age single axes and the major watercourses in the study area.

Whilst the distribution curves for each period display a degree of variance from one other, they generally follow the same broad trends, matching that of the simulated population. The overall shape of the curves and their relative continuity suggests that throughout the Bronze Age axe deposition was not restricted to any single zone within a river catchment, and no particular zones were obviously favoured or avoided. Within the 0.5 - 2km distance range, where Late Bronze Age sword deposits are most numerous, the distribution curve for contemporary socketed axes

closely parallels that of the simulated population. It is therefore evident that the find-spots of Late Bronze Age single axes do not share the same strong association with major watercourses as sword deposits. The dramatic rise in Late Bronze Age axe find-spots between 2 and 4km, increasing in percentage terms well above the Early Bronze Age, Middle Bronze Age and simulated population levels is noteworthy in this context. Another appreciable divergence from the simulated population appears amongst the Middle Bronze Age axes which are particularly well represented in the 0.5 – 1km range in relation to principal watercourses.

6.4.6 Relationships with water

The trend for both single axe and spearhead distributions to parallel the simulated populations' relationship to major watercourses is broadly maintained when smaller watercourses are included in the analysis. It is particularly worth noting however that both spearheads and axes display a closer association with all watercourses than the simulated population, particularly at the shorter distance ranges.



Figures 6.8 and 6.9 - Graphs showing the relationship between the find-spots of Early, Middle and Late Bronze Age single axes and 10km+ and all watercourses in the study area.

Based on the progression of the distribution curves at each level of analysis we can speculate that the appreciable divergence in the distribution curves above the simulated distribution at level four reflects the possibility that the find-spots of single spearheads, and to a lesser extent single axes, favour locations in the vicinity of smaller watercourses. The rank and P values in Table 6.1 clearly show how at the <0.25km and <0.5km distance ranges spearheads shift from having one of the weakest relationships with major watercourses, to having the strongest observed relationship at the same distance ranges when the smaller level four watercourses are incorporated in the analysis. In the case of axe deposits the number of find-spots within <0.5km of the nearest watercourse increase from 28% at level three (10km+) to 48% at level four (all watercourses). This 20% increase is only matched by one of the 20 random simulations, emphasising the significant impact the addition of the smallest watercourses has on the axe distribution curve at the shorter distance ranges.

	Rank											
Single Axes	<250	P Value	<500	P Value	<1000	P Value	<2000	P Value	<4000	P Value	4000+	P Value
All	16-17	0.76-0.81	18-20	0.86-0.95	14	0.67	7-10	0.33-0.48	3-21	0.14-1	n/a	
PR/25/10	15-17	0.71-0.81	14-16	0.67-0.76	14-16	0.67-0.76	8	0.38	18-19	0.86-0.90	3-4	0.14-0.19
PR/25	13	0.62	3-10	0.14-0.48	12	0.57	6-9	0.29-0.43	10-12	0.48-0.57	10-12	0.48-0.57
PR	18	0.86	11-17	0.52-0.81	15-18	0.71-0.86	17-19	0.81-0.90	19-20	0.90-0.95	2-3	0.10-0.14
Spearheads	<250	P Value	<500	P Value	<1000	P Value	<2000	P Value	<4000	P Value	4000+	P Value
All	21	1	21	1	21	1	7-10	0.33-0.48	n/a		n/a	
PR/25/10	11-16	0.52-0.76	16-20	0.76-0.95	20	0.95	20	0.95	n/a		n/a	
PR/25	1	0.05	2	0.1	4-9	0.19-0.43	15-17	0.71-0.81	n/a		n/a	
PR	1-2	0.05-0.10	2	0.1	11	0.52	17-19	0.81-0.90	n/a		n/a	

Table 6.1 – Rank and P values for single axes and spearheads

Yates and Bradley (2010b, 55-66) have shown that in south-east England the distributions of Middle and Late Bronze Age hoards and single finds, many containing axes, display a re-current association with fresh water courses, in particular, the upper headwaters and tributaries of prominent rivers. These particular associations represent part of a broader dendritic pattern of metalwork deposition within individual river catchments. The analysis here suggests that similar

topographic associations may be common across north-east England amongst deposits of similar artefact types.

Whilst this analysis can reliably identify very broad topographic trends that appear to reflect real contrasts in Bronze Age depositional activity, interpretations of more subtle trends, such as those identified amongst the single axe find-spots from a temporal perspective, must be treated with a great deal of caution due to biases in the archaeological record, and consequently, the sampled find-spots. Nevertheless, the contrasting nature of the distribution curves for axe deposits from different periods is intriguing and worthy of more detailed consideration. It is notable that the distribution of Early Bronze Age axes most closely parallels the simulated distribution at the first two levels of analysis. Given that the simulated distribution reflects randomly selected points across the full extent of the major river catchments, the close correlation between the Early Bronze Age axe find-spots and the simulated population implies that the sampled axe deposits are more evenly distributed across the river catchment area in comparison to their Middle and Late Bronze Age successors. This is potentially significant as we might expect to see this pattern in a society in which an itinerant lifestyle is practised, with populations utilising a wide range of different landscape zones within the river catchments. In contrast, the slightly more erratic Middle and Late Bronze Age curves, with deposits appearing to favour certain spatial zones, represented by comparatively high concentrations of finds within particular distance ranges in relation to the simulated population, might be expected with a more sedentary lifestyle, with people depositing metalwork across a more restricted area. This is perhaps reflected in the existence of what Fontijn has termed ‘multiple-deposition zones’ (2002, 260-63), where communities practising a relatively sedentary lifestyle, return to places of significance within their local cultural geographies, to deposit metalwork over an extended period of time.

6.5 Limitations of a generic catchment

Although the measurement of proximity to watercourse hints at differences between where various types of deposit were placed within river catchments, it does not explicitly locate the relative position of these find-spots within the catchment area. Deposits spread across a narrow upland valley are bound to display a closer association with the principal river than deposits spread across a wide lowland valley. Whilst the analysis above shows that axe and spearhead find-spots have a tendency to be located at greater distances from prominent watercourses compared to swords and earlier side-arms, it does not necessary follow that these locations are peripheral within the catchment. To understand the siting of different deposit types within the catchment area in greater detail it is also necessary to consider the position of each find-spot in relation to the edge of the catchment, topographically defined by the watershed.

The graph below shows the results of analysis undertaken on single axe and sword deposits within the study area (fig 6.10). At first glance the overall picture appears to support the conclusions that have been drawn based on comparisons of proximity to watercourses. The single axes, which occur at a greater range of distances to principal watercourses than swords, are distributed relatively evenly across the river catchments. Whilst single axes can be found in similar positions to sword deposits, they are much more likely to be located in comparatively more peripheral locations in relation to major watercourses. Conversely, deposits containing swords are found predominantly closer to the major rivers than they are to the margins of the catchments in which they are located. This analysis therefore supports the argument that different zones within river catchments were favoured for different types of depositional activity.

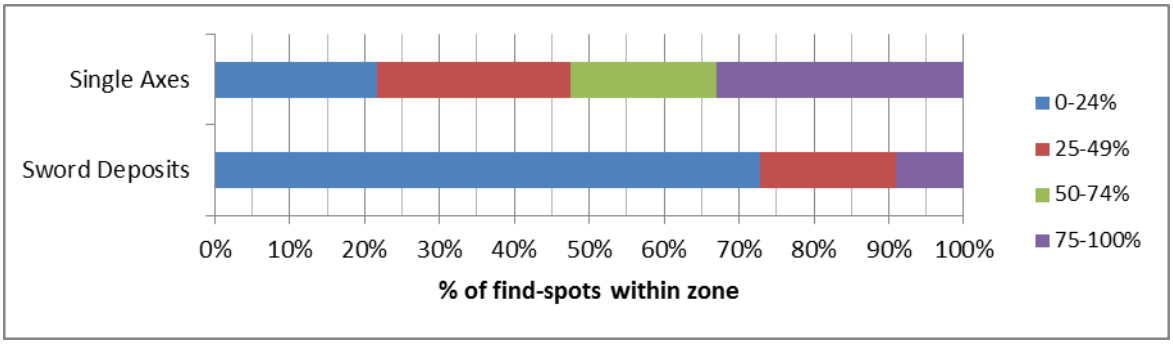


Figure 6.10 – Graph showing the relative position of single axe and sword find-spots within the combined river catchments, based on a ratio of comparative distance to the nearest principal watercourse and major watershed. The four different colours represent relative location within the catchment. (0%=watercourse, 100%=watershed, 50%=equal distance from both).

In the preceding analysis and discussion the river catchment as a topographic unit of study is treated as a homogenous form. Attempts have been made to account for the unique topographic characteristics of individual river catchments by examining the relative location of different find-spots in relation to different sized watercourses and primary watersheds. However, potential pitfalls still remain when interpreting the data because it is not the case that different deposit types are represented uniformly across the study area. In fact, specific types of deposit are considerably more prevalent in certain river catchments than others. These variations impose a geographical bias on the samples of different deposit types included in the analysis. For example, 8 of the 12 sword deposits are from Northumberland and Durham, but 55 of the 85 single axe deposits are from North Yorkshire.

The graph below provides a detailed breakdown of the relative position of single axe find-spots within the principal river catchments in North Yorkshire and the overall picture for the counties of North Yorkshire, Northumberland and Durham (Fig. 6.11). A striking aspect of this data is the extent to which the sampled find-spots display significant variation at both a regional and intra-regional level. It is evident that the contrast between the locations of sword and axe deposits

across the whole study area is exaggerated by the predominance of sampled single axe find-spots in North Yorkshire which favour locations away from the major rivers. In five of the seven river catchments analysed in North Yorkshire the find-spots of single axes are located closer to a primary watershed than the principal river within the catchment. The metalwork lacuna within the Vale of York discussed in the proceeding chapter clearly stands out in these results with single axes from the Swale and Ouse catchments strongly favouring locations away from the principal rivers.

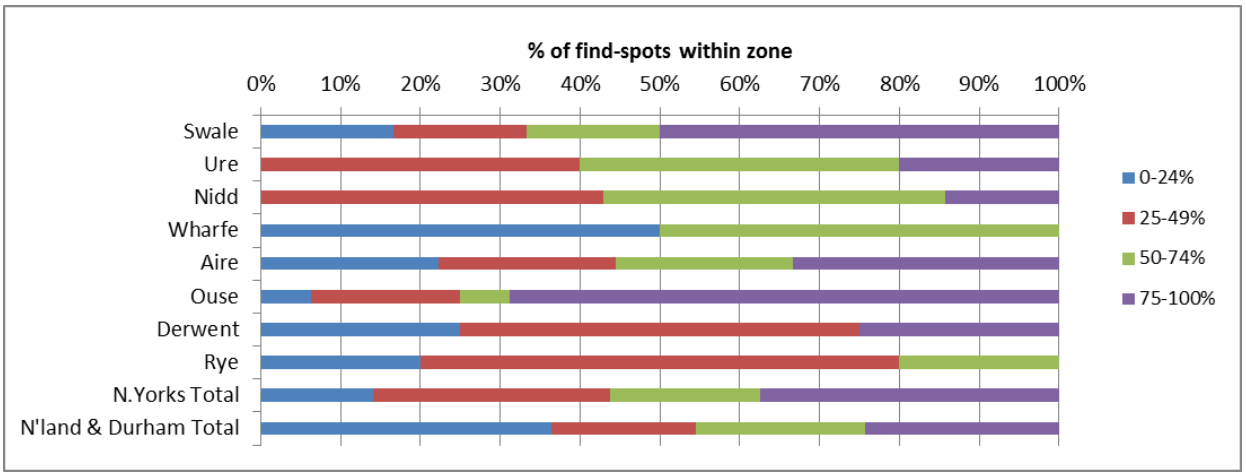


Figure 6.11 - Graph showing the relative position of single axe find-spots within specific river catchments, based on a ratio of comparative distance to the nearest principal watercourse and major watershed. The four different colours represent relative location within the catchment. (0%=watercourse, 100%=watershed, 50%=equal distance from both).

In contrast to North Yorkshire where just under 40% of the sampled axe find-spots are located in the final quarter of the river catchment area closest to a major watershed, in Northumberland and Durham, just under 40% of the find-spots are located in the first quarter closest to the principal river. Whilst the sword deposits in the northern half of the study area do retain a stronger association with principal rivers in comparison to other deposit types, both in terms of proximity to principal rivers and relative catchment location, it is therefore less pronounced than for the study area as a whole.

6.6 Conclusions

Notwithstanding the limitations discussed above, the basic topographic characterisation has highlighted some potentially significant trends relating to the deposition of different types of metalwork across north-east England. Most striking is the apparent primacy of the main river valleys as a location for the deposition of Late Bronze Age swords. The significance of major rivers as a focal point for martial metalwork deposition across north-west Europe has long been recognised in metalwork studies (Bradley 1998, 99-109), and north-east England clearly contributes to this trend. The fact that terrestrial sword deposits favour locations closer to major watercourses than other types of deposit is potentially significant considering the Bronze Age predilection for martial metalwork deposition within major rivers. Whilst concentrations of riverine metalwork may attest to the importance of particular stretches of these rivers, for example the lower Tyne at Newcastle, it appears that the significance of prominent river valleys in north-east England as a location for Late Bronze Age martial metalwork deposition extended beyond the focal point of the river itself.

It is interesting that the sampled find-spots of Early and Middle Bronze Age side-arms also show a preference towards locations in the immediate valleys of major watercourses but to a lesser degree than Late Bronze Age swords. These objects are also commonly found in major watercourses and it is quite possible that the relatively weaker association with prominent watercourses in comparison to swords is simply due to sample bias. However, when considered in relation to the transition from placing daggers in burials in terrestrial locations in the Early Bronze Age, to swords in wet contexts with a preference for major watercourses in the Late Bronze Age, it is necessary to consider the possibility that the more intermediate position of the dirks and rapiers curve possibly reflects this transition in social conventions, with the old custom being slowly superseded by a new one.

In contrast, both single axe and spearhead deposits do not display such a strong trend for any particular zone overall. Whilst sword deposition reflects the wide-spread use of a specific zone – the immediate valley sides of major watercourses, the distributions of both axes and spearheads reflect a more extensive utilisation of the catchment area for metalwork deposition. The analysis suggests that areas close to prominent watercourses, and the particular socio-political and environmental features particular to these zones that made them desirable as a location for sword deposits, did not assert the same universal influence on the deposition of axes and spearheads.

The multi-zonal distribution of axes is in keeping with the picture we have of Bronze Age axes in Britain from other metalwork studies, which suggest that they were subject to considerably less strict social conventions in comparison to other object types. For instance, Becker notes how axes appear to have been treated in a very flexible manner in the context of deposition. They appear in a wide range of depositional contexts and occur alongside many different artefact types in mixed hoards (2012, 256). Furthermore, where multiple axes are deposited together they often display a striking lack of uniformity, with contrasting levels of use-wear and fragmentation often visible. Whilst certain objects such as swords often experienced purposeful acts of de-commissioning prior to their deposition, similar practices were not as obviously commonplace with axes. Indeed, of the 31 axes from East Yorkshire examined by Roberts and Ottaway (2003), 25 were still in a usable condition. For Roberts and Ottaway the varied contents and condition of axe deposits suggests that the significance of socketed axes was largely bound up in the 'timing and the location of the deposition, which transformed active tools into offerings to the land', (2003, 136). If we assume that axes were deposited at places that were significant within peoples' local cultural geographies - the extents of which may have varied between period and region, then their distributions must reflect contrasting land-use patterns within different river catchments.

As noted in the introduction, such an assumption has historically been taken for granted by archaeologists who have logically equated metalwork distributions with patterns of settlement even though axes, spearheads and side-arms rarely occur on occupation sites. The wide-spread utilisation of the landscape implicit in the distributions of single axes and mundane spearheads, raises an interesting question about the reasons for the considerably more restricted distributions of side-arms, particularly those of Late Bronze Age swords. The predilection for sword deposits to be located within the valleys of major rivers suggests that swords either gravitated towards these particular topographic zones due to economic or socio-political reasons, or, they were distributed more widely across the landscape but were brought to this particular zone within a catchment specifically for the purpose of deposition.

Characterising the depositional histories of individual river catchments and topographic zones

7.1 Introduction: diverse narratives

One of the main limitations with the generic topographic analysis is the way in which broad distribution patterns can mask the precise nature of more nuanced depositional activity within individual river catchments and wider topographic zones. Whilst the generic approach allows us to consider some of the overarching principles that guided metalwork deposition, it would be wrong to assume that depositional behaviour was uniform across the study area. In order to examine the peculiarities of local practices it is necessary to contextualise the locations of different deposit types within individual catchments by relating the positions of the metalwork find-spots to both one another, and the local topography. As the number of well provenanced finds within each catchment is generally limited, this is best achieved through a less restricted narrative approach.

Table 7.1 provides a breakdown of the different metalwork deposits found within the main river catchments across the study area. The extent to which different artefacts are represented within the principal river catchments displays significant variation. For example, certain catchments are represented by a greater proportion of martial deposits than others. At an intra-regional level the proportion of complete side-arm deposits from the Till/Tweed (31%) and lower Tyne/Derwent catchments (26%), contrasts markedly with the Wansbeck (0%) and the Blyth (12%). There can be considerable variation at a local geographic level between adjoining river catchments, but the nature of the metalwork record can also contrast greatly within the catchment of a single watercourse. Within the wider Tyne catchment, there are notable differences between the north and south Tyne catchments and the lower Tyne below the confluence of these two rivers.

Catchment	Axe (Single)	Axe (Hoard)	Spear (Single)	Spear (Hoard)	Sword (Single, SwOH, WH)	Dagger/Dirk/Rapier (Single, WH)	Side-arm Fragments (Single)	Side-arm (Frag/s in mixed hoard)	Shield (Single & Hoard)	Other mixed hoards (non-martial)	Total	% Axe (Single & Hoard)	% Spear (Single & Hoard)	% Side-arms (Single, S-AOH, WH) & Shield	% deposits with martial artefacts	Orn. / Tool / Misc.
Till - Tweed (Lower)	15	1	3	0	4	4	0	0	1	1	29	55	10	31	31	0
Aln	6	0	6	0	2	0	0	0	0	2	16	38	38	13	13	0
Coquet	10	1	0	0	2	1	1	0	0	1	16	69	0	19	25	2 Tl
Lyne	1	1	0	0	0	0	0	0	0	0	2	100	0	0	0	1 Tl
Wansbeck (Font)	7	2	1	0	0	0	0	1	0	2	13	69	8	0	8	1 Tl / 1 Or
Blyth (Pont)	8	0	4	1	0	1	1	0	1	1	17	47	29	12	18	1 Tl, 2 Or
Tyne	32	4	14	3	7	5	1	1	1	1	69	52	25	19	22	1 Tl, 1 Or
North Tyne / Rede	11	2	1	1	1	0	0	0	0	0	16	81	13	6	6	1 Or
South Tyne	2	2	2	1	0	0	0	0	0	0	7	57	43	0	0	0
Lower Tyne / Derwent	19	0	11	1	6	5	1	1	1	1	46	41	26	26	30	1 Tl
North Coastal Plain	3	0	5	0	0	0	0	0	0	1	9	33	56	0	0	0
Wear	13	3	5	0	4	3	1	0	1	1	31	52	16	23	29	0
Tees	26	1	10	0	3	0	1	1	0	3	45	60	22	7	11	2 Or
Coastal Plain	2	1	0	0	0	0	0	0	0	1	4	75	0	0	0	0
Swale	38	1	7	0	1	3	0	1	0	1	52	75	13	8	10	6 Tl
Ure	16	0	7	0	1	0	2	1	0	3	30	53	23	3	13	1 Tl, 2 Or
Nidd	13	0	3	0	1	0	0	1	0	1	19	68	16	5	11	1 Tl
Wharfe	11	5	7	0	2	1	2	0	0	0	28	57	25	11	18	1 Tl, 1 Ms
Aire	37	8	6	0	1	3	0	0	1	2	58	78	10	9	9	3 Tl
Ouse	39	1	9	0	0	1	1	1	0	0	52	77	17	2	6	2 Tl, 1 Or
Derwent / Hertford	51	10	19	1	5	6	3	0	0	2	99	62	20	11	14	5 Tl
Upper Derwent (VoP)	34	4	12	1	4	5	1	0	0	1	62	61	21	15	16	3 Tl
Lower Derwent (VoY)	17	6	7	0	1	1	2	0	0	1	35	66	20	6	11	2 Tl
Rye	23	2	7	0	1	5	0	1	0	1	40	63	18	15	18	2 Or, 1 Tl
Low Ouse / Humber	18	1	2	0	0	0	1	0	0	2	24	79	8	0	4	3 Tl
Esk	10	0	3	0	0	1	1	0	0	0	15	67	20	7	13	1 Ms
Coastal Plain	10	0	1	0	1	0	0	2	0	0	14	71	7	7	21	0

Table 7.1 – The absolute and relative frequency (%) of metalwork deposits by type within the main river catchments and coastal zones. (Key – SwOH = sword only hoard, WH= weapon hoard, S-AOH = side-arm only hoard, Tl=tool, Or=Ornament, Ms=Miscellaneous)

Both the relative frequency and absolute numbers of martial deposits from the Till/Tweed, lower Tyne and Wear catchments also stand out at an inter-regional level. In the southern half of the study area only the upper Derwent catchment contains similar absolute numbers of side-arm deposits. Distinctions between the catchments are considerably more subtle in the southern half of the study area, but both the upper Derwent and Rye catchments, which together form the Vale of Pickering, stand out in a local context when compared to the lower Derwent (6%), the Ouse (2%) and lower Ouse-Humber (0%). Conversely, the latter two catchments are amongst those with the highest proportion of deposits of single axes and axe only hoards.

As well as typological differences, there are clear temporal variations between the river catchments too (Fig 7.1). For instance, Early Bronze Age axes are well represented in the Wansbeck, Blyth and Nidd catchments, whilst Middle Bronze Age axes are the predominate type in the adjoining Tees and Swale catchments. The Till/Tweed and Rye catchments stand out for their high percentage of Late Bronze Age axes. Whilst each region is defined by its own unique characteristics - the low frequency of Middle Bronze Age axes in Northumberland stands out – particularly as I have incorporated metalwork from the problematic Wallington complex in this period, there is greater continuity between the different regions overall than between individual catchments in each region, emphasising the potential for great variation at a localised level.

Indeed, if we were to interpret these observations as truthfully reflecting Bronze Age depositional patterns, the variations between catchments would imply that depositional behaviour followed different trajectories in different areas. The Till/Tweed and Tyne and Wear catchments would appear to have more overtly martial characteristics than other catchments both locally and at a regional scale. Furthermore, the analysis of axe deposits suggests that there was a temporal

element to these trajectories. Different river catchments, and even distinct landscape zones along individual rivers, appear to come in and out of focus as locales for metalwork deposition at different times during the Bronze Age.

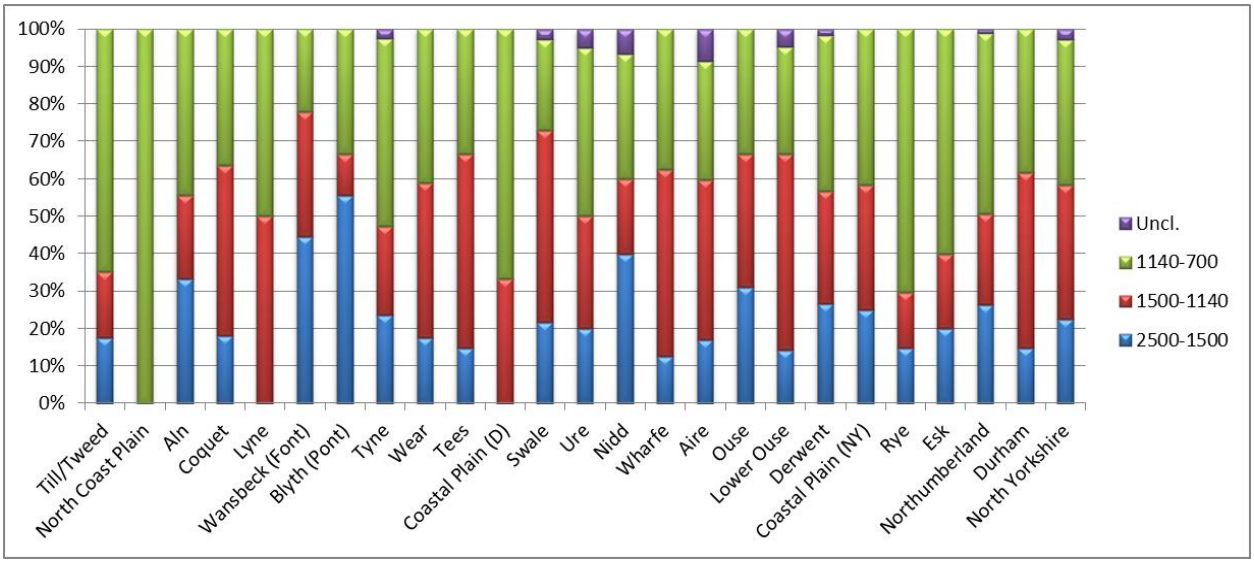


Figure 7.1 – The frequency (%) of axes by period within each of the principal river catchments, coastal zones and regions. The figures are based on deposits that contain at least one axe and do not reflect absolute axe numbers. (Key – (D)= County Durham, (NY)= North Yorkshire)

As discussed in the literature review, comparisons of metalwork distributions within defined geographical areas have often formed the basis of social, economic and political interpretations of Bronze Age society. In the case of southern Britain, the high concentration of martial artefacts within the Thames valley has been used to argue that this was a regional power centre, where social elites drew upon resources from a peripheral hinterland to the south (Rowlands 1980, Sharples 2010). The contrast between the martial metalwork records for these different areas is so well defined, there is little reason to doubt that the pattern truthfully reflects real variations in depositional histories across the region.

Whilst local concentrations of martial artefacts are present in north-east England, the differences in absolute numbers of finds between many of the river catchments are subtle. Therefore, instead of placing too much emphasis on comparisons of absolute totals and relative artefact representation, which is inherently problematic for reasons already discussed, these trends are perhaps best utilised as a series of signposts, signalling where more targeted analysis should be directed. In conjunction with the topographic characterisation, these different trends provide a number of avenues for more detailed research, examining the nuances of depositional behaviour within individual river catchments and wider topographic zones. Once these trends have been examined in greater detail, it may then be possible to consider the potential significance of contrasting depositional histories at a range of topographic and geographic scales, in relation to socio-political narratives of Bronze Age society in the study area.

7.2 Catchment narratives

7.2.1 Till/Tweed catchment (Figure. 7.2 and Appendix A1.1)

The distribution of metalwork deposits within the Till-Tweed catchment displays a spatial-temporal pattern broadly based on a north (Early to Middle Bronze Age), south (Late Bronze Age) divide (Fig 7.2). The deposition of Late Bronze Age metalwork within the Till catchment extends over a substantial area taking in the fringes of the Cheviot uplands and the valleys of the rivers Glen and the upper Till. Although well dispersed, this distribution is quite distinct from that of earlier metalwork deposits which are located in the lower Till, Bowmont and Tweed valleys, to the north of the Cheviot massif.

The Late Bronze Age metalwork is notable for the fact that it nearly exclusively derives from the Ewart Park metalworking assemblage. The four sword deposits from the central and upper Till

valley all contain Ewart Park type swords, specifically step two of the northern series. These deposits share the common characteristic of being exclusively sword only deposits, occurring either as single finds – at Chatton South Lyham and Chatton Low Grounds, or with other similar swords – at Thirlings (Ewart Park) and Brandon Hill. Furthermore, with the exception of the find from South Lyham, the swords all appear to have been in a complete or nearly complete state at the point of deposition, whilst the South Lyham sword is a substantial fragment of a leaf shaped blade, with only the hilt and upper blade missing.

Information about a number of the socketed axe deposits is rather vague preventing detailed classification, but those with established typologies fall within the Ewart Park phase. The presence of two imported type Dowris axes at Ewart Park and Barmoor South Moor is particularly notable as only six axes of this type are known from the entire study area. A third example from Hulne Park in the Aln catchment is also relatively local to these two axes, and the possible significance of this loose cluster will be considered shortly. A probable variant of a type Sompting axe which was found with a whetstone and a piece of iron on Coldlaw Hope high in the Cheviots, belongs to the subsequent Llyn Fawr assemblage, 800-700BC.

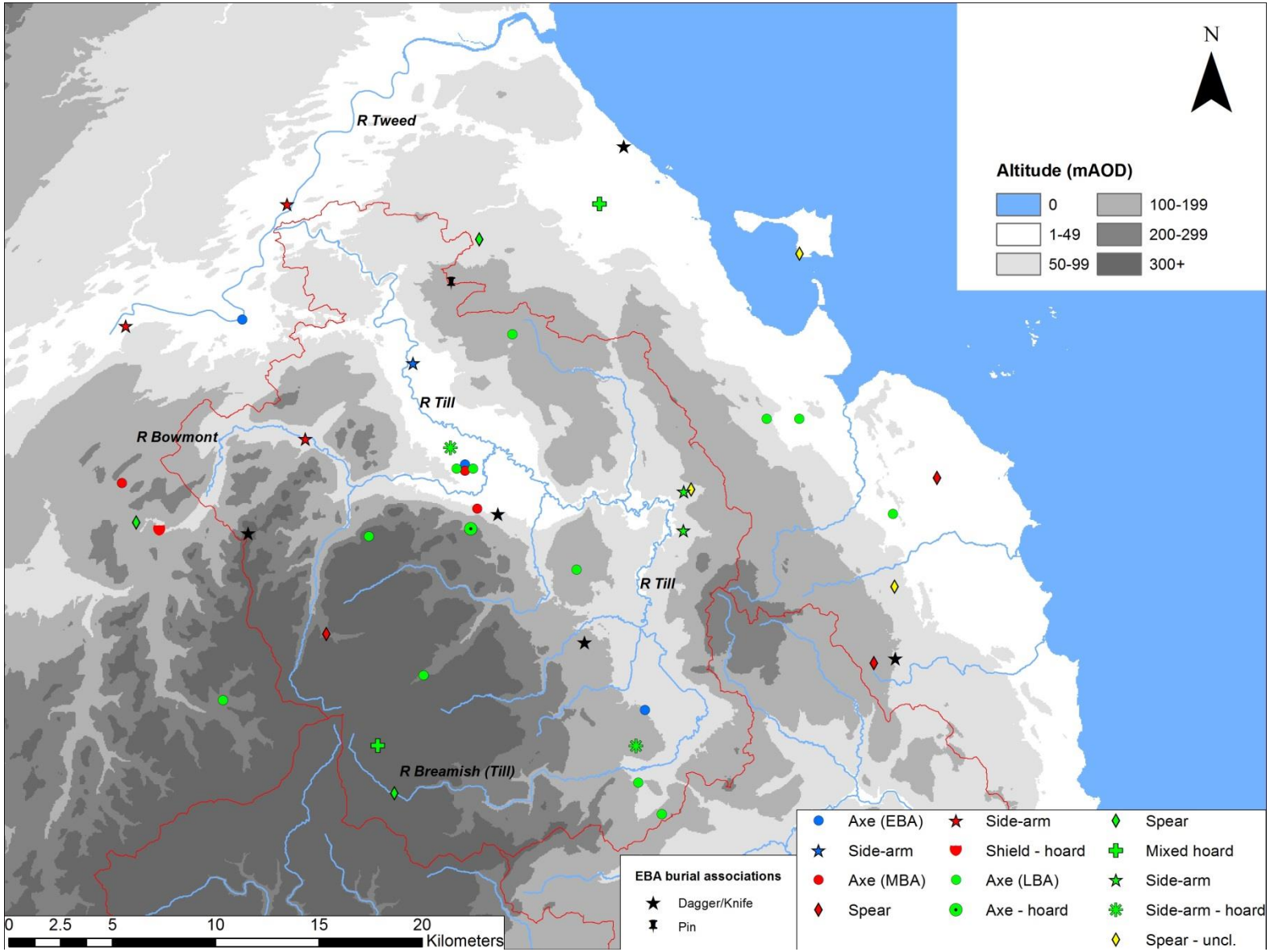


Figure 7.2 – The Till/Tweed catchments and North Northumberland coastal plain.

By contrast, in the Bowmont, upper Till and Tweed valleys, Late Bronze Age metalwork is significantly less well represented – there are no recorded socketed axe finds at present - and the focus is very much on earlier metalwork types. Middle Bronze Age finds are recorded from the Tweed valley at Carham, where a group three dirk was discovered during drainage work and at Milne Graden, just to the north of the study area, close to the confluence of the Till and the Tweed, where a group four rapier was discovered. In between these two locales an Early Bronze Age axe of type Falkland was found close to the banks of the Tweed at Cornhill. To the south at Kilham in the Bowmont Valley, a group two rapier was found in the Bowmont water itself, whilst a Middle Bronze Age looped spearhead was discovered on gravels of the Lamsden Burn. At Yetholm, upstream of Kilham, two late Middle Bronze Age Yetholm type shields were discovered during the draining of a bog, and a Middle Bronze Age type Lissett flanged axe is recorded from Graden a little distance to the north. A number of finds are known from the upper Till valley such as an Early Bronze Age dagger or halberd from Ford Westfield, which is situated on the floor of the valley at the north end of the Millfield Plain, whilst a type Lissett flanged axe and an Early Bronze Age Migdale axe from Ewart Park, and a type Ulrome flanged axe from near Akeld, are all from the southern end of the plain.

Whilst the weapon deposits from all periods give the catchment a strong martial identity, the Middle and Late Bronze Age finds have largely mutually exclusive distributions, overlapping along the fringes of the northern Cheviots. The appearance of Ewart Park deposits across the southern half of the catchment is particularly striking as there is currently little evidence of a precedent for metalwork deposition within these areas prior to the Late Bronze Age. Conversely, deposits that can definitely be attributed to the Ewart Park phase are largely absent in the northern half of catchment, an area that has witnessed metalwork deposition in earlier times.

The depositional locales of different deposit types appear to be consistent with the trends identified in the topographic analysis. All four of the sword deposits were positioned on the direct sides of the principal valley of the river Till. The find-spots of Early and Middle Bronze Age side-arms are all general provenances but they are not inconsistent with locations in the direct vicinity of the main rivers, whilst the rapier from Kilham appears to have been deposited in the Bowmont Water itself. The primacy of the main river valleys as a suitable depositional locale for side-arms is therefore apparent through-out the Bronze Age in the Till catchment.

There are presently only three spearhead finds recorded from the Till catchment[5]. The general provenances of these spearheads are consistent with locations within steep upland valleys, one in the upper stretches of the principal river, one of a major tributary, and the other a minor tributary. The first two of these finds take the form of ostentatious Late Bronze Age lunate-opening spearheads which is notable given the relative wealth of broadly contemporary side-arm deposits within the catchment. The other find, a Middle Bronze Age looped spearhead found lying on the river gravels of the Lamben Burn high in the Cheviot uplands was potentially deposited within the watercourse itself, although the patina is not typical of a wet context, and the spearhead may have eroded out of the stream bank. By contrast, the single axe deposits appear in a wider range of locales within the catchment, both close to the main watercourses but also in more peripheral locations on higher ground towards both principal and local watersheds.

[5] McLaughlin notes the discovery of a spearhead at South Lyham in 1833, but, it is highly probable that this is a misidentification of a sword blade that was found in the same field in 1838 (Bruce 1880). A more detailed discussion is provided on p.223.

7.2.2 Aln catchment (Figure 7.3 and Appendix A1.3)

In the Aln catchment there is no evidence of spatial-temporal patterns so evident in the Till catchment to the north-west. Metalwork deposits of all periods are widely distributed and favour no single area. Although Ewart Park metalwork dominates the metalwork record to a lesser extent in comparison to the Till catchment, a defining feature of the depositional narrative in both catchments is the presence of a number of striking martial deposits belonging to this phase, all of which are located within the valley of the principal river in the catchment.

At Thrunton, a northern series Ewart Park sword was recovered along with a rare 'antennenschwerter' sword, a continental form with distributions centred on northern Germany and coastal Poland, (Colquhon and Burgess 1988, 123), as well as three spearheads. Two of the spearheads are noteworthy themselves, one has substantial proportions for its type – a pegged leaf-shaped spearhead measuring 38.4cm in length, whilst the lunate-opening spearhead which also has elegant proportions is a relatively uncommon type in the study area. The Thrunton spearhead closely parallels the one from Thirlestane House, Yetholm, in the adjoining Till catchment, which is similar in form and proportions.

A second probable Ewart Park hoard containing 78 artefacts, including 20 leaf-shaped swords, 16 spearheads of both pegged and lunate-opening leaf-shaped type, and 42 socketed axes, was discovered on the Hulne Park estate, which straddles the river Aln north-west of Alnwick. The discovery was made in 1726 and unfortunately the whereabouts of only one artefact from the hoard is known today, a pegged leaf-shaped spearhead in the British Museum. An account of the discovery in the British Museum's Bronze Implement Card Catalogue (BICC hereafter) suggests that the axes were recovered from a different context to the swords and spearheads,

the axes being positioned ‘a foot lower in the ground’. The two groups of objects also appear to have been in different conditions, the spearheads and swords being ‘well finished’ and the axes ‘much broken and battered’ (BICC / Annable 1987).

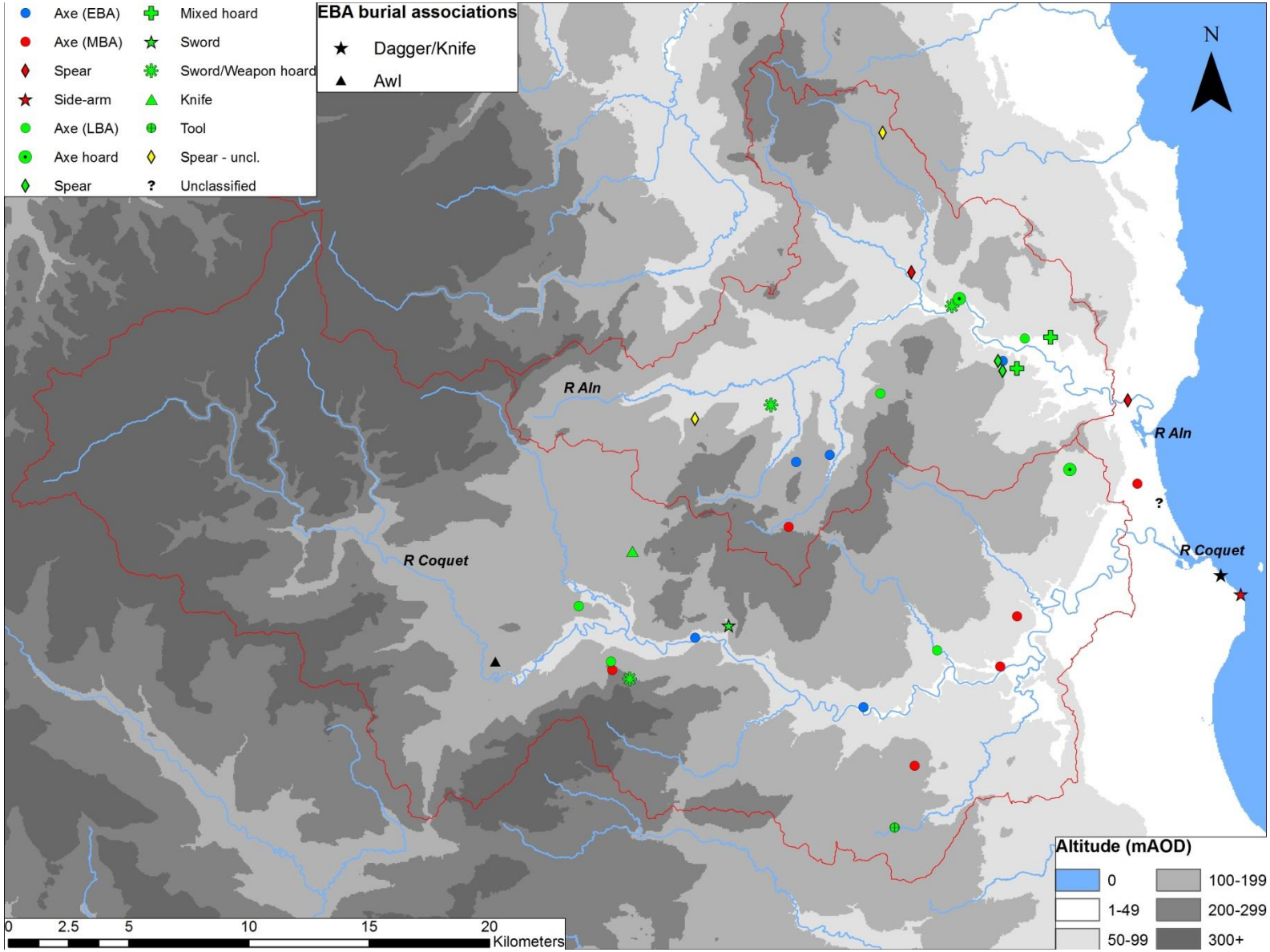


Figure 7.3 – The Aln and Coquet catchments.

The siting of the different deposits within the catchment is consistent with the results of the topographic analysis. The weapon hoard from Thrunton was deposited towards the edge of the valley floor of the river Aln whilst the general, Hulne Park, provenance for the large mixed hoard suggests a find-spot in the vicinity of the same river. The find-spot of the other notable Ewart Park phase hoard from the catchment, the two gold lock rings allegedly found in association with a socketed axe and pottery vessel at Cooper's Hill, Alnwick, also lies within the Aln valley, approximately 750m south of the river.

The find-spots of the five recorded single axes are more widely distributed across the breadth of the catchment, although the finds are limited to two individual valleys. The limited sample displays a dendritic pattern, with three of the five find-spots located along the course of the Edlingham Burn - a prominent tributary of the Aln, or its headwaters. Of the two single axes from Alnwick on the southern bank of the Aln, one is only vaguely provenanced to 'near Alniwck', but the second, a Wilburton phase socketed axe of type Highfield, has an area provenance within the North Demense of Alnwick Castle, an area which lies on the northern bank of the river.

A small number of vaguely provenanced spearhead finds are distributed widely across the catchment although the valley of the Aln appears as a focal zone. A complete Middle Bronze Age looped spearhead from Lesbury appears to have been deposited in the river itself a short distance upstream from the estuary. By contrast a tip fragment from an unclassified spearhead was found near Camp Hill on the sandstone uplands approximately 7.5km north of the river Aln, close to the watershed with the coastal plain.

7.2.3 North Northumberland coastal plain (Figure 7.2 and Appendix A1.2)

The metalwork from along the northern coastal plain of Northumberland has a number of defining features. In common with the adjoining Till catchment to the west, Late Bronze Age metalwork, particularly of the Ewart Park phase, represents the predominate type of deposit. Three single socketed axe finds and two single spearheads are complemented by a substantial mixed hoard from near Berwick containing six socketed axes, ornaments – including gold lock rings, an assortment of bronze tools, a spearhead fragment, a large bronze ingot and pottery. However, in contrast to the surrounding catchments of the Till, Aln and Coquet, the coastal zone stands out for the complete absence of both Middle and Late Bronze Age side-arms. Metalwork from the Middle Bronze Age is represented by a looped leaf-shaped spearhead from North Charlton and a straight based basal-looped spearhead from Elford. A further spearhead fragment from Lindisfarne is unclassified.

Given that Late Bronze Age side-arm deposits appear to favour terrestrial locations within the valleys of major rivers, or the watercourse itself, it is necessary to draw the obvious link between the current absence of sword deposits from this zone and the distinct topography along this section of the coastal plain, which contains only relatively minor watercourses that rise on the sandstone uplands and flow the short distance eastwards to the coast. By contrast, spearheads, which are represented by a number of Middle and Late Bronze Age types, have been found across a range of landscape zones from the coastal fringe to the sandstone uplands. The discovery of a Late Bronze Age lunate-opening spearhead at Bowsden Moor, which lies in a natural hollow just below the Till watershed, is consistent with similar ostentatious spearhead finds from the adjoining Till catchment at Thrunton and Yetholm, and could be viewed as contributing to a distinct grouping of side-arms and elaborate spearhead deposits from the Till catchment and its close hinterlands.

7.2.4 Coquet catchment & coastal hinterland (Figure 7.3 and Appendix A1.4)

The distribution of find-spots within the Coquet catchment displays a definite bias towards the middle and lower sections of the catchment with no metalwork finds currently recorded from the Cheviot upland zone. A subtle spatial-temporal trend is visible with Middle Bronze Age metalwork favouring the eastern, coastal part of the catchment and Late Bronze Age metalwork favouring locations further inland to the west, although this division is by no means strictly adhered to. The Late Bronze Age mixed axe hoard from Shilbottle is an obvious exception to this pattern, although as I will discuss shortly, this hoard contributes to a quite separate pattern of Late Bronze Age hoard deposits from along the eastern seaboard of the study area.

It is particularly notable that the two recorded Ewart Park phase sword deposits from the catchment compliment the distribution of similar finds in the Till and Aln catchments to the north. These two sword deposits share many similar characteristics both with one another and with the sword deposits previously discussed. A complete sword and a substantial blade fragment were found along with two lead pommels and ring fragments under a large stone slab on the lower slopes of the Simonside hills south-west of Rothbury in the Coquet valley. On the opposing side of the valley within the Debdon Burn, north-east of Rothbury, a single sword in a complete condition was discovered along with three bronze rings. The complete sword from Simonside and the Debdon Burn sword both belong to step two of the northern series, and both consist of two fragments, each having a break towards the lower section of the blade.

The location of the sword deposits in the middle section of the catchment, in a location where the river Coquet cuts through the sandstone uplands, provides a common topographic bond with the sword deposits from the Till and Aln catchments to the north. The find-spots occupy a distinct

zone, in valley locations at points where the rivers cut through the sandstone uplands, or in valley locations enclosed between the sandstone ridge and the Cheviot massif. The siting of the sword deposits is therefore consistent with the topographic analysis. This is also true of the find-spots of single axe deposits which are distributed more widely across the catchment, occupying locations both close to the River Coquet as well as more remote positions along its tributaries. The rapier from High Hauxley is notable for being one of the few Middle to Late Bronze Age side-arms from the coastal plain. Whilst it is by no means distant from the River Coquet, the defining topographic feature of the find-spot locale is the coastal headland. However, given the scarcity of side-arm deposits along the north Northumberland coastal plain - where there are no major watercourses or prominent valleys- the siting of this find, relatively close to the River Coquet although not directly within its catchment, is worthy of note.

7.2.5 Lyne, Wansbeck & Blyth catchments & coastal hinterland (Figure 7.4 and Appendices A1.5 and A1.6)

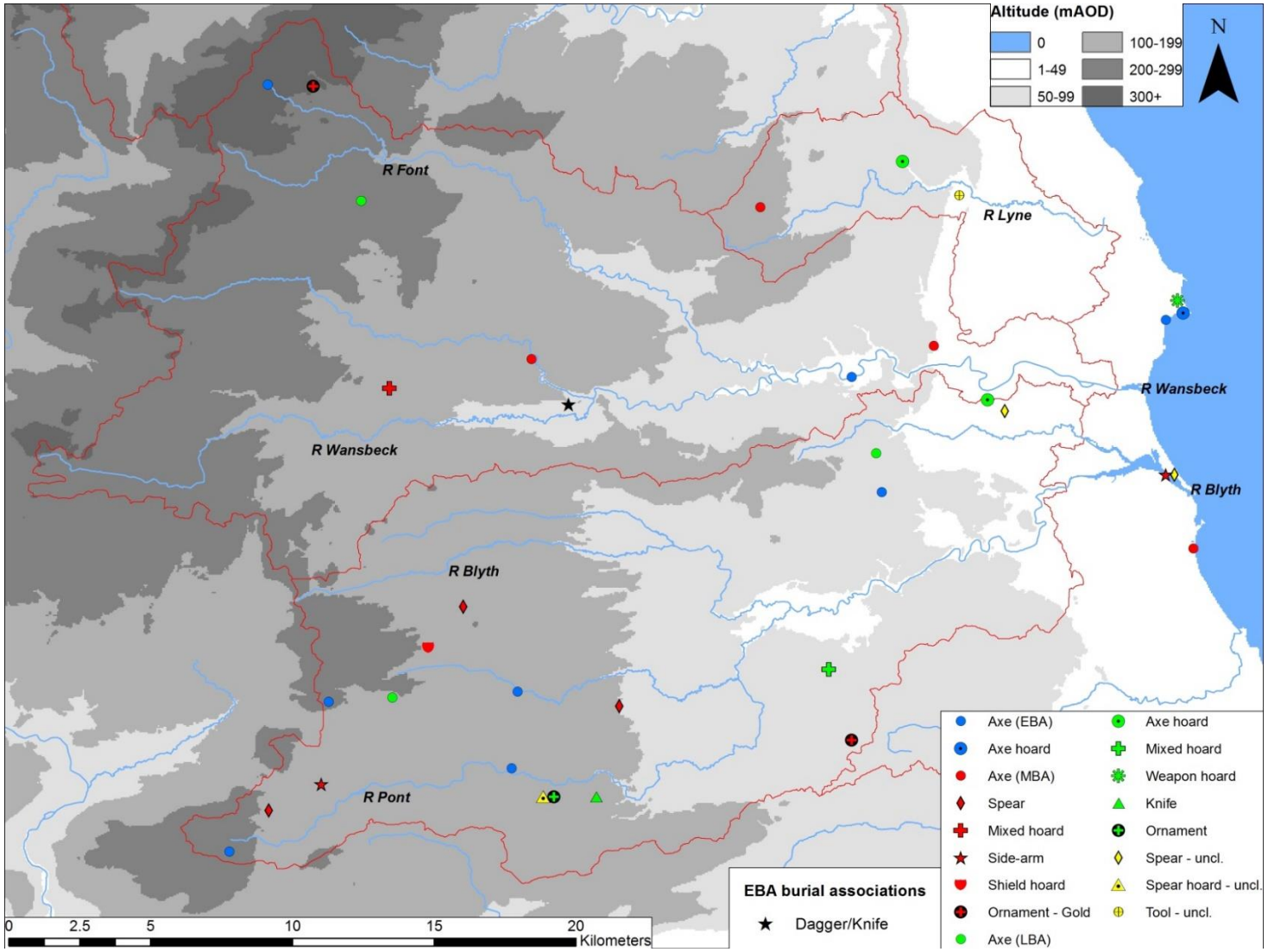


Figure 7.4 – The Lyne, Wansbeck and Blyth catchments.

The depositional narratives of the Wansbeck, Lyne and Blyth catchments display some obvious contrasts to those of the catchments to the north, with significant differences particularly emerging during the Late Bronze Age. Finds from the Early Bronze Age are well represented, relatively more so than in other catchments in the study area. A total of five Early Bronze Age axe find-spots are currently recorded for the Blyth catchment, whilst the three axe find-spots from the Wansbeck catchment are complemented by the only definitive hoard of Early Bronze Age axes from Northumberland, and only one of five in north-east England, from the coastal headland at Newbiggin-on-Sea. A stone mould for two flat axes of type Migdale from Cambo, one of only three from the study area, also lies within the Wansbeck catchment.

Middle Bronze Age deposits are represented by a large range of metalwork types including numerous early and late short-flanged axes, side-looped spearheads, a complete rapier and a dirk/rapier fragment. As well as these more common artefacts a number of rarer objects have also been discovered. Finds of single gold ornaments are recorded from both the Wansbeck and Blyth catchments and a hoard containing fragments of Yetholm and Harlech type shields was discovered at Bellridge in the upper Blyth catchment.

Given the relative wealth of Early and Middle Bronze Age deposits it is notable that Ewart Park phase metalwork is less well represented in comparison to the Till, Aln and Coquet catchments. Whilst these contrasts are subtle and based on a limited number of finds, there are more notable differences in the types of Late Bronze Age artefacts that have been discovered. One feature that sets the Lyne, Wansbeck and Blyth catchments apart from the Till, Aln and Coquet catchments is the absence of Late Bronze Age swords. A number of deposits containing double bladed side-arms are known from this area but they are limited to a single Thorndon type socketed

knife from Dissington and a hoard from the coastal headland at Newbiggin Moor containing a fragment of a socketed knife, an unclassified blade fragment, and four spearheads. Given its relatively recent find date, it is unfortunate that the full composition of the potentially large Ewart Park phase hoard from Guide Post is unknown, however, the alleged association of casting debris along with the two recorded socketed axes would be inconsistent with the presence of complete swords based on established artefact associations in hoards of this date. Axes and swords appear to have been kept physically separate in the Hulne Park hoard/s, whilst the numerous sword deposits from the Till, Aln and Coquet catchments are either single finds, sword only hoards or sword-spearhead hoards, a trend replicated across the study area as a whole.

Instead, we can speculate that the Guide Post deposit actually contributes to a wider pattern of Ewart Park phase hoards with varied contents, which are united by the presence of socketed axes and the general absence of overtly martial side-arms, which are scattered along the coastal plains of Northumberland and Durham. A number of these hoards are particularly noteworthy for the fact that they contain gold ornaments – Berwick and Alnwick, or comparatively rare objects such as horse and wagon fittings – Stannington. Similar types of deposit have yet to be discovered within the upland zones of the Till, Aln or Coquet catchments[6].

The find-spots of both single side-arms are consistent with the topographic analysis, occupying locations within major river valleys although the nature of each deposit contrasts greatly. A complete group two rapier is recorded from the estuary of the river Blyth, whilst at the opposite

[6] The only non-martial hoards from this zone contain complete axes. In addition to the small hoard from Humbleton Hill, Paul Frodsham (2006) notes that a farmer in the upper Coquet catchment is in possession of two type Yorkshire socketed axes that he found whilst ploughing a field in Warton. A third type Yorkshire socketed axe was discovered in the same field in the nineteenth century and it is possible that these finds are from a dispersed hoard.

end of the catchment, the hilt and lower blade fragment of a dirk or rapier was found within one kilometre of the of the river Pont, a primary tributary of the Blyth, but a minor feature in the landscape in its upper reaches.

7.2.6 Tyne catchment & coastal hinterland (Figure 7.5 and Appendix A1.7)

Metalwork deposits from all periods are widely distributed across the Tyne catchment although finds are largely absent from the extensive upland areas in the south-west and north-west. Early Bronze Age deposits have the most restricted distribution, with finds limited to the lower Tyne and the lower sections of the North and South Tyne valleys, the latter of which has few metalwork finds from all periods. In the far north of the catchment there is a concentration of Middle Bronze Age metalwork finds that have been discovered in upland locations to the north and east of the River Rede.

More notable patterns begin to emerge with an examination of the distributions of different deposit types across the catchment. A defining feature of the lower Tyne catchment is the significant proportion of deposits that contain martial artefacts, particularly complete side-arms. Similar types of deposit are all but absent in the North Tyne/Rede and South Tyne catchments where axes are the primary metalwork type, complimented by a scattering of spearheads. Within the lower Tyne catchment the distribution of martial artefacts displays its own subtle localised spatial patterning with deposits appearing to favour a number of loosely defined zones.

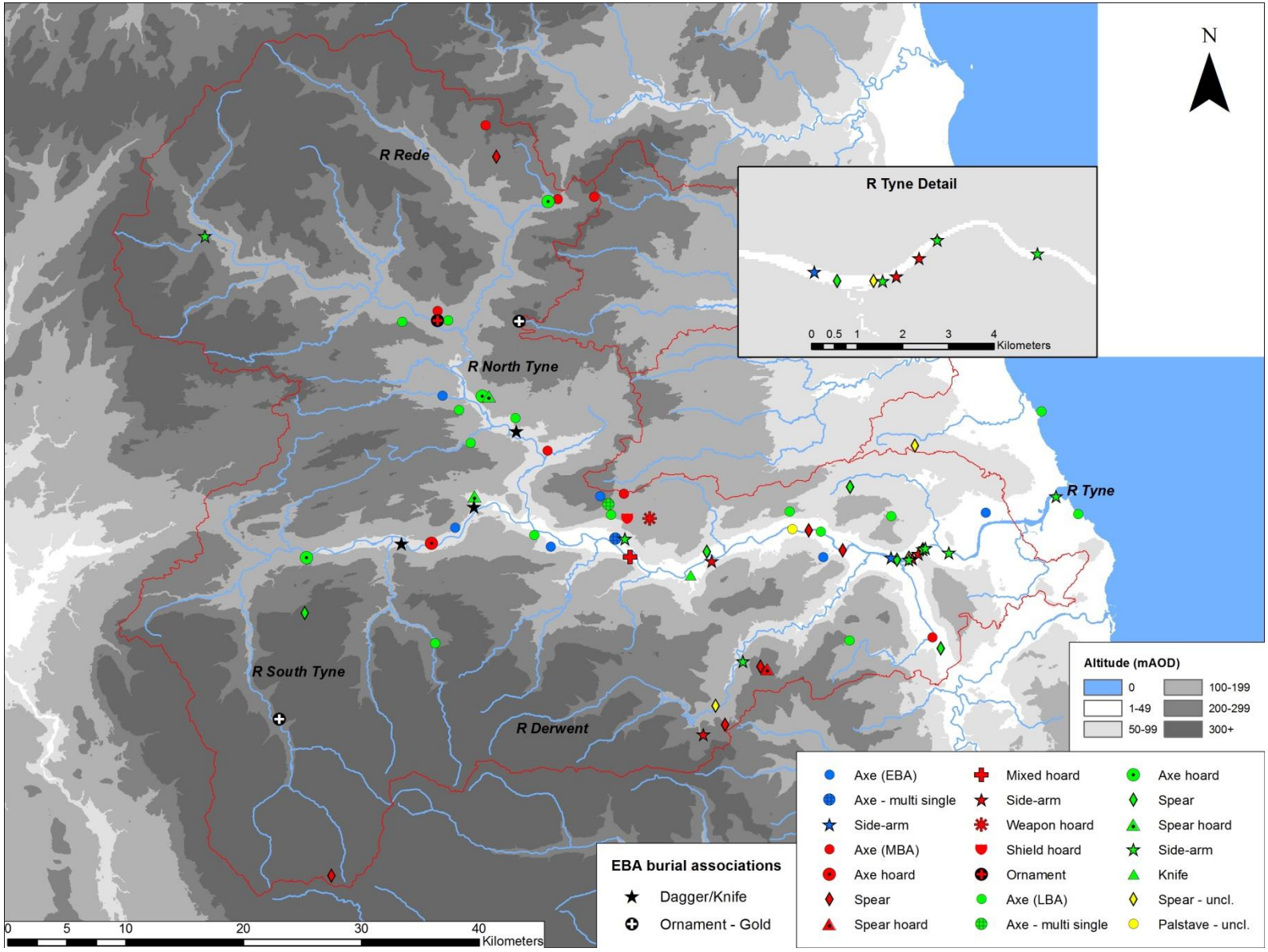


Figure 7.5 – The Tyne catchment. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence

The river Tyne at Newcastle appears to have acted as focal point for martial metalwork deposition during the Bronze Age. There are eight recorded finds from a 3km stretch of the river representing a range of martial artefacts and periods – a ribbed ogival dagger (type Arreton), two group three rapiers (type Taunton), a lunate-opening spearhead (type Wilburton), a Ewart Park sword (type Ewart Park), a Gundlingen sword (type Llyn Fawr), and two spearheads (one unclassified and one pegged, leaf-shaped variety with elegant proportions of probable Late Bronze Age date). Two further Gundlingen swords have also been dredged from the lower Tyne below Newcastle.

Whilst artefacts from the three main periods are present, there is a bias towards metalwork from the Late Bronze Age with the Wilburton, Ewart Park and Llyn Fawr phases all represented. The presence of these swords is particularly noteworthy as whilst the distributions of earlier side-arms and spearheads from both riverine and terrestrial settings extend above the lower reaches of the lower Tyne valley, no definite sword deposits are yet to be recorded away from this loose cluster. The two adjoining fragments from a probable Danish Muller type sword from near Corbridge, 25km upstream from Newcastle, may have been a terrestrial deposit, but the exact provenance for this find is unknown. More significantly, Burgess suggests that the distinctive patina on the fragments is typical of swords found in Scandinavia, calling into question the general Corbridge provenance altogether (1988, 125).

If there is a slight bias towards Late Bronze Age martial metalwork in the lower reaches of the Tyne valley, further upstream to the west of Newcastle, martial metalwork from the Middle Bronze Age is the predominate type. Probable riverine deposits in the form of looped and basal looped leaf-shaped spearheads are known from Blaydon and Ryton Willows. Further to the west a number of late Middle Bronze Age martial deposits have been found along a stretch of the valley between Corbridge and Mickley. Hoards belonging to the Wallington complex are known from

Shildon Lough, where a group four rapier was discovered alongside a protected-opening spearhead, and Farnley, where four group four rapier blades formed part of a mixed hoard containing eight spearheads and a single transitional palstave. Another group four rapier is believed to originate from a gravel quarry on the banks of the Tyne at Mickley. Finally, a fragment of a Yetholm type shield was discovered near to Aydon Castle, a little under 2km west of Shildon Lough, and 3.2km north of Farnley.

The different deposits within the Tyne catchment adhere to the general rules established by the topographic analysis. In addition to the riverine finds from the Tyne, two further swords are recorded within the greater Tyne catchment, a largely complete Ewart Park sword in two fragments from West Law Farm near Ebchester in the Derwent valley, and a largely complete Ewart Park sword from the confluence of the Lewis Burn and the North Tyne in the upland zone. Although excluded from the topographic analysis, both find-spots are consistent with the topographic convention of favouring locales within major river valleys. The Derwent, a primary tributary of the Tyne, is a major watercourse and a prominent landscape feature. The Ebchester sword was found on West Law Farm and thus a general area provenance suggests that the find-spot was located on the lower slopes of the Derwent Valley. Both the find circumstances and patina support the classification of the Lewis Burn sword as a riverine/stream deposit. The sword was recovered from the lower reaches of the Lewis Burn at a point just below its confluence with the North Tyne and thus the find-spot also has a close association with a principal valley and its watercourse.

Although spearhead deposits are distributed more widely than side-arms across the catchment, there is a definite bias towards the lower Tyne. The lower Tyne and Derwent catchments contain 66% of metalwork deposits within the greater Tyne catchment, but 78% of the deposits that

contain at least one spearhead. In addition to a Late Bronze Age Wilburton phase lunate-opening spearhead, both the largest Middle Bronze Age looped spearhead and Late Bronze Age pegged spearhead from the study area come from the same stretch of river where numerous side-arms have been recovered in the vicinity of Newcastle. Further upstream a relatively uncommon complete Middle Bronze Age basal-looped, leaf-shaped spearhead was found on a gravel bed on the banks of the Tyne opposite Ryton Willows and a second Wilburton phase lunate-opening spearhead is recorded from the north bank of the Tyne at Ovington. Finally, although the protected-opening spearhead from the Penard phase hoard from Shildon Lough consists of just a complete blade fragment it is by far the largest blade section of this type in the study area. Whilst the find-spot is located over 3km from the river Tyne, the local topography and patina of the metalwork strongly suggests that this weapon only hoard was deposited in boggy ground which occupied a substantial natural hollow on the valley side.

Whilst it is not possible to comment on their specific topographic setting, the less aesthetically impressive spearheads from Woolsington and Birtley in the lower Tyne catchment, and Wideopen on the coastal plain, are considerably more peripheral to the river Tyne. In both the north and south Tyne catchments, where only one side-arm find is recorded, spearheads are represented by the common looped and pegged varieties, and appear moderately proportioned in size.

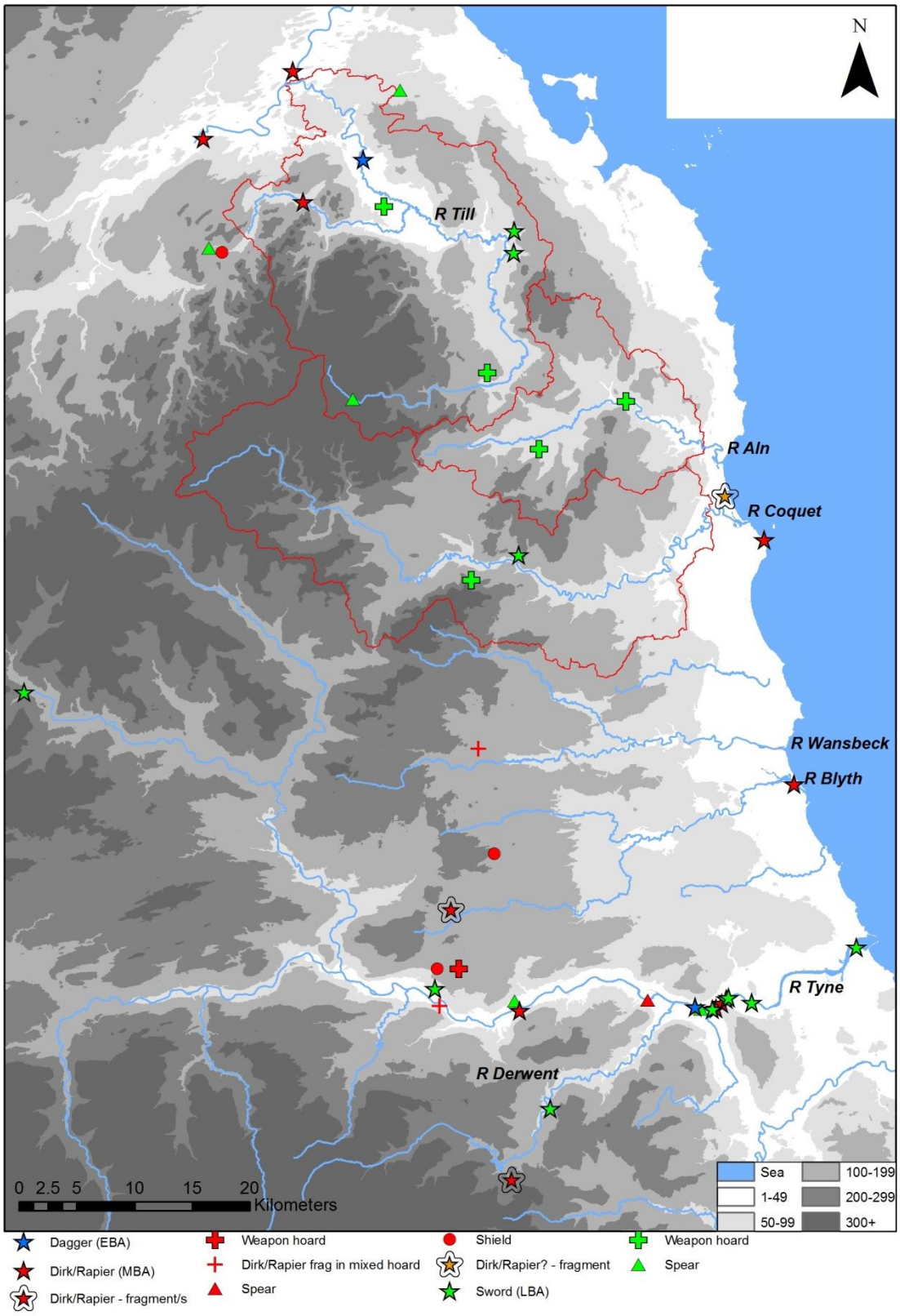


Figure 7.6 – The distribution of deposits containing side-arms, ostentatious and/or large spearheads and shields within the Tweed to Tyne catchments.

7.2.7 Summary: Tweed to Tyne catchments

In the north of the study area it is possible to identify a number of distinct depositional histories that appear to have been directly influenced by the topography of the region. Individual river catchments have their own unique depositional histories but these often form part of wider patterns of depositional activity which extend into adjoining catchments which together form broader topographic zones. The north-west uplands and northern coastal plain only come strongly into focus towards the end of the Bronze Age with the large scale deposition of Ewart Park metalwork. The sandstone uplands and Coquet/Rede/Wansbeck watersheds represent the limit of Middle Bronze Age depositional activity, with deposits largely restricted to the east, south-east and south of these major watersheds. Local depositional narratives within the Aln and Coquet catchments emphasise this division, with Ewart Park swords occurring solely within the sandstone upland zone, and Middle Bronze Age deposits favouring locations in the lower river valleys and along the coastal plain.

Depositional activity was widespread during the Ewart Park phase but the nature of the upland and coastal zone metalwork display some marked contrasts. The upland zone is defined by the overtly martial deposits such as single swords, sword only hoards and weapon only hoards, whilst the coastal plain is defined by hoards with varied contents but united by the presence of socketed axes, the general absence of side-arms which only appear in the Amble hoard in a fragmented form, and the occasional inclusion of gold ornaments and/or rare artefacts. With this contrast in mind, the specific circumstances of the Hulne Park hoard become more intriguing with the alleged physical separation of the fragmented axes from the complete swords and spearheads, and its positioning at what could be considered a transitional location in the landscape, between the coastal plain to the east and sandstone fells and Cheviot uplands to the west. The presence of a type Dowris axe in this hoard, potentially further aligns the deposit with the upland metalwork

distribution given that the only other Dowris axes from the northern half of the study area are both from the Till catchment.

Given the precedent for martial metalwork deposition during the Middle Bronze Age on the coastal plain and the presence of numerous Late Bronze Age deposits, including gold ornaments, the current absence of complete swords and impressive spearheads from this zone is striking, particularly as it is sandwiched between two geographically distinct distributions of such objects. Whilst swords and ostentatious spearheads are a defining feature of upland metalwork deposition in the Late Bronze Age, these objects were either inaccessible, available but not adopted, or were not considered suitable objects for deposition along the coastal unless broken.

On the eastern seaboard of the region the river Tyne at Newcastle is the notable exception to this rule, with a tradition of martial metalwork deposition spanning the Bronze Age. Just as the sword deposits from the upland zone are united by a number of shared characteristics, so too are the sword deposits from the lower Tyne valley (Table 7.2). All but one of the swords from the upland distribution is of type Ewart Park, the majority of which belong to step two of the northern series, whilst three of the four lower Tyne swords are of type Gundlingen, dating from the subsequent Llyn Fawr phase. The swords from the lower Tyne were dredged from the river itself and are interpreted as riverine deposits. There is some debate as to whether the origins of Gundlingen swords lies on the continent or southern England. Cowen (1967) and Colquhoun and Burgess (1988) believe them to be a continental development, whilst Gerloff (2007, 153) has argued that the they are more likely to have originated within the sword production centre of the Thames Valley as a native development of Thames type swords, which are aligned with the Ewart Park metalworking phase. Although the distinction between continental import and native development is an important one, a more pertinent distinction for this discussion is perhaps the more

fundamental contrast between local and non-local metalwork types, and the possible desire to imitate non-local forms.

Zone	Predominate Typology	Phase / Date	Origin	Topographic Setting	Condition
Upland	Ewart Park - N2	Ewart Park (1020–800BC)	Local type	Floor or sides of main river valley	Complete or large fragment
Lower Tyne	Gundlingen – C	Llyn Fawr (800–650BC)	Local development of type with continental origins	Within main river	Largely complete

Table 7.2 – Principal characteristics of the north-west upland and River Tyne sword concentrations.

The three Gundlingen swords from the lower Tyne represent a continuation of the long history of martial metalwork deposition in the river, but, their presence is quite significant as they are unlikely to be the product of local people simply depositing a sword type that was popular at the time. Only five Gundlingen C swords are recorded from the whole of Britain (Colquhoun and Burgess 1988, 116), with three from the River Thames complementing the two from the River Tyne. Only two examples are known from the European mainland and thus they are considered by Burgess and Colquhoun to be a development of the Gundlingen B type that is considerably more numerous on the continent (46 Continent, 11 Britain including 7 from the River Thames). The Gundlingen sword from the River Tyne may be local products, but they do not necessarily reflect local identities. As Colquhoun and Burgess (1988, 116) point out, given that the Gundlingen swords date from a period when their iron counterparts were also in circulation, it is not obvious why metal smiths continued to produce bronze swords. Burgess and Colquhoun provide their own answer to this question, suggesting that the swords may have been produced primarily with deposition in mind. One of the Gundlingen C swords from the River Tyne is described by Colquhoun and Burgess as being a 'poor casting with many flaws visible on one side' (1988, 117), which may reflect the fact that the sword was not produced for use as a functioning weapon.

Fontijn (2002, 266) has noted how in the southern Netherlands, the most exotic, non-local metalwork types are those that are most likely to have been deposited in major rivers. Fontijn suggests that this depositional behaviour may have been influenced by the role rivers play in providing links between places. Rivers would have been important arteries for transport and communication and people would have understood the role that they played in linking their home area to more distant communities, even if they did not experience these other places in person. Major rivers, especially those that flow towards areas where certain metalwork types originated, would appear to be particularly apt depositional locales for deposits that through their appearance reference their origins. In the case of the lower Tyne, if the Gundlingen C swords were made or commissioned primarily for the purpose of deposition, it suggests those depositing the swords may have been concerned with displaying a cosmopolitan identity by linking themselves with the wider world.

Differences in the swords deposits from the north-west uplands and the lower Tyne reflect the contrasting concerns, attitudes and motives that were behind martial metalwork deposition in these two areas at different points of Late Bronze Age. In the upland zone communities deposited swords that reflected local, regional identities. The swords from the upland zone were not deposited in the principal rivers, but were placed in dry or wet, non-riverine contexts on the valley sides. The possible significance of these particular metalwork deposits in both the social and cosmological landscape are examined in greater detail in the following chapter.

The topographic analysis suggested that differences between the find-spots of swords and axes, in terms of their locations relative to major watercourses, were not as pronounced in Northumberland than for the study area as a whole. However, detailed examination of all deposits from within each catchment confirms the presence of substantial differences in the siting of the

various find-spots. Both Middle and Late Bronze Age single side-arms and weapon only hoards favour locations in major river valleys, whilst single axe find-spots occupy a much broader cross-section of each catchment. The distinctions between different types of spearhead are upheld by their broad geographical distributions. The most aesthetically impressive types are located in the same catchments and wider topographic zones as contemporary side-arm deposits, and appear exclusively alongside side-arms in a number of hoards. The distribution of lunate-opening spearheads exemplifies this trend with all six finds coming from the two areas where martial deposits are most prevalent. Four of the spearheads are from the north-west uplands and two are from the lower Tyne valley.

7.3 Wear and Tees catchments and coastal hinterland (Figure 7.7 and Appendices A1.8-9)

Across the Wear and Tees catchments it is possible to identify a number of subtle trends which may reflect real spatial-temporal shifts in Bronze Age depositional activity, with deposits from different periods displaying a degree of clustering in a number of distinct areas and topographic zones. Some of these trends are all the more notable for the fact that they occur in both catchments, for example, the core distributions of Middle Bronze Age axes are located in the middle sections of each catchment. More nuanced trends which relate to the distributions of different object types from individual periods are also visible, such as the apparent zonation of Late Bronze Age martial deposits, with sword find-spots restricted to the upper and lower sections of both catchments.

The Wear catchment has a strong martial identify that mirrors that of the Tyne catchment to the north with deposits from throughout the Bronze Age represented along the length of the Wear valley and its main tributaries. In common with the Tyne, a short stretch of the Wear

approximately 6km from the mouth of the river appears as a focal point for martial metalwork deposition. A complete Wilburton sword and a large blade fragment from a Ewart Park sword were dredged from the Wear on separate occasions at Hylton. A Late Bronze Age socketed axe also comes from this general locale whilst a third sword may have been recovered from the river a short distance downstream. A little over a kilometre further downstream a complete group four rapier was found on the north shore of the river at Claxheugh.

One metalwork hoard in particular from the upper Wear catchment – the Heathery Burn hoard - deserves special attention as its character is quite unlike any other deposit from north-east England. This deposit comprises both metal and non-metal objects which were spread over a 150m length of the cave. The material displays a degree of spatial structuring based on deposit type, but it is not strictly adhered too. The absence of a focal point within the cave, even amongst similar deposits, implies that the material may have been deposited in a piecemeal fashion, perhaps over an extended period of time. In this regard Heathery Burn may be similar to other depositional zones within the study area, such as the lower Tyne at Newcastle, or the fringes of the Vale of Pickering. The cave appears to have been an important depositional locale within the local landscape, and may have been a significant place within the cultural geographies of more than one group. Whilst the upland environment limits the potential for the discovery of metalwork deposits, it is perhaps significant that only two other Late Bronze Age deposits are known from upper Weardale. These deposits appear to be very isolated within the catchment, with the closest broadly contemporary find-spot located over 25km downstream. We might therefore speculate that the cultural significance of the cave to Bronze Age communities in upper Weardale may have been such that it was considered the primary locale for depositional activity.

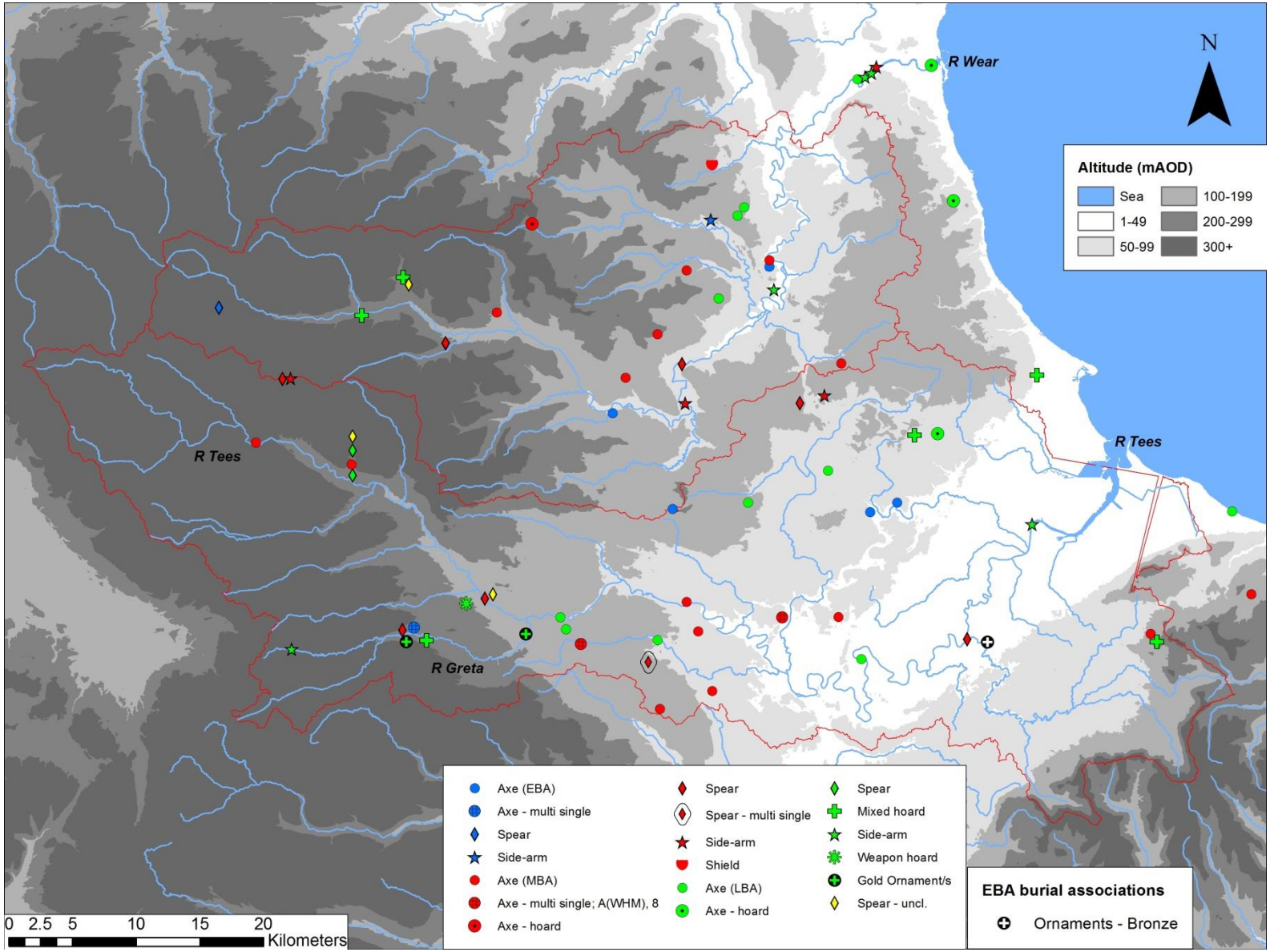


Figure 7.7 – The Wear and Tees catchments. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Within the Tees catchment metalwork from all periods is distributed more widely than in the Wear catchment to the north but it is still possible to discern a number of distinct spatial patterns based on temporal and typological grounds. The presence of numerous single axe deposits across a large portion of the central catchment and the relative absence of other deposit types is particularly notable. This general trend is the result of a number of more subtle temporal patterns with metalwork from different periods occupying distinct zones.

Although the central catchment is not a total lacuna for martial metalwork - no side-arms have yet to be discovered in this area and the few spearhead deposits - a Middle Bronze Age side-looped spearhead from the river Tees at its confluence with the river Leven, and three Middle Bronze Age spearheads from Stanwick St John, are located towards the margins of the axe distributions effectively bookending the loose cluster of Middle Bronze Age axes. The only other side-arm deposit from the lower half of the Tees catchment is a dirk or rapier blade fragment from Durham Ferryhill. Along with a side-looped spearhead found 2km to the east, these deposits stand apart from the core distribution of Middle Bronze Age deposits along the Tees valley lowlands and its hinterland and are more easily viewed as outliers of the distribution of contemporary Middle Bronze Age metalwork from the Wear catchment a short distance to the north.

In addition to the Middle Bronze Age spearhead from the Tees, a complete Ewart Park sword belonging to step one of the northern series was dredged from the Tees in the vicinity of central Middlesbrough. Though no other riverine metalwork finds are recorded from this general area an Early Bronze Age stone battle axe was also recovered whilst dredging a mile upstream from the mouth of the river (Middlesborough Museum - MIDDM:1892.5). The apparent re-current use of the lower stretch of the river for the deposition of martial artefacts over an extended period of time

is consistent with similar activity in the Rivers Wear and Tyne. In contrast to the thin scattering of spearheads and side-arms in the lower half of the Tees catchment, such deposits are considerably more numerous in the upland zone, to the west of the confluence of the Rivers Tees and Greta. The metalwork from this area is defined by two distinct distributions – a Late Bronze Age focus along the Greta valley and adjoining sections of the Tees valley and a concentration of Middle to Late Bronze Age axes and spearheads in upper Teesdale.

The Late Bronze Age distribution along the Greta and adjoining Tees valley displays its own subtle spatial patterning. The find-spots of three single socketed axes below the Tees-Greta confluence which contribute to the wider distribution of axe deposits across the centre of the catchment are spatially distinct from the Middle Bronze Age axes in the Tees valley lowlands to the east. In contrast, to the west of the Tees-Greta confluence the Late Bronze Age deposits are of a distinctly more martial and ostentatious nature. In the Greta valley gold bracelets of an Irish form are recorded from Greta Bridge and Bowes, whilst a complete variant C Wilburton type sword was discovered in the Stainmore pass towards the head of the valley. At Gilmonby, a short distance east of Bowes on the south bank of the Greta, the single largest hoard currently recorded within the study area was discovered in 1980. Finally, at Startforth in the Tees valley 5km north of the Tees-Greta confluence two complete northern series Ewart Park type swords were found in association with a gold lock ring.

Whilst the Late Bronze Age metalwork builds on a history of depositional activity within the Greta valley, two of the seven recorded Early Bronze Age axes from the Tees and Wear catchments come from the Bowes area, as does a Middle Bronze Age side-looped spearhead, it is the concentration of comparatively uncommon and lavish forms of Late Bronze Age metalwork that

sets this area apart at a regional level. The potential significance of this grouping of metalwork finds has already been considered in relation to its positioning on the eastern side of the Stainmore pass, a prominent Trans-Pennine route-way (Vyner et al 2001). Whilst the precise role of metalwork deposition in relation to the pass is enigmatic and cannot be proven based solely on the spatial association, the implication that local populations were able to acquire such metalwork in the first place hints at the potential importance of this topographic feature. Vyner suggests that it may reflect power and status associated with controlling interests over upland pasture within the pass and/or controlling stakes in the route-way itself (2001, 176-177).

The pattern of hoard deposition along the coastal plain of Northumberland with its emphasis on axes continues south of the Tyne with the recent metal detector discovery of 19 largely intact socketed axes primarily of type Yorkshire from the vicinity of Sedgefield, adding to poorly recorded deposits from Wearmouth and Cold Hesledon. In addition, two distinctive hoards from High Throston and Butterwick, a little over 10km apart, share a number of characteristics with both deposits containing amongst other objects, a spearhead fragment, amber beads and bronze rings.

The significance of the major river valleys as a depositional locale for Late Bronze Age swords is clearly evident in both catchments. In addition to the riverine finds, four terrestrial deposits contain complete swords, of which three are located in major valleys a short distance from the main watercourse. A Ewart Park sword from Houghall Farm, discovered during the excavation of archaeological test pits, appears to have been placed in an ox bow lake that was situated on the floodplain of the river Wear (Gwilt 1996). In the Tees catchment two complete Ewart Park swords belonging to steps two and three of the northern series were found in association with a gold ring

at Startforth, whilst a complete variant C Wilburton sword was discovered in the vicinity of the Reys Cross native settlement on Bowes Moor (Vyner et al 2001). The general provenance suggests a find-spot a short distance to the north of the Yardstone Beck on the side of the upland valley.

Of the five Early and Middle Bronze Age side-arm deposits, the late Middle Bronze Age rapier from the Wear at Claxheugh and the Early Bronze Age tanged dagger from Witton Gilbert, have a close association with a principal river and a primary tributary respectively. The group one rapier from Binchester must be treated with a degree of caution as although the village lies on the banks of the River Wear the general provenance may reflect a find-spot within the wider historic parish. In common with the side-arm deposits from Northumberland, those with the closest associations to major watercourses are all in a largely complete condition, whilst displaying varying degrees of breakage, bending, twisting or minor damage. Conversely, the two single finds that are most distant from a major watercourse, at Swinhope-Westgate and Durham Ferryhill, are both small fragments consisting of the tip end portions of dirk or rapier blades. In a similar vein, although the find-spot of the side-arm fragment from Great Whittingham in Northumberland is located within 1km from the river Pont, the main tributary of the river Blyth, it is by no means a prominent feature in the local landscape at this point being close to its source.

7.4 Swale to Humber (Appendices A.10-21)

As the way depositional patterns can be structured within individual river catchments and wider topographic zones has already been addressed through the discussion of the Tweed to Tees catchments, the following section omits a detailed discussion of each catchment, and instead focuses on a number of the most striking and overarching depositional patterns across the southern half of the study area. Particular attention is given to depositional patterns relating to two of the main classes of metalwork objects, side-arms and axes.

7.4.1 Side-arms

The locations of side-arm deposits in the southern half of the study are display many similar characteristics to those already identified in Durham and Northumberland (Fig 7.8). The primacy of the major river valleys as a suitable depositional locale for side-arms is evident across the region. The discovery of a complete Ewart Park sword by a fisherman on the bed of the river Ure at Ripon, a group two dirk from the river Derwent at Stamford Bridge, in addition to possible riverine sword deposits from riverside gravels at Ben Rhydding on the Wharfe and Temple Newsam on the Aire, show that the deposition of side-arms within major rivers in the north-east was not restricted to the coastal zone. In the east of the region both the Vale of Pickering, through which the principal rivers of the Rye and Derwent flow, and a 5km stretch along the upper section of the river Hull in East Yorkshire, appear as focal zones for martial metalwork deposits.

In common with the finds from Northumberland and Durham, side-arms from riverine contexts or terrestrial locations close to principal rivers are generally in a complete or largely complete state, or represent substantial blade fragments. However, whilst the finds from Northumberland and Durham are nearly exclusively of this type, the Swale to Humber catchments provides an

interesting contrast as many smaller side-arm fragments have been discovered, either as single finds or along with other artefact types in mixed hoards. The contrasting condition of the side-arms in these deposits is interesting as complete and fragmented objects appear to occupy distinct parts of the landscape, a pattern which has already been highlighted in north Northumberland. Across the western upland and central low lying vales complete side-arm deposits are located on the western fringes of the Vales of York and Mowbray, and within the well-defined valleys of the principal rivers that rise in the Pennines. Away from the valleys of the principal rivers and towards the centre of the vales, side-arm deposits are considerably more fragmented, occurring as either single category finds or with other objects in mixed hoards. In the east of the region the concentration of complete side-arms in the Vale of Pickering is surrounded by a number of mixed hoards from along the adjoining coastal plain and North York Moor uplands that contain sword fragments. Similarly, in East Yorkshire, deposits containing sword fragments effectively enclose the core distribution of complete sword deposits from the upper Hull basin to the north and west.

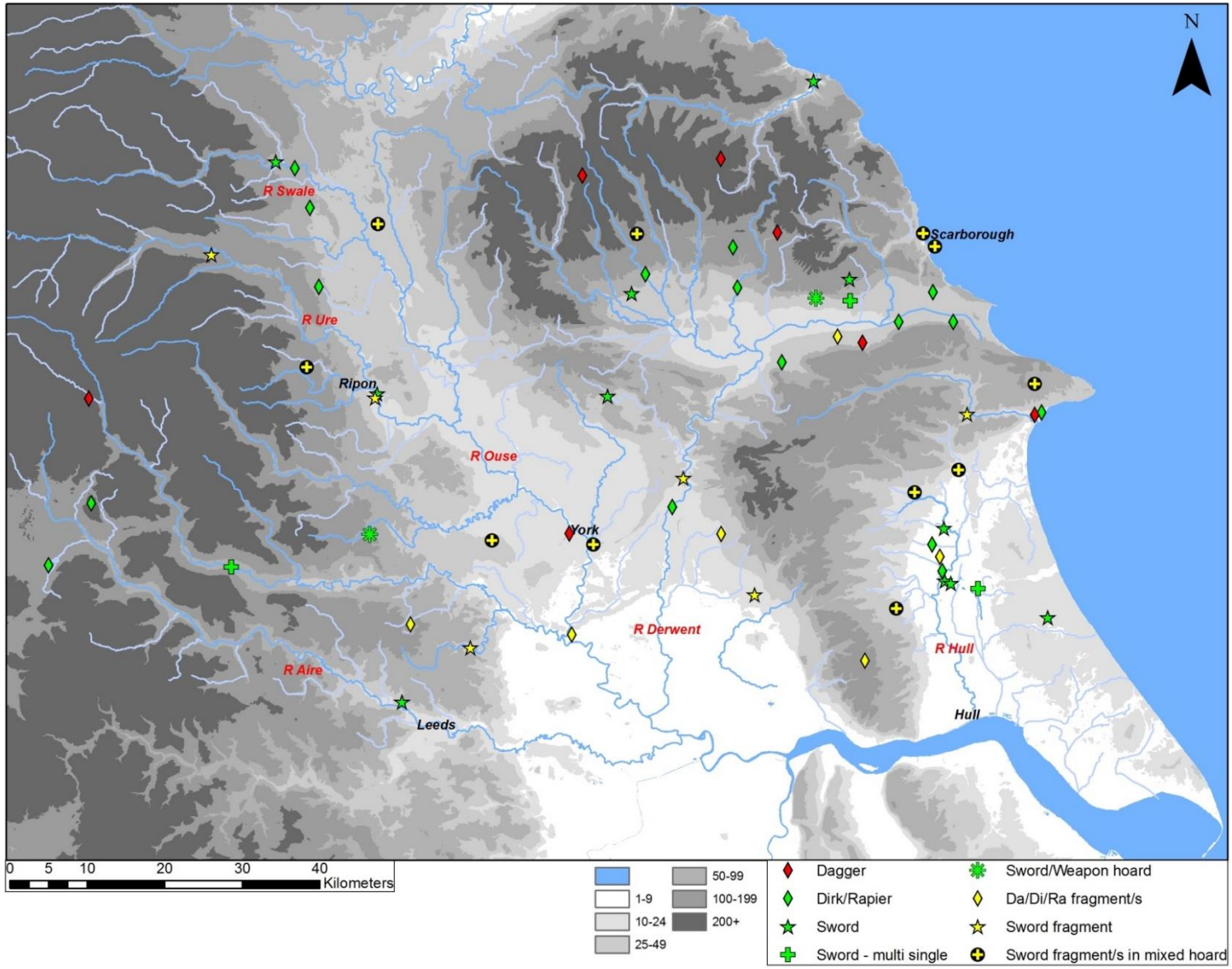


Figure 7.8 – The distribution of deposits containing side-arms in East and North Yorkshire (including the Aire catchment).

7.4.2 Contrasting conditions: swords in hoards

Just as spearheads in weapon only hoards predominantly appear in a largely complete condition, but display greater fragmentation when associated with other object types in mixed hoards, swords appear to have been subject to even stricter depositional rules, a feature recognised by Becker amongst metalwork deposits in Ireland (2012, 254), and more generally across central and western Europe as summarised by Dirk Brandherm (2007). In north-east England swords appear in a complete or largely complete condition as single finds, when deposited with other swords or in weapon only hoards. However, when axes or other tools are present, swords only appear in a highly fragmented condition, with individual swords represented by one or two small fragments. In nearly all cases a significant proportion of each individual sword is therefore absent from the hoard. Furthermore, there appears to be a preference for hilt fragments - occasionally including a small section of the upper blade, and the avoidance of large lower blade sections which include the tip (Table 7.3).

Hoards containing sword fragments in Yorkshire		
Location	**Sword Parts**	**Associations**
Bilton	Two hilt and upper blade fragments	Axes, Spearheads
York Cemetary	Shoulder fragment from hilt / mid blade section - c.5cm	Axes, Spearheads
Scalby Ness	Handle fragment from hilt	Axes, Spearheads, Tools, MW
Scarborough - Castle Hill	Handle fragment from hilt	Axes, Tools, Ornaments, MW
Ainderby Steeple	Handle fragments from two hilts / four small mid blade fragments - all <10cm length	Axe, Spearhead
Gillamoor	Hilt fragment	Axes, Speartheads, MW
Cherry Burton	Hilt fragment	Axes, Spearheads, Misc
Kirby Malzeard	Hilt fragment	Axes, Spearhead
Driffield (uncertain)	Sword fragments	Axes
Other bladed objects		
Westow	Hilt and upper blade from a tanged knife	Axes, Tools, Ornaments, MW
Largely complete sword/s in a fragmentary form		
Near Bridlington	19 sword fragments incl. at least three individual hilts. Numerous blade sections and one hilt refit to form a nearly complete sword	Axes, Knife, MW, Misc

Table 7.3 – Hoards containing sword fragments in the Swale to Humber catchments

This pattern has previously been noted by Bradley (2005, 153) amongst British provenanced swords recorded in Colquhoun and Burgess's *Praehistorische Bronzefunde* catalogue (1988). Given that this corpus contains many of the sword deposits from north-east England included in this study it is perhaps not surprising that I have identified the same pattern at a regional level. A number of recent discoveries and a few poorly recorded finds that were excluded from the *Praehistorische Bronzefunde* catalogue also conform to this pattern.

It is perhaps revealing that examples of large blade only fragments including the tip from within the study area are either single finds or from sword only hoards, and share similar topographic settings as the find-spots of complete swords, appearing within the valleys of principal rivers, primarily in wet locales. It appears that the strict rules that governed the curation and deposition of swords in a complete state extended to the treatment of different parts of the sword when fragmented. The apparent purposeful exclusion of large blade fragments from mixed hoards, appearing only rarely as multiple adjoining fragments, such as in the recently discovered hoard from near Bridlington, suggests that the blade and hilt sections may have had different meanings to Bronze Age people.

The purposeful de-commissioning of side-arms prior to their deposition was not uncommon in Britain during the Late Bronze Age. Based on a sample of metalwork recovered from the river Thames, York (2002, 87) notes that 74% of Ewart Park phase swords were purposefully damaged to the extent that they were made unusable. The purposeful act of breaking or inflicting damage upon a side-arm prevents its future use in its current form by another person. At the same time, the identity of the object which is closely tied to its owner may become indelibly fixed at the point of destruction. If the similarities in depositional context suggest that large blade fragments were perhaps synonymous with an identity and values associated with largely intact swords, the hilt

may be associated with a different or new identity and significance, allowing the curation of these fragments into deposits containing a mixture of artefact types. Whilst the variability in the metalwork record suggests that there was no definite way to de-commission a sword, the removal of part, or the entire hilt, may represent one particular mode of purposeful destruction.

Whilst the destiny of the large portions of swords that are excluded from mixed hoards remains largely enigmatic, the discovery of a number of single hilt fragments from terrestrial locations in the near vicinity of principal rivers at Ripon racecourse, Buttercrambe and York cemetery, the later as part of a small mixed hoard, is potentially revealing when set against the landscape context of large blade fragments which come from principal rivers, or wet contexts in the near vicinity of such watercourses. Whilst there are no direct links between the various hilt and blade fragments, the evidence hints at the existence of recurring patterns of behaviour in which the hilt was purposefully removed from some swords, and the resulting fragments took quite distinct life paths from that point onwards.

Clearly such a direct relationship can only be proved were it possible to re-fit an individual sword from hilt and blade fragments found separately in these different landscape contexts, an unlikely prospect, albeit not one beyond the realms of possibility given that this has already been achieved with two adjoining blade fragments from a single sword found 3km apart on opposing sides of the river Trent in Staffordshire. (Bradley and Ford 2004). Brück has noted how the tip end fragment of the sword was considerably more worn than the upper blade fragment, suggesting that they may not have been deposited simultaneously (2006, 91). Furthermore, in the context of the trends identified above an additional observation would be that the two fragments represent the full length of the sword blade, but the hilt is absent. This neatly highlights the potential for fragments

from individual objects to have alternative life-histories, including the possibility that pieces of objects could remain in circulation for extended periods of time after their fragmentation.

If the missing fragments from broken objects in mixed hoards were not retained indefinitely or themselves deposited elsewhere, then the possibility exists that they were re-cycled (Bradley 2005, Becker 2012). Becker views fragmentation as a part of wider process of transformation in which the majority of the sword is recycled but a fragment is returned to nature, where the raw materials originated from, as a gift (2012, 254). Bradley suggests that such selective recycling may explain why there is such a disparity between the numbers of hilt and lower blade fragments in the metalwork record, the bias towards hilts possibly reflecting the fact this part of the sword 'was thought to be more directly associated with the original owner' (2005, 155).

It is apparent that whilst there is convincing evidence to reject scrap hoards as collections of metalwork awaiting to be re-cycled, in a neat twist of this traditional interpretation, it is possible that some hoards of this nature may represent collections of metalwork specifically selected not to be recycled. Whilst this may apply to many small to medium hoards which appear to be personal or communal in nature, Fontijn suggests this as a likely interpretation for many of the large scrap and axe hoards in the southern Netherlands. He views this material as a sample of metalwork purposefully selected and set aside from large collections of objects involved in commodity exchanges. Whilst the bulk of this alien material might be melted down and re-cast into objects in keeping with more local traditions, 'the sacrifice of *a part* of the acquired goods, perhaps envisaged as a gift to the supernatural, might have been the procedure to make the new bulk of material morally acceptable', (2002, 255).

7.4.3 Sword distributions: complete versus fragments

This section started by noting how the distributions of complete swords and those containing sword fragments are largely mutually exclusive. Before attempts are made to interpret why such patterns arose it is first necessary to question how reliably these distributions are likely to represent actual Bronze Age depositional trends. The pattern identified in Northumberland appears likely to genuinely represent Bronze Age depositional activity, but is this true for other areas of north-east England? For instance, are complete side-arms genuinely absent from the lower lying areas of the Vales of York and Mowbray or can their absence in the metalwork record be explained by other factors?

Whilst there are numerous hilt parts but no substantial blade fragments or complete swords in the mixed hoards, across north-east England there are numerous sword deposits that are missing part or all of their hilts, yet hilt fragments have yet to be found in hoards or as single finds in these areas. In the Vales of York and Mowbray, there is little chance to discover metalwork that may have been deposited within the channels or backwaters of the main rivers – only two finds are presently known from the major rivers - locales that were favoured for the deposition of complete swords. However, it is notable that deposits containing sword fragments have been recovered from terrestrial locations not far from prominent watercourses.

In the Vale of Mowbray the find-spot of a Late Bronze Age hoard containing sword fragments from Ainderby Steeple is unlikely to have been located more than 1.5km from either the river Swale, or the river Wiske, a primary tributary. The Ripon Racecourse provenance for the lower hilt fragment from a Ewart Park sword locates the find-spot on the western bank of the river Swale. In the Vale of York the find-spots of the sword fragments from Buttercrambe and Aberford are

sited close to a principal river, the Derwent, and a main tributary of the river Wharfe, Cock Beck. Within the central vale of York both the unclassified blade fragment from near Cawood and the York cemetery hoard containing two fragments of Ewart Park swords share similar topographic settings being located on the Escrick and York moraines, glacial till ridges which transverse the Vale of York form west to east. Both find-spots are located towards the end of these ridges, close to where the river Ouse has cut its path through the moraines.

It is therefore not necessarily the case that areas with mixed hoards containing sword fragments were distinct from areas where swords were deposited in a largely complete condition. In certain areas the pattern may result from the fact that these different deposit types favoured different topographic zones within the landscape, and reflect the ways in which these different zones relate to each other at a local level. It is necessary to bear in mind that the diversity in the metalwork record reflects the existence of multiple chaîne opératoires, each involving a series of activities specific to the social processes which were integral to the deposition of individual metalwork hoards and single objects. For example, one scenario might require the de-commissioning of a sword, followed by the curation and deposition of the resulting fragments in different parts of the landscape. An alternative situation may have required de-commissioning followed by the deposition of certain fragments and the re-cycling of others. Further options such as the complete re-cycling of an object or its deposition in an intact state are also possible.

Bradley, who has highlighted this pattern at a broader scale across the British Isles, believes that it may reflect differences in the role that objects played in different areas (Bradley 1998, 2013). Where certain objects played a particularly significant and/or specialised role, cultural conventions relating to the deposition of these objects might have been quite strict, requiring the deposition of complete or largely complete objects, either individually or within single category hoards. Outside

of these areas swords are treated with greater freedom in certain contexts, for instance, they are associated with a much broader group of artefact types in hoards, but the physical treatment of swords in deposition is actually also highly prescribed. Swords are associated with many different types of objects in a fragmented or complete state, but the swords themselves invariably appear in a heavily fragmented condition. The mutually exclusive distributions of complete and fragmented swords implies that the treatment of these objects in both areas, was highly prescribed, and based on conventions that were relational to one another. The absence of complete swords outside of the special significance zones, not only implies that the fragmentation and re-cycling of sword parts was culturally acceptable in these areas, it appears to have been a prerequisite for deposition.

I would suggest that we can be confident that the patterns represent genuine Bronze Age depositional behaviours in areas where differences in the nature of contemporary metalwork deposits are very clearly defined between adjoining landscape zones, such as in Northumberland. However, the pattern is less well-articulated in other areas, such as across the Vale of York and its hinterlands. This could genuinely reflect the complexity of depositional conventions and behaviours relating to Late Bronze Age swords across north-east England. Different areas may have been strongly defined by their relationships to one and another, and this may have influenced the nature of metalwork deposition in both zones. If credence is given to Rowland's (1980) interpretation of Bronze Age society as one that functioned as a prestige goods economy, the contrasting treatment of swords in different parts of north-east England could be interpreted in similar terms to Rowland's narrative for the south of England, where a social elite centred in one area – distinguished by the presence of martial metalwork deposits, functioned by drawing upon resources from peripheral areas. It is not hard to see why Rowland's draws the conclusion that these depositional patterns reflect the presence of interrelated core and peripheral zones in

the landscape of southern Britain. Similar patterns appear to be replicated across north-east England, albeit with significantly fewer deposits. Whether or not these patterns truly indicate the existence of interdependent relationships between different areas, in which one played a more prominent, powerful role than the other, there was at the very least a clear and shared understanding of the cultural and social significance of swords, which meant that they were treated differently in different areas.

7.4.4 Axes

The comparative distribution of Middle and Late Bronze Age palstaves and contemporary flanged and socketed axes is a striking feature of the metalwork record for North Yorkshire (Fig 7.9). Palstaves from all periods have a southern distribution, largely restricted to a zone south of the river Nidd and the Ouse below York. With the exception of a concentration of early palstaves and flanged axes from the extreme south-east of the vale, which includes the only known association of palstaves and flanged axes within a hoard in the study area – six palstaves, a palstave mould and a single later-short flanged axe were found together at Hotham Carr, palstaves are all but absent from the eastern side of the Vale of York. To the west, palstaves of all periods are particularly well represented along the length of the Aire valley, but the type is poorly represented to the north, with a single 'transverse' palstave from Starbotton in Wharfedale and two early palstaves from Ripon, both geographically isolated from the core distribution. The thinning out of palstave find-spots as you head north through North Yorkshire culminates with the absence of any recorded finds from the expansive Swale and Rye catchments. This absence is all the more notable for the fact that flanged axes, particularly later-short types, are so numerous across the centre and eastern fringe of the Vale of Mowbray, a distribution noted by Manby (1986, 73).

The recovery patterns of the different axe types suggest that the spread of palstaves, physically and/or ideologically, gained little traction north of the York moraine. It is perhaps revealing that the four most northerly occurrences of palstaves within the wider Vale of York and Mowbray areas are all early types. In a similar vein, across the Swale-Tees watershed, the four recorded palstaves from the Tees catchment consist of two low-flanged and two Irish-C types, both products of early Middle Bronze Age metalworking. The presence of Irish types and the current absence of palstave finds north of Ripon provide further support for the role of the Stainmore Pass as a possible natural east-west route-way at this time. It therefore appears likely that following the initial spread of early palstaves into the study area, potentially in a very limited and piecemeal fashion, instead of becoming the popular axe of choice, within the Aire to Tees catchments palstave distributions actually contracted over time, becoming increasingly restricted to the south-west of the region.

A more detailed examination of the distribution of short-flanged axes by typology is also quite revealing. Whilst early flanged axes are the predominant flanged axe type in the Aire catchment – notably types Caverton and Cragg Wood - the Swale and northern Ouse catchments are dominated by late short-flanged axes – notably type Lissett. This pattern is interesting as late short-flanged axes which are more abundant than their earlier predecessors across the region as a whole, have only a minimal presence in the metalwork record for the Aire catchment. A probable explanation for this pattern becomes clear however when you consider the form and aesthetics of these early short-flanged axes, as Schmidt and Burgess note, 'the southerly distribution of types Caverton and Cragg Wood agrees quite well with that of the Shield Pattern palstaves, as befits a form of flanged axe which shows such obvious affinities with Shield Palstaves…' (1981, 87).

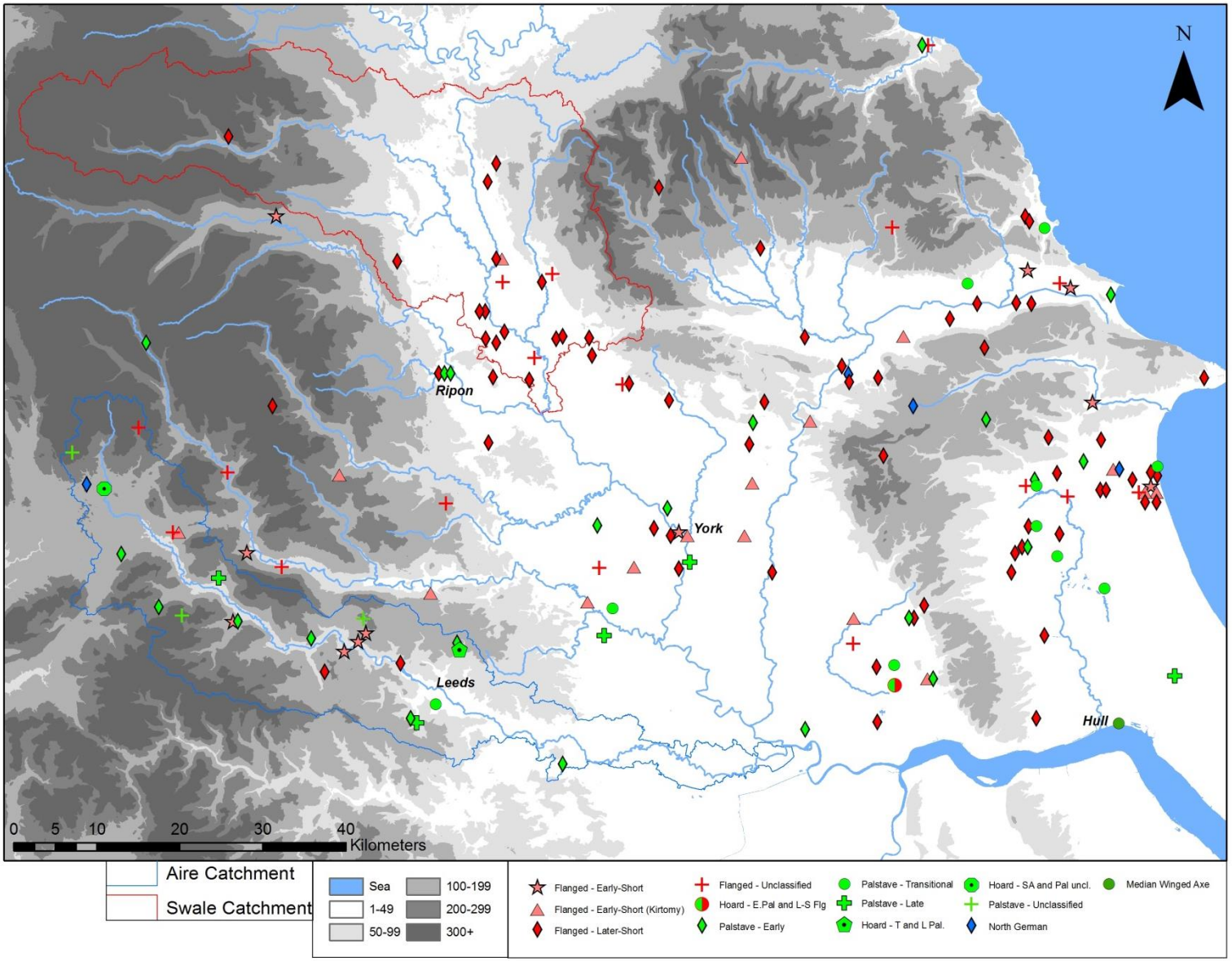


Figure 7.9 – Palstave and flange axe distributions in North and East Yorkshire.

Although in the south of the region early palstaves and flanged axes share similar distributions, the distinctions between the two types of axe are upheld by the fact that they only appear together in one hoard. The axes from the Hotham Carr hoard are particularly noteworthy for the fact that in addition to a single Lissett type later-flanged axe and two low-flanged palstaves, all of which display varying degrees of fragmentation, there are three axes and a mould - from which two of the axes may have derived, which mix both palstave and flanged axe elements (Burgess 1968, 5). Whilst it is impossible to comprehend the seemingly complex motives behind the curation and deposition of individual hoards, the combination of objects within this deposit, with a number of the axes and the mould providing common ground between the distinct flanged and palstave types, is particularly interesting given that this is the only recorded association of these axes in the study area. The south-eastern fringe of the Vale of York, where Hotham Carr is located, was seemingly well exposed to the core distributions of both flanged axes to the north and palstaves to the south and east. As such it seems the logical place to find a hoard which appears to amalgamate elements of the two axe types, with Burgess suggesting the hoard represents 'a localised reaction by an individual craftsmen subjected to diverse influences', (1981, 168-69).

The north north-east, south-west division within the region based on the core distributions of contemporary Middle Bronze Age axes appears to be largely maintained into the Late Bronze Age with the appearance of late palstaves and socketed axes (Figs 7.10 and 7.11). Amongst the socketed axes, the trend is epitomised by the distribution of Meldreth and Sompting type axes - artefacts with predominantly southern and eastern distributions across Britain, which are concentrated in East Yorkshire and the Vale of Pickering. In a similar vein socketed axes with northern distributions across Britain – types Gillespie, Portree and Dowris - are restricted to the north and east of the region with no finds presently recorded south of the Ure catchment.

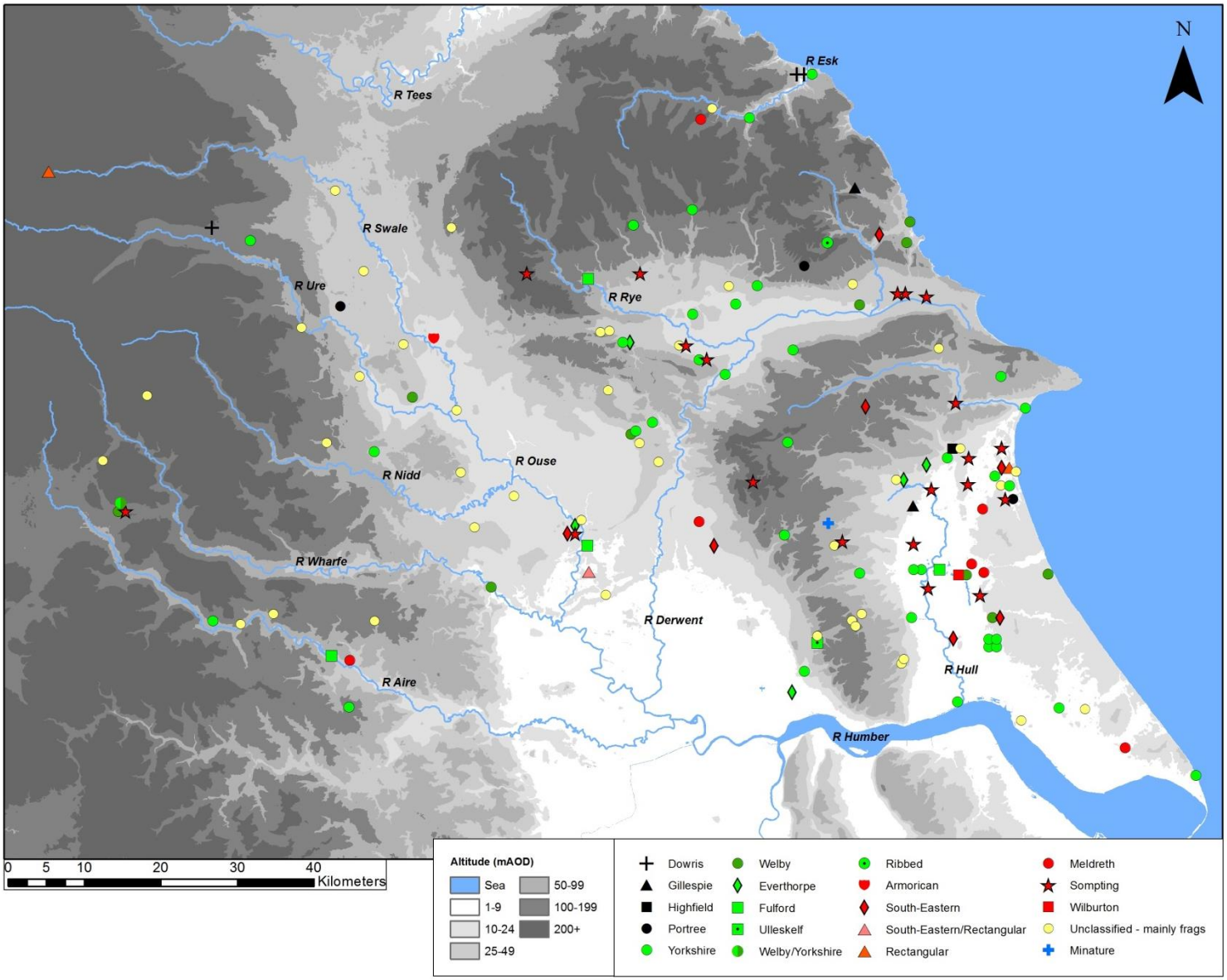


Figure 7.10 – Single socketed axe find-spot distributions in North and East Yorkshire.

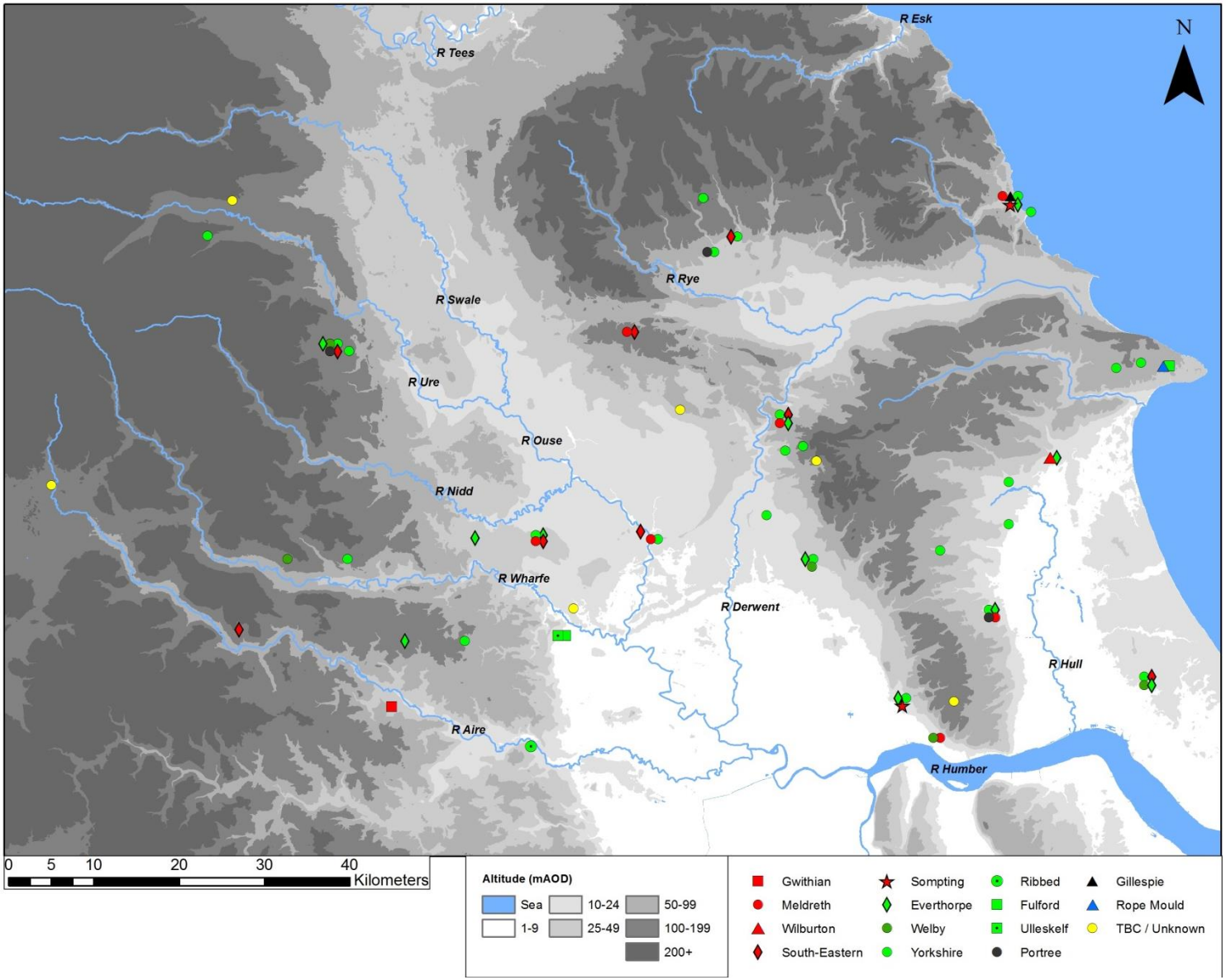


Figure 7.11 – Distribution of hoards containing socketed axes in North and East Yorkshire.

Even the more abundant regional Yorkshire type axe which is found widely across the region has its core distribution towards the east. A number of distinct socketed axes – Fulford, Ulleskelf and Gwithian - that are found as single finds and alongside palstaves in a number of hoards in the south of the region, appear only once to the north of York in the form of a Fulford axe from the Rye catchment.

A detailed examination of the axe distributions across the southern half of the study area highlights the contrasting trajectories that depositional narratives took at a regional level. The trends display strong geographic and topographic dimensions, with boundaries that emerge during the Middle Bronze Age being largely respected and re-affirmed during the Late Bronze Age. The metalwork record for the Aire catchment and the south-western half of the vale of York has a rather distinct appearance being heavily influenced by metalworking traditions to the south and west. Whilst the Vale of York did not represent a physical barrier to movement, the contrasting nature of the metalwork records on opposing sides of the vale suggest that both early and transitional palstaves and later short-flanged axes made few in-roads into areas where the alternative axe form was dominant. A particularly striking trend is the manner in which the north-eastern fringe of the Vale of York and the eastern fringe of the Vale of Mowbray, which are so well represented by Middle Bronze Age later-short flanged axes, go almost completely out of focus during the Late Bronze Age. The relative absence of Late Bronze Age metalwork, which is so abundant to the east and south-east, further illustrates how depositional activity within individual catchments and topographic zones did not necessarily gently ebb and flow over the course of the Bronze Age, but could experience sudden step changes, with different areas coming sharply into focus at different times.

7.5 The Rye, upper Derwent and East Yorkshire

7.5.1 The Rye and upper Derwent - Vale of Pickering (Appendices A1.17-18)

In common with western and central Yorkshire, many of the main spatial-temporal trends relating to metalwork deposits within the Derwent and Rye catchments have already been highlighted by Manby (1980), and the numerous metalwork finds that have come to light in the intervening years have done little to contradict this picture. The fringes of the vale stand out as a focal zone for metalwork deposition through-out the Bronze Age, with different areas coming in and out of focus at different times. There is a particularly strong late Early and Middle Bronze Age focus on the eastern and southern side of the vale, a pattern which extends southwards into the northern fringe of the Wolds and western section of the Great Wold Valley. By contrast no Early Bronze Age deposits have yet to be recorded from the north-western part of the Rye catchment and there are only a few widely dispersed finds of Middle Bronze Age date. Bronze Age activity in the western part of the Vale is considerably more visible in the metalwork record during the Late Bronze Age, with the appearance of numerous deposits on both the southern and northern side of the vale. The distribution of Late Bronze Age metalwork extends along the northern side of the vale to the east, but the southern Wold edge, with its numerous Early and Middle Bronze Age metalwork deposits, has only one recorded Late Bronze Age find at present.

A striking feature of the metalwork record for the upper Derwent and Rye catchments is the relatively high frequency of Middle and Late Bronze Age side-arms in comparison to the rest of North Yorkshire. Whilst the find-spots of all metalwork deposits from the Rye and upper Derwent catchments account for 22% of find-spots in North Yorkshire, amongst single side-arms and sword and weapon hoards this figure rises to 36%. The side-arm deposits display a strong degree of spatial patterning with a distribution largely restricted to the fringes of the

vale, avoiding the extensive uplands and river valleys of the North York Moors to the north and the northern slopes of the Yorkshire Wolds and Howardian Hills to the south.

Whilst comparisons of relative catchment location are complicated by issues relating to find-spot accuracy due to the long north-south axis of the parishes in this area, the overall distributions of different deposits hint at similarities with the trends identified across the study area. Four of the side-arms have provenances from individual natural features, two of which are carr-lands representing relatively small areas of land on the floor of the vale adjoining the northern Wold escarpment. It appears likely that the find-spots of complete or near complete side-arms are nearly exclusively limited to the vale itself or to rising ground on the vale edge. This particular zone was also favoured for the deposition of other metalwork types, but in contrast to side-arms, both contemporary axes and spearheads have also been found away from the vale itself.

The recurrent use of the vale edge suggests this was a zone whose significance was recognised and shared by many different people. The side-arms are not concentrated in one area, but are distributed along the fringes of the vale, similar to the way in which metalwork has been recovered along a stretch of the lower Tyne. The dispersed distribution of metalwork raises the possibility that these deposits were made by different communities, who were scattered along the fringes of the vale, or based along the main river valleys that extend into the North York Moor uplands. Whilst the upland valleys of Northumberland share watersheds which physically delimit the catchment areas from one another, the north-south aligned valleys of the North York Moors all open out onto the Vale of Pickering. The low lying vale therefore represents a distinct topographic zone that many different communities shared, albeit from their own unique perspectives. In this regard it may be significant that the deposition of

complete side-arms did not take place within the confined, and potentially insular valleys, but out in the open on the edge of the vale.

7.5.2 East Yorkshire (Appendix A1.22)

Whilst axes have been found across the region, complete side-arms have considerably more restricted distributions, with the middle and upper sections of the River Hull and its floodplain wetlands in particular appearing as a focal zone for martial metalwork deposition. The precise siting of the these different martial deposits is consistent with the wider chronological developments of metalwork deposition across the region identified by Manby (1980), with Middle Bronze Age rapiers and dirks and a Wilburton phase sword and lunate-opening spearhead located to the west of the river Hull and the later Ewart Park swords to the East. This chronological trend is reinforced by the only other well provenanced side-arm find from east Holderness, a Carp's Tongue sword from Withernwick. The martial deposits along the river Hull basin appear to mark the edge of an extensive wetland zone, in a manner similar to the distribution of side-arm deposits along the southern fringe of the Vale of Pickering. The river Hull and its adjoining wetlands would have been a prominent feature within the landscape, positioned at the centre of a large bowl shaped drainage basin nestled between the gentle east facing dip-slope of the Wolds to the west and low boulder clay ridges to the east.

7.6 Conclusions

The discussion in this chapter is the result of a distributional analysis of metalwork deposits across north-east England utilising the river catchment as a primary unit of study. As self-contained topographic units, major river catchments were influential in shaping bespoke depositional histories, however, a more striking and re-current theme in the landscape setting of Bronze Age metalwork finds from north-east England is the manner in which specific deposit

types and/or deposits from particular metalworking phases cluster in wider topographically distinct zones which incorporate parts of multiple catchments. Whilst we cannot hope to extrapolate distinct communities from the depositional patterns of these predominantly un-contextualised metalwork finds alone, the strong topographic dimensions apparent in contrasting depositional narratives across the study area reflect the existence of shared geographies of experience.

Although certain depositional conventions were widely adhered to, such as the universal appeal of major rivers and their direct valley sides as a suitable location for the deposition of Late Bronze Age swords, at both a regional and inter-regional scale, distinctive local topographies were influential in shaping depositional histories in different areas. One of the most striking patterns visible in the metalwork record is the existence of a number of distinct zones which display strong martial characteristics, particularly during the Late Bronze Age – the north Northumberland uplands, the lower course of the River Tyne, the Vale of Pickering and the upper basin of the River Hull.

The proceeding chapter discussed the results of a Monte Carlo based analysis to characterise the location of different metalwork deposits within a generic catchment area. Observations regarding the general landscape setting of many less well provenanced finds in this chapter have done nothing to contradict the conventions that have been outlined with regard to the zonation of different types of metalwork deposit across the catchment zone. Complete swords, sword only hoards and weapon hoards are from locations within the valleys of principal rivers. Earlier Middle Bronze Age side-arm types also display a similar preference, although the association is not as strong. Bronze shields, another martial object with Middle Bronze Age origins, were excluded from the Monte Carlo analysis due to the small sample size, but it is interesting that at least two of the five shield deposits come from locations which

are relatively remote in relation to principal rivers and their valleys. Dirks and rapiers have been found away from the main concentrations of Late Bronze Age martial metalwork, and to varying degrees this is true of all five shield deposits from the study area. It is possible that Bronze Age shields of the type found in north-east England may still have been in circulation towards the start of the Ewart Park phase (Colquhoun and Burgess 1988, 89), but if so, their absence from the core martial metalwork zones would suggest that they were not appropriated into the martial metalwork repertoire, at least not as deposits. It is perhaps more likely that the majority of the shields were deposited during the Middle or early Late Bronze Age. The find-spots of both single axes and spearheads are distributed widely across the landscape, but large, ostentatious spearheads clearly display a preference towards major rivers and their direct valley sides. It is overly simplistic to ascribe cultural significance to these objects based solely on their appearance, but their distribution patterns definitely suggest that the large, ostentatious forms of spearhead were associated with values and meanings that may not have been too dissimilar to swords.

One of the most striking features of the recovery patterns of Bronze Age metalwork within the study area is absence of clearly defined central places. Metalwork deposits cluster within certain geographic and topographic zones, and display a preference towards certain topographic features – such as the deposition of Late Bronze Age swords in rivers or principal river valleys, but with exception of the Heathery Burn cave, there is little evidence for the re-current use of individual places. If the Heathery Burn hoard was the result of multiple depositional acts then it is one of few definitive examples of the re-current use of a specific place for depositional activity in north-east England. The absence of clearly defined central places further hints at the importance of the role of local cultural geographies in depositional narratives. Few individual features or places asserted a particularly strong influence or had a wide sphere of influence in the context of metalwork deposition. These patterns replicate those identified by Fontijn (2002, 260) in the southern Netherlands, who uses the term ‘multiple

deposition zones', to describe broader topographic features, such as bogs, which are recognised as being suitable locations to deposit particular types of metalwork. The bog as a whole is a common location for depositional activity, but no single place within the bog was favoured for repeated acts of deposition.

Case study: the topographic setting of martial metalwork deposits in north-west Northumberland

8.1 Introduction

The analysis and discussion in chapters five and six has illustrated the significant role that topography plays in structuring patterns in the metalwork record across north-east England. Spatial relationships between the find-spots different types of metalwork deposit and prominent topographic features were studied as a means of charactersing find-spot distributions across a generic catchment area. Different spatial zones within river catchments appear to have been favoured for the deposition of particular types of object. For example, the find-spots of Late Bronze Age swords display a disposition towards major rivers or locales within the primary valleys of these watercourses. A number of distinctive relationships have also been noted amongst axes, spearheads and earlier side-arm types. Whilst these general topographic associations are reproduced across the study area, the depositional narratives of individual river catchments are far from uniform. A detailed examination of the metalwork record for individual river catchments highlighted how contrasting depositional histories appear to be, in part, contingent on topography. Each of the principal river catchments has its own unique depositional history, but elements of these histories form part of bigger narratives that extend beyond the boundaries of individual catchment watersheds. Many depositional patterns are structured within larger, topographically distinct landscape zones, which encompass areas from multiple adjoining catchments.

Whilst this analysis helps illustrate the important role topography played in structuring metalwork deposition at a number of broad scales, it reveals nothing about the positioning of find-spots within a local landscape setting. If we hope to achieve a deeper understanding of depositional narratives

within individual river catchments or distinct topographic zones, it is necessary to undertake a more detailed contextual analysis of the dataset, comparing the characteristics of the contents and topographic context of each find, with those of other deposits from the surrounding landscape. The portability of Bronze Age metalwork afforded people the opportunity to deposit these culturally meaningful objects, at selective locations that held particular significance within their cultural geographies. If we can establish the presence or absence of depositional patterns, we might then attempt to consider why particular places were apparently favoured for the deposition of metalwork over others in the surrounding landscape. In an attempt to address these questions, this chapter examines the topographic setting of a distinctive group of martial metalwork deposits from three adjoining catchments in north Northumberland – the Till, Aln and Coquet.

8.2 Late Bronze Age martial metalwork deposition in the north Northumberland uplands

In the preceding chapter I highlighted the presence of a number of striking metalwork deposits from the Till, Aln and Coquet catchments in the far north of the study area that contain Late Bronze Age Ewart Park swords. Although these deposits are spatially well dispersed - the Thirlings and Simonside hoards are over 33km apart, they share a number of characteristics that arguably unite them as a coherent group (Fig. 8.1). The middle and upper sections of these three adjoining catchments therefore represent a distinctive topographic zone in which the possession and deposition of Ewart Park type swords took on particular significance during the Late Bronze Age.

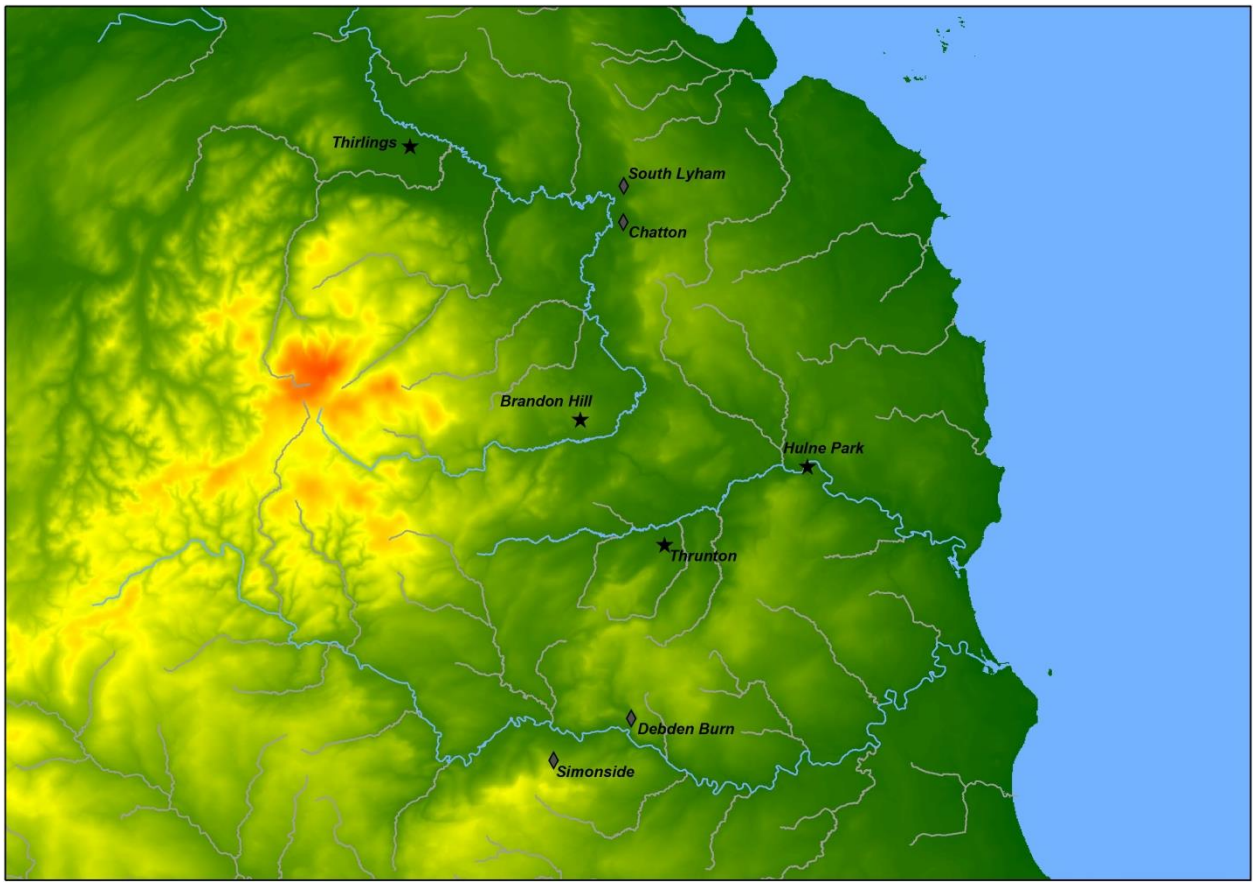


Figure 8.1 – Locations of martial deposits containing complete or largely complete Ewart Park type swords in north Northumberland. All of the find-spots are on the floor or valley sides of principal rivers. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

However, whilst these martial deposits share a number of common characteristics, they are by no means identical. All of the finds contain Ewart Park swords, but the composition and condition of the objects in the eight deposits is far from uniform. Similarly, whilst I have emphasised the fact that the find-spots are all located on the floor or sides of the valleys of the three principal rivers, there is potential for great variation in the detailed topographic setting of each locale. Indeed, whilst the contents and condition of these deposits are relatively well documented, less consideration has been given to the landscape context of the find-spots. Any attempt to produce a more nuanced understanding of martial metalwork deposition across the three catchments must integrate detailed information about the contents, condition and landscape context of the deposits.

The following section will examine each of the finds and the find-spots in detail, starting with the deposits recorded as single finds.

8.2.1 South Lyham

The find is a large, lower blade fragment, from an unclassified Ewart Park type sword.

The provenance for the South Lyham sword is provided by Bruce (1880) who notes that the sword was discovered in Wood Close, South Lyham, during work to drain a bog in 1838 at a depth of five foot. In the nineteenth-century Wood Close covered a substantial area although the find-spot was presumably in the lowest lying section of the field, where wet ground conditions are still clearly visible today. It is noteworthy that MacLauchan (1864) fails to make reference to this sword on his survey map. Instead he refers to a spearhead, found in the same field in 1833, which at the time of writing was supposedly in Alnwick Castle Museum. MacLauchlan provides a relatively precise location for the find-spot, approximately 600 yards south-west of South Lyham and 100 yards north of the brook, which is a point a short distance to the east of the lowest lying part of the field. Perhaps significantly, just as MacLauchlan fails to mention the sword, Bruce makes no mention of this spearhead in his catalogue of bronze metalwork in Alnwick Castle Museum. Given the potential for confusion to exist over the dates of these two finds – 1833 for the spearhead and 1838 for the sword, and the fact that the sword is only a blade fragment, opening up the potential for misidentification, it seems plausible that the sword and spearhead are actually one and the same.

A notable feature of the South Lyham find-spot therefore appears to be the way in which it occupies a low point in the local landscape, being flanked by rising ground to the north, east and south. Considerably more subtle rises in ground level continue to the west and south south-west

resulting in a bowl-shaped depression which is almost completely encircled by higher ground (Figs 8.2, 8.4 & 8.5).

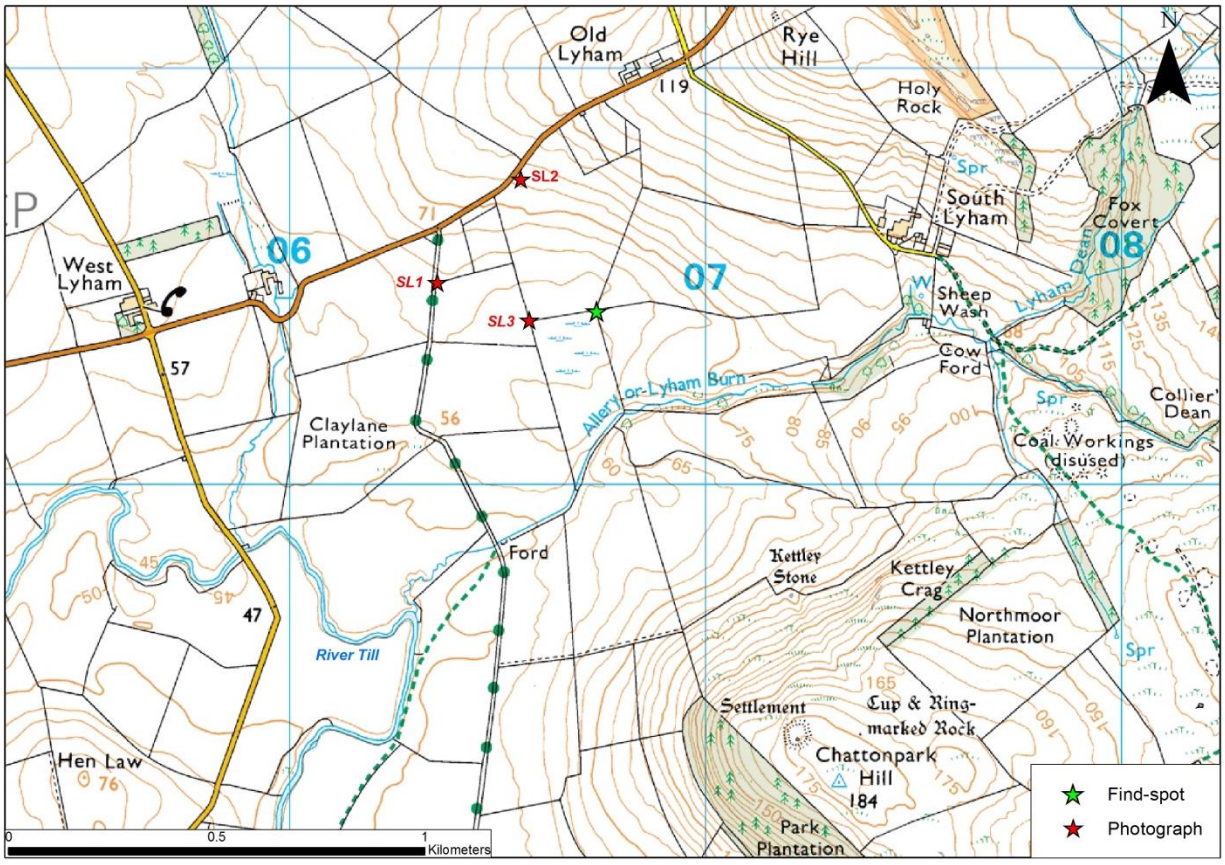


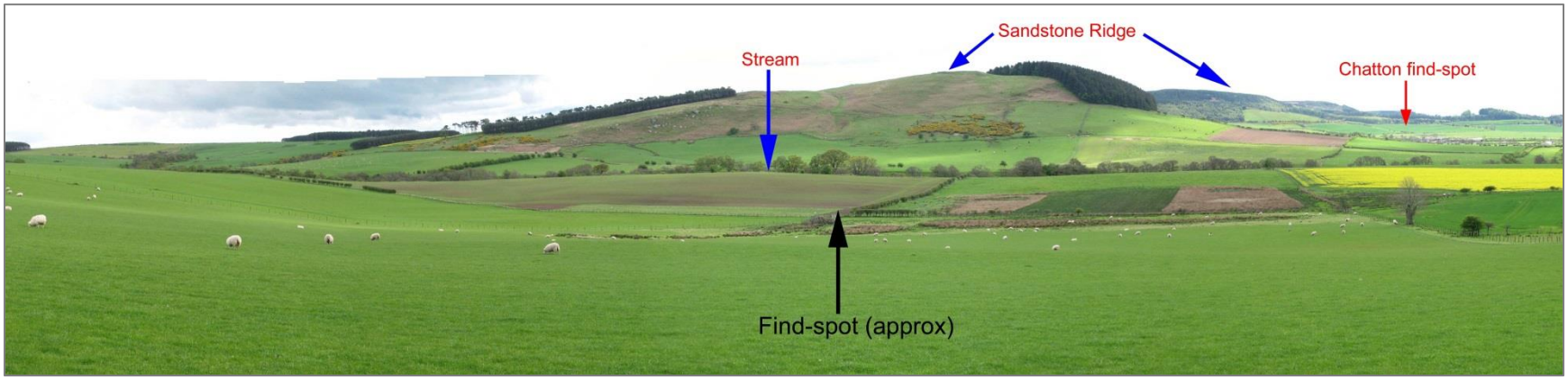
Figure 8.2 - Map showing the approximate location of the South Lyham find-spot which is located within a bowl-like depression that is very likely to have been water-logged in prehistory. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Examination of the 1m resolution LIDAR image of the valley side shows that at some point this marshy area was drained by a small stream that flowed the short distance south-west to the River Till. These characteristics are important because the natural local topography means that this small area is likely to always have been susceptible to waterlogging. As previously noted, the sword is recorded as being discovered at a depth of 1.5m during work to drain a bog, and the natural propensity for this area to gather water from the surrounding landscape, is evidenced by the wet conditions that persist to this day (Fig. 8.3).

The sword itself has a dark black and gold patina, coloration that is consistent with bronze that has spent a considerable amount of time in wet conditions. Given the predilection for martial metalwork to be placed in watery contexts, it seems plausible that the existence of a small marsh or bog may have been an influential factor in the selection of this place as a suitable depositional locale. Whilst such an interpretation is based solely on circumstantial evidence there is good reason to believe that this small area of land would have been waterlogged during the Late Bronze Age.

Figure 8.3 – Looking east from SL3 towards the general find-spot locale. The sedges in the foreground indicate that the ground remains wet in spite of improvement and drainage.

Figures 8.4 (above) and 8.5 (below) - Panoramas from SL1 centred east south-east (above) and SL2 centred south south-east (below).



8.2.2 Chatton (Amerside Law)

This find takes the form of a complete Ewart Park type sword belonging to step N1 of Burgess and Colquhoun's northern series.

No precise details regarding the circumstances of the discovery of this sword in 1834 are recorded. Based on the eight figure grid reference extrapolated from MacLauchlan's 1864 survey map the find-spot is located approximately 3km to the south of the South Lyham find-spot, on moderately rising ground on the side of the Till valley, roughly 600m east / south-east of the present day course of the river (Fig 8.6). Bruce (1880) states that the sword was found close to an ancient rampart, and a number of small enclosures surviving as earthworks are located a short distance from the proposed find-spot to the south and east. MacLauchlan refers to a third enclosure a short distance to the south-west below the summit of Ewe Hill, although no earthwork is visible in this area today and it has yet to be identified on aerial photographs.

The topography in the direct vicinity of the find-spot has a number of notable characteristics. A short distance to the south of the find-spot the slope levels out onto a small plateau which marks a transitional point between the relatively gentle rise of the valley sides from the river Till to the north-west, and the considerably steeper gradients of the valley sides to the east and south east (Fig. 8.7).

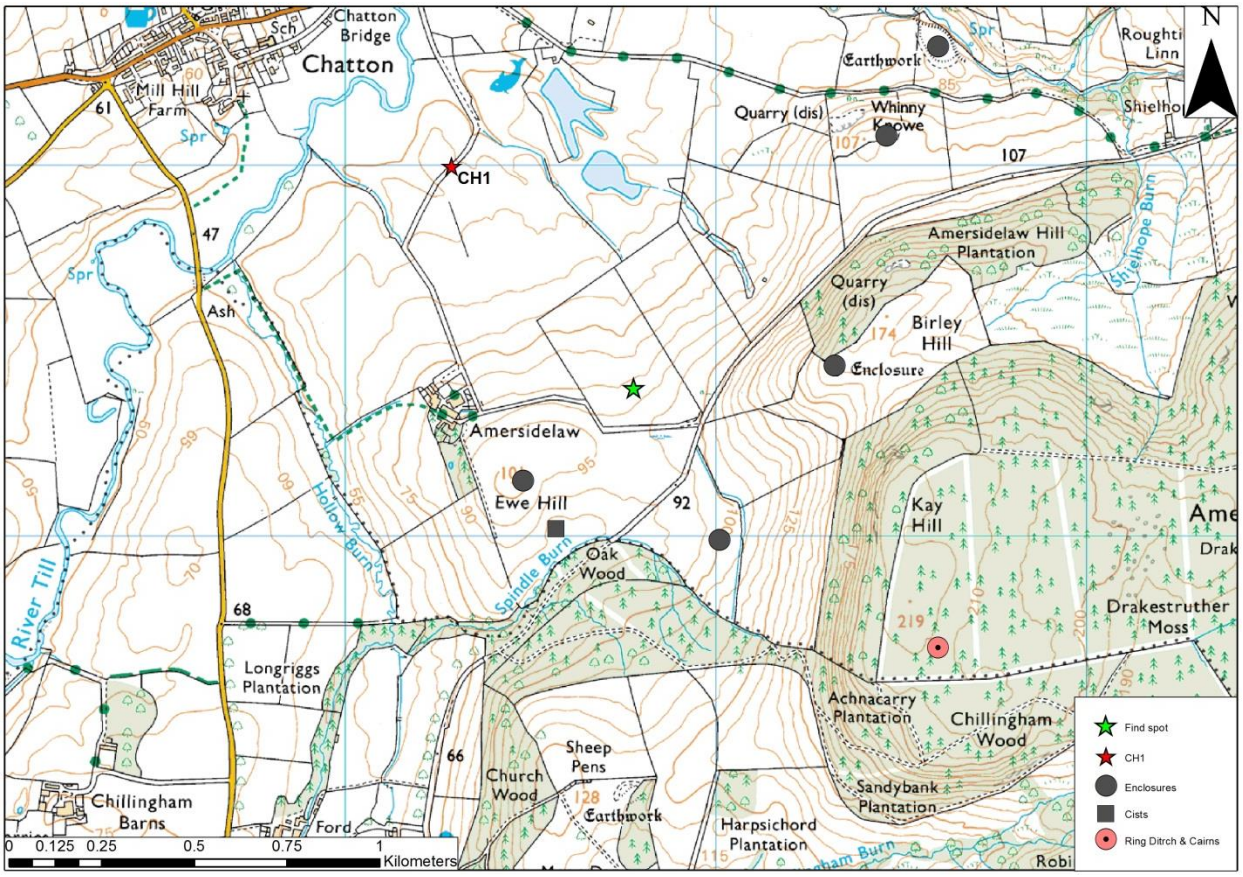


Figure 8.6 – Map showing the approximate location of the Chatton find-spot. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

The sword itself is notable for its excellent state of preservation. Burgess notes that the sword has a gold and black patina, so deposition within a wet context is a possibility.

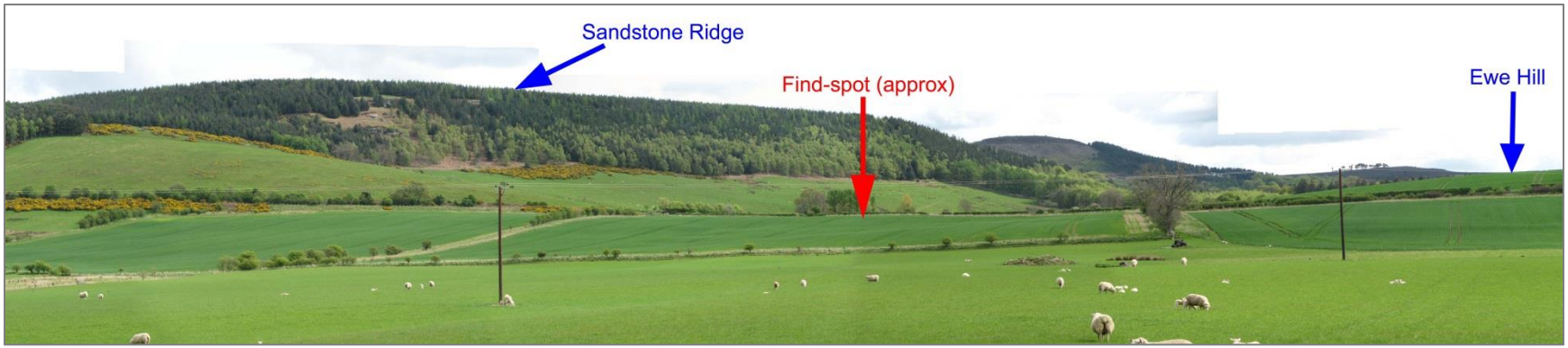


Figure 8.7 – Panorama from CH1 looking south south-east towards the approximate Chatton find-spot.

8.2.3 Simonside (Tosson)

This small hoard is believed to have comprised a complete Ewart Park type sword of step N2 in two fragments, a large lower blade fragment from an unclassified Ewart Park type sword, three bronze rings, 2 lead pommels, a blade fragment from a possible bronze knife and a small piece of bone.

Whilst the circumstances of the discovery of the Simonside hoard are recorded in detail by numerous authors, none of the accounts pinpoint the exact location of the find-spot. In a near contemporary account in the Times from 1869 outlining a survey of places of antiquarian interest undertaken by Cannon Greenwell, the anonymous author states that the swords, rings and pommels were found 'in a hollow between two large stones, and about midway between the two camps named *(namely Lordenshaws and Burgh Hill*), and up the slopes of Simonside', (1869, 205). Arkle (1876, 176-177), states that the hoard was found by a boy and a girl from Tosson out collecting ferns who, 'in looking under the projecting edge of a rock, observed something uncommon. To obtain access part of the surrounding stones were removed when a bronze sword and blade of another were found'. Arkle adds that the other objects were actually discovered separately when removing subsoil from beneath the swords, with a reliable source stating that they were located under an oblong stone buried horizontally in the ground.

These descriptions suggest that the hoard was found a short distance to the south-east of Tosson on the lower slopes of Simonside, but it is only from an account by Scott (cited in Hedley and Quartermaine 2004), written 16 years after the discovery, that we get a more detailed siting of find-spot, located between the Cockpit and Cowet wells (Fig 8.8). If credence is given to Scott's 1885 account, the find-spot appears to have occupied a particularly striking topographic setting on the lower slopes of the Simonside hills, positioned on a natural terrace that marks a boundary

between the shallow gradients of the lower valley floor and sides to the north and the much steeper slopes of the Simonside massif to the south. The area in which the find-spot is believed to be located is directly overlooked by steeply rising ground which forms a crescent shaped backdrop to the terrace, effectively creating a natural amphitheatre with restricted lines of sight to the east, south and west (Figs. 8.9-8.11).

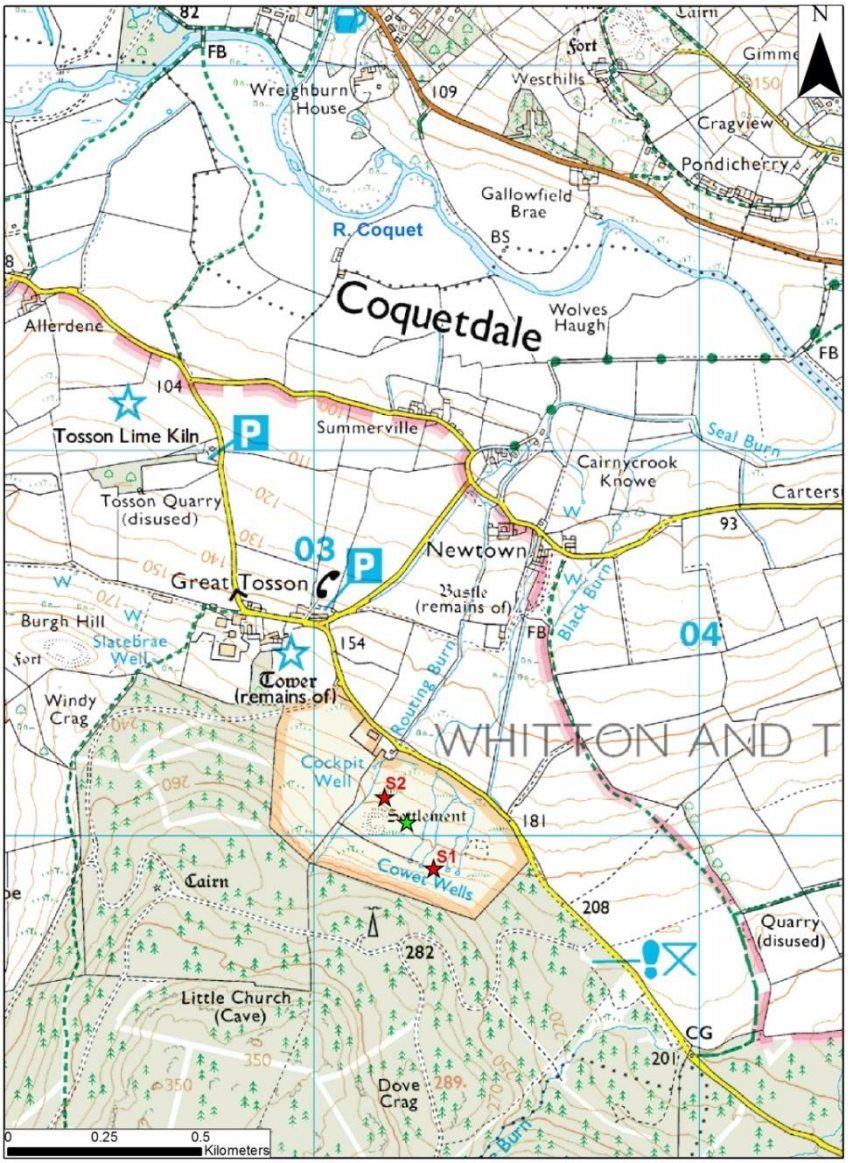


Figure 8.8 - Map showing the approximate location of the Simonside find-spot and the positions from which the photographs in Figs 8.9-8.12 were taken. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Figures 8.9 (top left, from S2) and 8.10 (top right, from S1) looking south-east and north-west respectively across the terrace.

Figure 8.11 (above) – Panorama from S2 looking south in the direction of Simonside.

Figure 8.12 (above) – Panorama from S2 looking north across Upper Coquetdale.

By contrast, to the north and north-east the terrace provides unimpeded views across the immediate valley of the river Coquet, and a considerably more expansive outlook towards the Cheviot uplands to the north-west (Fig 8.12). Whilst the accounts of the discovery and physical condition of the objects suggests that they were placed in a dry context, the topography of the terrace is notable for the fact that a number of springs rise at the base of the moor in this general area.

Both swords are in a fragmented condition. One complete sword in two fragments with a break towards the lower portion of the blade. There is significant wastage of blade around the break suggestive of intentional fragmentation. The second is a tip end blade fragment which is similar in size to the tip end blade fragment from South Lyham.

8.2.4 Debdon Burn - Cragside

This small find comprises a largely complete Ewart Park type sword of step N2 in two fragments and three bronze rings (Fig 8.13). Similar rings occur alongside other sword deposits within the study area, such as at Simonside - 3km from the Debdon find, and are interpreted as fittings to secure the scabbard to the belt.

Figure 8.13 – The Cragside sword © Tyne & Wear Archives & Museums and Society of Antiquaries of Newcastle upon Tyne.

None of the early accounts of this find locate the find-spot in any detail. The sword is first mentioned in 1869 in a Times notice, 'On the north side of the Coquet, and about three miles from where the above-mentioned relics were deposited *(Simonside hoard)*, another bronze sword was found, with two rings. This is in possession of Sir William Armstrong, at Cragside' (Times 1869, 205). The location of the find-spot is narrowed down by Dixon, who provides an incorrect date for the discovery, noting that 'In 1888 a bronze sword, 36 inches long, was found in the bed of the stream that flows through Cragside grounds (1903, 149). Whilst the watercourse is not named, there can be little doubt that the stream referred to is the Debdon Burn, the main watercourse that runs through the heart of the estate and into the River Coquet.

For much of its short course the Debdon Burn flows at the bottom of a steep ravine, but in a number of places the topography opens out to form a series of natural bowls. These are now occupied by a series of manmade lakes, created when the burn was damned during the late 1860s. It is interesting that the sword is first mentioned around the same time that this scheme

of work was being undertaken, and it is possible that the discovery of the sword may be linked to this activity.

The sword is in two fragments but most of the object is represented. The sword shares notable similarities with that of the complete sword from Simonside, found 3km to the south-west on the opposite side of the Coqeut valley. Both swords consist of two fragments with the break appearing at a similar point on each blade, and both were found with bronze rings which may have been the means by which the scabbards were attached to the belt. Both swords display wastage of the blade around the breaks, suggesting that they were both broken intentionally. Although the sword was recovered from the Debdon Burn it does not display the characteristic water patina.

Summary

Three of the find-spots appear to be located on flat or slightly sloping ground, but close to prominent breaks of slope where the relatively gentle gradients of the lower valley sides give way to considerably steeper inclines. Whilst the general find-spot locales are not topographically enclosed they are all directly overlooked by higher ground to varying degrees. A similar setting cannot be ruled out for the sword from Debdon Burn. Three of the find-spots have a close association with watery features that were present in the Bronze Age landscape and have survived to varying degrees to the present day – South Lyham (bog and stream), Simonside (springs and stream), Debdon Burn (stream). A similar association is less evident for the Chatton find-spot although the patina on the sword suggests it may have lain in a wet context for an extended period of time.

8.2.5 Thrunton (Whittingham)

A small hoard comprising two swords – a largely complete Ewart Park type sword of step N2, a largely complete Antennenschwerter type sword in two fragments, and three complete spearheads – one large flame shaped lunate-opening spearhead and two pegged spearheads (Fig 8.14).

Figure 8.14 – The Thrunton Hoard
© *Tyne & Wear Archives & Museums* and Society of Antiquaries of Newcastle upon Tyne.

The eight figure grid reference extrapolated from MacLauchlan's 1864 survey map and description places the Thrunton hoard on the lower slopes of a spur of land that rises up from the Aln valley (Figs 8.15-17). An account of the discovery by Lord Ravensworth state that the objects were discovered in 1846 in boggy ground, a spot which 'must formerly have been a quagmire, (being) supplied with a copious spring of water (Hardy 1873, 305). The artefacts were found point downwards in the ground and arranged in a circular formation. MacLauchlan (1867) locates the find-spot relatively precisely, approximately 550 yards (500 metres) north of Thrunton and 130 yards (120 metres) west of the public road, the present day A697. Whilst there is no evidence for the existence of a spring in this precise locale, in the adjacent field to the west, a spring rises at roughly the same position on the valley side as the find-spot. The area identified by MacLauchlan as the find-spot coincides with a notable break of slope which may have been conducive to creating the boggy conditions previously described. The excellent state of preservation of the artefacts is consistent with them having lain in a watery context for an extended period of time.

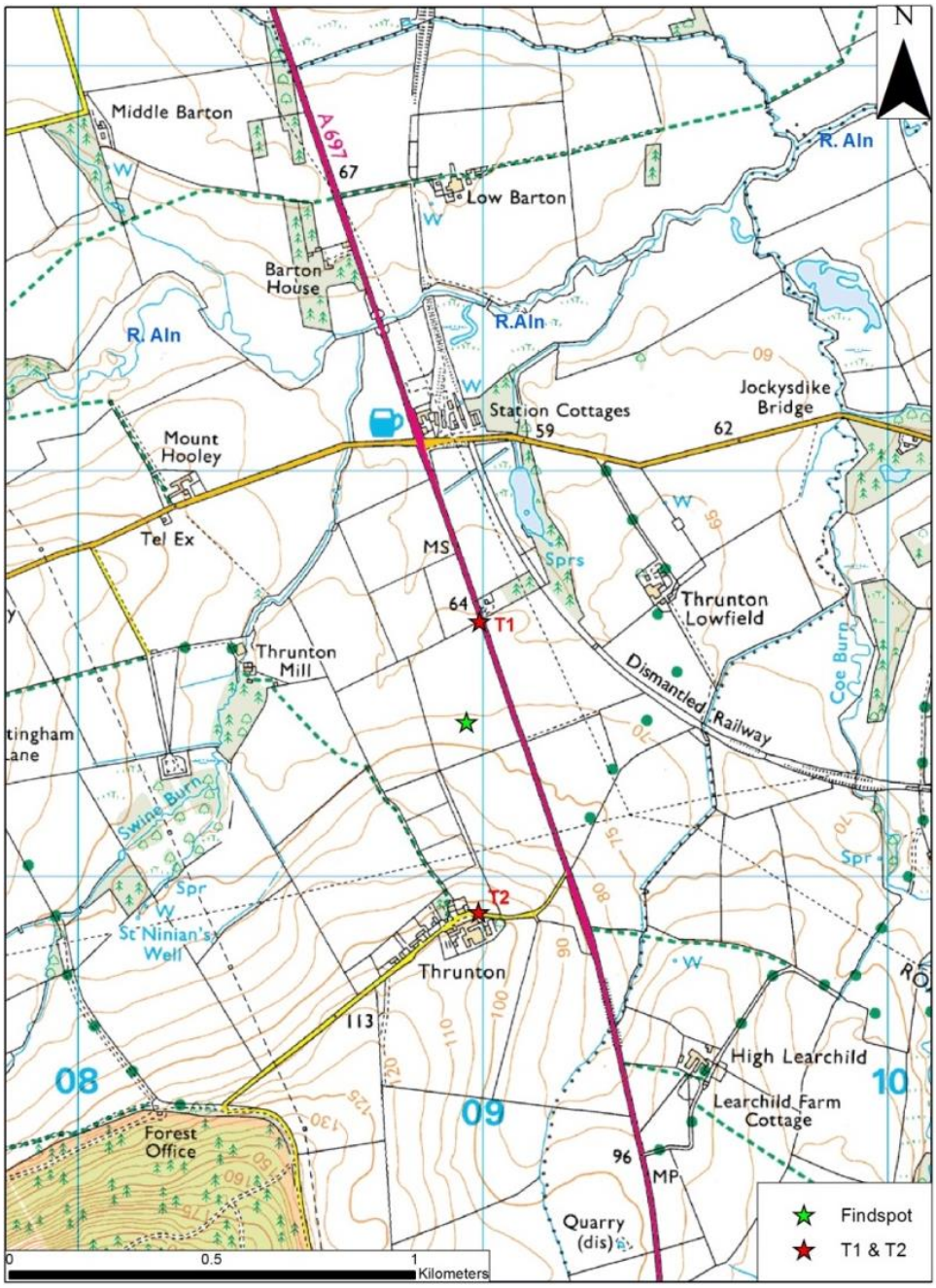


Figure 8.15 – Map showing the location of the Thrunton find-spot. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

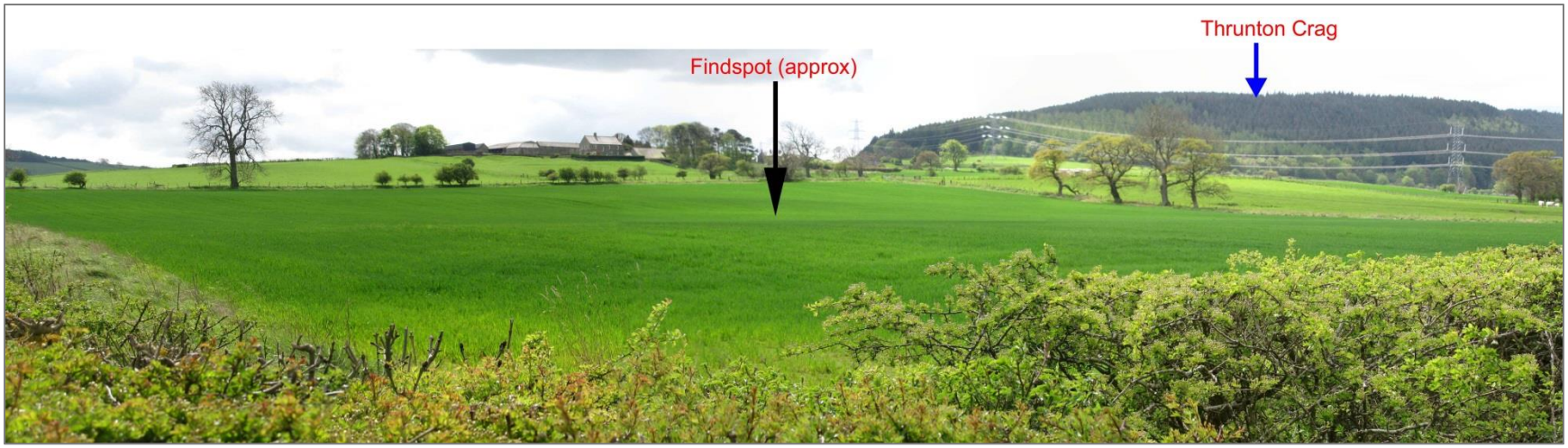
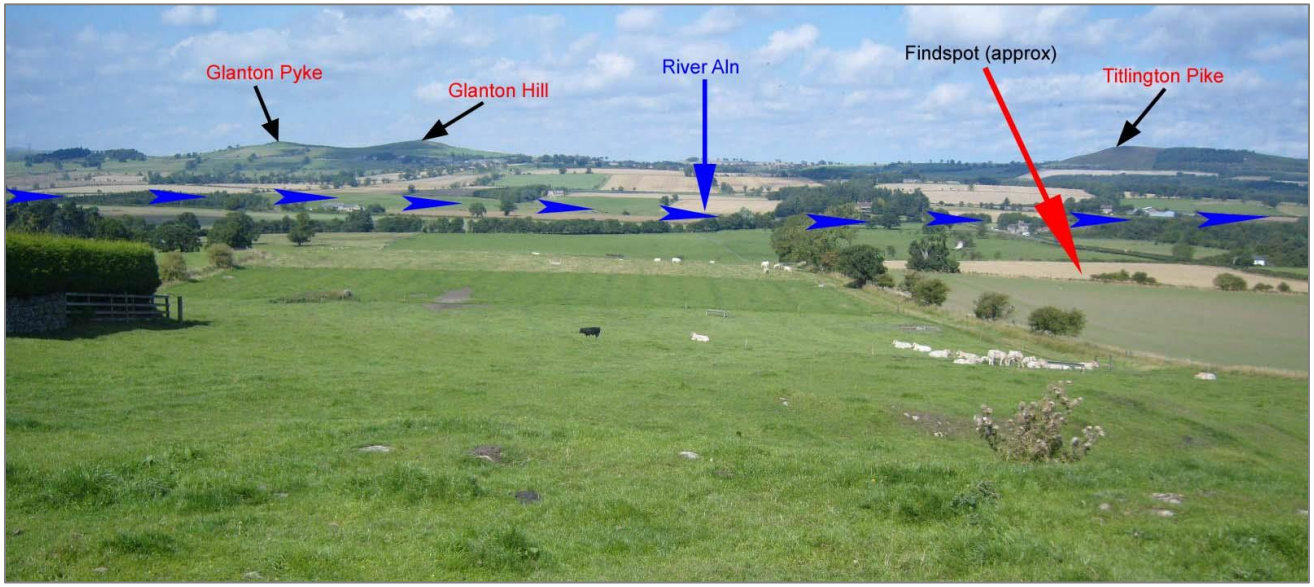


Figure 8.16 (above) – Panorama looking south from T1

Figure 8.17 (below) – View looking north from T2



8.2.6 Thirlings (Ewart Park)

A small hoard of three Ewart Park type swords comprising a complete sword of step N2, and two largely complete unclassified swords that are both missing the lower section of their hilts below the shoulder (Fig 8.18).

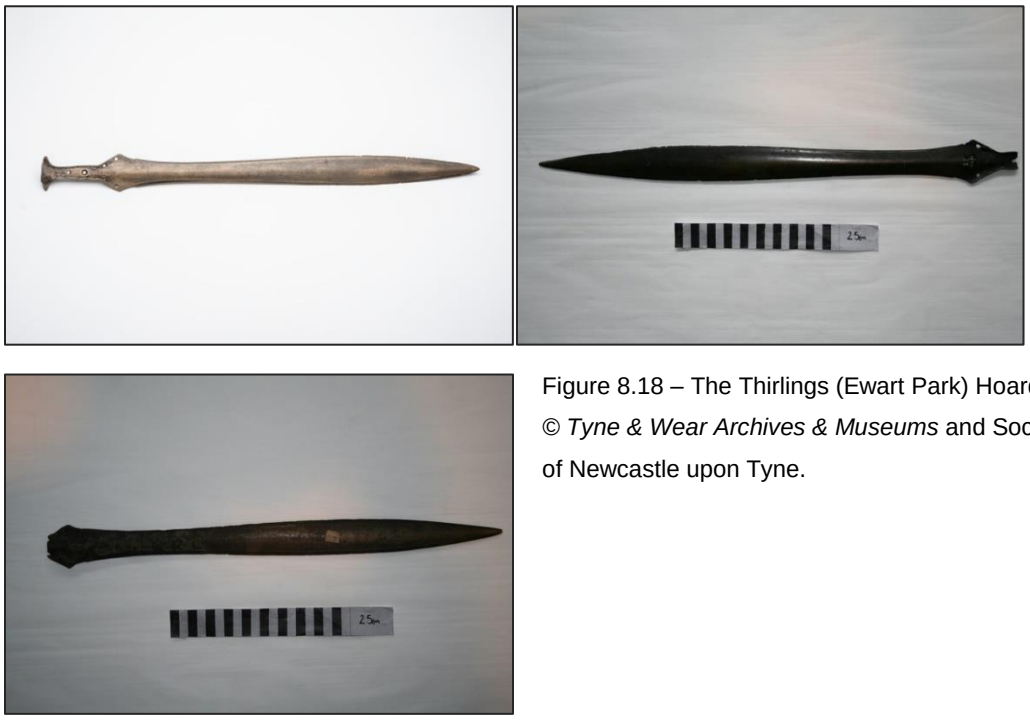


Figure 8.18 – The Thirlings (Ewart Park) Hoard
© *Tyne & Wear Archives & Museums* and Society of Antiquaries of Newcastle upon Tyne.

MacLauchlan's account of the discovery states that the swords were buried on a small knoll 300 yards south-east of the farm buildings at Thirlings (1867, 26). The swords were found together, point downwards in the ground, leaving little doubt over the intent of the depositor/s to purposefully place the objects in this specific locale. The swords were found on a small spur of land that is slightly higher than the surrounding landscape (Figs 8.19 & 8.20). A subtle rise in ground level in the general area of the find-spot locale is clearly perceptible when viewed first hand, marked by the changing elevation of the tree-line (Figs 8.22 & 8.23). A more thorough appreciation of the relatively subtle topography is hindered by extensive tracts of dense forestry plantation. The find-spot lies within such an area, access to which I was unable to obtain. Crucially, a much clearer

picture of the topographic setting of the find-spot can be gained by looking at 1m resolution LIDAR data for the area, which shows the find-spot is situated on a finger of land which is elevated above the floor of the Till valley (Fig 8.21).

Although this ridge of slightly higher ground is barely perceptible when experienced in the field, it is not necessarily the case that the find-spot has always been largely unremarkable from a topographic perspective. Whilst the differences in elevation are only slight, the peninsular of higher ground could potentially have stood out in the local topography as a short jetty of dry land that projected across a wetter area of the valley floor. Whilst we can only speculate on the environmental context of the find-spot and the surrounding area, there is no question that the swords were deposited on the elevated river terrace close to the intersection with the floodplain.

The find-spot is overlooked by the western outlying hills of the Cheviot uplands, with Yeavering Bell in particular a notable presence on the skyline 4km to the south-west. The proximity of the hoard to Yeavering Bell is of particular interest as the hill was crowned by the most substantial Iron Age hillfort in Northumberland, a settlement which potentially had embryonic origins in the Late Bronze Age (Fig 8.23). The close proximity of the find-spot of this impressive collection of swords to the premiere hillfort in Northumberland seems unlikely to be coincidental. The find-spot is positioned on a tongue of land which lies at the junction of two major upland valleys, Glendale and the Till valley which incorporates the wide, flat expanse of the Millfield Plain.

Figure 8.19 – Map showing the location of the Ewart Park find-spot in its wider landscape context. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

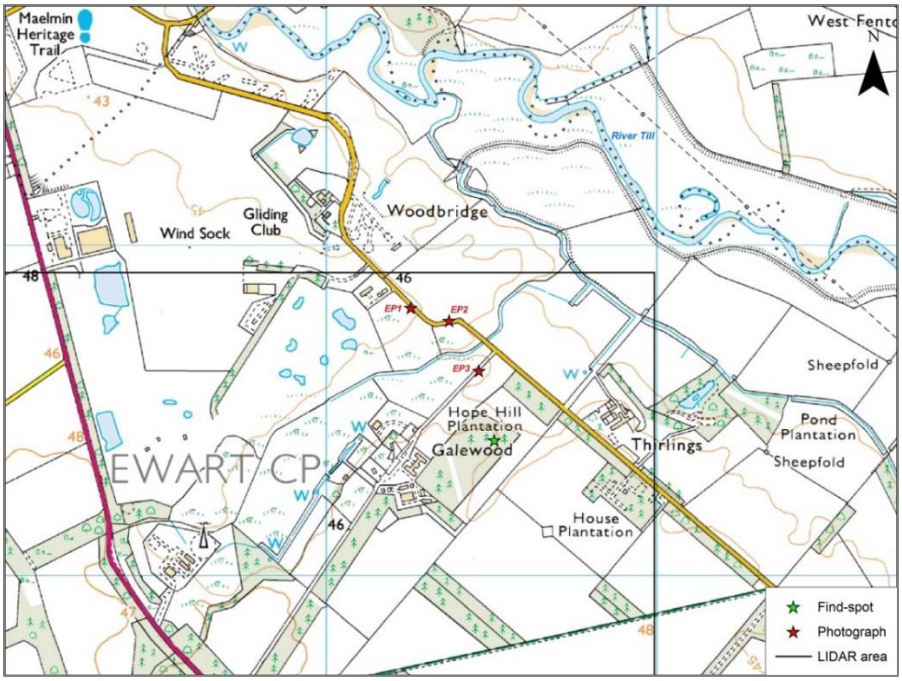


Figure 8.20 – Detailed map of the Ewart Park find-spot. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

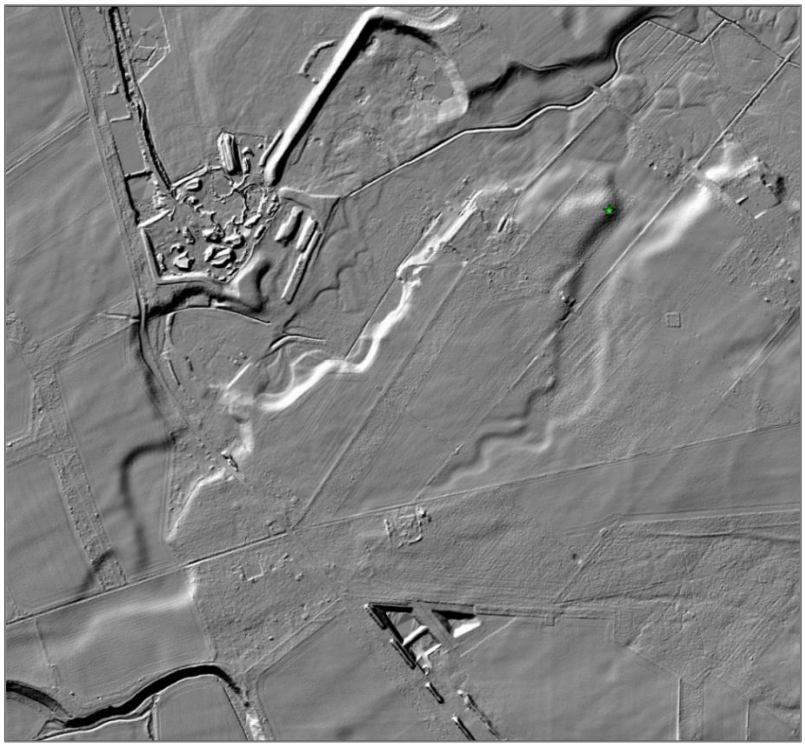
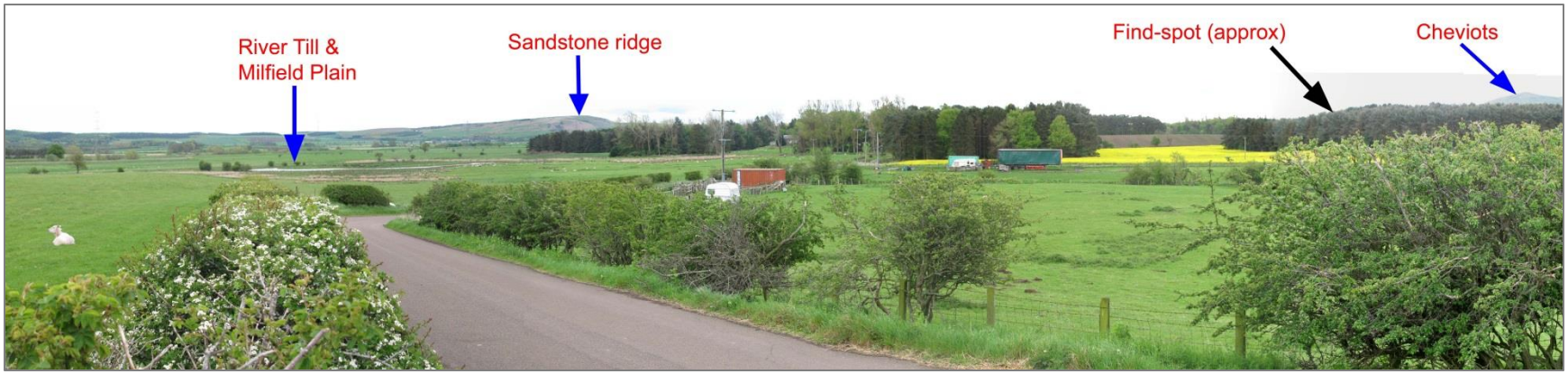


Figure 8.21 – LIDAR image of the area outlined in Figures 8.19 and 8.20. The find-spot is marked by the green star. © Environment Agency copyright and/or database right 2015. All rights reserved.



Figures 8.22 (above) and 8.23 (below) - Panoramas from EP 2 centred south-east (above) and EP1 centred south (below).

8.2.7 Brandon Hill

A small hoard comprising three swords, of which, the location of one is known - a largely complete Ewart Park type sword of step N2 (Fig 8.24). Tate's contemporary account describes a second largely complete sword, most likely of Ewart Park type, and a third sword that was badly damaged at the point of discovery, when the objects were turned over by a plough (Hardy 1887, 243)

Figure 8.24 – The surviving sword from Brandon Hill © Tyne & Wear Archives & Museums and Society of Antiquaries of Newcastle upon Tyne.

A journal by Tate written in 1857 states that 'near the summit of the hill east of Brandon Farm, three bronze leaf-shaped swords were exposed by ploughing 18 inches below the surface. They were lying parallel with each other in the direction from north to south' (Hardy 1887, 243). Tate goes on to confirm the location of the find-spot by noting that the objects were found a short distance to the east of the hillfort, the multivallate earthworks of which sit atop the western edge of Brandon Hill. In a second contemporary account of the find, MacLauchlan provides a slightly more precise find-spot, stating that the bronze weapons were found on a knoll approximately 200 yards from the camp. The swords appear again on MacLauchlan's 1864 survey map at a point located roughly 180m north-east of the rampart earthworks.

Brandon Hill is not a particularly prominent or distinctive landscape feature itself. The hump backs of Glanton Hill and Glanton Pyke which form the watershed between the Aln and Breamish valleys to the south, and East Hill, which towers above the entrance to the Ingram valley on the southern side of the Aln, have a significantly more striking presence in the local landscape (Fig. 8.25).

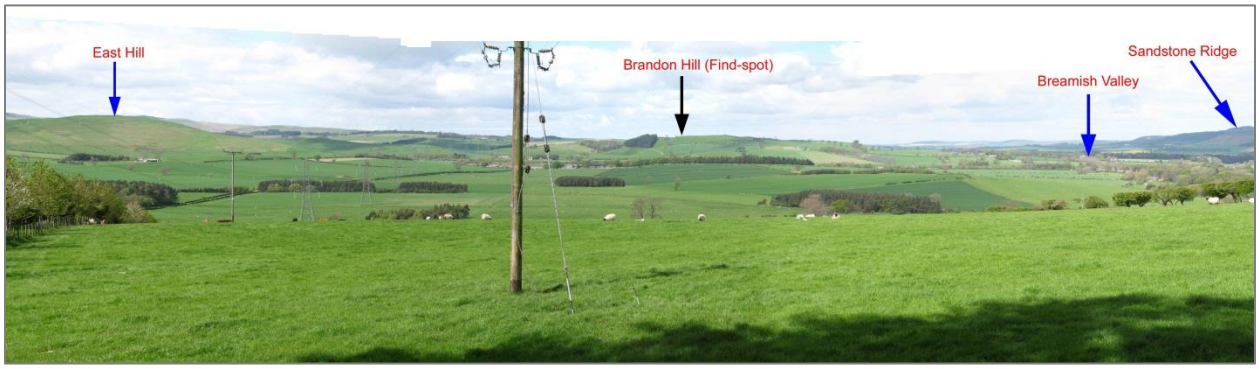


Figure 8.25 – View looking north from Glanton Pyke Farm towards Brandon Hill and the Breamish Valley

However, it is easy to see how the location of Brandon Hill may have been important during the Bronze Age. The hill represents the eastern most high point along a chain of hills on the northern side of the Ingram valley, effectively marking the entrance to valley on the north side of the river Breamish, much in the same way as East Hill does on the southern bank. The summit takes the form of a large multi-tiered plateau which presents extensive views across the upland zone to the north, west and south (Figs 8.27 & 8.28). The eastern end of the summit plateau overlooks the relatively flat expanse of the Breamish valley which extends outwards from the base of the hill to the east and north-east. It is therefore a locale which marks the boundary between two distinctive topographic zones, the high uplands of the Cheviots to the west, and the fertile Breamish valley which lies between the Cheviot foothills to the west and the sandstone ridge to the east.

In addition to the mulitivallate hillfort positioned on the western edge of the hill, it appears likely that the find-spot is located within the boundaries of a double or triple ditched palisaded enclosure that encircled the main summit plateau (Historic England: Pastscape, NMR number NU 01 NW 162). The precise relationship between the two from a temporal perspective in unknown, but the choice of this locale for both the deposition of martial artefacts and the construction of a fortified enclosure is potentially quite significant. The Brandon Hill hoard is particularly noteworthy for the fact that it shares many similarities with the Ewart Park hoard. Both deposits contained three

largely complete swords, including examples from step two of the northern series. The swords were placed in dry land contexts, overlooking the River Breamish/Till, and they are both situated in locations that border a number of different landscape zones and are at the intersection of major valleys.

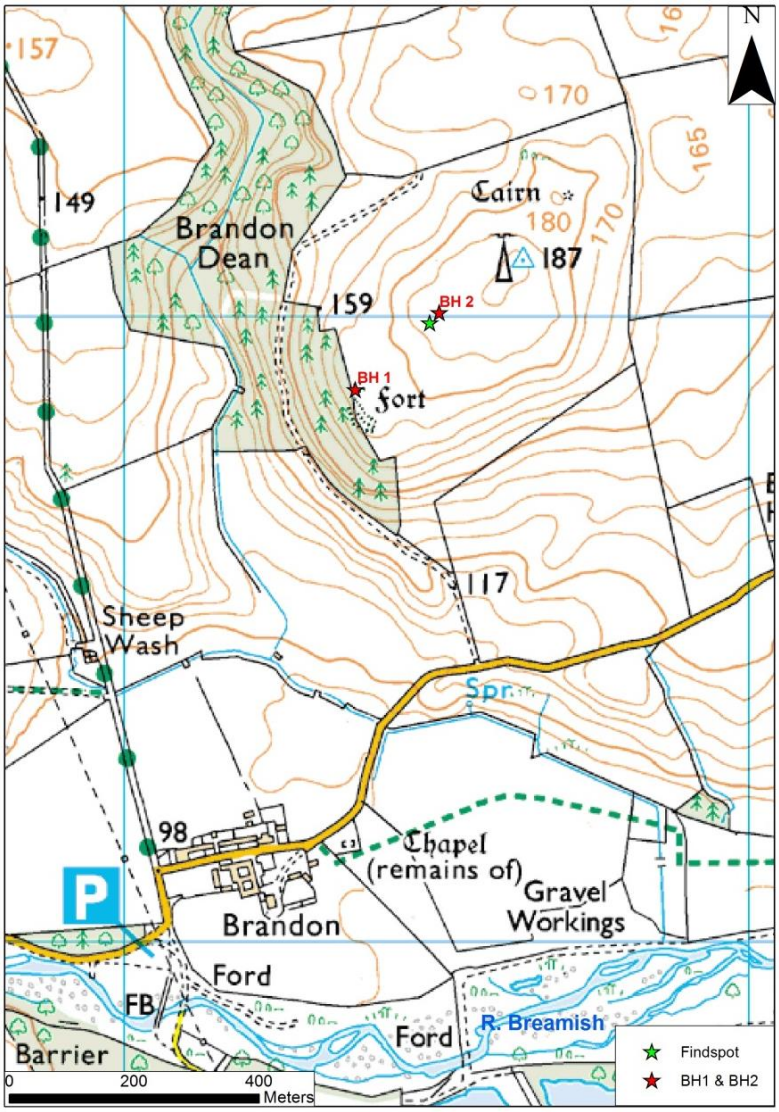


Figure 8.26 – Map showing the location of the Brandon Hill find-spot. © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence)

Figure 8.27 – Panorama from BH1 centred east north-east looking towards the find-spot and hill summit. The find was discovered during ploughing and the ridge and furrow created by the plough action is visible across the saddle of the hill. The ramparts of the hillfort are visible in the foreground.

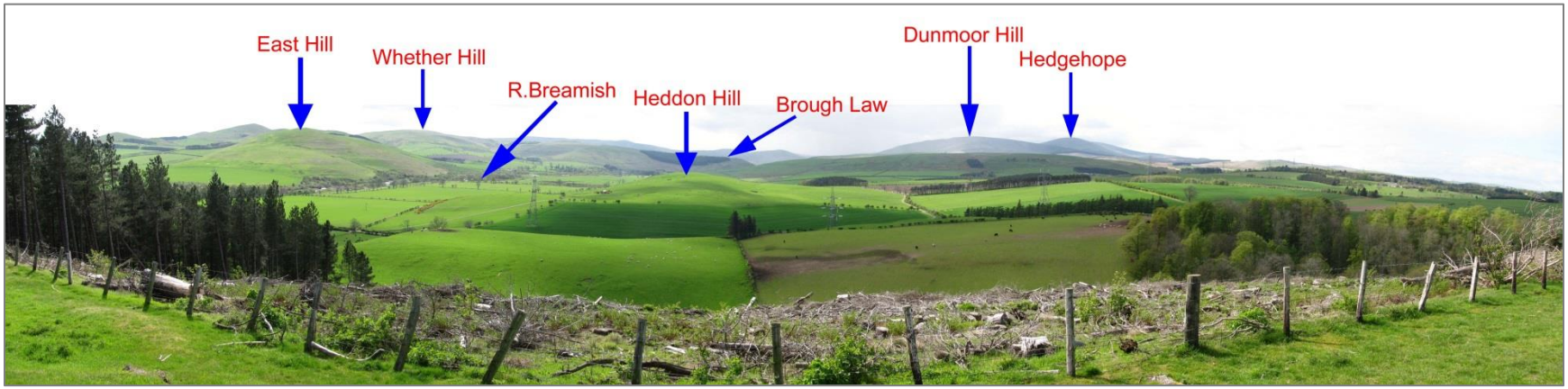


Figure 8.28 – Panorama from BH2 centred west south-west looking towards the upper Breamish valley.

Summary

Although all of the hoards are located on the direct valley sides of the principal rivers in each catchment, it is possible to discern some subtle differences between the topographic setting of the single finds and the small hoard of mixed objects from Simonside, and the deposits that contain multiple swords – Thirlings and Brandon Hill - and multiple swords and spearheads – Thrunton. The find-spots at South Lyham, Chatton and Simonside are all located above the valley floor in locations that are immediately overlooked by higher ground. In the case of both South Lyham and Simonside the approximate find-spots are set in landscapes where the topography forms a natural bowl. The approximate Chatton find-spot is also close to a small plateau which interrupts the shallow but steady rise of the valley sides. Whilst these general find-spot locales are by no means tightly confined topographically - South Lyham, Chatton and Simonside all potentially offer expansive views across the upland zone, they all have the appearance of being nestled on the sides of these principal valleys.

In contrast to the find-spots of the single swords and the small hoard from Simonside which are located on the sides of principal river valleys, the find-spots of the larger hoards containing multiple swords at Thirlings, and swords and spearheads at Thrunton, are both located on or near to the floor of principal valleys. The sword hoard from Brandon Hill differs from the other sword deposits in that the find-spot is located in a truly elevated position, on the upper summit slopes of a small hill.

8.3 *Deposition in a social landscape*

In the preceding discussion I highlighted how a number of the find-spots were located in close proximity to hillforts. Given that both the core distribution of sword deposits and the main concentration of hillforts in Northumberland coincide, this is perhaps not surprising. However, the presence of numerous Late Bronze Age martial metalwork deposits in the same geographic area as the core concentration of hillforts, is in itself a particularly striking pattern and one that seems unlikely to be coincidental (Fig. 8.29). Whilst the precise nature of the relationship between the two can only remain a subject for speculation, both the deposition of these comparatively rare and potentially valuable martial artefacts and the early development of the first defended hilltop enclosures, were activities that ran broadly parallel with one another. The results of excavations at a number of upland hillforts suggest that basic defensive structures first appeared during the Late Bronze Age, with wooden palisades enclosing a small number of roundhouses, such as at Mid Hill (College Valley) and possibly Yeavering Bell (Till), whilst similar features have also been identified at High Knowes (Breamish/Aln). Whilst these embryonic Late Bronze Age hilltop enclosures are far removed from the considerably more monumental hillforts that developed later during the Iron Age, the erection of simple wooden palisade circuits around small settlements on conspicuous hilltops, reflects a fundamental shift in the organization of upland settlement, as open settlements - with round houses set amongst small and irregular fields, are slowly joined in the landscape by increasing numbers of hilltop enclosures associated with more formalised field systems (Young 2000, 77).

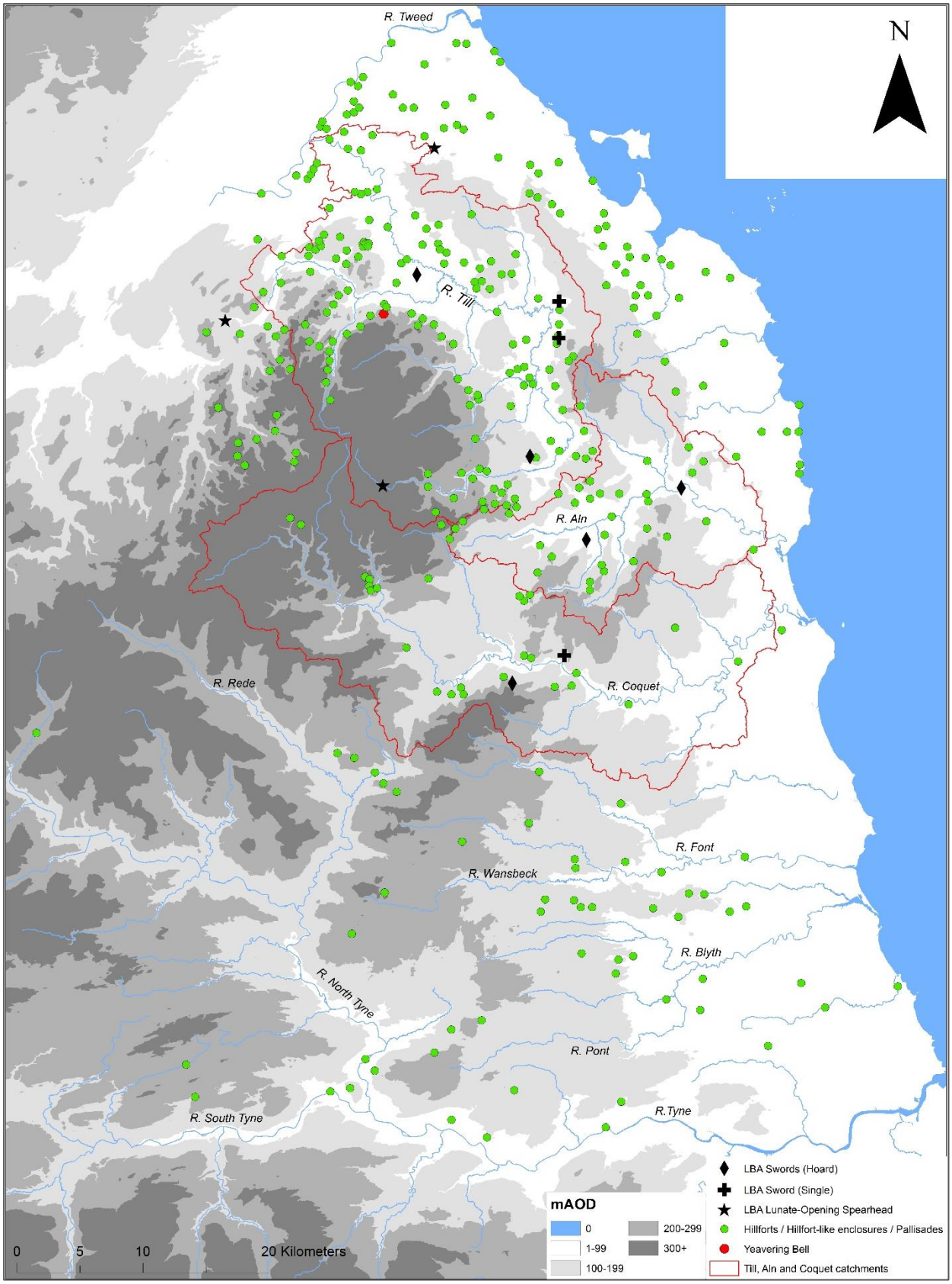


Figure 8.29 – The distributions of Late Bronze Age martial metalwork deposits in north Northumberland, and hillforts, hillfort-like enclosures and palisades in Northumberland © Crown Copyright and Database Right 2015. Ordnance Survey (Digimap Licence).

Young suggests that 'with the development of palisades we are seeing a complete social and economic response to climate change, which involves the wider integration of different landscape zones into the economic system' (2000, 77). Whilst it is true that the climate did deteriorate during the Late Bronze Age, with conditions becoming cooler and wetter, it is Young's observation about changes in the organisation of subsistence practices that is of greatest interest to this discussion. If the Late Bronze Age was a time of substantial changes in regards to the organisation of subsistence practices, and presumably the ways in which communities related to one another, is this possibly reflected in the landscape setting of the martial metalwork deposits?

8.3.1 Exploring scales of connectedness

Although the contrasts in the landscape setting of the find-spots appear quite subtle, the relationship between the different types of deposit and the characteristics of the topographic context of each find-spot is potentially significant. Whilst all of the find-spots are in locations that border different topographic zones, the larger hoards from Thirlings, Brandon and Thrunton stand out from the single finds as they all occupy positions that are close to intersections of major valleys and/or potential route ways. Whilst it is difficult to be certain about the occasion or trigger which led to these martial objects being deposited – and no single interpretation may apply to all cases, the different deposit types may reflect different scales of connectedness and influence, associated with each depositional event.

To help illustrate this hypothesis, let us assume that all of these martial deposits are the product of the same broad social process, for example, funerary rites associated with the death of an individual. In this context, we might interpret the single swords, or the small hoard from Simonside with a mix of objects, as grave good representing the belongings of a single individual. The scope of the influence of this individual, and the group to which they primarily identified themselves with, is perhaps reflected by both the limited contents of the deposit, and

the landscape setting of the find-spots. If extended kin-ship groups were present at the depositional event, then funerary gifts in the form of other martial artefacts were apparently not necessary. From a topographic perspective, the find-spots have the feel of been tucked away in relatively discrete locations on the valley sides. As such these locales perhaps represent places that were significant in the cultural geographies of a small and select number of people.

By contrast, the deposits containing multiple swords and spearheads could represent the contributions of numerous individuals from different communities or extended kinship groups, or perhaps, the trappings of a particularly powerful individual. We might expect such a scenario to involve a larger and more complex network of social relationships, perhaps extending widely across the landscape and incorporating many different community groups, than for the single swords. Consequently, the locations in which multiple objects were deposited may reflect these wider spheres of influence.

8.3.2 An age of quarrel?

Whilst I have suggested that the emergence of fortified enclosures and the deposition of martial metalwork may both be products of the changing social, economic and political environment in the upland zone, I have yet to make the obvious martial connections between the two. Swords and spearheads have the potential to act as weapons of violence and control. The act of enclosing settlements behind fortifications implies a preoccupation with deterring and defending against the threat of violence, whether perceived or real. The relationship between deposits of martial metalwork and the emergence of defended enclosures has received some attention in Bronze Age studies. Bradley had postulated that the deposition of martial metalwork, such as the large quantities recovered from riverine contexts in the east of the British Isles, may have represented a form of military posturing, equivalent to the construction of fortified enclosures (1998, 139).

In a number of studies significance is given to the presence of large quantities of martial artefacts from major rivers, because as topographic features which naturally divide up the landscape, they may have represented physical boundaries between distinct groups (Fontijn 2002). The idea that metalwork may have been deposited as a form of military posturing appears plausible in these circumstances. In certain areas, rivers may have played a central role in Bronze Age daily life and thus acts of deposition - some of which may have taken place from boats on the river, had the potential to be observed informally by people standing on the banks of the river.

In the case of north-west Northumberland the interpretation of metalwork deposition as a form of military posturing, or even as surrogate warfare, appears less convincing. Metal deposits containing swords are distributed relatively evenly across the upland zone, appearing in all of the principal river valleys. This pattern suggests that the swords were deposited by a number of distinct community groups, whose lives revolved around specific parts of these different river catchments. On the face of it, the dispersed nature of the sword deposits may reflect these different community groups competing against one another through the consumption of valuable metalwork. However, if some of these deposits did represent a form of military posturing, who were they designed to be targeted at?

The landscapes in which martial metalwork deposition took place in north Northumberland potentially afforded high levels of visibility. Whilst it may be a mere coincidence, it is striking that the bowl shaped landscapes in which both the Simonside and South Lyham find-spots are located, appear to be ideally suited to events which were observed by an audience. However, it is much harder to comprehend how the topographic setting of these spatially dispersed find-spots would have allowed each depositional event to be observed in an informal, chance manner by competing groups. Attendance would have required prior knowledge of the event, acquired through affiliation with the relevant social network/s. Instead

of being for an external audience, the deposition of some martial deposits in north Northumberland may therefore have fulfilled a posturing element, but one that was directed internally to bolster and re-affirm established social relationships and group identities.

8.3.3 Negotiating change: a role for swords

If the Late Bronze Age was characterized by growing social pressures then the need to re-affirm group identities and traditional rights to land and resources may therefore have been a pressing concern. The construction of the first hilltop enclosures and structured field systems appears to be a manifestation of this. Whilst at one level their construction may simply reflect a practical adaptation to evolving subsistence practices (Young 2000, 77), their emergence in the landscape would also serve to secure and formalise rights to land and resources held by different groups. The deposition of martial metalwork may well have been another means by which communities attempted to negotiate the changes that were occurring within society at this time. The locations selected for the purposeful deposition of metalwork are unlikely to have been random, but seem likely to represent places that were particularly significant within the cultural geographies of the groups making the deposits. This is consistent with Young's argument that far from abandoning the upland zone as the climate deteriorated, communities may have actually intensified their efforts to maintain a way of life which was firmly rooted in long standing traditions and attachments to particular places (2000, 74-77).

If metalwork deposition could fulfil a role of re-affirming and enhancing the cohesion of established social relationships within groups, it is also necessary to consider the possibility that it could have been played a similar function in the creation of new social relationships between groups. If we consider the landscape setting of the various martial deposits the potential for the find-spots of the single swords and the Simonside hoard to have acted as nodal locales for dispersed populations is not as obvious as for the hoards, which are positioned close to the intersections of major valleys and potentially significant natural route-

ways. The Thirlings hoard is located close to the intersection of Glendale and the Milfield Plain. The Brandon Hill hoard is located at the intersection of the Ingram Valley and the Breamish valley, and the Thrunton hoard is located at the intersection of the Vale of Whittingham and a historically important north south route-way – the Devil's Causeway, a Roman road which transects the principal valleys of the sandstone uplands on a north-south alignment, linking the lowlands of southern Northumberland and the northern uplands.

The idea that metalwork may have been deposited by different parties when entering into new social relationships is not a new one. Needham has speculated that a distinct group of small Middle Bronze Age hoards from Somerset which all contain one to three palstaves along with ornaments – always including torcs, may represent deposits designed to 'seal a marriage alliance between two important families', with objects from both the male side – axes, and female side – ornaments, being brought together in a community deposit (2001, 292).

I would therefore venture the interpretation that some of the deposits that contain multiple swords and/or spearheads may be a physical by-product of the creation of new social contracts between distinct community groups. It is possible to envisage a scenario in which upon forming new alliances, the groups involved undertook the symbolic act of contributing metalwork to form a larger community deposit. The siting of hoards at boundary locations would appear highly significant in this context. Against a background of heightened social tensions, overtly martial objects such as swords or ostentatious spearheads would appear to be ideally suited to this role. Such collections of martial objects might represent the newly acquired strength of the unified communities, as well as marking the entrance of each group into a web of new social relationships based on mutual co-operation. By giving up objects which are inherently associated with violence and conflict, each group displays it's commitment towards the new alliance by quite literally laying down their arms, or at least a token representation of them.

Climate deterioration fits neatly into the narrative and it may very well have been a significant driving factor behind the changes that occurred. If climatic deterioration led to the utilization of both greater areas of land, and a more diverse range of landscape zones for subsistence purposes, then the established land-use patterns of various co-existing communities may have come under pressure in the Late Bronze Age. Individual community groups may have responded to this by reaffirming traditionally held rights to land and resources but also by negotiating new arrangements with other groups. As no area of the Cheviot uplands was immune to climatic deterioration, the need to adapt to the changing conditions would have been felt by the many communities whose economy and subsistence was reliant on land and resources in the Till, upper Coquet and upper Aln catchments. The construction of palisaded enclosures alongside the procurement and deposition of comparatively large numbers of swords at a regional level, are both possible means by which communities negotiated their way through these times of change.

8.3.4 Common ground: hillforts and martial metalwork

I started this section by highlighting the correlation between one of the main distributions of martial metalwork find-spots in Northumberland and the core concentration of fortified enclosures, an overlap which seems unlikely to be coincidental. This is by no means the first study to examine the connection between the appearance of fortified enclosures and the substantial increase in the deposition of martial metalwork towards the end of the Bronze Age. Bradley has suggested that these practices may have represented two distinct forms of military posturing, with metalwork deposition favoured in the east of Britain, and the construction of fortified enclosures in the west. With their inherent connotations for defence and violence, the interpretation of these practices as communities adopting a more war like footing, appears well merited.

The broadly parallel appearance of these practices alongside each other in Northumberland suggests that there may have been seismic shifts in the social climate across this upland zone during the Late Bronze Age. Whilst both the construction of enclosures and the deposition of martial metalwork may be indicative of heightened social tensions, with communities feeling pressured to distinguish themselves, and their rights to particular areas of land from other competing groups, it was not necessarily the case however, that these practices only defined antagonistic relationships.

An alternative view on the potential similarities between metalwork deposition and hillfort construction is provided by Niall Sharples (2010). In common with Bradley, Sharples views the two distinct practices of metalwork deposition and hillfort construction as fulfilling similar roles, but Sharples interprets the later Iron Age tradition as a direct replacement for the former Bronze Age one. In Sharples narrative of the Bronze Age – Iron Age transition, labour takes on the important role that bronze previously fulfilled within society, as the metals ability to act as the conduit for the creation and reproduction of social relationships is diminished following the widespread adoption of iron. As a consequence, the mechanism by which social relations were previously created and maintained during the Late Bronze Age - through the ability to acquire and consume metalwork, is replaced by a new mechanism, based on the contrasting abilities of individuals and groups to organise and control labour.

One of the ways in which the organisation of labour most clearly manifests itself during the Iron Age is through the construction of hillforts. Whilst the influence of different scales of connectedness behind acts of metalwork deposition can only be inferred, the relative size of social networks involved in the construction of hillforts is considerably more evident in the contrasting scale and appearance of the monuments. The construction of hillforts required a great resource of labour and evidence from excavation of these monuments revels the piecemeal nature of their development. Hillforts therefore represent distinct places where

groups from across the surrounding landscape converged to collaborate in a shared experience that served to define and re-inforce group identities.

Oswald et al have noted how many of the Cheviot hillforts have few real defensive qualities, suggesting that these monuments were primarily of a superficial and symbolic nature. Many hillforts fail to maximize the natural advantages of local topography and some are even positioned in locales that are counter-productive from a defensive perspective (2006, 65-69). The deposition of lavish metalwork and hillfort construction could therefore both be symbolic acts, undertaken to display the power, authority and influence of different individuals or groups. The construction of hillforts would serve to differentiate groups from one another, whilst simultaneously strengthening within group bonds by mutual collaboration in the project. It has been suggested that the sword and weapon only hoards from the north Northumberland uplands could represent the quite literal and symbolic gesture of laying down arms upon entering into a new alliance, or consolidating a pre-existing agreement, and therefore the two processes should not necessarily be interpreted solely in simplistic terms as defining antagonistic, 'us' versus 'them' relationships. The deposition of metalwork or the construction of a hillfort, may also have been a direct product of, or involved, the creation of new social relationships. The timescales involved in their construction of hillforts would offer the potential for social networks to be open to change and negotiation, with groups joining, or leaving construction projects as they progressed.

It should be noted that although the primary concentration of hillforts appears in the Till, Aln and upper Coquet catchments, there are many hillfort-like enclosures across Northumberland, the numbers of which are steadily increasing with the identification of new crop mark sites on aerial photographs. The presence of many hillfort-like enclosures in areas where there are no Late Bronze Age martial metalwork deposits, such as along the north Northumberland coastal

plain and within the Wansbeck and Blyth catchments, does not necessarily contradict the arguments set out in this chapter.

As already noted, in terms of their geographic distributions the relative densities of hillfort sites and martial metalwork find-spots are mutually inclusive. This is particularly apparent in the contrast between the core distributions of hillforts and Late Bronze Age swords in the Till and upland sections of the Aln and Coquet catchments, and the catchments of the north and south Tyne where there are just nine hillforts and hillfort like enclosures and few overtly martial metalwork deposits (Oswald et al 2006, 63). It is also significant that the most substantial hillforts in Northumberland are all located in the upland zone, including the largest at Yeavering Bell which overlooks the Millfield Plain and the site of Thirlings, where three Late Bronze Age Ewart Park type swords were deposited together. The Brandon Hill hoard was possibly deposited within a hill top enclosure. Although a direct, contemporary relationship between the two has not been proved, at the very least the spatial association implies a degree of continuity in the significance of this location to the local population over time.

Further supporting evidence for a probably relationship between martial deposits and fortified enclosures can be found by looking beyond the boundaries of the study area. An examination of the metalwork record between the Tyne and Forth, reveals that the concentration of Ewart Park sword deposits in north Northumberland forms part of a much wider distribution of similar deposits that stretches across the southern Scottish uplands. This area is also characterised by a dense concentration of hillforts, including a number of monumental types similar to that of Yeavering Bell, whose initial phases of development commenced in the Late Bronze Age. Metalwork finds from this period, including swords, have been discovered within, or near to, enclosures located on prominent hills at Arthur's Seat – two Ewart Park Swords of class N2, Duddington Loch on Arthur's Seat – a large mixed hoard including sword fragments, North Berwick Law – a leaf shaped sword and socketed axes, Traprain Law – sword moulds and socketed axes and Eildon Hill North – a hoard of socketed axes. The potential significance of

these associations has been recognised by Cowie and O'Connor who note that 'swords and other metalwork types continue to emphasise the significance of known or suspected Late Bronze Age central places' (2007, 331).

The fact that the most substantial hillforts in Northumberland appear in the upland zone, whilst the distributions of the more numerous hill-fort like enclosures extend onto the northern and central coastal plain, is potentially revealing in the context of Sharples interpretation of the Bronze Age-Iron Age transition, with labour taking on the role previously fulfilled by metalwork exchange and deposition, as a mechanism through which social relationships were created and maintained. If the construction of hillforts fulfilled a similar social function to the exchange and deposition of metalwork, it is possible to consider whether more nuanced parallels exist between the two practices, in particular, between the deposition of common, mundane metalwork and the construction of small fortified enclosures and the deposition of lavish and large hoards and the development of monumental hillforts. The construction of small hillfort-like enclosures and the deposition of individual axes or common spearheads was potentially a relatively inclusive process, one which many smaller community groups could initiate and claim ownership of. By contrast, the level of influence requisite to directly participate in the deposition of lavish metalwork, or oversee the construction of truly monumental hillforts, would have been quite exclusive.

These different processes therefore reflect contrasting scales of influence and connectedness both within and between the two zones. In the upland zone many smaller community groups could have initiated the construction of hill-fort like enclosures, but they may also have been bound to larger social networks, relationships formalised through the participation in the construction of monumental hillforts such as Yeavering Bell. From a temporal perspective, the deposition of martial metalwork overlaps with the early phases of hillfort construction, the

development of which could be seen as a symbolic death knell of the important role bronze played in society. There was presumably greater opportunity to organize and pool labour resources then there was to participate in the deposition of certain types of metalwork, particularly swords or large, ostentatious spearheads, and this could have represented a challenge to established social hierarchies. If similarly extensive social networks were present across the lowland zone, then such relationships were not articulated through participation in similar construction projects, as only small hill-fort like enclosures are found along the coastal plain. It therefore appears that distinctions between the upland and lowland zone that are reflected in the Late Bronze Age by the distribution of martial metalwork deposits are maintained into the Iron Age though patterns in the construction of hillforts and hill-fort like enclosures. This limited evidence suggests that different social conditions prevailed in the upland and lowland, coastal zones. What the interrelationship was between the two zones, is hard to infer from these two datasets alone.

It is important to note that current understanding of the chronological developments of hillforts and hill-fort like enclosures across the region is patchy, with absolute dating from radiocarbon analysis limited to a handful of sites in the upland zone. A number of hillforts appear in an embryonic form in the Late Bronze Age, but dates obtained from radiocarbon analysis at a number of upland hillforts suggest much later origins, with initial defensive features appearing at Wether Hill, Dod Law, Doddington Moor, Harehaugh Camp and Brough Law, between the fourth and second centuries BC (Oswald et al 2006). Whilst the absence of absolute dating evidence for the large number of hillforts and hillfort-like enclosures from coastal and lowland Northumberland prevents a detailed comparison of chronological developments between the different landscape zones, it remains likely that the majority of hillforts and defended enclosures in the region, including those in the upland zone, are firmly Iron Age in date, first appearing in the second half of the first millennium BC. Only through targeted fieldwork can

we hope to produce a more nuanced absolute chronology for the development of defended sites across the region.

8.4 Deposition in a cosmological landscape

The preference for depositing martial deposits on the valley sides in north-west Northumberland is in contrast to depositional behaviour in the lower Tyne catchment, the location of the other major concentration of Late Bronze Age martial metalwork deposits in the region, where the watercourse itself was favoured. These different depositional behaviours must in part reflect contrasting attitudes towards the principal rivers in each area. These differences may reflect the contrasting roles that these rivers played in the social landscape, but they could also represent the influence of Bronze Age cosmologies. One depositional convention in-particular, the placing of martial metalwork in major rivers, is believed to reflect part of a Bronze Age belief system in which certain watery contexts - rivers, lakes, bogs – acted as portals to another world, an under-world or afterlife (Bradley 1998; Fontijn 2002). If such a belief was influential in the deposition of martial metalwork in the River Tyne along its lower course, as well as in the Rivers Wear and Tees, then the apparent avoidance of the principal rivers in the upland zone as a place to deposit metalwork, suggests that not all watercourses were viewed in the same way.

We might expect a major topographic feature such as the river Tyne to have been widely known to Bronze Age communities at a regional or even inter-regional level. Certain locales along the river may have been prominent in the cultural geographies of different local populations, but a more universal understanding of the rivers overarching significance may have been held by many different groups. This is perhaps evidenced by the fact that metalwork deposits favour no single point in the river but are spread over a stretch of its lower course. Whilst people will have experienced the river from different perspectives particular to

their individual circumstances, the overall physical character of the watercourse in this zone and the meanings people attached to it may have been quite uniform.

Whilst we must be cautious not to overemphasise the concentration of metalwork finds from the vicinity of Newcastle due to possible formation process biases, we are perhaps on firmer ground to argue that the intrinsic physical qualities of the river in its lower reaches meant it was imbued with values and meaning that made it a preferable location for martial metalwork deposition over locales in the surrounding landscape. The qualities of the watercourse are potentially significant because further upstream in the lower Tyne valley, and elsewhere in the region, people commonly eschewed principal rivers in favour of terrestrial locations for martial deposits.

Although the general absence of riverine finds from the sandstone uplands does not necessarily imply that riverine deposition did not take place in this zone - the rapier from Kilham was found in the Bowmont Water - the presence of numerous side-arm deposits from varied terrestrial locations within the principal river valleys show that alternative modes of deposition were considered both appropriate, and even preferable to deposition in the rivers themselves. Even in the lower Tyne valley the primacy of the river as the definitive locale for martial metalwork deposits did not extend to all areas.

The late Middle Bronze Age weapon hoard from Shildon Lough, upstream from Newcastle, was deposited in a bog which occupied a substantial natural hollow on the north side of the Tyne valley, approximately 3km from the river itself - a 40 minute walk at an average pace. Assuming a scenario where the depositors had an intimate knowledge of the local landscape and freedom move about it at their will, the choice of depositional location reflects the outcome of a positive selection process in which all other landscape contexts in the near vicinity of

Shildon Lough, including other watery locales such as minor tributaries of the Tyne and the Tyne itself were rejected. Given that martial metalwork is so prevalent in major rivers across eastern Britain, including from the lower Tyne itself – including two group 3 rapiers, it is necessary to consider why a small and isolated bog appears to have been selected over a prominent nearby river, as a preferable locale for this particular martial deposit. Shildon Lough is not a prominent feature in the wider landscape, but a relatively small, topographically confined area which can be easily circumnavigated. As such it perhaps had a limited sphere of influence, only playing a significant role in the cultural geographies of the local population/s.

The appearance of the Rivers Tyne, Wear and Tees in their lower stretches are quite different from the smaller principal rivers in the upland zone and it is these contrasting physical characteristics and qualities that may have directly influenced the cosmological beliefs associated with these different watercourses. A particular distinction may have been drawn between the physical qualities of watery features that are perceptible to the senses, the tangible, and those that were cut off from the worldly realm, the intangible. Fontijn has noted how both marshes and rivers effectively 'seal off the invisible parts of the world' (2002, 266). Bogs may have had intangible qualities in the sense that it would have been difficult if not impossible for people to define the limits of their depth. Bogs appear dark, still and bottomless, and objects placed in such places would quickly disappear from view. By contrast, the characteristics and qualities of a river can change dramatically along the length of its course. A river in its lower course, such as the Tyne at Newcastle, may share similar characteristics to bogs and marshes. The river would have been substantially wider than today, but it would have appeared muddy and deep with a slow rate of flow.

Although rivers may have had many intangible elements, they can also have wholly tangible qualities at particular points along their course. They can be shallow, clear and fast flowing.

The bed of a river may be clearly visible from its banks and the river itself may be easily forded. At these points a river has few hidden or mysterious elements that are imperceptible to the human senses. A common theme in the deposition of metalwork, either in the ground, beneath rocks, or in bogs and rivers, is the physical concealment of the artefacts from view. Such an outcome is clearly unachievable by placing metalwork in a shallow, clear watercourse.

Across Northumberland there are a number of instances where bogs located on valley sides were selected as places to deposit martial metalwork over nearby principal rivers, such as at South Lyham and Shildon Lough. It may have been the case that the physical qualities of the watercourses at these points in the landscape, were such that they did not hold the same cosmological significance to Bronze Age people as the lower courses of major rivers in the region. Conversely, as watery contexts with quite different physical qualities to the nearby rivers, both the bogs at South Lyham and Shildon Lough could have been played an important role in the cosmological landscape. One deposit which appears to offer a tantalising illustration of how such qualities may have influenced where deposits were placed at a localised level is an Early Bronze Age flat axe that was found in a stream at Ramshaw Mill in the upper Tyne valley. Unfortunately the rather vague provenance, in addition to possible influences of post-depositional processes, is inadequate to confidently attribute the find to an exact location, but a literal reading of the description would suggest that the axe was recovered from Warks Burn, a tributary of the upper Tyne, at a point where the stream has cut a narrow path through a sandstone gorge, creating a series of deep and dark pools. The photographs in Figures 8.30 and 8.31, taken from approximately the same location looking upstream and downstream, show how the character of the river changes dramatically at this point.


Figures 8.30 and 8.31 – Looking upstream (right) and downstream (left) at Ramshaw Mill

In addition to the watercourse itself, the juxtaposition of the possible find-spot with the sandstone gorge is also worthy of consideration. The association between metalwork deposits and rock outcrops is a well-documented one (Barber 2003; Stevens 2008, 247) and numerous examples are known from the study area. Just as water appears to have been an element which had great significance within Bronze Age society, stone too, with its unique properties, may also have been imbued with particular values that made it a suitable locale for metalwork deposition. A number of authors have suggested that an important aspect of metalwork deposition might have been the fulfilment of obligations based on reciprocal relationships with the natural world (Fontijn 2002; Stevens 2008). The placing of metalwork within rock outcrops may therefore represent the act of 'metaphorically referenc*(ing)* the mineral source of raw materials used in the production of metalwork', an argument put forward by Stevens (2008, 247). The existence of such reciprocal relationships is perhaps exemplified by the probable metal-smiths hoard from Roseberry Topping, where a collection of tools and raw materials central to the metalworking process were seemingly placed in a cleft in a rock outcrop on the southern slopes of this prominent hill.

8.5 Conclusion

It is impossible to comprehend the precise social processes surrounding the deposition of the martial metalwork deposits discussed in this chapter. The contrasting contents and topographic contexts of the finds suggest it would be wrong to assume that there is a one size fits all interpretation. Inferences have been made about the prevailing social climate and motivations which led to martial metalwork being deposited across the upland zone. Consideration has also been given to how relatively subtle differences in the contents and contexts of the deposits may reflect the existence of contrasting scales of social networks and spheres of influence in depositional events.

The concentration of Ewart Park sword deposits in north-west Northumberland has its roots in the shared experiences of life within a number of valley systems which lie within a broader distinct topographic zone. Whilst the sword is a common thread that distinguishes this area from the surrounding landscape, the composition of each deposit and the topographic setting of each find-spot display significant variation. Within the sandstone uplands the metalwork deposits appear to mark individual places that were significant in the cultural geographies of local populations, whilst eschewing the principal rivers, prominent topographic features that provided a common link with other communities living within the same catchments. The principal rivers also lead to other landscape zones away from the uplands, and it is possible that that they were deemed unsuitable for metalwork deposition because they provided these wider links and associations.

The preference for terrestrial locations for martial metalwork deposits is in keeping with the trend towards the increasingly formalised demarcation of space in the landscape in the form of fortified enclosures and their associated field systems. It seems likely that the Late Bronze Age is a period during which Bronze Age communities across the upland zone displayed a growing concern with defining their rights to land and resources. During a time when

relationships between groups and communities required re-affirmation, or possibly re-alignment, metalwork, in its role as an important conduit for the creation and reproduction of social relationships, could have played an important role.

An important aspect of metalwork deposition that I have not yet considered is the possible desire to maintain the integrity of a deposit, and subsequently, the potential for its retrieval at a later date. It would have been easy to recover objects placed in dry land contexts, and even metalwork placed in bogs could have been marked, facilitating future retrieval (Becker 2008, 13; Needham 2001, 290-1). However, such actions could not necessarily be replicated for objects thrown into a river, even if they were bound together in some way. It is therefore possible that the social processes and conventions that were behind the deposition of some martial metalwork deposits in north-west Northumberland, could potentially have necessitated the retrieval of the artefacts at a later date. Such flexibility may have been required in instances where metalwork was deposited to mark the creation of new social relationships. Allegiances could change, and the disarticulation of a hoard deposited to seal the formation of a new relationship might have been necessary if the relationship ceased.

Particular focus has been placed on the possible role of martial metalwork deposits in the social landscape, but cosmological beliefs may also have influenced the preference for terrestrial locations over the principal rivers for some deposits, such as the sword blade from South Lyham bog. Parallels can be drawn between such a deposit and the small martial hoard from Shildon Lough, which may represent the personal belongings of individuals, and the numerous martial deposits from the lower stretches of the Rivers Tyne, Wear and Tees, which in line with Bradley's (1998, 99-114) interpretation, could represent surrogate grave goods. There is definitely a finality to the metalwork deposited in the River Tyne, which would be in keeping with deposits made to mark the end of an individual's life, as it would have been difficult if not impossible to recover it once given up. Such finality does not apply to the martial metalwork hoards from the upland zone which were predominantly deposited on dry land.

Across north-east England it is possible to observe a wide range of depositional behaviour that is contingent on the unique topography of different areas and the prevailing environmental conditions in which life played out. Whilst the deposition of axes and mundane spearhead was a wide spread phenomena, occurring across the study area, swords and ostentatious spearheads appear to have played a particularly significant role in only a small number of well-defined geographic areas. Although widely dispersed geographically, the find-spots for many of the deposits containing swords share similar characteristics.

The find-spots from a number of the core concentrations of sword deposits appear to emphasise locations that are at the intersection of multiple landscape zones. In the uplands of north-west Northumberland the find-spot locations border the high Cheviot uplands, the sandstone ridge and the vale and valley floors. In the Vale of Pickering the find-spots are located between the edge of the vale and the foot hills of the North York Moors. On the lower to mid slopes of the Moors and Tabular hills there are many substantial boundary earthworks such as cross dykes, which possibly date to the Late Bronze Age. Although the precise nature of the archaeological evidence is different, both display a growing concern for the formalised demarcation of the landscape.

It is reasonable to postulate that the possession of swords and more ostentatious spearheads may be indicate of individuals, and/or groups, that have acquired a particular status and position of authority in society. The appearance of martial metalwork deposits in these upland fringe areas may indicate a concern with control and access to resources in different landscape zones. In a similar vein, it has been suggested that the concentration of martial metalwork in the upper part of the Tees catchment may be linked to the Stainmore pass.

Not necessarily just martial artefacts that are important though. Large and/or mixed hoards as community deposits with individual family units contributing artefacts to common goal

instead of making individual deposits. Community hoarding has potential place within this scheme – defining and consolidating relationships to one another and place. This is perhaps why we see a notable increase in the number of hoards during this phase.

Conclusion

9.1 Conclusion

A principal aim of this research was to examine the role that topography played in structuring depositional behaviour across north-east England. Analysis of the metalwork record has revealed the existence of many different depositional patterns at various geographic and topographic scales. Different types of metalwork deposit favour individual topographic features or particular zones within catchments, and catchments themselves can represent either discrete topographic units, or contribute to larger topographic zones, where the deposition of certain metalwork types was favoured or eschewed. Yates and Bradley suggest that depositional 'conventions changed from one area to another' (2010b, 70), and the analysis of patterns in the metalwork record for north-east England provides evidence in support of this statement. For example, in many areas, the distributions of Late Bronze Age sword deposits and martial hoards, and mixed hoards containing sword fragments are mutually exclusive. Conventions appeared to permit the deposition of complete swords and ostentatious spearheads in certain areas, whilst restricting it in others. Depositional conventions could also vary for similar deposit types. The find-spots of single swords and martial hoards are invariably located within the main valleys of principal rivers across north-east England, but the specific topographic setting of these find-spots adhere to local conventions. In the far north of study area the lower stretches of the river Tyne appear to have been the preferred location for martial metalwork deposition, but in the uplands of north-west Northumberland, the principal rivers appear to have been eschewed in favour of locations on the valley sides. The discussion in this study has focused on swords, an object class which displays particularly striking depositional patterns, but more detailed examination of other metalwork deposit types could reveal similarly nuanced depositional behaviour.

There were suitable places to deposit certain types of metalwork and particular cultural conventions were widely adhered to. However, whilst overarching cultural conventions provided a guiding hand for metalwork deposition, the specific detail of depositional behaviour at a local level is the product of an intimate knowledge of a locations significance within the wider landscape in which daily life played out. The modern hoard at Newbiggin can be interpreted along these lines. The placing of a time capsule in the ground to commemorate a significant event is a widely practised phenomenon in the modern world. The Newbiggin community therefore adopted a well-known cultural convention as a means of celebrating the new millennium, but the specific detail of the project was forged at a local level. This is most visible in the personal contents of the hoard and the choice of the monuments location. The deposition of the Early Bronze Age axe hoard at Newbiggin must reflect a similar process, but much of the fine detail relating to the process, such as the trigger and motives that led to the hoard being deposited, and the significance of the find-spot in the social landscape are largely inaccessible to us because of the unique nature of the hoard. However, whilst the Newbiggin hoard is unique within the study area, other forms of selective deposition were so prevalent, they left an indelible mark which can be traced in the metalwork record. It is an examination of these patterns, which forms the basis of the study.

The first scale of analysis examined very broad distribution patterns, with all metalwork finds treated as a homogenous group. This provided a broad overview of depositional activity across the study area and facilitated a discussion of the formation process for the metalwork record. Comparison of metalwork finds discovered by metal detecting against those found by other means, revealed how biases can influence find-spot distributions and artefact representation at different scales. Throughout the study, consideration is therefore given to possible biases in the formation process and limitations with the dataset. The distributional analysis identified a number of absence zones across north-east England which have strong geographic and topographic dimensions. It is believed that these represent genuine

metalwork lacunas and this raised a number of interesting questions about the possible roles these zones of absence played in structuring depositional patterns in adjoining areas.

These questions are addressed by the next scale of analysis, which focuses on the characterisation of metalwork deposits within the principal river catchments in the study area. The analysis reveals the existence of diverse depositional histories across north-east England, with topography playing an important role in defining discrete areas where communities had shared geographies of experience. Some of the zones of absence, such as the Vale of York, appear to have acted as buffer zones between two or more areas where metalwork deposits display contrasting characteristics. For example, the Vale of York separates two areas where different types of contemporary axes were favoured during the later Middle Bronze Age. The pattern supports the existence of two or more distinct population centres located on opposing sides of the vale. The groups who inhabit these distinct parts of the landscape share in a common experience, which finds expression in the types of metalwork they deposit. These patterns are interesting, but they reveal little about the nature of society in these two areas. Other depositional patterns, such as those involving Late Bronze Age side-arms, show that there could be significant differences in the role that individual metalwork types played in different areas. These patterns may reflect more fundamental societal differences.

Results of the Monte Carlo analysis reveal some fundamental differences in the zonation of different types of metalwork deposit within the principal river catchments of north-east England. The analysis illustrates prominent associations that are already well documented in metalwork studies, such as that between swords and major river valleys, but a number of more subtle trends are also revealed relating to earlier side-arms types and axe deposits from different periods. The analysis suggests that the find-spots for certain deposits, such as single

Late Bronze Age axes and all single spearheads, may favour locations close to minor watercourses, supporting Yates and Bradley's observations from south-east England (2010b).

If depositional patterns reflect the contrasting experiences of communities living in different physical environments, the final scale of analysis uses a case study to examine how such a relationship was articulated in one particular landscape zone. By stressing the social element of metalwork deposition, it is possible to provide alternative interpretations for depositional activity to those which view deposition as a ritual activity that was separate from daily life (Fontijn 2002). The sword deposits from north-west Northumberland appear to be primarily from natural, uncultivated places which presumably were not in the direct vicinity of nearby settlements. However, this does not necessary mean that the deposition of these objects was a process that was separate from activities and concerns that surround everyday life. It is suggested that some of the martial hoards may represent deposits which re-affirmed established ties or sealed the creation of new social relationships at a time of social change. In this context, the location of these deposits might be interpreted as being integral to daily life, as they marked boundaries, or central places which were important points which referenced the nature of social relationships between communities. Interpreted in this way, the deposits would have arisen from practical, every day concerns relating to the need to establish and formalise access to resources, land and allies. As such, the places in the landscape where metalwork was deposited did not need to be visited every day in order to play an important role in daily life.

9.2 Critique and scope for future research

This study focuses primarily on the topographic setting of metalwork deposits, but, as Yates and Bradley (2010b) and Fontijn (2002) have shown, there is potential to integrate evidence of metalwork deposition into a fuller picture of landscape in-habitation by contextualising find-

spots in relation to contemporary features of the built cultural landscape - settlements, field boundaries, track-ways and burials. Such an approach could be employed in a number of ways. One option would be to identify a specific area with a large number of well provenance find-spots, in which to undertake primary fieldwork to identify evidence for other forms of Bronze Age archaeology in the vicinity of find-spots. Alternatively, if the dataset does not meet the minimum criteria for such a targeted geographical approach, the find-spots of a number of well provenance deposits of different types from across north-east England could be chosen for more detailed archaeological investigation. The approaches that could be applied such as geophysical survey, field walking and test pitting are time consuming and can be labour intensive. An absence of evidence would support the interpretation that metalwork was deposited in places that were beyond the boundaries of the occupied and cultivated zone.

An initial aim of the study was to examine the topographic setting of the find-spots of different types of metalwork deposit within a defined river catchment. This relies on there being a substantial number of different and well provenanced types of metalwork find within a single catchment, but unfortunately, such an arrangement does not occur within the study area. In areas where there are greater number of finds, such as the south-east, it should be possible to consider the relationships between topographic variables and a more varied set of metalwork types. In particular, there would be great potential to apply the Monte Carlo analysis more thoroughly to a larger and more varied sample of deposits. The theoretical underpinning of the river catchment as the basic unit of study also impacts on the application of the Monte Carlo Simulation in the study, as the integrity of the catchment approach required all samples to be manually checked. An alternative approach which simply measures the distance to the nearest watercourse could easily utilise a larger number of samples, producing a more accurate and representative background population against which to compare the archaeological dataset. Yates and Bradley (2010b) identify differences in depositional activity between different river catchments in south-east England, but, the metalwork deposits are

treated as a rather homogenous group, with a focus on tools and raw materials. By applying methods used in this study to a larger dataset – Yates and Bradley focus on a sample of just 100 find-spots - it is possible that more nuanced patterns in depositional behaviour both within and between the various catchments, may be revealed. A robust Monte Carlo Simulation would also address Yates and Bradley's claim about the striking association between metalwork find-spots and fresh water sources, by examining whether spatial relationships between the two are statistically significant.

Analysis has revealed the existence of a number of striking patterns relating to the general condition of different metalwork deposits. The study has explored the most clearly visible patterns of fragmentation, something that can be achieved without needing to examine artefacts first hand. By undertaking macro and/or micro use-wear analysis of bronze objects, there is great potential to examine the life history of metalwork deposits from north-east England in greater detail. Roberts and Ottaway (2003) have laid the foundation for an approach based on macro use-wear analysis, and the PAS database provides a large database of new material to study which can build on their work. It would be particularly interesting to apply such analysis to spearheads, to examine relationships between the form of different types of spearhead and evidence of use-wear. Does the use life of a spearhead, inferred through evidence of use-wear, influence the depositional context of the object? Similar questions could be asked of other common metalwork types such as side-arms or axes. The PAS dataset has a particular advantage over many earlier finds that are in museum collections, as the location of many PAS finds are recorded to a least a six figure grid reference, allowing accurate topographic characterisation of the find-spots.

9.3 Reflection

The direction that my research followed was heavily influenced by the work of Pendleton (1992, 2001) and a need to question many aspects of the metalwork record for north-east

England. This approach represents sound methodological practice, but the reality of undertaking such work is far from straightforward. My continual questioning of the metalwork record as a reliable representation of Bronze Age depositional activity regularly rendered me into a state of befuddlement as I agonised over the relative strength of arguments for and against the authenticity of particular depositional patterns. Whilst these are easy to identify in the metalwork record, it is often impossible to prove definitively if they are genuine or not, and in many cases a statement of confidence regarding a particular observation is the best outcome that can be achieved. Whilst metal detecting is a contentious issue, there can be little doubt that the Portable Antiquities Scheme database, which comprises predominantly of finds discovered by metal detecting, is of great value to researchers studying Bronze Age metalwork.

In summing up his recent examination of Early Bronze Age mortuary practices in Northumberland and Durham, Chris Fowler 'acknowledges the temporary and contingent nature of the assemblage' he is studying (2013, 257). Given that the Bronze Age metalwork record for the north-east of England is growing on a fortnightly basis, in few other areas of archaeological research could this observation be more pertinent in a quite literal sense[7]. During the final stages of writing up my findings, a new Late Bronze Age hoard was discovered along the Northumberland coastal plain close to the town of Amble on the Coquet estuary that contained fragments of a sword hilt and a substantial portion of a blade. This represents the first definite discovery of a Late Bronze Age sword along the coastal plain[8], which lead me to re-evaluate my interpretation of sword deposition across central and north Northumberland. The depositional patterns in this area now reflect those that occur elsewhere in the study area and further afield, with deposits of complete and largely complete swords, and those

[7] Based on Bronze Age copper alloy finds from Northumberland, Durham, East and North Yorkshire recorded in the PAS database for 2014

[8] A fragment of a sword hilt is recorded in the PAS database (KENT683) with a find-spot of Widdrington parish, approximately 10km south of Amble. The find was recorded prior to the start of PAS and conflicting information about the find-spot led me to exclude it from the study.

containing smaller sword fragments, occupying mutually exclusive zones in the landscape. The discovery acts as an important reminder that the metalwork record should not be taken at face value as a genuine representation of actual Bronze Age depositional behaviour. Whilst new finds may help affirm established patterns and relationships and the interpretations we derive from them, other discoveries might be just around the corner that make us question and re-evaluate our understanding of particular forms of depositional activity and behaviour.

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Appendix - List of references that are abbreviated in the appendix

AA - Archaeologia Aeliana

AnJ - Antiquaries Journal

ArJ - Archaeological Journal

BAGB - Bradford Archaeological Group Bulletin

BAR - British Archaeological Reports

BICC - Bronze Implement Card Catalogue (held at British Museum)

DAJ - Durham Archaeological Journal

HBNC - History of the Berwickshire Naturalists' Club

HER - Historic Environmental Record

HMP - Hull Museum Publication

JBAA - Journal of the British Archaeological Association

JESL - Journal of the Ethnological Society of London

LPLS - Leeds Philosophical and Literary Society

NCH - Northumberland County History

PAI - Proceedings of the Archaeological Institute

PAS - Portable Antiquities Scheme

PSAN - Proceedings of the Society of Antiquities of Newcastle upon Tyne

PPS - Proceedings of the Prehistoric Society

PSAL - Proceedings of the Society of Antiquaries of London

PSAS - Proceedings of the Society of Antiquities of Scotland

PYGS - Proceedings of the Yorkshire Geological Society

SALA - Society of Antiquaries of London Archaeologia

TAASDN – Transactions of the Architectural and Archaeological Society of Durham and Northumberland

TERAS - Transactions of the East Riding Antiquarian Society

TSAHS - Transactions of the Scarborough Archaeological and Historical Society

VCH Durham - Victoria County History of Durham

VCH York - Victoria County History of York

YAJ - Yorkshire Archaeological Journal

YATJ - Yorkshire Archaeological and Topographical Journal

YPS - Yorkshire Philosophical Society

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Key for Appendix

Column	*Symbol / Abbreviation*	*Meaning*
Ref		Deposit included in Monte Carlo analysis
	*	Deposit recorded by Portable Antiquities Scheme
		Early Bronze Age (2500 - 1500BC)
		Middle Bronze Age (1500 - 1140BC)
		Late Bronze Age (1140 - 700BC)
Type	A	Axe
	Sp	Spearhead
	Sw	Sword
	Di	Dirk
	Ra	Rapier
	T	Tool
	O	Ornament
	Shld	Shield
	Da	Dagger
	Kn	Knife
	MW	Metal Working Debris
	Misc	Miscellaneous - non metal objects
	H.	Hoard (followed by contents)
Metal Ass.	Metal Ass.	Metalworking Assembladge (p.91)
Typology	*	Confident attribution of typology by Andrew Poyer
	**	Tentative attribution of typology by Andrew Poyer
Condition	C	Complete
	LC	Largely Complete
	F	Fragment
	Bu	Butt
	M	Missing
	S	Section
	Bl	Blade
	L	Large
	HC	Heavily corroded
	HW	Heavily worn
	Dam	Damaged
	b	Bent
	O	Only
	CE	Cutting Edge
	Lp	Loop
	So	Socket
	Pt	Part
	Shld	Shield
	T	Tip
	E	End
	Upp	Upper
	Fa	Face
	Low	Lower
	Adj	Adjoining
	Br	Broken

Appendix A1.1 - River Till / River Tweed Catchments

Ref	Type	Contents	Size	Date (BC)	Metal Ass.	Typology	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TT1	A	Flat Axe	1	2150 - 2000	3	Dunnottar	Hedgeley Moor	NU 04 19	C	11.7	Drainage	Found whilst draining ground on Hedgeley Moor near Percy's Leap	Pre1880	Alnwick, Castle Museum	1880.189	Bruce, J.C. 1880, 45 / HBNC 11, 1885-86, 281-2 / Schmidt, P. & Burgess, C. 1981, 32 (No.46)
TT2	A	Flat Axe	1	2150 - 2000	3	Migdale	Ewart Park	NT 96 31	C	12.8		Estate	Pre 1932	Newcastle, Great North Museum: Hancock	NEWMA : 1932.47	Schmidt, P. & Burgess, C. 1981, 43 (No.173)
TT3	A	Flat Axe (D)	1	1900 - 1700	5	Falkland	Cornhill on Tweed	NT 8543 3861	C	14.6	Surface	Finder	1945	Edinburgh, National Museum of Antiquities	DC 126	HBNC 30, 1938-46, 229 / Schmidt, P. & Burgess, C. 1981, 63-64 (No.324) / Clarke, D. Cowie T. & Foxon, A (eds) 1985, 95-6, 305
TT4	Da / Ha	Dagger / Halberd	1		1-6		Ford Westfield Farm	NT 93 36	LC-Hilt.Dam&T.M	22.3		Farm	Pre 1881	British Museum	WG.2064 - listed as dagger	Evans, J. 1881, 244 / Annable, R. BAR 160, 1987, 435 - lists as Halberd
TT5	A	Flanged Axe (L-S)	1	1450 - 1250	8	Ulrome	Akeld	NT 96809 29459			Detector	Found within 200m of the Bendor Stone	1991/92			Northumberland HER - 20790
TT6	A	Flanged Axe (L-S)	1	1450 - 1250	8	Lissett	Ewart Park	NT 96 31	C	14.0		Estate	Pre 1932	Newcastle, Great North Museum: Hancock	NEWMA : 1932.48	PSAN (4) 5, 1933, 300 / Burgess, C. & Miket, R. AA (5) 2, 1974, 27-32 / Schmidt, P. & Burgess, C. 1981, 103 (No.661)
TT7	A	Flanged Axe (L-S)	1	1450 - 1250	8	Lissett - Baldersby	Graden	NT 79 30	C	11.6		Estate	Pre 1888	Edinburgh, NMAS	L 1933.2111	PSAS 22, 1888, 16 / Coles, J. PSAS 97, 1966, 140 / Schmidt, P. & Burgess, C. 1981, 105 (No.680)
TT8	Sp	Socketed Spearhead	1	1500 - 1140	7-9	Looped, Flame	Lamsden Burn - College Valley	NT 895 234	LF-So&Upp.Bl	9.2	Surface	Finder - from river gravels	1976	Private		Davis, R. 2012, 80-1 (No.346)
TT9	Ra	Rapier	1	1550 - 1350	7/8	Group 2	Kilham - Bowmont Water	NT 8849 3283	LC-Dam.Bu	27.2		From the Bowmont Water at Kilham	Pre 1889	Edinburgh, NMA	DJ 25	PSAS 24, 1889-90, 16 / Burgess, C. & Gerloff, S. 1981, 32 (No.193)
TT10	Di	Dirk	1	1400 - 1250	8	Group 3	Carham	NT 79 38	C	19.5	Drainage	Village & Parish	1853	Newcastle, Great North Museum: Hancock	NEWMA : 1853. 5	AA (1) 4, 1855, 19 / Burgess, C. & Gerloff, S. 1981, 52 (No.369)
TT11	Ra	Rapier	1	1400 - 1140	8-9	Group 4	Milne Graden	NT 87 44	LC-Dam.Bu	29.3		Estate & Hamlet		Edinburgh, NMAS	DJ 23	Burgess, C. & Gerloff, S. 1981, 101 (No.915)
TT12	H.Sh	Shields	2	1275 - 975	9-11	Yetholm	Yetholm	NT 8142 2843			Drainage	Found on separate occasions in the same field - the first during work to drain Yetholm Bog in 1837, the second during ploughing in 1869	1837/69	Edinburgh, NMAS	DN 1 / DN 2	Coles, J. PSAS 93, 1959-60, 16-134

Appendix A1.1 - River Till / River Tweed Catchments

Ref	Type	Contents	Size	Date (BC)	Metal Ass.	Typology	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TT13	A	Socketed Axe	1	950 - 800	11	Yorkshire	Branton	NU 04 16	C	8.0	Surface	Discarded by workmen putting up a gatepost in Branton	Pre 1885	British Museum	WG.1939	HBNC 11, 1885-6, 287 / Schmidt, P. & Burgess, C. 1981, 233 (No.1491)
TT14	A	Socketed Axe	1	950 - 800	11	Yorkshire	Ewart Park	NT 96 31	C	7.3		Estate		Newcastle, Great North Museum: Hancock	NEWMA : 1932.49	BICC / Burgess, C. 1968, 30 / Schmidt, P. & Burgess, C. 1981, 234 (No.1509)
TT15	A	Socketed Axe	1	900 - 800	11	Dowris - Derrynadooey	Barmoor South Moor	NT 98 38	LF-So.M	6.9	Surface	Topographic feature	1878 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1926.22	BICC / PSAN (4) 2, 1927, 218 / Schmidt, P. & Burgess, C. 1981, 203 (No.1205)
TT16	A	Socketed Axe	1	900 - 800	11	Dowris - Newton	Ewart Park	NT 96 31	C	6.8		Estate		Newcastle, Great North Museum: Hancock	NEWMA : 1932.50	BICC / Schmidt, P. & Burgess, C. 1981, 199 (No.1171)
TT17	A	Socketed Axe	1	1140 - 700	11	Gillespie** or Meldreth**	Easter Tor	NT 9155 2812	C			Found amongst stones on the summit of Easter Tor	1904 pre			HBNC 19, 1903-05, 165 / Annable, R. BAR 160, 1987, 457
TT18	A	Socketed Axe	1	1140 - 700	10-	Unclassified - affinities with Type Portree	Sourhope Farm	NT 84 20	C	7.2		Farm	Pre 1888	Edinburgh, NMAS	L.1933.2113	Schmidt, P. & Burgess, C. 1981, 251 (No.1674)
TT19 *	A	Socketed Axe	1	1140 - 700	10-		South of Wooler	NU 01 26 *	F-Bl.O	4.0	Detector	Finder - 6 to 10 figure grid reference	2003	Private		PAS: NCL-E7B5F0
TT20	A	Socketed Axe	1	1140 - 700	10-		Langleeford	NT 94 21	C		Surface	Found on surface of a recently graded road between Langleeford and Langleeford Hope	1978			BICC
TT21	A	Socketed Axe	1	1140 - 700	10-		Glanton Westfield	NU 0573 1468			Construction	Found a quarter of a mile north of Glanton Westfield during work to erect a fence	1760s			HBNC 11, 1885-86, 314 / Annable, R. BAR 160, 1987, 457
TT22	Sp	Socketed Spearhead	1	1140 - 1020	10	Lunate opening, Pegged - Lozenge	High Bleakhope	NT 92 15	C	24.7		Hamlet	Pre 1881	British Museum	WG.2056	HBNC 11, 1885-6, 290-1 / Evans, J. 1881, 334-5 / Burgess, C. 1968, 31, 69
TT23	Sp	Socketed Spearhead	1	1020 - 800	11-	Lunate opening, Pegged - Flame	Thirlestane House	NT 803 288	C	53.0 c.	Construction	Found near the north side of the house, in an area of ground that had been heavily landscaped. Cowie and Bowles suggest that this is not neccesarily the original context, and that the spearhead may have been deposited in Yetholm Bog	2009	Scottish Borders Council Museums		Cowie, T. and Bowles, C. 2010. Thirlestane House, Scottish Borders (Yetholm parish), chance find. Discovery Excav Scot, New, vol. 11, 157

Appendix A1.1 - River Till / River Tweed Catchments

Ref	Type	Contents	Size	Date (BC)	Metal Ass.	Typology	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TT24	H.A	Socketed Axes	2	900 - 800	11	Gillespie / Meldreth	Humbleton Hill	NT 96 28	LC / LC	10.2 c. / 7.6 c.		Topographic feature	1816			PSAN (2) 3, 1889, 352 / AA (4) 26, 1948, 130-1 / Schmidt, P. & Burgess, C. 1981, 197 (No.1151A)
TT25	Sw	Sword	1	1020 - 800	11	Ewart Park - Uncl.	Chatton - South Lyham	NU 068 303	F-Mid&Low.Bl with.Tip	42.0	Drainage	Found when draining a bog in Wood Close, South Lyham, at a depth of 5 feet	1838	Alnwick, Castle Museum	1880.229	McLaughlin, H. 1857 - spearhead / Bruce, J. 1880, 53 / Colquhoun, I. & Burgess, C. 1988, 98-99 (No.568)
TT26	Sw	Sword	1	1020 - 800	11	Ewart Park - N1	Amerside Law - Chatton	NU 0678 2740	C	65.3		Found near an ancient rampart in Chatton Low Grounds on Amerside Law Farm	1834	Alnwick, Castle Museum	228	McLaughlin, H. 1857 / Bruce, J. 1880, 51 / Colquhoun, I. & Burgess, C. 1988, 125 (No.780)
TT27	H.Sw	Swords	3	1020 - 800	11	Ewart Park - N2/Uncl./Uncl.	Thirlings	NT 9551 3241	C / LC-Bu.Hilt.M / LC-Bu.Hilt.M	64.4 / 50.1 / 57.7	Ploughing	Found in dry gravel under a grassy knoll approximately 300 yards west of the farm offices at Thirlings. The swords were positioned vertically in the ground	1814	Newcastle, Great North Museum: Hancock	NEWMA : 1814.22.1 / 1814.22.2 / 1932.20	Evans, J. 1881, 285 / Cowen, J.D. AA (4) 10, 1933, 185-198 / Colquhoun, I. & Burgess, C. 1988, 97 (No.542)
TT28	H.Sw	Swords	3,4	1020 - 800	11	Ewart Park - N2	Brandon Hill	NU 0449 1799	LC-T.M (others C/LC at point of discovery)	59.8	Ploughing	Found lying parralel to each other on a north south alignment near the summit of Brandon Hill	1857	Newcastle, Great North Museum: Hancock	NEWMA : 1932.21	McLaughlin, H. 1857 / Evans, J. 1881, 285 / HBNC 11, 1885-6, 283-85 / Colquhoun, I. & Burgess, C. 1988, 91 (No.473)
TT29	H.A/Misc	Socketed Axe / Iron Implement (spear fragment?) / Whetstone	3	800 - 700	12	Axe - 4 ribs, unclassified	Coldlaw Hope	NT 92 18	Axe-LC		At surface	Found in a peat rift near Comb Fell, a quarter of a mile west of Coldlaw Hope	1877	Newcastle, Great North Museum: Hancock	NEWMA : 1956.115.A	HBNC 11, 1885-6, 291-2 / AA 4 (26), 1948, 138-9 / Schmidt, P. & Burgess, C. 1981, 253 (No.1715A)

Appendix A1.2 - North Northumberland Coastal Plain

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
NC1	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	North Charlton	NU 16 22	C	11.3		Village	Pre 1908	British Museum	WG.2040	Annable, R. BAR 160, 1987, 445 - lists as Charlton, North Tyne / Davis, R. 2012, 88 (No.436)
NC2	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular	9	Elford	NU 19 30	C	21.8		Hamlet	Pre 1881	British Museum	WG.2058	Evans, J. 1881, 327 / Burgess, C. 1968, 21, 67 / Davis, R. 2012, 145 (No.930)
NC3	A	Socketed Axe	1	1140 - 1020	Highfield	10	Belford Station	NU 1238 3380	C	8.4	Construction	Found when digging the foundations for a grain dryer at the Mart Field, Belford	1944	Newcastle, Great North Museum: Hancock	NEWMA : 1946.1	BICC / PSAN (4) 10, 1947, 215, 280 / AA (4) 26, 1948, 135-7 / Schmidt, P. & Burgess, C. 1981, 182 (No.1031)
NC4	A	Socketed Axe	1	1000 - 800	Gillespie	11	Belford	NU 10 33	C	8.2		Village & Parish	Pre 1908	British Museum	WG.1924	Schmidt, P. & Burgess, C. 1981, 192 (No.1118)
NC5	A	Socketed Axe	1	900 - 800	Meldreth	11	Newham Lough	NU 16 29	C	11.9	Drainage	Topographic feature	1868	British Museum	WG.1914	Evans, J. 1881, 129 / Schmidt, P. & Burgess, C. 1981, 206 (No.1227)
NC6	Sp	Socketed Spearhead	1	1020 - 800	Lunate opening, Flame	11	Bowsden Moor	NT 96 42	C	43.2 c.	Drainage	Topographic feature	1882 c.	Edinburgh, NMA	DH99	HBNC 10, 1882-4, 192-4 / Anderson, J. PSAS 17, 1883, 93-98 / Annable, R. BAR 160, 1987, 460
NC7 *	H.A/O/T/Sp/ MW/Misc	6 Sock Axes / 16 Orn / 3 Sock Gouges, 2 Razors, 1 Spearhead, 3 Pins, Misc Met. / Ingot / Pottery	65	950 - 800	Axes - 1 Yorkshire, 1 South-Eastern, 1 Gillespie, 1 Everthorpe**, 1 Meldreth-Portree, 1 Portree / Orn - incl. Gold Lock rings & bronze	11	Near Berwick-upon-Tweed	Restricted	Axe-C&F; Sp-F,Bl.S		Detector	Finder - 6 to 10 figure grid reference	2005	Newcastle, Great North Museum: Hancock	NEWMA : 2007.1.22-27 (34) / 2006.18	PAS: NCL-9F9F92 / Needham, S. Varndell, G. & Worrell, S. 2007, 397-402
NC8	Sp	Socketed Spearhead	1	1500 -		7-	Lindisfarne	NU 124 418	F-Bl.O	7.0	Surface	Found on the shore to the north west of Lindisfarne Priory. The spearhead is believed to have fallen from the cliff face above.	1978	Newcastle, Great North Museum: Hancock	NEWMA : 1978.20	Coleman-Smith, AA 5 (7), 1979, 245-246
NC9	Sp	Spearhead	1	1140 -		10-	Ellingham	NU 17 25				Village & Parish		Newcastle, Great North Museum: Hancock	NEWMA : 1977.2?	164th Annual Report of the Society of Antiquaries, Newcastle upon Tyne, 1977
NCM1	Mould.Ra	Rapier	1	1550 - 1400	Group 1 ?	7	Bradford Kaims?	NU 16 31				Found at the Kames near Bamburgh				Burgess, C. & Gerloff, S. 1981, Appendix 2 (No. 3)

Appendix A1.3 - River Aln Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
AL1 *	A	Flat Axe	1	2500 - 2000	Minature**	1-3	Edlingham	NU 11 09	C	4.8	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: NCL-7B3D97
AL2	A	Flat Axe	1	2500 - 2000	Minature?	1-3	Newtown	NU 10 09	C	4.7	Detector	Farm	1995	Private		Northumberland HER - 4243
AL3	A	Flat Axe	1	2150 - 2000	Migdale	3	Alnwick	NU 18 13	LC	14.0		Town & Parish	Pre 1908	British Museum	WG.1804	Evans, J. 1881, 43 / Schmidt, P. & Burgess, C. 1981, 44 (No.187)
AL4 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Wandystead	NU 09 06	LC	11.3	Detector	Finder - 6 to 10 figure grid reference	1997	Private		PAS: NCL-8C1FE2
AL5	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Shipley Farm	NU 14 16	LC-Lp&So.Dam	14.6	Ploughing	Farm	1865	Alnwick, Castle Museum	1880.246	BICC / Bruce, J.C. 1880, 57 / AA (3) 20, 1923, 1 / Davis, R. 2012, 78 (No.308)
AL6	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	River Aln - Lesbury	NU 2381 1158	C	13.5	Construction	Found on the bed of the River Aln during work to construct the footbridge at lesbury	1858	Alnwick, Castle Museum	1880.247	BICC / Bruce, J.C. 1880, 58 / Davis, R. 2012, 73 (No.249)
AL7	H.Sp/A	Palstave (T) / Socketed Spearhead	2	1275 - 1140	P-Shelf / S- Pegged, Leaf	9	Denwick	NU 20 14	Pal-LC / Sp-C	Sp-18.5		Village & Parish	1832	Alnwick, Castle Museum	196 & 243	BICC / Bruce, J.C. 1880, 47, 57 / Burgess, C. 1968, 11, 57-8 / Schmidt, P. & Burgess, C. 1981, 149 (No.880)
AL8	A	Socketed Axe	1	1140 - 1020	Highfield	10	Alnwick - North Demesne	NU 19 14	C	7.8		Area of land directly north of the river Aln at Alnwick, opposite Alnwick Castle	Pre 1880	Alnwick, Castle Museum	1880.213	Bruce, J. 1880, 49 / Schmidt, P. & Burgess, C. 1981, 182 (No.1030)
AL9	A	Socketed Axe	1	950 - 800	Yorkshire	11	Broome Wood	NU 1350 1185	C	7.8		Found in a sod of earth which lined the top of the stone wall that surrounded the enclosure at Broome Wood	1885 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1944.10	BICC / HBNC 11, 1885-6, 311-2 / AA (4) 26, 1948, 137 / Schmidt, P. & Burgess, C. 1981, 233-34 (No.1507)
AL10	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Alnwick	NU 18 13	C	32.8		Town & Parish		Herts Co. Museum	Ball Collection	BICC
AL11	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Alnwick	NU 18 13	C	13.2		Town & Parish		Herts Co. Museum	Ball Collection	BICC
AL12	H.A/Sw/Sp	20 Swords / 16 Spearheads / 42 Socketed Axes	78	1020 - 800	Axe - Dowris / Spearhead - Leaf Shaped, Pegged / Swords - Leaf Shaped	11	Hulne Park	NU 16 15	Sw & SP: C / Axe: F		Quarrying	Found by a mason excavating for rock a mile north-west of Alnwick in Old Park. The axes were located approximately a foot away from the swords and spearheads that were found at a depth of 18 inches, just above a buried rock surface	1726	British Museum	WG.2051	Rome-Hall, G. AA (2) 7, 1876, 211 / Evans, J. 1881, 113, 285, 321 / Schmidt, P. & Burgess, C. 1981, 203 (No.1208A) / Annable, R. BAR 160, 1987, 456
AL13	H.A/O/Misc	Socketed Axe / 2 Gold Lock Rings / Pottery	3	1020 - 800	Orn-Gold Lock rings	11	Alnwick - Coopers Hill	NU 192 129			Construction	Found during excavations for the railway branch line at Cooper's Hill, Alnwick	1850	Newcastle, Great North Museum: Hancock	NEWMA : 1859.5 - gold rings only	AA (2) 4, 1860, 36-7 / Annable, R. BAR 160, 1987, 463
AL14	H.Sw/Sp	3 Sock Spearheads / 2 Swords	5	1020 - 800	Sw-Ewart Park (N2), Antennenschwerter / Sp-Lunate opening	11	Thrunton	NU 0896 1138	Sw:C-Bu.Hilt.M / C-2F-Pt.Hilt.M; Sp-C / C / C	Sp; 20.2 & 38.4 - leaf-pegged / 48.7 - lunate Sw;58.0/50.7	Drainage	Found during work to drain a boggy patch of Coldwell Field / The objects were placed vetically in the ground, point downwards and arranged in a circle about 2 feet below surface	1847	Newcastle, Great North Museum: Hancock	NEWMA : 1956.236. 1.A - 5.A	BICC / McLaughlin, H. 1857 / Evans, J. 1881, 280, 314, 335 / HBNC 11, 1885-6, 305-8 / Colquhoun, I. & Burgess, C. 1988, 94 (No.509)
AL15 *	Sp	Spearhead	1			7-	Callaly	NU 05 10	F-TO	4.0	Detector	Finder - 6 to 10 figure grid reference	2011	Private		PAS: NCL-ADAA17
AL16	Sp	Spearhead	1			7-	Camp Hill	NU 136 227	F-TO	3.8	Surface	Found approximately a quarter of a mile west of the cairn on Camp Hill	Pre 1855			Hardy, J. HBNC 13, 1890-91, 271

Appendix A1.4 - River Coquet Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	References
C1	A	Flat Axe	1	2150 - 2000	Migdale*	3	Todburn - Thistleyhaugh Farm	NZ 128 988	LC		Detector	Finder	1990s	Newcastle, Great North Museum: Hancock	1999.9	
C2	A	Flat Axe (D) / Flanged Axe (L)	1	2000 - 1500		4-6	Near Rothbury	NU 05 01				Town & Parish	Pre 1821			PSAN (4) 11, 1951, 193-4 / Annable, R. BAR 160, 1987, 433
C3 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Field 44	Restricted	LC	6.9	Detector	Finder - 6 to 10 figure grid reference	2008/09	Private		PAS: NCL-D16855
C4	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Tosson Burgh	NU 0235 0035	C	14.9	Forestry	Found whilst digging trenches in the Long Planting, a short distance to the south of Burgh Hill Camp, Tosson	1890	Cragside House, Rothbury		Schmidt, P. & Burgess, C. 1981, 98 (No.592)
C5	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Linden	NZ 14 96	C	13.3		Hamlet & Farms	Pre 1908	British Museum	WG.1825	HBNC 7, 1873-5, 276 / Evans, J. 1881, 76 / Schmidt, P. & Burgess, C. 1981, 96 (No.561)
C6	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Felton	NU 18 00	LC-Bl.Dam	14.4		Village & Parish		Private		PSAN (3) 10, 1921-22, 215 / Schmidt, P. & Burgess, C. 1981, 103 (No.664)
C7	A	Palstave (T)	1	1275 - 1140	Shelf	9.Wal	Acton	NU 1919 0259	C - casting seams present	17.4	Construction	Found when deepening a pond at Acton House	1886	British Museum	WG.1843	PSAN (2) 3, 1889, 387 / Burgess, C. 1968, 65 / Schmidt, P. & Burgess, C. 1981, 147 (No.853)
C8 *	Di	Dirk?	1	1550 - 1140	Uncl.	7-9	Birling Carrs	NU 25 07	F-Hilt&Upper.Bl		Detector	Finder - 6 to 10 figure grid reference	?	Private		PAS: NCL-E1C785
C9	Ra	Rapier	1	1275 - 1140	Group 4 - notched butt	9.Wal	Low Hauxley	NU 28 03	C		Surface	Finder	1999	Newcastle, Great North Museum: Hancock	NEWMA : 1999.10	
C10	A	Socketed Axe	1	1020 - 800	Portree	11	Swarland Burn	NU 1587 0117	C	8.7		Found in Swarland Burn near Swarland Mill, approximately 200 metres below the road bridge	1934	Newcastle, Great North Museum: Hancock	NEWMA : 1934.27	BICC / PSAN (3) 10, 1923, 215 / PSAN (4) 6, 1935, 352 / Schmidt, P. & Burgess, C. 1981, 186 (No.1065)
C11	A	Socketed Axe	1	950 - 800	Yorkshire	11	Warton	NU 00 03	C	8.5		Found in a field at Warton	1897	Newcastle, Great North Museum: Hancock	NEWMA : 1988.41	BICC / Dixon, D. 1903, 127 / Schmidt, P. & Burgess, C. 1981, 250 (No.1664) / Frodsham, P. 2006, 143
C12	A	Socketed Axe	1	1140 - 700		10-	Tosson	NU 02 00			Ploughing	Found in a field at the bottom of Burgh Hill, Tosson	Pre 1900			Dixon, D. 1903, 132 / Annable, R. BAR 160, 1987, 443
C13	Kn	Knife	1	1020 - 800	Tanged - Double Edge	11	Cartington	NU 03 05	LC-HC	19.5 c.		Found between Whittle and Cartington Bank Head	1890 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1981.21	Burgess, C. 1982, Northern Archaeology 3, 32-45
C14 *	T	Socketed Chisel	1	1020 - 800		11	Longhorsley	NZ 14 93	F-Bl.O	4.0	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: SWYOR-271817
C15	H.A	Socketed Axes	2+	1020 - 800	Yorkshire, Gillespie	11	Warton - Clover Field	NU 00 03	C		Ploughing	NGR centred on Warton		Private		Frodsham, P. 2006, 143 &185
C16	H.A/Sp	Socketed Axes / Spearhead/s	7	950 - 800	A - 1 Yorkshire, 1 Portree	11	Shillbottle	NZ 2116 0920	C & F		Detector	Find-spot located by A.Poyer during field visit in March 2015	1980s	Private		Northumberland HER - 5429 (Illustrations - SMR F1 1497)
C17	H.Sw/Misc	2 Swords / 2 Lead Pommels / 3 Rings / Knife? / Bone	8+	1020 - 800	Ewart Park - N2 / Uncl.	11	Simonside - Tosson	NZ 0309 9999	C-2F / F-Low.Bl.S - T.End	53 / c.36		Found at the base of the moor between the Cockpit and Cowet Wells	1868	Alnwick, Castle Museum	1880.23	JESL, 1869-70, (1) 2, 205 / HBNC 8, 1876-8, 176-7 / Bruce, J. 1880, 53 / Dixon, D. 1903, 131-2 / Colquhoun, I. & Burgess, C. 1988, 92 (No.492)
C18	Sw	Sword, 3 Rings	1(4)	1020 - 800	Ewart Park - N2	11	Cragside - Debdon Burn	NU 07 02	LC-2F,T.M,Pt.Shld.M	59.7		Found in the bed of the stream that runs through Cragside grounds. Ony the Debdon Burn runs through the length of the estate	Pre 1869	Newcastle, Great North Museum: Hancock	NEWMA : 1888.21	JESL, 1869-70, 1 (2), 205 / Evans, J. 1881, 285 / Burgess, C. 1968, 30 / Colquhoun, I. & Burgess, C. 1988, 92 (No.487)

Appendix A1.5 - River Wansbeck / River Lyne Catchments

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
WL1	A	1	Flat Axe	2150 - 2000	Migdale	3	Near Morpeth	NZ 19 85	C	16.0		Town & Parish		Newcastle, Great North Museum: Hancock	NEWMA : 1932.28	Schmidt, P. & Burgess, C. 1981, 43 (No.177)
WL2	A	1	Flat Axe	2150 - 2000	Migdale	3	Newbiggin-by-the-Sea	NZ 31 88	C	15.5 c.	Surface	Found on the beach below the headland. The axe is believed to have fallen from the cliff during the construction of a bungalow on adjacent ground	1990 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1990.1	
WL3	HA	5	Flat Axes	2150 - 2000	Killaha, Migdale	3	Newbiggin-by-the-Sea	NZ 3170 8805	C / C	12.5 / 12.9		Found just outside the entrance to the churchyard at Newbiggin	1869 c.	British Museum - 2 surviving	WG.1788 / WG.1789	Evans, J. 1881, 43 / Crawford, O.G.S. 1912, 309 / Britton, D. 1963, 300, 312 / Schmidt, P. & Burgess, C. 1981, 34 (No.59), 44 (No.186)
WL4 *	A	1	Flat Axe / Flat Axe (D)*	2500 - 1700		1-5	Darden Rigg	NY 99 96	F-Bu.O	4.7	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: NCL-A0D3E7
WL5 *	A	1	Flanged Axe (L-S)	1450 - 1250	Ulrome*	8	Longhorsley Moor	NZ 16 91	LC	15.4	Detector	Finder - 6 to 10 figure grid reference	2010	Private		PAS: NCL-A94030
WL6 *	A	1	Flanged Axe (L-S)	1450 - 1250	Ulrome*	8	Pegswood	NZ 22 86	C	11.1	Detector	Finder - 6 to 10 figure grid reference	Post 2000	Private		PAS: NCL-107462
WL7	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett	8	Hartburn	NZ 08 86	C	9.0		Village & Parish	Pre 1908	British Museum	WG.1819	Evans, J. 1881, 78 / Schmidt, P. & Burgess, C. 1981, 102 (No.636)
WL8	H.A/Sp/Ra/O	28	15 Axes (7 Socketed / 8 Palstaves(T) / 7 Spearheads / 3 Rapiers / 3 Armlets	1275 - 1140	P-5 Shelf, 1 Roundhay, 2 Penrith / Ra (G4) / Sp-Protected Opening, Single Loop, Basal Looped (Triangular)	9	Wallington - Middleton Moss	NZ 037 854	A - mostly C & LC; Ra:C,2F / LC-TM / F-midBl.S; Sp - LC,2F & Fs	Ra-30.3 / 18.0 / 22.5	Surface - in situ	Found protruding from the bank of the stream that runs through Middleton Moss underneath Middleton Hill	1879	Newcastle, Great North Museum: Hancock	NEWMA : 1967.12	BICC / AA (2) 9, 1880-3, 52-3 / Evans, J. 1881, 333, 382 / Burgess, C. 1968, 13-14, 59-60 / Schmidt, P. & Burgess, C. 1981, 147 (No.854) / Burgess, C. & Gerloff, S. 1981, 96-7 (No.860) / Davis, R. 2012, 111 (No.680)
WL9 *	O	1	Gold Ring	1300 - 1100	Pennanular, Coiled	8-9	Blackcock Cairn	NZ 01 96	F		Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: NCL-9A0DA1
WL10	A	1	Socketed Axe	950 - 800	Yorkshire	11	Greenleighton	NZ 02 920	C-Lp.Br	8.0		Farm	Pre 1908	British Museum	WG.1922	Schmidt, P. & Burgess, C. 1981, 234 (No.1519)
WL11	H.A	2	Socketed Axes	900 - 800	Yorkshire, Meldreth	11	Ulgham Park Farm	NZ 218 934	C / C	8.0 / 9.8	Ploughing	Found in the ploughsoil of Robin Hood's Field on separate occasions but in the same general location. The find-spot borders or is on reconstituted open cast land and it is therefore possible that the axes were not deposited in this location	1973+1975	Private		Burgess, C. & Miket, R. AA (5) 4, 1976, 1-9 / Schmidt, P. & Burgess, C. 1981, 207 (1245)
WL12	H.A?	2+	Socketed Axes	950 - 800	Gillespie, Yorkshire	11	Guide Post - High Pit	NZ 248 850	C / C	9.0 / 8.5	Farming	Found whilst lifting potatoes at East Choppington Farm, High Pit, Guide Post. The landowner states that over 100 other finds were dumped along the hedge line of the field. A metal detector survey recovered bronze slag	1981/82	Private		Schmidt, P. & Burgess, C. 1981, 195 (No.1137)
WL13	H.Sp/Kn	6	4 Sock Spearheads / 2 Sock Knives	1020 - 800	Sp-2 Pegged, Leaf	11	Newbiggin Moor	NZ 31 88	C / F	C-25.3	Construction	Found on Newbiggin Moor during work to make a cutting down to the shore	1878	Edinburgh, NMA	DRI-5	BICC / PSAS 17, 1882-83, 138-9 / HBNC 11, 1885-86, 335-6 / Annable, R. BAR 160, 1987, 452
WL 14*	T	1	Razor / Knife	1500 - 800	Leaf	7-	Ulgham	NZ 23 92	F-Bl.O/HC/CE's absent	6.6	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: NCL-71EF23
WL 15*	Sp	1	Socketed Spearhead	1500 -	Leaf	7-	Guide Post	NZ 25 84	F-Bl.O	15.5	Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: NCL-490390
WL.M1	M.A	1	Flat Axe (2), Knife, Arm Ring	2150 - 2000	Migdale	3	Cambo	NZ 02 85				Found in a field a short distance to the north of Cambo	Pre 1855	British Museum	1852.10-4.1	AA (1) 4, 1855, 107 / Evans, J. 1881, 429-30 / Britton, D. 1963, 299 / Schmidt, P. & Burgess, C. 1981, (No.309)

Appendix A1.6 - River Blyth Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
B1 *	A	Flat Axe	1	2500 - 2000	Copper form - uncl.*	1-3	Stamfordham	NZ 08 74	F-Bu&S.Bl.M	5.0	Detector	Finder - 6 to 10 figure grid reference	2013	Private		PAS: NCL-D66994
B2	A	Flat Axe	1	2150 - 2000	Migdale - Biggar	3	Stamfordham	NZ 08 72	C	12.7		Village & Parish	Pre 1908	British Museum	WG.1790	Schmidt, P. & Burgess, C. 1981, 47 (No.229)
B3 *	A	Flat Axe	1	2150 - 2000	Migdale*	3	Stannington	NZ 21 81	F-Bu.M	10.1	Detector	Finder - 6 to 10 figure grid reference	2012	Newcastle, Great North Museum: Hancock?		PAS: NCL-A1A937
B4	A	Flat Axe (D)	1	1900 - 1700	Falkland	5	Ryal	NZ 01 74	C	15.2		Village	Pre 1908	British Museum	WG.1809	Schmidt, P. & Burgess, C. 1981, 63 (No.329)
B5	A	Flanged Axe (L)	1	1700 - 1500	Balbirnie	5-6	Whittington Fell	NY 98 69	C	16.2		Topographic feature	Pre 1881	British Museum	WG.1814	Evans, J. 1881, 74 / Schmidt, P. & Burgess, C. 1981, 71 (No.407)
B6	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett**	8	Blyth South Beach	NZ 32 79	C		Detector	Finder	1993	Newcastle, Great North Museum: Hancock	NEWMA : 1994.7	N/A
B7 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Whittington	NY 99 70	LC	10.5	Detector	Finder - 6 to 10 figure grid reference	2013/14	Private		PAS: NCL-E6C2CE
B8 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Bygate Hill	NZ 06 77	F-So&Upp.Bl	7.4	Detector	Finder - 6 to 10 figure grid reference	2000 - 2007	Private		PAS: NCL-325BE1
B9	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Wide	7-9	Milbourne - Low House Farm	NZ 11 74	C	12.0		Farm	1944	Newcastle, Great North Museum: Hancock	NEWMA : 1967.1.A	AA (4) 46, 1968, 232-5 / Davis, R. 2012, 62 (No.179)
B10	Ra	Rapier	1	1550 - 1350	Group 2	7/8	River Blyth - Cowpen	NZ 3108 8235	LC-Dam.Bu	31.0	Dredging	The rapier was dredged from a point close to Monkey's Island, a place now occupied by the High Ferry. Recovered along with BL20 and animal skulls	1890 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1901.10	Trotter, PSAN 10, 1902, 36-7 / Burgess, C. & Gerloff, S. 1981, 32 (No.195)
B11 *	Di / Ra	Dirk / Rapier	1	1550 - 1140		7-9	Great Whittington	NZ 01 71	F-Hilt&Upper.Bl	6.8	Detector	Finder - 6 to 10 figure grid reference	2011	Private		PAS: NCL-BCC384
B12	O	Gold Ring	1	1300 - 1100	Bar Twisted	8/9	Dinnington	NZ 20 73	C			Town & Parish	1861	British Museum	WG.22	NCH 14, 1935, 26 / Annable, R. BAR 160, 1987, 448
B13	H.Shld	Shields	2	1275 - 975	Yetholm & Harlech	9-11	Bellridge	NZ 0507 7627	F		Drainage	Found during drainage work approximately 100 yards south of Low Bellridge Farmhouse	1860	Alnwick, Castle Museum		Bruce, J. 1880, 62-3 / Evans, J. 1881. 351 / Annable, R. BAR 160, 1987, 439
B14	A	Socketed Axe	1	950 - 800	Yorkshire	11	Ingoe	NZ 03 74	C	8.3		Found in an old camp at Ingoe March. This could be the earthworks of a deserted medieval village which are located to the south of the modern settlement (EH field investigator comment)	1834	Alnwick, Castle Museum	1880.212	Bruce, J.C. 1880, 49 / Schmidt, P. & Burgess, C. 1981, 226 (No.1389)
B15 *	A	Socketed Axe	1	950 - 800	Yorkshire*	11	Clifton	NZ 20 83	LC-S.Fa.M	6.7	Detector	Finder - 6 to 10 figure grid reference	2012	Museum - Hancock, Newcastle?		PAS: NCL-A1ECA3
B16	Kn	Socketed Knife	1	1020 - 800	Thorndon - Double Edge	11	Dissington - Shipley Farm	NZ 11 71				Farm	1884 c.			PSAN (2) 6, 1895, 26 / PSAN (4) 5, 1933, 328 / Annable, R. BAR 160, 1987, 461

Appendix A1.6 - River Blyth Catchment

Ref	*Type*	*Contents*	*Size*	*Date (BC)*	*Typology*	*Metal Ass.*	*Location*	Grid Reference	*Condition*	*Length (cm)*	*Method*	*Find-spot provenance / Comments on find circumstances*	*Find Date*	Present Location	Accession Number	Reference/s
B17	O	Gold Ring	1	1000 - 750	Pennanular, Lock	11	Cheeseburn Grange	NZ 09 71	C			Estate	Pre 1866	British Museum	WG.20	An.J 5, 1925, 142-3 / Annable, R. BAR 160, 1987, 463
B18 *	H.A/O/Misc	5 Sock Axes / Orn / Phalara - Horse & Wagon Fittings, Cauldron Handle	28?	950 - 800	Axes - 3 Yorkshire, 1 Meldreth, 1 Uncl.	11	Stannington	NZ 19 75	C & F		Detector	Finder - 6 to 10 figure grid reference / The main group of objects were spread over a 6m2 area at varying depths. This is probably a hoard dispersed by ploughing	2010/2013	Newcastle, Great North Museum: Hancock		PAS: NCL-8E8B52 / NCL-1F12D2 / NCL-2E4872
B19	H.Sp	Spearheads	Several				Cheeseburn Grange	NZ 09 71			Drainage	Estate	1803			Dodds, M. NCH 12, 1926, 12 / Annable, R. BAR 160, 1987, 466
B20	Sp	Socketed Spearhead	1				River Blyth	NZ 3108 8235			Dredging	The spearhead was dredged from a point close to Monkey's Island, a place now occupied by the High Ferry. Recovered along with BL10 and animal skulls	1890 c.			Trotter, PSAN 10, 1902, 36-7 / NCH 9, 1909, 305-6

Appendix A1.7 - River Tyne Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TY1	A	Flat Axe	1	2500 - 2150	Growton / Middleton Moss	1-2	LC-S.Bl.M	12.7	Ramshaw Mill	NY 8442 7673		Found in a stream at Ramshaw Mill	1918	Newcastle, Great North Museum: Hancock	NEWMA : 1933.19	PSAN (4) 6, 1933, 60 / Schmidt, P. & Burgess, C. 1981, 24 (No.13)
TY2	A	Flat Axe	1	2150 - 2000	Migdale	3	LC-S.Bu.M	13.9	Wallsend	NZ 30 66		Suburb & Parish	Pre 1908	British Museum	WG.1791	Evans, J. 1881, 43 / Schmidt, P. & Burgess, C. 1981, 44 (No.185)
TY3	A	Flat Axe	1	2150 - 2000	Migdale	3	C	15.2	Near Corbridge	NY 99 64		Town & Parish	1862/63	Alnwick, Castle Museum	1880.190	Bruce, J.C. 1880, 45 / Schmidt, P. & Burgess, C. 1981, 43 (No.175)
TY4	A	Flat Axe	1	2150 - 2000	Migdale - Nairn	3	C	19.4	Near Corbridge	NY 99 64		Town & Parish	1862/63	Alnwick, Castle Museum	1880.192	Bruce, J.C. 1880, 45 / Schmidt, P. & Burgess, C. 1981, 48 (No.243)
TY5	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	C	18.2	Near Hexham	NY 93 63		Town & Parish	1843 c.			AA (4) 26, 1948, 127-8 / Schmidt, P. & Burgess, C. 1981, 61 (No.317B)
TY6	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	C	13.5	Blaydon - Stargate	NZ 1671 6302		Found protruding from a cutting at Bewes Hill sand quarry, 4 feet from the surface	1951	Newcastle, Great North Museum: Hancock	NEWMA : 1952.4	Schmidt, P. & Burgess, C. 1981, 60 (No.311)
TY7	A	Flat Axe (D)	1	1900 - 1700	Bandon	5	C	12.5	Near Corbridge	NY 99 64		Town & Parish	1862/63	Alnwick, Castle Museum	1880.191	Bruce, J.C. 1880, 45 / Evans, J. 1881, 46 / Schmidt, P. & Burgess, C. 1981, 67 (No.372)
TY8	H.A/MW	Flat Axe (D) / Lenticular Bronze Cake	2	1900 - 1700	Bandon	5	C		Heddon Haughs	NZ 1407 6550	Surface	Found on a tidal island in the Tyne, near Cathouse Plantation south of Heddon-on-the-Wall	Pre 1991	Newcastle, Great North Museum: Hancock	NEWMA : 2002.3	Beckensall, S. 1991, Metal finds in the Throckley area, Unpublished
TY9	A	Flat Axe	1	2500 - 1700		1-5			Stagshaw Bank	NY 98 67		Topographic feature	1981	Newcastle, Great North Museum: Hancock	NEWMA : 1981.4	
TY10 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	LC-HC,CE.Dam	10.8	Haydon Bridge	NY 85 65	Detector	Finder - 4 figure grid reference	2003	Newcastle, Great North Museum: Hancock		PAS: NCL-B54DB4
TY11	Da	Dagger	1	1700 - 1500	Arreton	6	C-Hilt.Dam	33.4	River Tyne - King's Meadow	NZ 225 630	Dredged	Dregded from the north side of King's Meadow Island	1884	British Museum	WG.1681	Gerloff, S. 1975 (No.226) / Britton, D. 1963, 309 / AA (4) 43, 1965, 75
TY12	A	Flanged Axe (E-S)	1	1650 - 1450	Bannockburn	6-7	LC-HC	16.6	Bellingham	NY 84 83		Town & Parish	Pre 1908	British Museum	WG.1848	Rome-Hall, G. Archaeologica 45, 1880, 371 / Schmidt, P. & Burgess, C. 1981, 77 (No.431)
TY13	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Carleton)	7-8	C	15.0	Elsdon	NY 93 93		Village & Parish / From peat	1865	Newcastle, Great North Museum: Hancock	NEWMA : 1925.1.3	Rome-Hall, G. Archaeologica 45, 1880, 371 / Schmidt, P. & Burgess, C. 1981, 139 (No.827)
TY14	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	C	13.9	Eastnook Farm	NY 973 936	Forestry	Found east of Eastnook Farm during forestry operations	1973			Burgess, C. & Miket, R. AA (5) 2, 1974, 27-32 / Schmidt, P. & Burgess, C. 1981, 98 (No.599)
TY15	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	C	13.3	Halton Chesters	NY 998 684		Found in a field to the east of Halton Chesters	1886	Newcastle, Great North Museum: Hancock	NEWMA : 1886.14	PSAN (2) 2 1887, 246 / Burgess, C. & Miket, R. AA (5) 2, 1974, 27-32 / Schmidt, P. & Burgess, C. 1981, 103 (No.659)
TY16	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	C	16.7	Branshaw	NY 8807 9966		Found close to a shepherd's house called Branshaw, in a drain 16 inches deep	1886	Newcastle, Great North Museum: Hancock	NEWMA : 1931.49	PSAN (2) 3, 1888, 321 / PSAN (4) 5, 1931-2, 152-3 / Burgess, C. & Miket, R. AA (5) 2, 1974, 27-32 / Schmidt, P. & Burgess, C. 1981, 101 (No.617)
TY17	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	C	16.3	Chollerton	NY 93 72		Village & Parish	Pre 1855	Newcastle, Great North Museum: Hancock	NEWMA : 1855.2	Evans, J. 1881, 78 / Burgess, C. & Miket, R. AA (5) 2, 1974, 27-32 / Schmidt, P. & Burgess, C. 1981, 102 (No.636)
TY18	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	C	13.3	Birtley Clay Pit	NZ 26 55	Quarrying	Found at Blythe and Co's Clay Pits, Birltey (Birtley Brickworks)	1931			PSAN (4) 5, 1933, 212 / PSAN (4) 9, 1942, 107-8 / Schmidt, P. & Burgess, C. 1981, 102 (No.638)
TY19	H.A	Palstave (T) / Socketed Axe	2	1275 - 1140	P-Roundhay / SA-Rope-moulded mouth	9.Wal	C	14.5 / 8.2	Haydon Bridge	NY 835 642	Construction	Found a short distance to the west of Haydon Bridge during the cutting of the railway	1835/36	Newcastle, Great North Museum: Hancock	NEWMA 1947.4.2 / 1947.4.A	BICC / PSAN (2) 5, 1891-2, 228 / AA (4) 26, 1948, 134-5 / Burgess, C. 1968, 11, 59 / Schmidt, P. & Burgess, C. 1981, 150 (No.899)
TY20	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Wide	7-9	C	19.2	River Tyne - Blaydon	NZ 184 636	Dredged	Dredged from the Tyne at Blaydon	1884	Newcastle, Great North Museum: Hancock	NEWMA : 1884.7	BICC / PSAN (2) 1, 1884, 355 / Davis, R. 2012, 60 (No.159)
TY21 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	LC-TM	11.8	Castleside	NZ 08 48	Detector	Finder - grid reference centred on village	2010	Private		PAS: DUR-11AAE3
TY22	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	C	15.7	Otterburn - Daveyshiel Moor	NY 89 97	Drainage	Topographic feature / Found when cutting a drain on Daveyshiel Moor, near Otterburn	1850 c.	Private		Rome-Hall, G. Archaeologia 45, 1880, 371 / Davis, R. 2012, 71 (No.221)
TY23	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped, Leaf	7-9	C-So.Dam	26.0	Ryton Willows	NZ 155 653		Found in a gravel bed opposite Ryton Willows	1899	Private		BICC / PSAN (2) 9, 1901, 48 / Davis, R. 2012, 130 (No.797)
TY24	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped, Flame	9-	LF-So.E.M	19.0	Alston	NY 75 36		Found near the source of the River South Tyne		Carlisle, Tullie House Museum	1997.325.365	Davis, R. 2012, 122 (No.732)

Appendix A1.7 - River Tyne Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TY25 *	Sp	Socketed Spearhead	1	1275 - 1140	Single Loop, Leaf	9.Wal	F-So&Low.Bl	10.2	Consett area	Restricted	Detector	Finder - 6 to 10 figure grid reference		PAS - Education Scheme		PAS: DUR-F54FE1
TY26	H.Sp	Socketed Spearhead	21(1)	1275 - 1140	Single Loop, Leaf	9.Wal	C-2F	21.6	Medomsley - High Bradley Farm	NZ 1194 5354	Ploughing	Approximate location of the find-spot provided by the nephew of the finder. Only one spearhead survives.	1891/92	Newcastle, Great North Museum: Hancock	NEWMA : 1892.5	BICC / PSAN (2) 5, 1891-92, 184 / Burgess, C. 1968, 20 & 57 / Davis, R. 2012, 111 (No.681)
TY27	Ra	Rapier	1	1400 - 1250	Group 3	8	C	49.7	River Tyne - Redheugh Bridge	NZ 243 629	Dredging		Pre 1887	British Museum	WG.1683	Burgess, C. & Gerloff, S. 1981, 47 (No.323)
TY28	Ra	Rapier	1	1400 - 1250	Group 3	8	C	39.0	River Tyne - KEB - HLB	NZ 248 633	Dredging		Pre 1887	British Museum	WG.1682	Burgess, C. & Gerloff, S. 1981, 52 (No.368)
TY29	Ra	Rapier	1	1400 - 1140	Group 4	8-9	LC-Dam.Bu	21.1	Mickley-on-Tyne	NZ 0727 6315	Quarrying	Found in material that originates from the gravel quarry at Mickley-on-Tyne	1950's	Newcastle, Great North Museum: Hancock	NEWMA : 1950. 5	PSAN (4) 11, 1951, 393 / Burgess, C. & Gerloff, S. 1981, 101 (No.916)
TY30 *	Ra / Da	Rapier (poss dagger)	1	1500 - 1140		7-9	F-Bl.S,2F		Castleside	NZ 06 47	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: NCL-A09BA4
TY31	H.Ra/Sp	Rapier / Sock Spearhead	2	1275 - 1140	Ra(G4-notched butt) / Sp-Protected Opening	9.Wal	Sp-F-Bl.O; Ra-C	Sp-27.3 / Ra-34.8	Shildon Lough	NZ 02 66	Drainage	Found a mile to the north-east of Corbridge, at the west end of Shildon Lough	1862	Alnwick, Castle Museum	238	BICC / ArJ 19, 1862, 363 / Bruce, J.C. 1880, 55, 58 / Evans, J. 1881, 248, 333 / Burgess, C. 1968, 20, 57 / Burgess, C. & Gerloff, S. 1981, 86 (No.701) / Davis, R. 2012, 157 (No.1001)
TY32	H.Sp/Ra/A	7 Spearheads / 4 Rapier blades / Palstave (T)	13	1275 - 1140	Ra(G4) / P-Penrith / Sp-Protected Opening; Basal Looped(Triangular)	9.Wal	All Ra - F,Bl.S,mid; Pal - C; All Sp - F	Ra-6.7,6.5,12.1, 4.3	Farnley	NZ 0034 6306	Construction	Found about 13 feet below the surface during the excavtion of a railway cutting	1835	Newcastle & Alnwick, Castle Museum	Aln. Castle - 195 (Palstave)	BICC / Bruce, J.C. 1880, 46-7, 56-8 / AA (4) 26, 1948, 132-3 / Burgess, C. 1968, 20, 58 / Schmidt, P. & Burgess, C. 1981, 151 (No.906) / Burgess, C. & Gerloff, S. 1988, 101 (No.917) / Davis, R. 2012, 142 (No.890)
TY33	Shield	Shield	1	1275 - 975	Yetholm	9-11	F		Near Aydon Castle	NZ 00 66	Drainage	Dug up near Aydon Castle	1863	Alnwick, Castle Museum		Bruce, J. 1880, 63 / Evans, J. 1881, 351 / Annable, R. BAR 160, 1987, 448
TY34	O	Gold Bracelet / Torc	1	1300 - 1100	Penannular, Bar Twisted	8-9	?		Bellingham	NY 84 83		Town & Parish	1861	Destroyed		AA (2) 6, 1865, 48 / Rome-Hall, G. Archaeologia 45, 1880, 370 / AA (2) 12, 1886-7, 264 / Annable, R. BAR 160, 1987
TY35	A	Socketed Axe	1	1020 - 800	Portree	11	C	8.2	Heddon on the Wall	NZ 1387 6687	Exc	Found whilst cutting a section across the vallum / The find-spot is marked on the 1921 Ordnance Survey map	1893	Chesters Museum		BICC / AA (2) 16, 1891-94, 338 / Schmidt, P. & Burgess, C. 1981, 186 (No.1067)
TY36	A	Socketed Axe	1	1000 - 800	Gillespie - Luncarty	11	C	7.4	Hesleyside	NY 81 83		Estate	1852	Newcastle, Great North Museum: Hancock	1956.305	BICC / AA 4, 1865, 16 / Schmidt, P. & Burgess, C. 1981, 195 (No.1139)
TY37	A	Socketed Axe	1	1000 - 800	Gillespie - Leith	11	C	7.9	Allendale	NY 83 55		Village & Parish	1920's	Newcastle, Great North Museum: Hancock	NEWMA : 1928.127	BICC / PSAN (4) 3, 1927-8, 215 / Burgess 1968, 30 / Schmidt, P. & Burgess, C. 1981, 194-95 (No.1136)
TY38	A	Socketed Axe	1	1000 - 800	Gillespie	11	C	6.8	Stagshaw	NY 98 67		Hamlet	Pre 1908	British Museum	WG.1932	Schmidt, P. & Burgess, C. 1981, 193 (No.1123)
TY39	A	Socketed Axe	1	1000 - 800	Gillespie - Forfar	11	C	8.0	Uppertown	NY 868 727	Construction	Found when levelling a close called the East Edge, Uppertown	1807	British Museum	WG.1925	Schmidt, P. & Burgess, C. 1981, 196 (No.1145) - listed as Simonburn
TY40	A	Socketed Axe	1	950 - 800	Yorkshire	11	C	7.1	Hexham Golf Course	NY 92 64		Hamlet	Pre 1909	Newcastle, Great North Museum: Hancock	NEWMA : 1932.85	BICC / PSAN (3) 4, 1910, 158 / Schmidt, P. & Burgess, C. 1981, 234 (No.1516)
TY41	A	Socketed Axe	1	950 - 800	Yorkshire	11	C	8.2	Stagshaw	NY 98 67		Hamlet	Pre 1908	British Museum	WG.1933	Schmidt, P. & Burgess, C. 1981, 235 (No.1533)
TY42	A	Socketed Axe	1	950 - 800	Yorkshire	11	C	8.1	Trow Rocks - South Shields	NZ 383 666		Topographic feature	1867	South Shields Museum?		Burgess, C. & Miket, R. AA (5) 4, 1976, 3-8 / Schmidt, P. & Burgess, C. 1981, 237 (No.1562B)
TY43	A	Socketed Axe	1	950 - 800	Yorkshire	11	LC	6.8	St Mary's Island - Whitely Bay	NZ 35 75		Topographic feature		Newcastle, Great North Museum: Hancock	NEWMA : 1925.14.3	Schmidt, P. & Burgess, C. 1981, 233 (No.1495)
TY44	A	Socketed Axe	1	950 - 800	Yorkshire	11	C	9.3	River Tyne - Newburn	NZ 165 651	Dredged	Dredged from the Tyne at Newburn	Pre 1899	Newcastle, Great North Museum: Hancock	NEWMA : 1899.12	BICC / PSAN (2) 9, 1898, 102, 139 / AA (2) 22, 1900
TY45 *	A	Socketed Axe	1	1140 - 700		10-	F-Bl.O	4.3	Gunnerton	NY 90 74	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: NCL-370D24
TY46 *	A	Socketed Axe	1	1140 - 700		10-	F-Bl.O	2.9	Near Stanley	Near Stanley	Detector	Finder - 6 to 10 figure grid reference	2004	Private		PAS: NCL-BC39A5
TY47	A	Socketed Axe	1	1140 - 700	Baggy Form	10-	F-Bl.O		Stagshaw - Chantry Farm	NY 987 666	Detector	Finder - from Homestead Field, Chantry Farm	1994	Private		Northumberland HER - 8697
TY48	A	Socketed Axe	1	1140 - 700	Minature	10-	C	6.0	Bellingham	NY 84 83		Town & Parish	Pre 1879	Edinburgh, NMA	DF 123	PSAS 13, 1878-79, 310 / Annable, R. BAR 160, 1987, 465

Appendix A1.7 - River Tyne Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TY49	A	Socketed Axe	1	1140 - 700		10-			Cornshields	NY 85 75		Farm / Found in a camp at Cornshields near Wark	Pre 1864			AA (2) 7, 1876, 16 / Annable, R. BAR 160, 1987, 466
TY50	A	Socketed Axe	1	1140 - 700		10-			Nuns Moor - Newcastle	NZ 22 66		Topographic feature		Newcastle, Great North Museum: Hancock	NEWMA : 1981.8	
TY51	H.A	Socketed Axes	2	1000 - 800	Gillespie	11			Parkhouse Quarry	NY 878 767	Quarrying	Found in a cleft in the rock at Park House Quarry	1874	British Museum	WG.1920 / WG.1921	Rome-Hall, G. Archaeologia 45, 1880, 371 / Schmidt, P. & Burgess, C. 1981, 195 (No.1143)
TY52	H.A	Socketed Axes	2	950 - 800	Yorkshire	11			Elsdon	NY 93 93		Village & Parish	Pre 1908	British Museum	WG.2432 / WG.1930	Schmidt, P. & Burgess, C. 1981, 232 (No.1481)
TY53	H.A	Socketed Axes	3	900 - 800	2 Yorkshire, 1 Meldreth	11			Unthank Hall	NY 72 63		Estate	Pre 1929	Newcastle, Great North Museum: Hancock	NEWMA : 1929.8-10	BICC / PSAN (4) 4, 1929-30, 30 / Schmidt, P. & Burgess, C. 1981, 227 (No.1406)
TY54	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	C	19.7	Woolsington	NZ 19 69		Village & Parish		Private		BICC / PSAN (3) 10, 1923, 186
TY55	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-		40.5	River Tyne - near Tyne Bridge	NZ 252 637	Dredging	Dredged from the Tyne at Newcastle	1867	British Museum	WG.1646	PSAN (2) 3, 1887-8, 309 / Annable, R. BAR 160, 1987, 449
TY56	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	C	17.2	Birtley Clay Pits	NZ 267 553	Quarrying?	Found in Birtley Clay Pits	1931/32	Skipton Museum	D 1942.9	Miket, R. 1984, 32, 121 / Annable, R. BAR 160, 1987, 465
TY57	Sp	Socketed Spearhead	1	1140 - 1020	Lunate opening, Pegged - Lozenge	10	C	23.4	River Tyne - King's Meadow (North Bank)	NZ 230 628	Dredging	Dregded from the Tyne on the north side of King's Meadow Island	1887 c.	British Museum	WG.1667	Annable, R. BAR 160, 1987, 449
TY58	Sp	Socketed Spearhead	1	1140 - 1020	Lunate opening, Pegged - Lozenge	10	C	24.6	Ovington	NZ 0685 6310		Found on the bank of the Tyne at Ovington		Private		BICC / Burgess, C. 1968, 33, 69
TY59	H.Sp	Socketed Spearheads	2	1140 -	Pegged, Leaf	10-	C & F-Bl.S	19.5/15	Parkhouse Quarry	NY 878 767	Quarrying	Discovered by a mason at a depth of 18 inches when clearing the ground to access a new section of sandstone at Park House Quarry. The speareheads were positioned in the ground point downards	1868/1871	British Museum	WG.2052 / WG.2053	Rome-Hall, G. Archaeologia 45, 1880, 371 / Rome-Hall, G. AA (2) 7, 1876, 209-11
TY60	H.Sp	Socketed Spearheads	2	1140 -	Pegged, Leaf	10-	C		Newbrough House	NY 8709 6818	Drainage	Found whilst draining a field near Newbrough Cottage, Newbrough. Likened to the spearheads from the Eastgate Hoard (Wear Catchment)	1822			PSAN 4 (11), 1946-50, 270-71 / Annable, R. BAR 160, 1987, 466
TY61	Kn	Socketed Knife	1	1020 - 800	Thorndon - Double Edge	11			Stocksfield	NZ 05 61	Quarrying	Village & Parish / From a crushed stone quarry in Stocksfield	1960's	Newcastle, Great North Museum: Hancock	NEWMA : 1961.11	AA (4) 41, 1963, 320
TY62	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	LC-Bu.Hilt.M	55.0	Kielder Forest	NY 6426 9028	Dredging	Found at a depth of 1.80m when removing gravel from the Lewis Burn at it's confluence with the North Tyne		British Museum	1951.10-7	Annable, R. BAR 160, 1987, 460 / Colquhoun, I. & Burgess, C. 1988, 97 (No.548)
TY63	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	LC-Pt.Hilt.M	54.4	River Tyne - KM to HLB	NZ 240 628	Dredging	Found in the Tyne between Kings Meadow Island and the High Level Bridge	1870 c.	Newcastle, Great North Museum: Hancock	NEWMA : 1923.9	PSAN (3) 10, 1923, 186 / Annable, R. BAR 160, 1987, 464 / Colquhoun, I. & Burgess, C. 1988, 97 (No.549)
TY64	Sw	Sword, Ring	1	1020 - 800	Ewart Park - Uncl.	11	LC-2F,Bu.Hilt.M	54.8	Ebchester - West Law	NZ 0992 5419	Ploughing	Farm / Found at West Law, Law Farm	1855	Newcastle, Great North Museum: Hancock	NEWMA : 1932.22 NEWMA : 1932.23	Evans, J. 1881, 285 / Burgess, C. 1968, 30 / Colquhoun, I. & Burgess, C. 1988, 97 (No.544)
TY65	Sw	Sword	1	800 - 600	Gundlingen - C - British	12	C	69.2	River Tyne - East Gateshead	NZ 274 634	Dredged	Dredged from the Tyne below Newcastle	Pre 1908	British Museum	WG.2271	Evans, J. 1881, 281 / Colquhoun, I. & Burgess, C. 1988, 118 (No.715)
TY66	Sw	Sword	1	800 - 600	Gundlingen - C - British	12	C-TM	69.6	River Tyne - Tyne Bridge	NZ 252 637	Dredged	Dredged from the Tyne near Tyne Bridge		Newcastle, Great North Museum: Hancock	NEWMA : 1886.23	Evans, J. 1881, 281 / Colquhoun, I. & Burgess, C. 1988, 118 (No.716)
TY67	Sw	Sword	1	800 - 600	Gundlingen - Uncl.	12	LC-Bu.Hilt.M,bent	60.1	River Tyne - South Shields?	NZ 365 682	Dredged	Dredged from the Tyne - object was purchased in South Shields and Miket states this location as the find-spot but the sword could have come from any stretch of the Tyne at Newcastle.	1892	Newcastle, Great North Museum: Hancock	NEWMA : 1929.67	Colquhoun, I. & Burgess, C. 1988, 119 (No.729)
TY68	Sw	Sword	1		Possibly Danish - Muller V	10-	F-Bl.S,2F,mid	21.4	Near Corbridge	NY 99 64		Town & Parish		Newcastle, Great North Museum: Hancock	NEWMA : 1956.51.A	Colquhoun, I. & Burgess, C. 1988, 125 (No.781) / AA 1933
TY69	Sp	Socketed Spearhead	1	LBA	Pegged?	10-			Wolf Hills	NY 7275 5830	Detector	Finder	1985 c.	Carlisle, Tullie House Museum	27-1987	Northumberland HER - 20718
TY70 *	Sp	Socketed Spearhead	1		Leaf	7-	F-Pt.So&Bl	3.5	Shotley Low Quarter	Restricted	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: NCL-848177
TY71	Sp	Socketed Spearhead	1	LBA		7-	F-Bl.O	12.7	Wideopen	NZ 24 72		Village	Pre 1960	Newcastle, Great North Museum: Hancock	NEWMA : 1960.6	AA (4) 41, 1963, 220 / Annable, R. BAR 160, 1987, 465

Appendix A1.8 - River Wear Catchment

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	References
WE1	A	1	Flat Axe	2500 - 2150	Lough Ravel / Minto	1-2	Durham	NZ 27 42	C	14.6	Construction	City / Found during work to sink a well at Durham	Pre 1873	British Museum	1873,0602.3	Page, W. VCH Durham, 1905, 207 / Britton, D. 1963, 260, 298 / Schmidt, P. & Burgess, C. 1981, 25 (No.22)
WE2 *	A	1	Flat Axe	2500 - 2000		1-3	Witton Castle	NZ 15 30	C	9.2	Detector	Finder - grid reference centred on Witton Castle	2004	Private		PAS: NCL-4BB675
WE3 *	A	1	Flat Axe	2500 - 2000		1-3	Bolam	NZ 19 23	C	12.5	Detector	Finder - 6 to 10 figure grid reference	2004	Private		PAS: NCL-8D0A91
WE4	Sp	1	Spearhead	1700 - 1500	Tanged	6	Burnhope Reservoir	NY 843 388	LC	21.2	Construction	Found during the construction of Burnhope Reservior at a depth of 6 feet	1936	Bowes Museum	1974.77	AA (4) 31, 1953, 114 / Davis, R. 2012, 34 (No.33)
WE5 *	Da	1	Dagger	2500 - 2150	Tanged / Copper	1-2	Witton Gilbert	NZ 22 45	C		Detector	Finder - 6 to 10 figure grid reference	2002	Private		PAS: NCL-093B77
WE6	A	1	Flanged Axe (E-S)	1550 - 1450	Kirtomy	7	Coxhoe	NZ 3313 3442	LC-BM	10.5	Surface	Finder / Found whilst fieldwalking	2001	Private		Durham HER - H5631
WE7	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett	8	Durham	NZ 27 42	C-HC	17.3		Town & Parish		British Museum	1873,0602.6	Schmidt, P. & Burgess, C. 1981, 103 (No.658)
WE8	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett	8	Fawnlees	NZ 06 38	C	13.5		Hamlet & Farms	Pre 1908	British Museum	WG.1824	Evans, J. 1881, 76 / Schmidt, P. & Burgess, C. 1981, 103 (No.652) - listed as Durham
WE9	A-PT	1	Palstave (T)	1275 - 1140	Penrith	9	Howden-le-Wear	NZ 16 33	C	18.1		Village	Pre 1904	British Museum	1904,0618.1	Burgess, C. 1968, 65 / Schmidt, P. & Burgess, C. 1981, 152 (No.915)
WE10 *	H.A	2	Palstaves (T)	1275 - 1140	Penrith*	9	Near Castleside	Restricted	C / C	13.1 / 14.2	Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: NCL-FDAF03 / NCL-FE25E4
WE11	A	1	Median Winged Axe	1200 - 1100	Median Winged	9	Willington - Nackshivan Farm	NZ 18 36	C?	17.1 c.		Farm	1938 c.			PSAN (4) 8, 1938-39, 149 / Annable, R. BAR 160, 1987, 443
WE12	A	1	Flanged Axe	1550 - 1200		7-9	Eshwood Hall	NZ 2101 4170				Marked on the 1923 Ordanance Survey Map	1899			Page, W. VCH Durham, 1905, 207 / Annable, R. BAR 160, 1987, 466
WE13	Sp	1	Socketed Spearhead	1500 - 1140	Looped	7-9	Bishopley Cragg Quarry	NZ 021 360		14.6	Quarrying	Found in a cleft of the limestone approximately 40 feet below the ground surface	Pre 1913			PSAN (3) 5, 1913, 19 / Annable, R. BAR 160, 1987, 445
WE14	Sp	1	Socketed Spearhead	1500 - 1140	Looped	7-9	Swinhope Head	NY 898 332			Surface	Topographic feature / Found by a shepherd / Young suggests that this find is the same as the dirk/rapier from Swinhope-Westgate (WE17)	1908 c.	Newcastle, Hancock Museum		AA (4) 31, 1953, 14 / Young, R. 1984, 209-10 / Annable, R. 1987, 445
WE15	Sp	1	Socketed Spearhead	1500 - 1140	Looped	7-9	Jubilee Gravel Quarry - Willington	NZ 2063 3437	LC-TM	17.1	Quarrying	Found in the Jubilee Gravel Quarry, just south of the Jubilee Bridge, Willington / The find spot occurs near the ancient natural crossing of the River Wear. Damaged by grading machine.				PSAN (4) 9, 1939-42, 143-4 / Annable, R. BAR 160, 1987, 445
WE16	Ra	1	Rapier	1550 - 1400	Group 1	7	Binchester	NZ 20 31	LC-TM	25.6		Hamlet		Yorkshire Museum	YORYM : 1948.1265	Burgess, C. & Gerloff, S. 1981, 12 (No.53)
WE17	Di / Ra	1	Dirk / Rapier	1550 - 1350	Group 2	7-8	Swinhope - Westgate	NY 8992 3325	F-Bl.S,T.End	12.5				Newcastle, Great North Museum: Hancock	NEWMA : 1934. 21	PSAN (4) 6, 1935 340 / Burgess, C. & Gerloff, S. 1981, 40 (308) / Young, R. 1984, 209-10
WE18	Ra	1	Rapier	1400 - 1140	Group 4	8-9	R. Weir - Claxheugh	NZ 359 577	C	32.6	Surface	Found on the north shore of the river Wear at Claxheugh	Pre 1905	British Museum	WG.2077	Burgess, C. & Gerloff, S. 1981, 76 (No.592)
WE19	Shield	1	Shield	1275 - 975	Yetholm	9-11	Tribley - Broomy Holme	NZ 23 50	C/LC			Found in a peat moss at Broomyholm / Found at the camp at Tribley, near Broomyholm	1802	Newcastle, Great North Museum: Hancock	NEWMA : 1814.16	Evans, J. 1881, 351 / Bruce, J. 1880, 63 / Annable, R. BAR 160, 1987, 448
WE20	A	1	Socketed Axe	1000 - 800	South-Eastern	11	Brandon	NZ 23 39	C	9.7		Village & Parish	Pre 1908	British Museum	WG.1919	Schmidt, P. & Burgess, C. 1981, 215 (No.1284)
WE21 *	A	1	Socketed Axe	LBA		10-12	Sacriston	NZ 25 46	F-Bl.O	4.9	Drainage	Finder - 6 to 10 figure grid reference	2005	Private		PAS: NCL-9AE033
WE22 *	A	1	Socketed Axe	LBA		10-12	Near Pity Me	Restricted	F-Bl.O	2.5	Detector	Finder - 4 figure grid reference		Private		PAS: NCL-EC2027
WE23	A	1	Socketed Axe	LBA		10-12	R. Weir - Hylton	NZ 350 569			Dredged?	Found in the river Wear at Hylton	Pre 1905			Page, W. VCH Durham, 1905, 207 / AA (4) 46, 1968

Appendix A1.8 - River Wear Catchment

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	References
WE24	H.A?	1+	Socketed Axe	1020 - 800	3 ribbed	11	Wearmouth	NZ 40 57				Suburb & Parish	Pre 1725			Miket, R. 1984, 91, 93
WE25	H.A?	1+	Socketed Axe	1000 - 800		11	Cold Hesledon	NZ 42 47			Detector	Found during the construction of the Cold Hesledon link road	1997	Private		
WE26	Sp	1	Socketed Spearhead	1140 -	Pegged?, Leaf	10-	Stanhope - West Pasture	NY 989 411	F-Bl.O?		Detector	Finder	1980s	Private		Harding, A. & Young, R. DAJ 2, 1986, 1-5
WE27	Sw	1	Sword	1140 - 1020	Wilburton - Uncl.	10	R. Weir - Hylton,Ford	NZ 350 569	LC-Bu.Hilt.M	50.2	Dredged	Dredged from the river Wear at Ford, Hylton	1910	Sunderland Museum		AA (4) 46, 1968, 300-1 / Colquhoun, I. & Burgess, C. 1988, 53 (No.236)
WE28	Sw	1	Sword	1020 - 800	Ewart Park	11	Houghall Farm	NZ 2785 4023	LC		Excavation	Found in a test pit / Possibly from an old ox bow lake on the flood plain of the River Wear	1990s	Durham, Museum of Archaeology		Gwilt, A. 1996
WE29	Sw	1	Sword	1020 - 800	Ewart Park - Uncl.	11	R. Weir - Hylton	NZ 350 569	F-Bl.S,T.End	42.5	Dredged	Dredged from the river Wear at Ford, Hylton	1830	Sunderland Museum		AA (4) 46, 1968, 300-1 / Colquhoun, I. & Burgess, C. 1988, 99 (No.569)
WE30	H.A/Sp/Bl/O/Misc	108 (+ 88 non-metal)	Axes / Spears / Swords (2) / Tools / Ornaments (Gold & Bronze) / SA Mould - Yorkshire / Harness & Wagon Fittings / Pins	1020 - 800	Axes - 14 Yorkshire, 1 Portree, 1 South-Eastern / Sw - Ewart Park (Uncl.)	11	Heathery Burn	NY 987 414	Sw-LC,3F,Bu.Hilt.M	51.5	Quarrying	Discovered along the length of a cave during quarrying operations	1843 - 1872	British Museum, Ashmolean, Edinburgh, Bowes		Britton, D. Inventaria Archaeologia 55, 1968 / Schmidt, P. & Burgess, C. 1981, 231 (No.1469) / Annable, R. BAR 160, 1987, 456 / Colquhoun, I. & Burgess, C. 1988, 96 (No.528)
WE31	H.Sp/A/T/Misc	15	5 Spearheads / 3 Sock Axes / Sock Knife frag - Thorndon/ Sock Chisel / Sock Gouge / Sock Hammer / Ferrule / Phalerae frags	900 - 800	Axes - 2 Yorkshire, 1 Meldreth	11	Eastgate	NY 955 382	Axes - C & F; Sp - C & F			Found under some large stones a little distance south of the river Wear, not far from Hag-gate Farmhouse	1812 c.	Private		Evans, J. 1881, 118, 129, 174, 179, 315, 403 / AA (4) 49, 1971, 29-36 / Schmidt, P. & Burgess, C. 1981, 207 (No.1247A)
WEM1	HMould.A	3	Flat Axes	2150 - 2000	Migdale	3	Hurbuck	NZ 144 482				Found at Hurbeck, near Lanchester	Pre 1904	British Museum	WG.2267	PSAS 38, 1903-4, 492 / PSAN (3) 2, 1907, 391 / Britton, D. 1963, 299, 320 / Schmidt, P. & Burgess, C. 1981, Plate 26B (No.307)

Appendix A1.9 - River Tees Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TE1 *	A	Flat Axe	1	2500 - 2150	Growton / Middleton Moss*	1-2	Bowes	NY 99 13	C	9.4	Detector	Finder - grid reference centred on village		Private		PAS: DUR-065531
TE2 *	A	Flat Axe	1	2500 - 2000	Copper form - minature*	1-3	Stillington	NZ 37 23	C	4.5	Detector	Finder - grid reference centred on village	2004	Private		PAS: NCL-7E8595
TE3 *	A	Flat Axe (D)	1	2000 - 1700	Aylesford / Bandon*	4-5	Great Stainton	NZ 35 22	C	10.3	Detector	Finder - 6 to 10 figure grid reference	2003	Private		PAS: NCL-292391
TE4	A	Flat Axe (D)	1	1900 - 1700	Falkland	5	Bowes	NY 99 13	C	16.4		Village & Parish	Pre 1933	Yorkshire Museum	YORYM : 1948.1101	Elgee, F & H. 1933, 244 / Manby, T. 1965, 353 / Schmidt, P. & Burgess, C. 1981, 63 (No.331)
TE5	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood	7	Hudeshope Beck	NY 94 26	C	17.5		Found in the bed of the Hudeshope Beck, Middleton-in-Teesdale	1927	Bowes Museum	1958.1838	PSAN (4) 7, 1937, 193-4 / Schmidt, P. & Burgess, C. 1981, 80 (No.465)
TE6	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Wantage)	7-8	Darlington	NZ 28 14	C	17.6		Town & Parish		Herts Co Museum, St Albans	Ball Coll. 48	Schmidt, P. & Burgess, C. 1981, 134 (No.808)
TE7	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Wantage) - Blackrock	7-8	Darlington	NZ 28 14	LC	13.1		Town & Parish		Hull and East Riding Museum	KINCM:1942.900.82	Schmidt, P. & Burgess, C. 1981, 134 (No.809)
TE8	A	Palstave (Irish)	1	1500 - 1300	Irish - C	7-8	Darlington	NZ 28 14	LC-HC	13.5		Town & Parish		Yorkshire Museum	YORYM : 1948.1261	Schmidt, P. & Burgess, C. 1981, 168 (No.961)
TE9	A	Palstave (Irish)	1	1500 - 1300	Irish - C	7-8	Manfield	NZ 22 13	C	11.0		Village & Parish	Pre 1908	British Museum	WG.1881	Schmidt, P. & Burgess, C. 1981, 168 (No.959) / Manby, T. 1986, 85
TE10	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Slapewath - Boosbeck	NZ 65 16	C	12.8		Found between the settlements of Slapewath and Boosbeck		Middlesborough, Dorman Museum	MIDDM : 1925.20	Schmidt, P. & Burgess, C. 1981, 97 (No.589) / Spratt, D.A. BAR 104, 1982, 281 - lists two flanged axes from Slapewath (1 in Middlesborough Museum, the other as missing)
TE11	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Gatherley Moor	NZ 18 07	C	16.4		Topographic feature		British Museum	1866,0627.21	Schmidt, P. & Burgess, C. 1981, 96 (No.563)
TE12 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Darlington	NZ 32 14	LC	11.9	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: DUR-157B50
TE13	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Deneholm Quarry	NY 87 28	C-2F	14.0	Quarrying	Found in the overburden at Deneholm Quarry, High Force	1958	Bowes Museum	1958.1839	Schmidt, P. & Burgess, C. 1981, 101 (No.621)
TE14	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Barton	NZ 23 08	C	10.3		Village & Parish		British Museum	WG.1878	Elgee, F & H. 1933, 244 - listed as Palstave / Schmidt, P. & Burgess, C. 1981, 104 (No.676)

Appendix A1.9 - River Tees Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TE15	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Roseberry Topping	NZ 580 126	LC-Bl&Bu.Dam	10.9		Schmidt & Burgess state the find-spot as Nafferton, Roseberry Topping but Nafferton can not be located in this vacinity. This may be a mistake as Nafferton is a place in East Yorkshire and axes from this location are also in the Hull Museum. The six figure grid reference from Spratt locates the find-spot on the slopes of Roseberry Topping.		Hull and East Riding Museum	KINCM:1942.900.56	Schmidt, P. & Burgess, C. 1981, 102-03 (No.650) / Spratt, D.A. BAR 104, 1982, 281
TE16	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome / Lissett	8	Wycliffe - Hutton Manga		C	12.9	Quarrying	One of three lalels on the axe states that it was found in a quarry near Hutton Wycliffe. This place could not be located in the UK but the vallages of Wycliffe and Hutton Manga in the Tees valley are just 2km apart and share a parish boundary. The 1:25000 OS map shows a number of disussed quarries in the vacinity of Hutton Manga.		Hull and East Riding Museum	KINCM:1966.99.2	
TE17	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome / Lissett	8	Wycliffe - Hutton Manga		LC-HC	14.2	Quarrying	See D82		Hull and East Riding Museum	KINCM:1966.99.1	
TE18	A	Flanged Axe (L-S)	1	1400 - 1200	Findowrie	8-9	Darlington	NZ 28 14	C	11.7		Town & Parish		Ashmolean Museum	1927.2610	Burgess, C. 1968, 33 / Schmidt, P. & Burgess, C. 1981, 112 (No.726)
TE19	A	Flanged Axe	1	1550 - 1200		7-9	Piercebridge	NZ 21 15				Village & Parish	Pre 1905			Page, W. VCH Durham, 1905, 207 / Annable, R. BAR 160, 1987, 466
TE20	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Bowes	NY 99 13	C	14.1		Village & Parish	Pre 1908	British Museum	WG.2034	Elgee, F & H. 1933, 244 / Radley, J. YAJ 42, 1967, 18 / Manby, T. 1986, 82 / Vyner, B. et al 2001 / Davis, R. 2012, 73 (No.242)
TE21	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Barnard Castle	NZ 0507 1598		6.4	Surface	Found on the north bank of the River Tees at Barnard Castle between Demesnes Mill and Thorngate	1974	Bowes Museum	1975.55	Jones, R. TAASDN 4, 1978, 1-6 / Annable, R. BAR 160, 1987, 445
TE22	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	R Leven & Tees Confluence	NZ 4302 1278	C	13.4	Dredging	Dredged up at the confluence of the Rivers Leven and Tees	1934 c.	Middlesborough, Dorman Museum	MIDDM : 1934.84	Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 73 (No.252)
TE23	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Chilton Quarries	NZ (299) (313)	LC	13.4 c.	Quarrying	Found in soil brought from Chiltern Quarries		Middlesborough, Dorman Museum?		Zealand, C. AA 4 (46), 1968, 296-7 / Annable, R. BAR 160, 1987, 445
TE24	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular	9	Stanwick St John	NZ 18 11	LF-Bl.O	29.0		Village & Parish	1847 c.	British Museum	1847,0208.104	BICC / Evans, J. 1881, 328 / Elgee, F & H. 1933, 251 / Radley, J. YAJ 42, 1967, 18 / Manby, T. 1986, 89 / Davis, R. 2012, 141 (No.887)

Appendix A1.9 - River Tees Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TE25 *	Ra	Rapier	1	1500 - 1140		7-9	Durham Ferryhill	Restricted	F-Bl.S,T.End	6.8	Detector	Finder - 6 to 10 figure grid reference	2000	Private		PAS: YORYM1650
TE26	A	Socketed Axe	1	1140 -		10-12	Low Dinsdale	NZ 347 112	F		Detector	Found 7 yards east of the church boundary wall at a depth of 4-5 inches	1985	Durham, Museum of Archaeology		
TE27 *	A	Socketed Axe	1	1140 -		10-12	Richmondshire	Restricted	F-Bl.O	3.9	Detector	Finder - 6 to 10 figure grid reference	2004	Private		PAS: NCL-7B9B90
TE28 *	A	Socketed Axe	1	1140 -		10-12	Wycliffe	NZ 11 13	F-Bl.O	2.8	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-980C73
TE29	A	Socketed Axe	1	1140 -		10-12	Marske	NZ 63 22			Surface?	Found on the beach		Middlesborough, Dorman Museum		Spratt, D. 1982, BAR 104, 284
TE30	A	Socketed Axe	1	1140 -		10-12	Mordon Carr	NZ 32 26				Topographic feature	Pre 1905			Page, W. VCH Durham, 1905, 207 / Annable, R. BAR 160, 1987, 458
TE31	A	Socketed Axe	1	1140 -	Ribbed	10-12	Near Wycliffe Hall	NZ 1113 1453		8.9 c.		Found 1/2 mile north of Wycliffe Hall, on the northern bank of the River Tees, 2 yards from the river bank.	1908			PSAN (3) 3, 1908, 318
TE32	A	Socketed Axe	1	1140 -	Ribbed?	10-12	School Aycliffe	NZ 25 23		8.9 c.	Surface	Village / Found in a ploughed field	Pre 1926			PSAN (4) 2, 1926, 228 / Annable, R. BAR 160, 1987, 458
TE33 *	H.A	Socketed Axes	19	950 - 800	16 Yorkshire, 1 Portree	11	Carols Field	Restricted	17 C, 2 F-Bl.EO		Detector	Finder - 6 to 10 figure grid reference	2008	British Museum	COL. 2010,802	PAS: NCL-12C141
TE34	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Middleton in Teesdale	NY 9478 2565		30.1	Digging	Found whilst digging a grave on the north side of the churchyard, near the Priest's Door, at Middleton in Teesdale	1936 c.	Bowes Museum	1958.1659	Coggins, D. 1984, 38-39
TE35	Sp	Socketed Spearhead	1	1140 -	Pegged	10-	Jack Scar Cave	NY 948 276	C	29.8	Surface	Found by a schoolboy on the floor of the cave. The spearhead presumably fell from a ledge or alcove on the wall sides as this was an established caving location but the spear had not previously been noticed.	1968	Bowes Museum	L-2-2	Coggins, D. 1984, 38-39
TE36	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Stanwick St John	NZ 18 11	C	20.0		Village & Parish	1847 c.	British Museum	1847,0208.102	BICC / Evans, J. 1881, 314 / Elgee, F & H. 1933, 251 / Manby, T. 1986, 90
TE37	Sw	Sword	1	1140 - 1020	Wilburton - C	10	Bowes Moor	NY 90 12	C	55.7	Detector	Found in the vacinity of Reys Cross native settlement	1983	Bowes Museum	1986.11	Vyner, B. et al, 2001
TE38	Sw	Sword	1	1020 - 800	Ewart Park - N1	11	R. Tees - Middlesbrough	NZ 48 21	C	55.0	Dredging	Dredged from the Tees opposite the ferry landing stage	1887	British Museum	WG 1181	Elgee, F & H. 1933, 249 / Burgess, C. 1968, 33, 68 / Colquhoun, I. & Burgess, C. 1988, 89 (No.459)
TE39	H.Sw/O	2 Swords / Gold Ring	3	1020 - 800	Ewart Park - N2/N3	11	Startforth	NZ 037 156	C-3F	58.0		Found together protruding from the bank of Gill Beck, 150 yards south east of West Wood Farm, Startforth	1955	Barnard Castle Museum	1958.1841 & 1958.1842	Challis, A. & Harding, D. BAR 20, 1975, 35 / Manby, T. 1986, 113 / Colquhoun, I. & Burgess, C. 1988, 91 (No.481)

Appendix A1.9 - River Tees Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
TE40	H.Sp/A/Sw/O/T/MW	27 Axes / 37 Spearheads / 14 Swords / Ornaments / Tools / Cauldron frag / 9 Ingots / Iron pieces	123	1020 - 700		11-12	Gilmonby	NZ 006 127	Sw- various fragments of different sizes; Sp - various - some complete; A - various - some complete		Drainage & Excavation	Archaeological excavation following the initial discovery of objects during drainage operations	1980	Bowes Museum	L180	Coggins, D. & Tylecote, R.F. 1983
TE41	H.A/T/MW/Misc	4 Sock Axes / Sock Sickle / Sock Hammer / Sock Gouge / Sock Punch-Chisel / Sock Gouge-Chisel / Bronze Mould / Cake / Whetstone / Jet Piece	14	800 - 700	1 Yorkshire, 2 Sompting, 1 Unclassified	12	Roseberry Topping	NZ 579 126			Quarrying	Found in a rock cleft approximately half way up the southern side of the hill during quarrying operations	1826	Sheffield Museum, Newcastle Great North Museum: Hancock	Sheffield - J.93.514-522, Newcastle - NEWMA : 1929.68	Elgee, F & H. 1933, 244 / Schmidt, P. & Burgess, C. 1981, 227 (No.1405), also possibly 243 (No.1604) / Manby, T. 1986, 115
TE42 *	H.Sp/O/Misc	Spearhead / Bugle-shaped fitting / 2 Rings / 3 Amber Beads	7	1020 - 800		11	Butterwick	NZ 38 28	Sp-F-Bl.O / Rings complete		Detector	Finder - 6 to 10 figure grid reference	2007	Bowes Museum		PAS: NCL-9F0675
TE43	H.Sp/O/Misc	Spearhead / Pins / Rings / Vessel / Wire / Beads (Amber & Jet) / Pot / Ash,Bone		1140 -		10 -	High Throston	NZ 485 335	Sp-F			Structured deposit - A pot containing six wire rings, a tin-alloy bead, a circular spoked rouelle, four amber beads and two jet beads lay on top of a spear fragment, pins, bronze vessel fragments and a ring, which themselves lay on top of ash and bone.				Daniels, R. Archaeology North 21, 2003
TE44	H.O	Gold Bracelet	6	1000 - 750	Penannular	11	Bowes	NY 99 13				Village & Parish	1860	British Museum (2)	1873,1218.1 & 1873,1218.2	Wooler, YAJ 22, 1913, 409 / Elgee, F & H. 1933, 245 / Manby, T. 1986, 118 / Vyner, B. et al, 2001
TE45	O	Gold Bracelet	1	1000 - 750	Penannular	11	Greta Bridge	NZ 08 13				Hamlet	Pre 1908	British Museum	WG.8	Elgee, F & H. 1933, 247 / Challis, A. & Harding, D. BAR 20, 1975, 35 / Manby, T. 1986, 92, 118
TE46	Sp	Socketed Spearhead	1			7-	Stanwick St John	NZ 18 11		34.6		Village & Parish	1847 c.	British Museum	1847,0208.103	BICC / Elgee, F & H. 1933, 251
TE47	Sp	Socketed Spearhead	1	LBA		7-	Barnard Castle	NZ 058 163	F		Surface?	Found in the playing fields at Barnard Castle School	1951	Bowes Museum	1958.184	Jones, R. TAASDN 4, 1978, 1-6 / Annable, R. BAR 160, 1987, 465
TEM1	M.A	Flat Axe or Ingot	1	2500 - 2000		1-3	Highcliff Nab	NZ 612 138				Topographic feature	1976 c.	Yorkshire Museum		YAJ 48, 1976, 2

Appendix A1.10 - River Swale Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
S1 *	A	Flat Axe	1	2500 - 2150	Ballybeg / Roseisle**	1-2	Northallerton	Restricted	LC-S.Bu.M	5.8	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-526764
S2 *	A	Flat Axe	1	2500 - 2000		1-3	Thormanby	SE 48 75	C-HC	5.9	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-CE8933
S3 *	A	Flat Axe	1	2150 - 2000	Migdale*	3	Bagby	SE 47 80	LF-Bu.E.M	7.8	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: NCL-2BE993
S4 *	A	Flat Axe (D)	1	1900 - 1700	Bandon*	5	Asenby	Restricted	C	10.0	Detector	Finder - 6 to 10 figure grid reference	2010	Private		PAS: YORYM-0D0388
S5 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton*	6	Kirklington	SE 31 81	C	13.7	Detector	Finder - grid reference centred on village / Detectors club are reluctant to provide grid reference for exact find-spot	2010	Private		PAS: DUR-C4D8C4
S6 *	A	Flanged Axe (L)	1	1700 - 1500	Bandon / Arreton*	6	Snape	SE 26 83	C	10.7	Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: YORYM-B87404
S7 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton**	6	Well	SE 26 81	LC-Bu.M	8.6	Detector	Finder - grid reference centred on parish		Private		PAS: DUR-863704
S8	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy - Arnhall	7	Kirby Wiske	SE 37 84	LC-S.Bl.M	13.1		Village & Parish	Pre 1930	Scarborough Museum	819.38	Elgee, F & H. 1933, 248 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 84 (No.510)
S9	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Rainton-cum-Newby	SE 36211 75207	C	15.0		Found about 1/2 a mile to the west of Rainton and approximately 400 yards east of Leeming Lane	1866	Ripon Museum		YAJ 20, 1909, 103-4 / Elgee, F & H. 1933, 249 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 101 (No.626)
S10	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Baldersby Park	SE 38 76	C	10.7		Estate		Yorkshire Museum	YORYM : 1948.1111	Radley, J. YAJ 46, 1974, 18 & 20 / Schmidt, P. & Burgess, C. 1981, 103 (No.660A)
S11	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Sessay - Cold Harbour Farm	SE 44 75	C	14.7		Farm	1939 c.	Yorkshire Museum	YORYM : 1951.23	Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 101 (No.619)
S12	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Rainton-cum-Newby	SE 37 75	C	13.5		Village & Parish		Ripon Museum	Missing	Schmidt, P. & Burgess, C. 1981, 102 (No.643)
S13	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Kirby Wiske	SE 37 84	C	13.1		Village & Parish		Scarborough Museum	1921.394	Schmidt, P. & Burgess, C. 1981, 102 (No.645)
S14	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Snape Castle	SE 26 84	C	11.7		Estate		Hull and East Riding Museum	KINCM:1942.900.81	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 105 (No.684)
S15	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Baldersby	SE 35 78	C	11.5		Village & Parish		Yorkshire Museum	YORYM : 1948.1114	Radley, J. YAJ 46, 1974, 18 & 20 / Schmidt, P. & Burgess, C. 1981, 104 (No.669)
S16	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Near Thirsk	SE 43 82	C	14.0		Town & Parish		Middlesborough Museum	?	Schmidt, P. & Burgess, C. 1981, 102 (No.639)
S17	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Baldersby	SE 35 78	C	15.2		Village & Parish		Hull and East Riding Museum	KINCM:1980.577	Elgee, F & H. 1933, 244 / Radley, J. YAJ 46, 1974, 18 & 20 / Schmidt, P. & Burgess, C. 1981, 98 (No.596)
S18	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Northallerton	SE 36 93	C	13.4		Topographic feature		British Museum	1875,0403.167	Elgee, F & H. 1933, 249 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 96 (No.559)
S19	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Sessay	SE 45 75	C	14.7		Village & Parish		Hull and East Riding Museum	KINCM:1942.900.62	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 98 (No.595)
S20 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Brafferton	SE 41 70	C	11.8	Detector	Finder - 6 to 10 figure grid reference	2011	Private		PAS: DUR-D33F77
S21 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome / Callander*	8	Thormanby	SE 48 75	C	14.3	Detector	Finder - 6 to 10 figure grid reference	2011/12	Private		PAS: NCL-A619B7
S22	A	Flanged Axe (L-S)	1	1450 - 1200	Kirklees	8	Brompton	SE 37 96	C	13.6		Village & Parish		Hull and East Riding Museum	KINCM:1980.648	Schmidt, P. & Burgess, C. 1981, 111 (No.719)
S23 *	A	Flanged Axe (S)	1	1550 - 1200		7-9	Thirsk	SE 44 83	C	14.7	Detector	Finder - 6 to 10 figure grid reference	2000	Private		PAS: YORYMB558
S24	A	Flanged Axe (S)	1	1550 - 1200		7-9	Cundall Manor	SE 42 72				Estate	Pre 1881			Evans, J. 1881, 86 / Raistrick, A. YAJ 29, 1929, 359 - listed as Palstave / Elgee, F & H. 1933, 246 - listed as Palstave / Radley, J. YAJ 46, 1974, 19
S25	A	Flanged Axe (S)	1	1550 - 1200		7-9	Sandhutton	SE 38 82				Village & Parish	Pre 1930	Middlesborough Museum		Elgee, F & H. 1930, 166 / Radley, J. YAJ 46, 1974, 19
S26	HA	Flanged Axes (L-S)	2+	1450 - 1250	Ulrome	8	Fremington Edge	SE 05 99	C / C	17.8 / 18.1		Topographic feature	Pre 1861	British Museum	WG.1820 / WG.1821	Evans, J. 1881, 75-6 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 250 / Schmidt, P. & Burgess, C. 1981, 95 (No.557) / Manby, T. 1986, 85
S27	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular	9	Northallerton - Castle Hills	SE 3610 9408	C	23.8		Found a little west of Castle Hills, Northallerton, in field 19 on the OS map. The grid reference is centred on the field.	1917 c.	Middlesborough Museum - not located in 2002		Wooler, E. YAJ 24, 1917, 106-8 / Elgee, F & H. 1933, 249 / Radley, J. YAJ 42, 1967, 18 / Burgess, C. 1968, 21, 67 / Davis, R. 2012, 144 (No.914)
S28	Sp	Socketed Spearhead	1	1275 - 1140	Single Loop, Leaf	9	Snape - Sail Tree Field	SE 274 837	C	20.8		Found at Snape on Salmon House Farm in Sail Tree Field. The grid reference is centred on the farm and not the field.	1951	Bradford, Cartwright Hall Museum	A20.53	BICC / Radley, J. YAJ 42, 1967, 18 / Burgess, C. 1968, 20, 67 / Davis, R. 2012, 112 (No.684)
S29	Sp	Socketed Spearhead	1	1275 - 1140	Protected Opening, Leaf	9	Rainton-cum-Newby	SE 376 755	C	27.8	Drainage	Found whilst digging a drain in Chapel Flatt Field . The field is located approximately 1/2 a mile north of Rainton. The grid reference is centred on the field.	1856	Ripon Museum	Missing in 1965 - Burgess (1968)	BICC / Wheater 1891, 451 / YAJ 20, 1909, 103-4 / Elgee, F & H. 1933, 249 / Radley, J. YAJ 42, 1967, 18 / Burgess, C. 1968, 21, 68 / Manby, T. 1986, 89 / Davis, R. 2012, 158 (No.1009)
S30 *	Di	Dirk	1	1550 - 1350	Group 2	7-8	Snape with Thorp	SE 26 84	C-Dam.Bu,be	17.1	Detector	Finder - grid reference centred on parish / Finder is reluctant to provide grid reference for exact find-spot	2008	Private		PAS: NCL-A35BC8
S31 *	Ra	Rapier	1	1275 - 1100	Group 4 - notched butt	8-9	Hackforth	Restricted	C (3F-post deposition)	34.5	Detector	Finder - 6 to 10 figure grid reference	2010/11	Private		PAS: SWYOR-7A4C37
S32	Ra	Rapier	1	1275 - 1100	Group 4 - notched butt	8-9	Catterick Bridge	SE 226 993	C	34.4	Construction & Excavation	North of the river on edge of river terrace	1992	York Museum		Burgess, C. YAJ 67 , 1995, 1-5
S33 *	A	Socketed Axe	1	1020 - 800	Portree**	11	Thornbrough	Restricted	C	6.0	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-306CC3

Appendix A1.10 - River Swale Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
S34 *	A	Socketed Axe	1	1020 - 800	Rectangular*	11	Mucker	SD 90 97	C	8.3	Surface	Finder - 6 to 10 figure grid reference (centred on village?) / Found in a dry river bed		Private		PAS: SWYOR-6F8BE7
S35	A	Socketed Axe	1	950 - 800	Yorkshire	11	Hutton Hang	SE 17 88	C	8.3		Hamlet & Parish		Yorkshire Museum	YORYM : 1948.1136	Schmidt, P. & Burgess, C. 1981, 226 (No.1392)
S36	A	Socketed Axe	1	800 - 700	Armorican	12	Topcliffe	SE 40 76	C	7.2		Village & Parish	1879	British Museum	WG.2002	Elgee, F & H. 1933, 251 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 249 (No.1653)
S37	A	Socketed Axe	1	1140 - 700		10-	Rainton-cum-Newby	SE 37 75				Village & Parish		Ripon Museum	L40	Raistrick, A. YAJ 29, 1929, 359-60
S38	A	Socketed Axe	1	1140 - 700		10-	Myton-on-Swale	SE 44 66				Village & Parish				Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 46, 1974, 19 / North Yorkshire HER - MNY 18651
S39	A	Socketed Axe	1	1140 - 700		10-	Skipton-on-Swale	SE 36 79				Village & Parish				North Yorkshire HER - MNY19963
S40 *	A	Socketed Axe	1	1140 - 700		10-	Leake	SE 43 90	F-Bl.EO	3.1	Detector	Finder - 6 to 10 figure grid reference (centred on village?)	2011	Private		PAS: NCL-1B1226
S41 *	A	Socketed Axe	1	1140 - 700		10-	Catterick	Restricted	F-Bl.EO	4.5	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-F5D474
S42 *	A	Socketed Axe	1	1140 - 700		10-	Burneston	SE 31 84	F-Bl.EO	3.6	Detector	Finder - 6 to 10 figure grid reference	2013	Private		PAS: NCL-28A975
S43	HSp/O/Kn	3 Spearheads / 2 Gold Ornaments / Tanged Knife / Ferrule	7+	1140 - 1020	Sp-1 Lunate opening, 1 Pegged, Leaf	10	Thirsk	SE 4349 8273	C		Construction		1988	Yorkshire Museum	YORYM : 1989.33.a - YORYM : 1989.33.g	Needham, S. AnJ (70) 2, 1990, 253-70
S44 *	HA/Sw/Sp	Sword fragments / Spearheads / Axes	6+	800 - 700		11-12	Ainderby Steeple	SE 33 92	Sw - 2 Hilt / 4 Bl.S		Detector	Finder - no grid reference provided, centred on village / Some iron corrosion on fragments suggests LBA-IA transition	2002	Yorkshire Museum / Newcastle, Museum of	YORYM : 2002.458	PAS: NCL-E8BE18
S45	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	Brompton-on-Swale	NZ 201 001	LC-TM	59.6	Surface	Village & Parish / Found on the bed of a partly dried up pond	1963	Private		Jackson, S. YAJ 42, 1970, 388 / Manby, T. 1986, 117 / Colquhoun, I. & Burgess, C. 1988, 97 (No.545)
S46 *	Kn	Knife	1	1020 - 800	Tanged - Double Edge	11	Well	Restricted	LC-Tg.M		Detector	Finder - 6 to 10 figure grid reference	2005	Private		PAS: YORYM-59AAF5
S47 *	Sp	Socketed Knife / Spearhead	1	1020 - 800	Thorndon / Donington-Bain	11	Snape	SE 26 83	LC		Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: YORYM-BB2DF6
S48 *	T	Chisel	1	1500 -	Tanged, Collared		Snape	Restricted	LC-Nk.Bl	8.3	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-9D1E47
S49 *	T	Chisel	1	1140 -	Tanged, Collared		Well	SE 26 82	C	11.6	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: DUR-5BADA1
S50 *	T	Chisel	1	1500 -	Tanged, Collared		Brompton	SE 38 96	LC-Nk.Bl	7.6	Detector	Finder - 6 to figure grid reference (centred on parish?)	2011	Private		PAS: DUR-BB5320
S51 *	T	Chisel ?	1		Parrallel		Snape	Restricted	F	2.9	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-F58364
S52 *	T	Chisel ?	1				Thornbrough	Restricted	F-Bl.O	1.5	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-427DC2
S53 *	Sp	Socketed Spearhead	1				Kirkby Fleetham	SE 28 95	F-TO	4.8	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-85FDD1
S54 *	Sp	Socketed Spearhead	1				Norton Le Clay	SE 40 71	6 F		Detector	Finder - 6 to 10 figure grid reference		Private		PAS: NCL-7AD516
S55	Sp	Spearhead	1				Sutton-under-Whitestonecliffe	SE 48 82				Village & Parish	Pre 1891	York Museum	1891	Radley, J. YAJ 42, 1967, 18
S56 *	A	Flat Axe / Flanged Axe	1	2500 - 1200		1-9	Well	Restricted	F-Bl.EO	4.8	Detector	Finder - 6 to 10 figure grid reference	2005	Private		PAS: YORYM-6EA8B0
S57 *	A	Axe (E-MBA)	1				Near Brompton-on-Swale	Restricted	F-Bl.EO	6.1	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: DUR-720865
S58	A	Axe	1				Moulton Hall Farm	NZ 22811 03150				Farm				North Yorkshire HER - MNY24523

Appendix A1.11 - River Ure Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
U1 *	A	Flat Axe	1	2500 - 2000	Copper form - minature*	1-3	Thornbrough	Restricted	LC-S.Bu.M	2.4	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-58BAF8
U2 *	A	Flat Axe	1	2150 - 2000	Migdale**	3	Kirkby Malzeard	Restricted	C-HW	7.8	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-CF5126
U3 *	A	Flat Axe	1	2150 - 2000	Migdale - minature*	3	Ripon	Restricted	C	4.0-5.0	Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: LANCUM-380236
U4	A	Flat Axe (D)	1	1900 - 1700	Falkland	5	Preston-under-Scar	SE 06 91	C	12.7		Topographic feature / Found in a limestone bed at 1040 feet AOD		Middlesborough Museum		Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 63 (No.330)
U5	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood	7	Leyburn	SE 11 90	LC	16.4		Town & Parish		Herts Co Museum, St Albans	Ball Coll 28	Schmidt, P. & Burgess, C. 1981, 81 (No.473)
U6	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Marton le Moor	SE 37 70	C	12.2		Village & Parish	Pre 1933	Yorkshire Museum	YORYM : 1948.1122	Elgee, F & H. 1933, 249 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 104 (No.674)
U7	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Staveley Marsh	SE 36 62	LC-Bl.HC/Dam	12.1		Village & Parish		Yorskhire Museum	YORYM : 1948.1112	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 101 (No.623)
U8	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Ripon	SE 31 71	C	14.0		Town & Parish		Hull and East Riding Museum	KINCM:1980.649	Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 102 (No.647)
U9	A	Palstave (Irish)	1	1500 - 1300	Irish - A	7-8	Ripon	SE 31 71	LC-S.Bu.M	12.6		Town & Parish		Yorkshire Museum	YORYM : 1955.5.2	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 166 (No.947)
U10	A	Palstave (E1)	1	1500 - 1300	Shield Pattern	7-8	Ripon	SE 31 71	C	15.4		Town & Parish		Yorkshire Museum	YORYM : 1955.5.1	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 118 (No.780) / Manby, T. 1986, 82
U11 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Hawes	Restricted	C	13.2	Detector	Finds Liason Officer - 6 to 10 figure grid reference	1999	Private		PAS: NLM4675
U12	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped, Flame	9-	Seamer Water - Bainbridge	SD 918 874	C	28.0	Surface	Reduction of water level Found at Seamer Water following a reduction in the water level.	1938	Private		BICC / Radley, J. YAJ 42, 1967, 18 / Manby, T. 1986, 85 / Davis, R. 2012, 122 (No.725)
U13	Sp	Socketed Spearhead	1	1275 - 1140	Protected Opening, Leaf	9	Ripon (near)	SE 31 71	C	27.1		Town & Parish		Ripon Museum	L39	BICC / Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 42, 1967, 19 / Burgess, C. 1968, 20, 68 / Needham, S. 1990, 268 / Davis, R. 2012, 158 (No.1010)
U14 *	A	Socketed Axe	1	1020 - 800	Yorkshire*	11	Kirby Hill	SE 38 68	LC-Pt.SO.M	7.3	Detector	Finder - 6 to 10 figure grid reference	1999	Private		PAS: LVPL697
U15 *	A	Socketed Axe	1	950 - 800	Yorkshire	11	Brearton	SE 33 61	C	6.7	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: SWYOR-3D34A6
U16	A	Socketed Axe	1	900 - 800	Dowris - Derrynadooey	11	Leyburn	SE 11 90	C	6.5		Town & Parish		Cambridge, Mus Arch Ethn	1905.206	Schmidt, P. & Burgess, C. 1981, 203 (No.1211)
U17	A	Socketed Axe	1	1140 - 700		10-	Ripon	SE 31 71				Town & Parish		Private - B.Kent, Beckwithshaw (in 1963)		Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 46, 1974, 19
U18	A	Socketed Axe	1	1140 - 700	Unclassified - 2 ribs	10-	Tanfield	SE 237 774	C	11.2		Found at the 'British Earthworks', Tanfield. This is most probably a reference to the archaeological earthworks which are located on the north bank of the Ure on the estate of Tanfield Lodge / Hall Farm		Hull and East Riding Museum	KINCM:1942.900.76	BICC / Elgee, F & H. 1933, 251 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 250 (No.1666)
U19 *	H.A/Misc	10 Sock Axes / Bronze Ring	11	950 - 800	Axes - Yorkshire	11	Azerley	SE 25 72	C, C-2F & F		Detector	Finder - 6 to 10 figure grid reference		Pending outcome of treasure inquest		PAS: YORYM-15AA2D
U20	H.A/Sp/Sw	Socketed Axes / Spear fragment / Sword fragment	36+	950 - 800	Axes - 15 Yorkshire, 1 Portree, 2 South-Eastern, 1 Welby, 2 Everthorpe / Sp - Leaf Shaped / Sw - Hilt frag	11	Kirkby Malzeard	SE 2408 7363	Axes - all C, LC; Sw - Hilt.F		Drainage	Found whilst draining Eller's Field on Willow House Farm, one mile south of Kirkby Malzeard / The grid reference is centred on the field.	1887	Ripon (18) / Bolton Castle Museum (2)? / British Museum (1)?	Ripon - L14 & L57	YAJ 20, 1909, 254 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 256 / Radley, J. YAJ 42 1967, 18 / Schmidt, P. & Burgess, C. 1981, 227-28 (No.1409) / Manby, T. 1986, 112
U21	H.A/Sp	Socketed Axe / Spearhead	2	950 - 800	Axe - Yorkshire / Sp - Lunate	11	Agglethorpe	SE 08 86	C / C	Axe - 8.1 / Sp - 39.0		Hamlet & Parish	1848	Sheffield Museum	J.93.468 & J.93.504	BICC / Evans, J. 1881, 235 / Raistrick, A YAJ 29, 1929, 360 - listed as Middleham / Elgee, F & H. 1933, 249 - listed as Middleham / Radley, J. YAJ 42, 1967, 18 - listed twice, as Coverham with Agelthorpe and as Middleham / Schmidt, P. & Burgess, C. 1981, 228-29 (No.1426) / Manby, T. 1986, 90 & 112
U22	H.A/Sp	3 Sock Axes / 2 Spearheads	5		Sp-Leaf	11	Leyburn	SE 11 90				Town & Parish - listed here as a hoard but these artefcts could be single finds	Pre 1929	Leyburn, Hornes Museum - lot purchased by Dales Countryside Museum?		Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 42, 1967, 18
U23	Sw	Sword	1	1020 - 800	Ewart Park - N1	11	Ripon	SE 3317 7025	C		Surface	Found by a fisherman on the bed of river, 5-6 metres from the southern bank. The eight figure grid reference in the BICC record (SE 3330 7025) places the find-spot on the eastern bank of the river and is therefore incorrect.	1993			BICC

Appendix A1.11 - River Ure Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
U24	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	Ripon	SE 329 697	F-Bu.Hilt	8.2		Found at Ripon racecourse		Ripon Museum		Colquhoun, I. & Burgess, C. 1988, 98 (No.565) / Manby, Moorhouse & Ottaway 2003
U25 *	Sw	Sword	1	1140 - 800		10-	Middleham	Restricted	F-BS,mid	26.6	Detector	Finder - 6 to 10 figure grid reference	2000	Private		PAS: WMID2412
U26	O	Gold Dress Fastener - trumpet terminals	1	1140 -		10-	Swinton Park	SE 2147 7973			Construction	Found during work to construct a fence, nearly opposite the entrance lodge to Swinton Park.	1815	Unknown - formely in Swinton Castle		PAI, 1846, 5 / Elgee, F & H. 1933, 249 - listed as Masham / Challis, A. & Harding, D. BAR 20, 1975, 35 / Manby, T. 1986, 92
U27	H.O?	Gold Dress Fastener - trumpet terminals	2	1140 -		10-	Ripon	SE 31 71				Town & Parish	1780	Lost		Elgee, F & H. 1933, 99 / Challis, A. & Harding, D. BAR 20, 1975, 35 / Manby, T. 1986, 119
U28 *	Kn	Knife	1	1020 - 800	Tanged - Double Edge	11	Middleham	SE 12 87	C		Detector	Finder - grid reference centred on village	2007	Private		PAS: NCL-9299B0
U29	Sp	Spearhead	1		Leaf	7-	Aldborough	SE 40 66				Village		Aldborough Museum		Radley, J. YAJ 42, 1967, 18
U30	Sp	Socketed Spearhead	1				Ripon	SE 31 71	F-TO	5.2		Town & Parish		Ripon Museum		BICC
U31 *	Sp	Socketed Spearhead	1				Richmondshire	Restricted	F-Bl.S	4.5	Detector	Finder - 6 to 10 figure grid reference	1997	Private		PAS: NLM298
U32	Sp	Socketed Spearhead	1	1140 -		10-	Sutton with Howgrave	SE 305 795			Detector	Finder	2000 c.	Private		North Yorkshire HER - MNY34153
U33	A	Axe	1				Spennithorne	SE 1376 8873			Construction	Found while laying a water pipe along the north side of the road south east of the Old Horn Inn / The find-spot location was indicated by the finder	1896	Private		Ordnance Survey Archaeology Division ONB, 1911, 83 / Ordnance Survey Map, OS 6" 1956

Appendix A1.12 - River Nidd Catchment

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	References
N1 *	A	1	Flat Axe	2500 - 2000	Unclassified	1-3	Green Hammerton	SE 46 56	F-Bl.EO	4.7	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: SWYOR-958D88
N2 *	A	1	Flat Axe	2150 - 2000	Migdale	3	Bilton in Ainsty	SE 47 51	LC-Bu&Bl.HW	11.8	Detector	Finder - 6 to 10 figure grid reference	2011	Private		PAS: SWYOR-6B6135
N3 *	A	1	Flat Axe (D)*	1900 - 1700	Bandon - Swinton**	5	Goldsborough Parish	SE 39 55	LC-HC	7.3	Detector	Finder - Parish (grid reference centred on Goldsborough)	2004	Private		PAS: SWYOR-B87A23
N4 *	A	1	Flat Axe (D)	1900 - 1700	Bandon	5	Goldsborough	SE 39 55	LC-Bu.HW	7.8	Detector	Finder - 6 to 10 figure grid reference	2011	Private		PAS: SWYOR-8EDA61
N5 *	A	1	Flat Axe (D)	1900 - 1700	Bandon - Swinton**	5	Near Clint cum Hamlets	Restricted	C-HC	8.7	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: YORYM-1844D7
N6 *	A	1	Flat Axe (D) / Flanged (L)	2000 - 1500		4-6	Ripley Parish	SE 28 60	F-Bl.EO	3.2		Finder - Parish (grid reference centred on Ripley)	2006	Private		PAS: SWYOR-EE0306
N7 *	A	1	Flanged Axe (E-S)	1550 - 1450	Kirtomy*	7	Menwith	SE 18 58	LC-HC	12.3	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: NCL-FE95C6
N8	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett - Baldersby	8	Heathfield Moor	SE 1073 6614	LC-S.Bu.M	9.8	Surface	Finder	1955	Harrogate Museum	61.1	Schmidt, P. & Burgess, C. 1981, 104 (No.672) / North Yorkshire HEY - MNY 5794
N9	A	1	Flanged Axe (S)	1550 - 1200		7-9	High Harrogate	SE 31 55			Farming	Found whilst digging in a field approximately 400 yards below the old spa. The old spa was located at SE 3150 5535	1788			The Gentleman's Magazine, 1789, 688 & 809
N10 *	Sp	1	Socketed Spearhead	1500 - 1140	Looped, Leaf	7-9	Nidd	SE 29 60	C	12.2	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-864C31
N11	A	1	Socketed Axe	1140 - 700		10-	Ripley	SE 2699 6237				Finder	1959	Private - Ripley Castle / Harrogate Museum - cast		Radley, J. YAJ 46, 1974, 19
N12 *	A	1	Socketed Axe	1140 - 700		10-	Whixley	Restricted	F-Bl.EO	<3.0	Detector	Finder - 6 to 10 figure grid reference (centred on village)	1997	Private		PAS: YORYM-F14E36
N13 *	A	1	Socketed Axe	1140 - 700		10-	Tockwith	SE 46 51	F-Bl.EO	3.5	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: SWYOR-7C54E2
N14 *	T	1	Socketed Hammer	1020 -		11	Spofforth	SE 36 52	C	5.4	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: FAKL-9C9543
N15	H.Sp/A	4	3 Spearheads / 1 Sock Axe	1020 - 800	Axe - Everthorpe; Sp - Pegged, Leaf Shaped	11	Kirk Deighton	SE 3997 5095	Sp: C / F-Bl.O / F-Bl.O	Sp: C-25.5 / F-23.5 / F-25.5	Ploughing / Surface	Found in a ploughed field on Deighton Banks Farm in subsequent years. The location of the general find-spot area was indicated by the farmer in 1963	1954 & 55	Harrogate Museum	KD 1- 4	BICC / Radley, J. YAJ 42, 1967, 15-16 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 219 (No.1313) / Manby, T. 1986, 111-2
N16	H.A/Sp/Sw	16 c.	7 Sock Axe / 7 Spearheads / 2 Sword fragments	900 - 800	Axes- 2 Meldreth, 1 Yorkshire, 1 South-Eastern, 1 Everthorpe, 1 Uncl. / Sw - Ewart Park - N2 & Uncl. / Sp - Leaf Frags, Pegged	11	Bilton	SE 4798 5130	Sw:F-Hilt&Upper.Bl/F-Hilt&Upper.Bl	Sw - 21.0 / 20.2	Drainage	Found during drainage work in a field approximately 3/4 mile north east of Bilton. In 1963 the occupier of Bilton Grange stated that this description of the discovery could be reconciled with improved fields centred on SE 4798 5130	1848	Sheffield Museum	J.93.464-7 & J.93.494-500	BICC / Jessop, JBAA 5, 1849, 249-50 / Raistrick, A. YAJ 29, 1929, 360 / Elgee, F & H. 1933, 238 / Radley, J. YAJ 42, 1967, 18 / Radley, J. YAJ 46. 1974, 20 / Schmidt, P. & Burgess, C. 1981, 229 (No.1435) / Manby, T. 1986, 91 - identifies the axes as 4 Everthorpe, 1 Yorkshire, 1 Facetted & 1 Uncl. / Colquhoun, I. & Burgess, C. 1988, 92 (No.491)
N17	H.Sp/Sw	3+?	Sword / 2 spearheads	950 - 700	Sw - Ewart Park / Sp - Basal Looped (Trinagular) Sp - Pegged, Leaf	11	Harrogate - Alexanders Hill	SE 3222 5211	Sp - C	Sp - Basal Looped 61.9 / Pegged 41.9	Construction	Found whilst removing stone from a barrow for use in the upkeep of a local road	Pre1849	Royal Ontario Museum, Toronto	927.3. 8-10	Wardell, J. 1849, 44-6 / Manby, T. 1986, 88 / Colquhoun, I. & Burgess, C. 1988, 97 (No.540) / Davis, R. 2012, 161-2 (No.161)
N18 *	A	1	Axe				Hunsingore	SE 43 54	F-Bl.EO	2.3	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: SWYOR-701257
N19 *	Sp	1	Socketed Spearhead		Leaf	7-	Harrogate area	SE 31 55	LF-Bl&Upp.So	c. 8.0		Finder - Town (grid reference centred)	1997	Private		PAS: YORYM-CC1B77
N20	Sp	1	Spearhead				Near How Stean	SE 09 73				Topographic feature	1842 c.			Lucas 1882, 210 / Raistrick, A. YAJ 29, 1929, 360

Appendix A1.13 - River Warfe Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
WH1	A	Flat Axe	1	2150 - 2000	Migdale	3	Skirethorns	SD 9654 6465	C	14.9		Manby states find-spot as as Skyrethorn, Heights	1961	Skipton Museum	D 1842	BAGB 6, 1961, 60-1 & 66 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P & Burgess, C. 1981, 43 (No.172) / Manby, T. 1986, 81
WH2 *	A	Flat Axe (D)	1	2000 - 1900	Aylesford*	4	Addingham	Restricted	C	13.6	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-D09336
WH3 *	Da	Dagger	1	1600 - 1500		6	Hawkswick	Restricted	LC		Detector	Finder - 6 to 10 figure grid reference / The same grid reference as PAS find WH13	2000	Private		PAS: LVPL1505
WH4	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy - Arnhall	7	Tadcaster	SE 48 43	C	13.9		Town & Parish / Radley states find-spot as SE 4907 4363		Yorkshire Museum	YORYM : 1954.10	Elgee, F & H. 1933, 258 / Burgess, C. 1968, 4 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P & Burgess, C. 1981, 84 (No.509)
WH5	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy - Arnhall	7	Weardley	SE 29 44	C	14.6		Village & Parish		Leeds Museum	D 192.1964	Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P & Burgess, C. 1981, 84 (No.507) / Manby, T. 1986, 82
WH6 *	A	Flanged Axe (E-S)	1	1550 - 1450	Caverton*	7	Near Addingham	Restricted	C	14.3	Detector	Finder - no grid reference provided	1990	Private		PAS: SWYOR-3BE8A5
WH7	A	Flanged Axe (S)	1	1550 - 1200	Unclassified	7-9	Healaugh - Robin Hood's Wood	SE 499 476	LC	14.2				Private		BICC / Radley, J. YAJ 46, 1974, 18 / Schmidt, P & Burgess, C. 1981, 114 (No.767)
WH8	A	Flanged Axe (S)	1	1550 - 1200	Unclassified	7-9	Drebley	SE 05 59	LC	9.7		Hamlet		Keighley Museum		Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P & Burgess, C. 1981, 114 (No.759)
WH9	A	Flanged Axe (S)	1	1550 - 1200		7-9	Ilkley	SE 11 47				Town & Parish		Ilkley Museum - curators had no knowledge of this find in 1964		Raistrick, A. YAJ 29, 1929, 359
WH10	A	Palstave (Trans)	1	1450 - 1250	Transverse	7-8	Starbotton	SD 9536 7469	C		Digging	Found near the by-pass road at Starbotton. The finder's sister indicated the approximate find-spot	1919 c.	Skipton, Craven Museum	A.65	YAJ 1931-4, 95-96 / Manby, T. 1986, 85
WH11	HA	Palstave (T)	2	1275 - 1140	Shelf	9	Bolton Percy - Pallathorpe (Palethorpe) Farm	SE 51 42	C / C	17.0 / 16.9	Drainage	Farm / Found when digging a drain	1850	British Museum	WG.1840 / 1873,1219.172	Evans, J. 1881, 88 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 253 / Burgess, C. 1968, 60 / Radley, J. YAJ 46 1974, 19 / Schmidt, P & Burgess, C. 1981, 148 (No.873) / Manby, T. 1986, 108
WH12	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Ogival	7-9	Healaugh - Robin Hood's Wood	SE 50 48	C	15.0	Surface	Found in a ditch in Robin Hood's Wood near the boundary between Healaugh and Hutton	1930'3	Private		BICC / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 95 (No.524)
WH13 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Hawkswick	Restricted	C-Lp&So.Dam	7.5	Detector	Finder - 6 to 10 figure grid reference / The same grid reference as PAS find WH3	2000	Private		PAS: LVPL1503 / Davis, R. 2012, 100 (No.585)
WH14 *	Sp	Socketed Spearhead	1	1275 - 1140	Single Loop, Leaf	9	Threshfield	Restricted	C	13.9	Detector	Finder - grid reference centred on village / The landowner does not wish for the precise find-spot to be made public	2012	Private		PAS: SWYOR-FD8F64
WH15	Sp	Socketed Spearhead	1	1275 - 1140	Protected Opening, Leaf	9	Malham Moor	SD 95 65	LC-So.Dam	14.6		Topographic feature	1934	Skipton, Craven Museum	A.70	Burgess, C. 1968, 20, 68 / Needham, S. 1990, 268 / Davis 2012, 159 (No.1020)
WH16 *	Di / Ra	Dirk / Rapier	1	1400 - 1140	Group 4	8-9	Thorner	SE 37 40	F-Hilt&Upper.Bl	7.6	Detector	Finder - grid reference centred on village	2004	Private		PAS: SWYOR-C9CAB7
WH17	A	Socketed Axe	1	1020 - 800	Welby	11	Tadcaster	SE 48 43	C	9.0		Town & Parish / The axe is attached to a bronze angular ring and jet bead via the loop but they are not believed to be a real bronze age association, with Evans suggesting they were added at a later date.	Pre 1807	British Museum	1937,1217.1	Evans, J. 1881, 118 & 158 / Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 46 1974, 19 / Schmidt, P & Burgess, C. 1981, 222 (No.1354) / Manby, T. 1986, 116
WH18	A	Socketed Axe	1	1140 - 700		10-	Grassington Moor	SE 03 68				Topographic feature	Pre 1802			Whitaker 1878 / Raistrick, A. YAJ 29, 1929, 360 / Elgee, F & H. 1933, 254
WH19	H.A	2 Sock Axes / Palstave (L)	3	1140 - 1020	P-Isleham / S-Fulford & Ulleskelf	10	Ulleskelf	SE 50 39	C / C / C	P-15.6 / Fu-10.1 / Ull - 12.2		Found between Towton (SE 48 39) and Ulleskelf (SE 51 39) at a depth of 5 feet	1849	Oxford, Ashmolean Museum	1969.487 / 1968.789 / 1968.787	ArJ 8, 1851, 99 / Evans, J. 1881, 131-2 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 258 / Burgess, C. 1968, 32, 65 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P & Burgess, C. 1981, 161-62 (No.928) / Manby, T. 1986, 110

Appendix A1.13 - River Warfe Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
WH20	H.A	Socketed Axes	3	1140 - 700	TBC	10-	Oxton	SE 515 427				Village & Parish	1975/76	Yorkshire Museum	YORYM : 1975.40.a / 1975.40.b / 1975.40.c	BICC / Thorp, YAJ 48, 1976, 2 / Manby, T. 1986, 113
WH21	H.A	Socketed Axes	5-6	1140 - 700	4 Yorkshire, 1 Everthorpe	10-	Flying Horse Farm - Kiddal	SE 38 38			Ploughing	Found which ploughing on Flying Horse Farm at Osmondthick. Manby notes that this hoard has commonly been refered to as the Bramham Moor hoard	1709 c.	British Museum - 1 axe	SLAntiq.238	PYGS 9, 427-32 / Evans, J. 1881, 31 / Raistrick, A. YAJ 29, 1929, 359 - listed as Bramham Moor / Elgee, F & H. 1933, 258 - single axe from Kiddall / Radley, J. YAJ 46, 1974, 19-20 - single axe listed as Thorner and hoard as Barwick / Schmidt, P. & Burgess, C. 1981 / Manby, T. 1986, 110
WH22	H.A	Socketed Axes	2	950 - 800	Welby, Yorkshire	11	Stainburn	SE 25 48			Digging	Village & Parish / Found when digging up a hedge / Schmidt, P & Burgess, C. list these two axes as single finds		Harrogate Museum	K112 & K115	Cowling 1946, 122 / Schmidt, P & Burgess, C. 1981, 222 (No.1347) / Manby, T. 1986, 113
WH23	Sw	Sword	1	1140 - 1020	Wilburton - Uncl.	10	Ben Rhydding	SE 144 479	F-BS,T.End	43.3	Quarrying	Found at the gravel workings of A Dewhirst & Sons	1952-53	Ilkley Museum		Burgess, C. 1968, 24, 68 / Manby, T. 1986, 117 / Colquhoun, I. & Burgess, C. 1988, 53 (No.245)
WH24	Sw	Sword	1	1140 - 1020	Wilburton - Uncl.	10	Ben Rhydding	SE 144 479	F-BS,T.End	c. 31.5	Quarrying	Found at the gravel workings of A Dewhirst & Sons	1952-53	Ilkley Museum		Burgess, C. 1968, 24, 68 / Manby, T. 1986, 117
WH25 *	Sw	Sword	1	1140 - 800		10-	Aberford	SE 45 37	F-BS,mid	2.7	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: SWYOR-F14BA0
WH26 *	Misc	Strap Fitting	1	1140 - 1020		11	Thorner	Restricted			Detector	Finder - 4 figure grid reference / The FLO notes that this fitting parrallels one in the Isleham hoard	1999	Private		PAS: YORYMM342
WH27	Sp	Spearhead	1				Barden	SE 05 57				Hamlet & Parish	Pre 1929	Skipton, Craven Museum - no record of accession (1964)		Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 42, 1967, 18
WH28	Sp	Spearheads	?				Towton	SE 48 39				Village & Parish	Pre 1907	Unknown - Page states Leeds Museum but not present in 1963		Page, W. VCH York, 1907, 414 / Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 42, 1967, 19
WH29	Sp	Spearhead	1				Addingham	SE 0645 4960			Surface	Found protruding from the beck-side, close to the Bar-House on the Lippersley side of the Silsden Road below the Roman Camp	1875 c.			Speight, H. 1900, 270
WH30 *	T	Awl / Chisel	1	1275 - 800		9-	Wighill	SE 47 46	C	6.1	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: SWYOR-55A4B7

Appendix A1.14 - River Aire Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
A1 *	A	Flat Axe	1	2500 - 2150	Growton / Milton Moss**	1-2	Silsden	Restricted	C-HC	9.9	Detector	Finder - 6 to 10 figure grid reference	2005	Private		PAS: SWYOR-1EE112
A2	A	Flat Axe	1	2500 - 2150	Copper - Unclassified	1-2	Carr House - Howden Rough	SE 0928 4201	F-Bu.O (from mould)	5.8		Found amongst rocks near Carr House, Howden Ridge / The find-spot is possibly Carr Cottage which is located in Howden Park below Rough Howden	1880	Keighley Museum	7371	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 30 (No.38)
A3	A	Flat Axe	1	2500 - 2000	Unclassified - chisel form	1-3	Cumingley (near Skipton)	SD 98 51	C	9.0		Town & Parish / Unable to locate Cumingley on modern or historic ordanance survey maps				Schmidt, P. & Burgess, C. 1981, 52 (No.294C)
A4 *	A	Flat Axe	1	2150 - 2000	Dunnottar / Migdale	3	Craven	Restricted	LC-S.Bu.M	6.2	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: SWYOR-CF9AC4
A5 *	A	Flat Axe	1	2150 - 2000	Migdale	3	North Yorkshire	Restricted	LC-S.Bu.M,CE.Dam	6.1	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: LVPL-851560
A6	A	Flat Axe (D)	1	1900 - 1700	Bandon - Swinton	5	Ickornshaw Moor	SD 96 41	LC-HC	8.4		Topographic feature	Pre 1929	Keighley Museum	M 611	Raistrick, A. YAJ 29, 1929, 359 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 68 (No.379)
A7	A	Flat Axe (D)	1	1900 - 1700	Scrabo Hill	5	Far Ghyll Grange Farm - Silesden	SE 0764 4601	C	17.9	Drainage	Found whilst digging a drainage ditch / The approximate location of the find-spot was indicated by the finder's grandson	1850 c.	Bradford Museum - cast	170.55	Raistrick, A. YAJ 29, 1929, 359 / Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 64 (No.340) / Manby, T. 1986, 81
A8 *	H.A	Flat Axes (D)	2	1900 - 1700	Bandon*	5	Silesden	SE 05 47	C / LC-2F	10.6 / 13.3	Detector	Finder - 6 to 10 figure grid reference		To be determined pending outcome of treasure request		PAS: SWYOR-DB9247
A9	Da	Dagger	1				Chapel Allerton	SE 30 37			Drainage	Suburb of Leeds / Found when cutting a drain	Pre1859	Leeds Museum?		LPLS Annual Report 40, 1859-60, 19 / Radley, J. YAJ 46, 1974, 20
A10	A	Flanged Axe (E-S)	1	1650 - 1450	Bannockburn	6-7	Keighley	SE 06 41	C	13.6		Town & Parish		Keighley Museum		Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 77-78 (No.438)
A11 *	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy*	7	Skipton	Restricted	C	12.0	Detector	Finder - 6 to 10 figure grid reference (centred on village)	2006	Private		PAS: LANCUM-D90642
A12	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood	7	Apperley Bridge	SE 19 37	LC	18.0		Village		Bradford Museum	219.33	Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P. & Burgess, C. 1981, 80 (No.468)
A13	A	Flanged Axe (E-S)	1	1550 - 1450	Caverton	7	Rawdon - Billing	SE 21 39	C	15.2		Village & Parish		Keighley Museum - cast		Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P. & Burgess, C. 1981, 79 (No.450)
A14	A	Bar-Stop Axe - related	1	1550 - 1450	Stegbeile	7	Otterburn	SD 88 57	C	15.7		Village & Parish		Skipton Museum	A 60	Schmidt, P. & Burgess, C. 1981, 90 (No.521)
A15	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Bradford	SE 1688 3509	C	12.4		Found on Ashbourne Gardens housing esate, Bolton, Bradford		Bradford, Cartwright Hall Museum	40.34	BAGB 4, 1959, 16-17 / Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 103 (No.651)
A16	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Kirkstall Abbey	SE 25 36	C	13.4		Estate		Guernsey, Lukis Museum		Schmidt, P. & Burgess, C. 1981, 97 (No.591)
A17 *	A	Flanged Axe (S)	1	1550 - 1200		7-9	Skipton	Restricted	F-Bu&CE.M,HC	6.1	Detector	Finder - 6 to 10 figure grid reference (centred on village)	2006	Private		PAS: LANCUM-D91721
A18	A	Palstave (Irish)	1	1500 - 1300	Irish - A	7-8	Elslack Fort	SD 92 49	C	9.0		Earthwork of Roman Fort	1933	Skipton Museum	A.62	Schmidt, P. & Burgess, C. 1981, 166 (No.946)
A19 *	A	Palstave (E1)	1	1500 - 1300	Shield Pattern*	7-8	Airedale	SE 45 24	C	14.0	Detector	Finder - 6 to 10 figure grid reference	2003	Private		PAS: SWYOR-8FDF87
A20	A	Palstave (E2)	1	1500 - 1300	Early Midribbed - Liswerry	7-8	Cowling	SD 97 43	C	13.0		Village & Parish		Keighley Museum	M.611	Schmidt, P. & Burgess, C. 1981, 127 (No.791)
A21	A	Palstave (E2)	1	1500 - 1300	Early Midribbed - Liswerry	7-8	Baildon Green	SE 1525 3915	C	15.0	Construction	Found during the construction of Sandals School	1893 c.	Bradford Museum	215.33	Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 252 / Schmidt, P. & Burgess, C. 1981, 127 (No.790)
A22	A	Palstave (E2)	1	1500 - 1300	Early Midribbed - Liswerry	7-8	Churwell	SE 27 29	C	13.8		Village		Lost		Schmidt, P. & Burgess, C. 1981, 127 (No.792) / Manby, T. 1986, 108 - attributes palstave to Churwell hoard
A23	A	Palstave (E2)	1	1500 - 1300	Early Midribbed - Liswerry	7-8	Roundhay	SE 33 37	C	15.7		Suburb of Leeds		Leeds Museum	D 42 1964	Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P. & Burgess, C. 1981, 127 (No.794A)
A24	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Uncl - Midbrib)	7-8	Near Keighley	SE 06 41	F-Bl.O	8.1		Town & Parish	1899	Sheffield Museum	5.93.493	Elgee, F & H. 1933, 255 - listed as Palstave / Schmidt, P. & Burgess, C. 1981, 141 (No.836)
A25	A	Palstave	1	1500 -		7-	High Side	SD 86 61				Topographic feature / Found at a depth of 2 feet	Pre 1933			Morkill 1933, 8

Appendix A1.14 - River Aire Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
A26	A	Palstave	1	1500 -		7-	Yeadon Moor	SE 21 41				Topographic feature	Pre 1882			Barnes, B. 1982, 123
A27	A	Palstave	1	1500 -		7-	Sutton Moor	SD 99 41				Topographic feature		Keighley Museum (Cliffe Castle?)		Barnes, B. 1982, 114
A28	A	Palstave	1	1500 -		7-	Morley	SE 26 27				Town & Parish				Elgee, F & H. 1933, 256
A29	H.A	Flanged Axes (E-S)	3	1550 - 1450	Cragg Wood	7	Rawdon - Cragg Wood	SE 20 38	LC-HC / S.Bu.M / Bu.O	16.4 / 14.6 / 8.1		Found under a rock in Cragg Wood	1866	Bradford Museum	222.33 / 223.33 / 224.33	Raistrick, A. YAJ 29, 1929, 359 / Schmidt, P. & Burgess, C. 1981, 80 (No.462) / Manby, T. 1986, 107
A30	H.A	8 Palstaves (T) / 1 Sock Axe	9	1275 - 1140	P - 5 Roundhay, 2 Shelf / SA - Gwithian	9	Carr Moorside - Hunslet	SE 30 31	All C or LC		Digging	Found at a depth of 2 1/2 feet in a field between Carr Moor Side and Dewsbury Road, south-west of Hunslet Moor and Beeston / This can be reconciled with an area between SE 3005 3102 and SE 3052 3140	1881	Leeds Museum (6) - some destroyed during WW2 bombing, Yorkshire Museum (1), Oxford, Ashmolean Museum (1)	Yorkshire - reference number given by Manby is for a socketed axe from Dunnington (YORYM : 1948.1137), Ashmolean - 1927.1948	Holmes, J. PYGS 7, 1881, 405 / Holmes, J. YATJ, 1882, 143-4 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 255 / Burgess, C. 1968, 12, 60-1 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 148 (No.877) / Manby, T. 1986, 108-9
A31	H.A	Palstaves (Late)	2+	1275 - 1140	Silsden	9	Brunthwaite Crag - Silesden	SE 05 46	C / C	17.1 / 18.4		Topographic feature	1821 c.	Yorkshire Museum	YORYM : 1948.1129 / 1948.1130	Raistrick, A. YAJ 29, 1929, 359 / Elgee F & H. 1933, 258 / Schmidt, P. & Burgess, C. 1981, 161 (No.923) / Manby, T. 1986, 87
A32	H.A	Palstaves (T & Late)	6	1275 - 1140	3 Shelf, 2 Roundhay, 1 Silesden	9	Roundhay	SE 33 37	All C or LC			Found just off Street Lane in Roundhay when digging foundations for a house	1905 c.	Leeds Museum	D231.1964 / D.232. 1964 / D 237.1964 / D. 232.1964a	Clark, E. PSAL 20, 1905, 261 / Page, W. VCH York, 1907, 411 / Raistrick, A. YAJ 29, 1929, 359 / Burgess, C. 1968, 11, 61-2 / Radley, J, YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 147 (No.856) / Manby, T. 1986, 87 & 109
A33	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular Blade	9	Morley	SE 26 27	LC-Lp,So&Bl.Dam	27.3	Construction	Town & Parish / Found when making the railway		Leeds Museum	237 - missing in 1964	BICC / Evans, J. 1881, 328 / Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 42, 1967, 19 / Burgess, C. 1968, 67 / Davis, R. 2012, 143 (No.908)
A34	Sp	Socketed Spearhead	1	1275 - 1140	Triangular Blade	9	Morley	SE 26 27	F-Bl.O	33.4	Construction	Town & Parish / Found when making the railway		Leeds Museum	236	BICC
A35	Di	Dirk	1	1550 - 1350	Group 2	7-8	Thornton-in-Craven	SD 9081 4814	C	19.1	Construction	Found in a field below the Manor House Hotel / The finder indicated the precise find-spot	1964	Skipton, Craven Museum		Burgess, C. & Gerloff, S. 1981, 31 (No.178) / Manby, T. 1986, 84
A36	Ra	Rapier	1	1400 - 1250	Group 3	8	Flasby Fell	SD 96 56	C-twisted	51.1		Topographic feature		Private - Tot Lord Collection, Settle		Burgess, C. & Gerloff, S. 1981, 51 (No.357) / Manby, T. 1986, 84
A37	Shld	Shield	1	1275 -		9-11	Leeds	SE 30 33				City	Pre 1715			Thoresby, Ducatus Leodensis, 1715, 565 / Radley, J. YAJ 46, 1974, 20
A38	A	Socketed Axe	1	1140 - 1020	Fulford	10	Kirkstall Road - Leeds	SE 27 34	C	9.3		Found in the vacinity of the Kirkstall Road, Leeds		Leeds Museum	D252.1964	Page, W. VCH York, 1907, 411 / Raistrick, A. YAJ 29, 1929, 360 / Burgess, C. 1968, 15, 66 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 177 (No.1000)
A39	A	Socketed Axe	1	1020 - 800	Welby	11	Embsay	SE 00 53	LC-Bl.Dam	8.9		Village & Parish		Skipton Museum	A 68	Raistrick, A. YAJ 29, 1929, 360 / Elgee, F & H. 1933, 254 / Schmidt, P. & Burgess, C. 1981, 222 (No.1352)
A40	A	Socketed Axe	1	950 - 800	Yorkshire	11	Near Middleton	SE 29 27	C	8.4		Suburb of Leeds		Oxford, Ashmolean Museum	1927-2665	Schmidt, P. & Burgess, C. 1981, 233 (No.1494)
A41	A	Socketed Axe	1	950 - 800	Yorkshire	11	Gilstead Moor	SE 12 39	C	8.0		Topographic feature		Cambridge, Museum of Archaeology and Ethnology	23.1557	Schmidt, P. & Burgess, C. 1981, 233 (No.1496)
A42	A	Socketed Axe	1	950 - 800	Yorkshire or Welby	11	Embsay	SE 00 53	C	8.1		A label on the axe reads Ombsay, W Yorks. There is no settlement in West Yorkshire called Ombsay, but this is probably the same as Embsay, a village and parish in the county		Hull and East Riding Museum	KINCM:1942.900.32	
A43	A	Socketed Axe	1	900 - 800	Meldreth - Aylsham	11	Leeds	SE 30 33	C	8.1		City		Sheffield Museum	J.93.573	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 207 (No.1241)
A44	A	Socketed Axe	1	800 - 700	Sompting - Roseberry Topping	12	Embsay Station	SE 0067 5341	C	10.8	Construction	Found at a depth of five feet whilst constructing a sewer on the main road near Embsay station	1923	Lost - formerly in Manchester Museum		Elgee, F & H. 1933, 254 / Schmidt, P. & Burgess, C. 1981, 244 (1618)
A45	A	Socketed Axe	1	1140 - 700		10-	Cracoe	SD 97 60				Hamlet & Parish				Morkill, J W. 1933, 8

Appendix A1.14 - River Aire Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
A46	A	Socketed Axe	1	1140 - 700		10-	Ferniehurst	SE 1570 3865			Construction	Found in the garden of 17 Midland Road, Ferniehurst, Baildon, at a depth of two feet	1935	Bradford Museum	A22/53	Barnes, B. 1982, 111
A47	A	Socketed Axe	1	1140 - 700		10-	Yeadon	SE 20 40				Town & Parish				Raistrick, A. YAJ 29, 1929, 360 / Elgee, F & H. 1933, 255 / Barnes, B. 1982, 123
A48	A	Socketed Axe	1	1140 - 700		10-	Leeds - Roundhay Park	SE 3327 3907				Found close to the Adyman Bridge in Roundhay Gorge	1883 c.	Leeds Museum ?		Leeds Mercury 27.03.1886 / Raistrick, A. YAJ 29, 1929, 360 / Radley, J. YAJ 46, 1974, 19
A49	H.A	Socketed Axes	4	1000 - 800	2 South-Eastern	11	Eldwick	SE 12 40	C / LC	9.3 / 9.3		Village	1912 c.	Bradford Museum	221.33 & 220.33	Raistrick, A. YAJ 29, 1929, 360 / Schmidt, P. & Burgess, C. 1981, 214 (No.1272)
A50	H.A/Sp	5 Palstaves (2 Late - 1 Continental) / 3 Spearheads	8	1050 - 950	P - 2 Silsden, 1 North German / 1 Sp - Pegged, Leaf Shaped	11	Churwell	SE 2795 2900	Pal. Sils. - both C; Sp - C	Pal. Sils - 17.8 / 16.5; Sp - 14.9	Construction	Found during the excavation of a railway cutting on the Leeds-Dewsbury line in the vacinity of Churwell. The only railway cutting in the vacinity of Churwell is centred on SE 2795 2900	1846	Leeds Museum / Bradford Museum	Leeds - D.226.1964 / D.236.1964 / D.242.1964 / (D.207.1964?), Bradford - 214.33	BICC / Holmes, J. PYGS 7, 1881, 405-6 / Holmes, J. YATJ, 1882, 143-4 / Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 252 / Radley, J. YAJ 42, 1967, 19 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 161 (No.925) 143-4 (No.844) / Manby, T. 1986, 87 & 108
A51	H.A/Sp/O	3 Sock Axes / Spearhead / Annular Ring	5	1020 - 800	A - 3 ribbed (Yorkshire?) / Sp - Barbed	11	Ferry Fryston	SE 46 26	Sp-2F		MD?	Found in a pit at a depth of 0.3m				Sumpter, T. Council British Archaeology Forum Gp 4 Newsletter, 1986, 34
A52	Sw	Sword	1	800 - 600	Gundlingen - Irish	12	Temple Newsam	SE 364 305	LC-Pt.Shld.M	66.1		From riparian gravel pits		Bradford Museum / Manby states 'private' with cast in Temple Newsam House		Cowen, J. D. PPS 33, 1967, 195-213 / Manby, T. 1986, 93 & 117 / Colquhoun, I. & Burgess, C. 1988, 121 (No.746) / Manby, Moorhouse & Ottaway, 2003
A53	H.A	Flanged Axes (S)	2	1550 - 1200		7-9	Bordley Moor	SD 94 64				Topographic feature. Possibly single finds.	Pre 1907	Unknown - not in Bradford Museum as stated by Page		Page, W. VCH York, 1907, 408 / Raistrick, A. YAJ 46, 1929, 359 / Elgee, F & H. 1933, 252
A54	H.A	Socketed Axe / Palstave	2	1275 -		9-	Airton	SD 9032 5713				Found separately on unknown dates. Posssibly single finds.	Pre 1929	Private		Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 252
A55 *	T	Socketed Hammer	1	1400 - 800		8-	Ledston	SE 42 28	LC-Lp.Br	6.5	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-D13642
A56 *	H.T	Socketed Hammers	2	1400 - 800		8-	North Yorkshire	Restricted	LC-So.M/LC		Detector	Finder - 6 to 10 figure grid reference	2010	Finder		PAS: LVPL-5A7954
A57	Sp	Spearhead	1		Leaf	7-	Otterburn	SD 88 57				Village & Parish	?	Skipton, Craven Museum	A.61	
A58 *	Sp	Spearhead	1				North Yorkshire	Restricted	F-T.O/HC	2.4	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: LVPL-154912
A59	Sp	Spearhead	1				Near Flasby	SD 94 56				Hamlet	1846 c.	Skipton, Craven Museum		
A60	Sp	Spearhead	1				Thwaite Gate	SE 3194 3145		c. 12.7	Construction	Found at a depth of 20 feet when digging a sewage tunnel under the River Aire	1878			Holmes, J. PYGS 7, 1881, 405 / Elgee, F & H. 1933, 256 / Radley, J. YAJ 42, 1967, 19 - listed as Leeds
A61 *	T	Chisel	1		Parrallel		North Yorkshire	Restricted	LC?-Bl.E		Detector	Finder - 6 to 10 figure grid reference	2010	Private		PAS: LVPL-BE0C32

Appendix A1.15 - River Ouse Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
O1*	A	Flat Axe	1	2500 - 2150	Growton / Milton Moss**	1-2	Nun Munkton	SE 49 59	C	9.8	Detector	Finder - 6 to 10 figure grid reference	2005	Private		PAS: SWYOR-0F2205
O2	A	Flat Axe	1	2500 - 2150	Ballybeg / Roseisle	1-2	York	SE 59 51	C	10.5		Town & Parish		Winchester Museum	850.115	Schmidt, P. & Burgess, C. 1981, 28 (No.34)
O3 *	A	Flat Axe	1	2500 - 2000	Unclassified	1-3	Marston Moor	Restricted	C?	10.1	Detector	Finder - 6 to 10 figure grid reference	2005	Private		PAS: YORYM-EAB4B7
O4 *	A	Flat Axe	1	2500 - 2000	Unclassified	1-3	Near Escrick	Restricted	F-Bu&Bl.M	6.5	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: YORYM-D86C33
O5 *	A	Flat Axe	1	2500 - 2000	Unclassified	1-3	Flaxton	SE 67 62	LC-HC	10.2	Detector	Finder - 6 to 10 figure grid reference (centred on village)		Private		PAS: YORYM-C14FC5
O6	A	Flat Axe	1	2150 - 2000	Migdale - Biggar	3	Knapton	SE 56 52	C	13.1		Village & Parish	Pre 1908	British Museum	WG.1810	Evans, J. 1881, 43 / Elgee, F & H. 1933, 241 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 47 (No.220)
O7 *	A	Flat Axe	1	2150 - 2000	Migdale	3	Deighton	Restricted	C?	15.3	Detector	Finder - 4 figure grid reference	1999	Private		PAS: YORYM886
O8 *	A	Flat Axe (D)	1	2000 - 1900	Aylesford**	4	Crayke	Restricted	C	11.4	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: LANCUM-C65DA1
O9 *	A	Flat Axe (D)	1	1900 - 1700	Bandon - Swinton**	5	Naburn	Restricted	C	8.9	Detector	Finder - 6 to 10 figure grid reference / The same grid refernce as NY340		Private		PAS: YORYM-8323F7
O10	A	Flat Axe (D)	1	1900 - 1700	Scrabo Hill	5	York	SE 59 15	LC-Bu.Dam	14.6		City		Yorkshire Museum	YORYM : 1948.1183	Manby, T. YAJ 41, 1965, 353 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 64 (No.339)
O11	A	Flat Axe (D)	1	1900 - 1700	Scrabo Hill	5	Near York	SE 59 51	LC-Bl.HW	21.8		City		British Museum	1853,1115.9	Evans, J. 1881 / Manby, T. YAJ 41, 1965, 353 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 64 (No.336)
O12 *	A	Flat Axe (D)	1	2000 - 1700		4-5	Towthorpe	Restricted	LC-S.Bl&Cu.E.M	9.0	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-FDFB91
O13 *	A	Flanged Axe (L?)	1	1700 - 1500		6	Heslington	Restricted	LC?	9.7	Detector	Finder - 6 to 10 figure grid reference	1999	Private		PAS: YORYM1379
O14	Da	Dagger	1			1-6	York - Boroughbridge Road	SE 58 52	LF-HC	14.0		Found in the vacanity of the Boroughbridge Road, York		Yorkshire Museum	YORYM : 1980.28	Manby, T. 1986, 81
O15	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy	7	York	SE 59 51	LC	16.0		City		Yorkshire Museum	YORYM : 1948.1132	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 83 (No.500B)
O16 *	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy**	7	Sand Hutton	SE 68 57	C	?	Detector	Finder - 6 to 10 figure grid reference	2006	Private - with metal detecting club		PAS: LVPL-60EFC4
O17 *	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy**	7	Askham Richard	SE 54 47	LC	7.4	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: LVPL-73FD92
O18 *	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy*	7	Dunnington	SE 67 51	LC-HC	11.2	Detector	Finder - 6 to 10 figure grid reference		Private		PAS YORYM-F9C7A6
O19	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood	7	Near York	SE 59 51	C	14.1		City		British Museum	1853,1115.10	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 81 (No.472)
O20	A-PCont	Palstave (Cont.)	1	1550 - 1450	Bohemian - Import	7	York - Rawcliffe	SE 581 548	C	13.8		Found in the garden of 14 Rawcliffe Lane, York		Yorkshire Museum	YORYM : 1965.1	Wilmot, G. YAJ 41, 1966, 556 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 91 (No.524)

Appendix A1.15 - River Ouse Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
O21	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Bishopthorpe	SE 59 47	LC	11.2	Ploughing	Village & Parish	1897	Yorkshire Museum	YORYM : 1948.1319	Elgee, F & H. 1933, 253 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 104 (No.671)
O22	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Stillington	SE 58 67	C	13.1		Village & Parish		Hull Museum	182	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 101 (No.615)
O23	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Knapton	SE 56 52	C	16.1		Village & Parish		Scarborough Museum	824.38	Schmidt, P. & Burgess, C. 1981, 97 (No.588)
O24 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Flaxton	Restricted	C	10.5	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-386DF5
O25 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Easingwold	SE 53 69	C	13.6	Detector	Finder - 6 to 10 figure grid reference (centred on parish?)	2012	Private		PAS: DUR-F7B424
O26 *	A	Flanged Axe (L-S)	1	1450 - 1250	Callander**	8	Thormanby	Restricted	LC-HC	13.1	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-0B8501
O27	A	Flanged Axe (L-S)	1	1400 - 1200	Balcarry	8-9	Near York	SE 59 51	C	14.2		City		British Museum	1853,1115.11	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 108 (No.708)
O28 *	A	Flanged Axe (S)	1	1550 - 1200		7-9	Easingwold	Restricted	C	16.0	Detector	Finder - 4 figure grid reference	1998	Private		PAS: YORYMM234
O29	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Wantage)	7-8	Marston Moor	SE 49 52	C	15.2		Topographic feature				Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 134 (No.806)
O30	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Little Fenton	SE 52 35	C-HC	10.6		Village & Parish		British Museum	1864,0505.1	PPS 25, 1959, 204 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 81 (No.357)
O31*	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Kite	7-9	Yearsley	SE 58 74	LC-Bu.Dam	9.2	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: DUR-95A965
O32	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Kite	7-9	Raskelf Mill	SE 497 704	LC-So&Bl.Dam	16.1		Found near to Raskelf Mill	1955	Easingwold School Museum (1967)		Radley, J. YAJ 42, 1967, 15-16 / Davis, R. 2012, 49 (No.96)
O33 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Lumby	SE 49 30	F-Pt.So	2.7	Detector	Finder - 6 to 10 figure grid reference	2009	Private		PAS: SWYOR-76EE76
O34	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Raskelf - Easingwold	SE 4930 6966			Drainage	The finder indicated the approximate find-spot	1934	Yorkshire Museum?		Radley, J. YAJ 42, 1967, 18
O35	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Uncl.	7-9	York - High Ousegate	SE 603 517	LF-Bl.Wings&TM/HC	7.8		Found in the vacinity of High Ousegate, York		Yorkshire Museum	YORYM : 1948.1171	Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 105 (No.644)
O36	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Heslington	SE 62 50				Village & Parish		York Museum		Elgee, F & H. 1933, 240 / Radley, J. YAJ 42, 1967, 18
O37 *	Di / Ra / Da	Dirk / Rapier / Dagger	1	1500 - 1140		7-9	Near Cawood	SE 58 39	F-BS,mid	7.0	Detector	Finder - 6 to 10 figure grid reference	2012	Private		PAS: SWYOR-4A2876
O38	A	Socketed Axe	1	1140 - 1020	Fulford	10	Fulford	SE 61 48	C	9.6		Village & Parish	Pre 1848	Sheffield Museum	J 93.502	Burgess, C. 1968, 15, 66 / Schmidt, P. & Burgess, C. 1981, 177 (No.1001) / Manby, T. 1986, 114
O39 *	A	Socketed Axe	1	1020 - 800	Welby*	11	Flaxton	Restricted	C	9.5	Detector	Finder - 6 to 10 figure grid reference	2004	Private		PAS: YORYM-F18A23
O40	A	Socketed Axe	1	1020 - 800	Everthorpe	11	York - The Mount	SE 594 511	C	7.8		Found on The Mount, York	1872	Yorkshire Museum	YORYM : 1948.1146	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 220 (No.1328)
O41 *	A	Socketed Axe	1	1000 - 800	Rectangular**	11	Naburn	Restricted	C	8.7	Detector	Finder - 6 to 10 figure grid reference / The same grid refernce as NY32	2012	Private		PAS: YORYM-480106
O42	A	Socketed Axe	1	1000 - 800	South-Eastern	11	York (at or near)	SE 59 51	LC	10.3		City / British Museum record states length as 11.4cm		British Museum	1863,1224.2	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 214 (No.1280) / Manby, T. 1986, 114

Appendix A1.15 - River Ouse Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
O43 *	A	Socketed Axe	1	950 - 800	Yorkshire*	11	Thornton-le-Clay	Restricted	C	7.3	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: YORYM-42AA28
O44	A	Socketed Axe	1	800 - 700	Sompting	12	York (at or near)	SE 59 51	C	10.0		City		British Museum	1863,1224.1	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 242 (No.1599) / Manby, T. 1986, 114
O45 *	A	Socketed Axe	1	1140 - 700		10-	Flaxton	Restricted	LC?	8.5	Detector	Finder - 4 figure grid reference	1997	Private		PAS: YORYM759
O46 *	A	Socketed Axe	1	1140 - 700		10-	Near Escrick	Restricted	F-Bl.EO	2.5	Detector	Finder - 6 to 10 figure grid reference (centred on village?)	2007	Private		PAS: YORYM-B41E65
O47 *	A	Socketed Axe	1	1140 - 700		10-	Moor Monkton	Restricted	F-Bl.EO	5.0	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-648FC4
O48	A	Palstave (L)	1	1050 - 950	Nettleham	11	Water Fulford	SE 60 48	C	13.9		Hamlet & Parish (Historic)		Sheffield Museum	J.93.488	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 162 (No.930)
O49	H.A	Socketed Axes	1+	1000 - 800	1 South-Eastern	11	York - Railway	SE 59 51			Construction	Found at York whilst excavating a railway cutting on the York - Scarborough railway, the construction of which started in 1845	1847	Liverpool Museum - majority of axes destroyed during World War 2 bombing	6996 M	Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 216 (No.1294A) / Manby, T. 1986, 114
O50	H.A/Sw/Sp	3 Sock Axes / Spearhead / 2 Sword fragments	6	900 - 800	Axes - 2 Meldreth, 1 Yorkshire / Sw - Ewart Park (Uncl.)	11	York Cemetary	SE 61 50	Sw:F-Pt.Hilt / F-Bl.S,mid; Axe - all Fs, So.&Body; Sp - F	Sw- 8.4 / c. 5.0		Found at York Cemetery, Cemetry Lane		British Museum	WG.2009 - WG.2014	Radley, J. YAJ 46, 1974, 19, 21 / Schmidt, P. & Burgess, C. 1981, 207 (No.1243) / Manby, T. 1986, 113-4 / Colquhoun, I. & Burgess, C. 1988, 98 (No.563)
O51	O	Penannular Gold Ring or Bracelet	1	1140 -		10-	Cawood	SE 57 37			Ploughing	Village & Parish	1868	Given to a goldsmith in Leeds and presumably melted down		PYGS 10, 1889, 324 / Elgee, F & H. 1933, 99 / Challis, A. & Harding, D. BAR 20, 1975, 35 / Manby, T. 1986, 118
O52 *	T	Chisel	1	1500 -	Tanged	7 -	Sherburn in Elmet	SE 48 33	LF-Bl.E	4.5	Detector	Finder - 6 to 10 figure grid reference	1990	Private		PAS: SWYOR-8D2683
O53 *	T	Socketed Sickle	1	1500 - 800		7-	Wistow	SE 60 37	F-So&Up.Bl.O		Detector	Finder - 6 to 10 figure grid reference	2010	Private		PAS: SWYOR-AEEB45
O54 *	Sp	Spearhead	1				Great Ouseburn	SE 44 62	F-TO	6.3	Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: SWYOR-CB5D80
O55 *	Sp	Socketed Spearhead	1				Stockton on the Forest	SE 67 57	F-Bl.S/HC	6.0	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-EE39D1

Appendix A1.16 - River Ouse Catchment (lower - below R.Derwent)

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
OL1 *	A	Flat Axe	1	2500 - 2000	Unclassified - chisel form	1-3	Near Newbald	Restricted	C	3.4	Detector	Finder - 6 to 10 figure grid reference	2006	Private		PAS: YORYM-EA1A07
OL2	A	Flat Axe	1	2500 - 2000	Unclassified	1-3	Elloughton	SE 94 28	LF-S.Bl.M	12.8		Village & Parish		Hull and East Riding Museum	KINCM:1982.1051	
OL3	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Goole	SE 74 23	C	14.0	Surface?	Found on the bank of the Ouse near Goole	1855	Hull Museum	M 2	Elgee, F & H. 1933, 254 / Manby, T. YAJ 41, 1965, 353 / Radley, J. YAJ 46, 1974, 17 / Schmidt, P. & Burgess, C. 1981, 60 (No.310B)
OL4	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy	7	Everingham - Southfield Farm	SE 80 41	C	16.1		Farm	1970	Hull and East Riding Museum - cast	KINCM:1980.638	Schmidt, P. & Burgess, C. 1981, 83 (No.500A)
OL5	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy	7	Hotham	SE 89 34	C	12.6		Village & Parish	Pre 1908	British Museum	WG.1880	Schmidt, P. & Burgess, C. 1981, 83 (No.493)
OL6	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Goodmanham	SE 89 43	C	13.7		Village & Parish	Pre 1908	British Museum	WG.1828	Elgee, F & H. 1933, 240 / Schmidt, P. & Burgess, C. 1981, 103 (No.654)
OL7	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Gilberdyke	SE 83 29	C	15.4		Village & Parish		Yorkshire Museum	YORYM : 1948.1123	Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 101 (No.629)
OL8	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Market Weighton	SE 87 41	C	13.2		Town & Parish				Schmidt, P. & Burgess, C. 1981, 97 (No.590)
OL9	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Tollingham Farm	SE 83 35	C	14.9	Ploughing	Farm	1925	Hull and East Riding Museum	KINCM:1942.900.10 (cast)	Elgee, F & H. 1933, 240 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 96 (No.574)
OL10 *	A	Flanged Axe (Lo/Sh)	1	1700 - 1200		6-9	Welton	Restricted	F-Bl.EO	3.2	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-9D6F42
OL11	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Carleton)	7-8	Hotham	SE 89 34	C-2F	15.0	Ploughing	Village & Parish		Hull and East Riding Museum	KINCM:1980.651	Schmidt, P. & Burgess, C. 1981, 139 (No.830)
OL12	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Harlech)	7-8	Howden	SE 74 28	C	14.4		Town & Parish		Herts Co Museum, St Albans	Ball Coll. 52	Elgee, F & H. 1933, 240 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 137 (No.822)
OL13	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Swanwick)	7-8	Near Market Weighton	SE 87 41	C	14.4		Town & Parish		Private		Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 140 (No.834)
OL14	A	Palstave (T)	1	1275 - 1140		9	Bunny Hill	SE 85 35				Topographic feature		Scunthorpe (North Lincolnshire Museum)	N.127	Burgess, C. 1968, 65
OL15	H.A	6 Palstaves (E) / Flanged Axe (L-S) / Mould	8	1400 - 1250	P- 3 Irish HothCarr, 1 Irish C, 2 Carleton / FA - Lissett (Baldersby) / Mould for Hotham Carr type palstave	8	Hotham Carr Farm	SE 85 33	C, LC & LF-Bu & Bl.Es			Farm	1867	British Museum	WG.1836 / WG.1849-1855	Antiquary 37, 1901, 89-90 / Elgee, F & H. 1933, 240 / Burgess, C. 1968, 6 / Radley, J. YAJ 46, 1974, 20 / Schmidt, P. & Burgess, C. 1981, 105 (No.686)
OL16	Sp	Socketed Spearhead	1	1275 - 1140	Triangular Blade	7	Brough-on-Humber	SE 93 26	F-Bl.O	17.0	Peat Digging	Town & Parish		York Museum / Elgee lists as Hornsea Museum - ex Morfitt Collection?		BICC / Elgee, F & H. 1933, 238 / Radley, J. YAJ 42, 1967, 17
OL17	A	Socketed Axe	1	1140 - 1020	Ulleskelf	10	Newbald	SE 91 36	C	11.8		Village & Parish / 2 feet deep		British Museum	1900,0719.5	Elgee, F & H. 1933, 241 (93-95 - duplicate of Newbald axe incorrectly provenanced to Beverley) / Burgess, C. 1968, 68 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 179 (No.1011)
OL18	A	Socketed Axe	1	1020 - 800	Everthorpe	11	Walling Fen	SE 87 29	C	8.5		Topographic feature	1883	Hull and East Riding Museum	KINCM:1942.900.83	Radley, J. YAJ 46, 1974, 19 - listed as Everthorpe / Schmidt, P. & Burgess, C. 1981, 219 (No.1311)
OL19	A	Socketed Axe	1	950 - 800	Yorkshire	11	North Cave	SE 89 32	C	8.4		Village & Parish		Hull and East Riding Museum	KINCM:1980.635	Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 236 (No.1561)
OL20 *	A	Socketed Axe	1	1140 - 700		10-	Newbald	Restricted	F-Bl.EO	4.4	Detector	Finder - 6 to 10 figure grid reference	2010	Private		PAS: YORYM-4E7851
OL21	H.A/Bronze Moulds/Sp/T	2 Socketed Axes / 2 Bronze Moulds / Spearhead / Sock Chisel / Awl	7+	900 - 800	Axes - Meldreth, Welby (these axes were cast from the accompanying moulds)	11	Brough-On-Humber	SE 94 27				Town & Parish	1719	British Museum (4 objects)	T.43.a-b / T.43.c	Elgee, F & H. 1933, 238 / Radley, J. YAJ 46, 1974, 20 / Briggs et al 1987, 11-28
OL22	H.A/T/MW	16 Socketed Axes / Socketed Gouge / 3 Copper Cakes	20	800 - 700	Axes - 8 Everthorpe, 3 Yorkshire, 1 Sompting, 1 Unclassified (affinities with Sompting)	12	Everthorpe	SE 903 320	All objects C or LC		Quarrying	Found in a gravel pit at a point where the high road crosses the railway at Everthorpe, on the slopes of Everthorpe Hill	1842 or 1887	Hull and East Riding Museum	KINCM:1942.900.92 - 108	Sheppard, T. HMP 142, 1926, 209-10 / Elgee, F & H. 1933, 239 / Radley, J. YAJ 46, 1974, 20 / Schmidt, P. & Burgess, C. 1981, 230 (No.1444) - state later find date of 1887
OL23	Sp	Socketed Spearhead	1	1020 - 800	Barbed, Pegged	11-	North Ferriby	SE 989 253	C	27.6	Quarrying	Found whilst digging for brick clay at North Ferriby. The only clay pits at North Ferriby are centred on SE 989 253	Pre 1908	British Museum	WG.2057	BICC / Elgee, F & H. 1933, 241 / Radley, J. YAJ 42, 1967, 18 / Manby, T. 1980, 370
OL24 *	Sw	Sword	1	1140 - 800		11	Pocklington area	Restricted	2F-Bl.S,mid (non adjoining)	3.9/2.6	Detector	Finder - 6 to 10 figure grid reference	2006			PAS: YORYM-AF4C52
OL25	T	Socketed Gouge	1	1140 - 700		10-	Broomfleet	SE 88 47		7.4		Village & Parish		Hull and East Riding Museum	KINCM:1980.613	Radley, J. YAJ 46, 1974, 19

Appendix A1.16 - River Ouse Catchment (lower - below R.Derwent)

Ref	*Type*	*Contents*	*Size*	*Date (BC)*	*Typology*	*Metal Ass.*	*Location*	*Grid Reference*	*Condition*	*Length (cm)*	*Method*	*Find-spot provenance / Comments on find circumstances*	*Find Date*	*Present Location*	*Accession Number*	*Reference/s*
OL26 *	T	Awl	1	1275 - 800		9-	North Cave	SE 88 32	C	8.9	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: PUBLIC-5155C5
OL27 *	T	Razor	1		Rectangular?		Sancton	Restricted	F-Tang&Upp.BI.O		Detector	Finder - 6 to 10 figure grid reference (centred on village)	2006	Private		PAS: YORYM-0030D8

Appendix A1.17 - River Rye Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
R1	A	Flat Axe	1	2500 - 2150	Growton / Milton Moss	1/2	Scackleton	SE 64 72	LC-CE.Dam	12.2		Village & Parish	Pre 1933	Hull and East Riding Museum	KINCM:1963.562	Elgee, F & H. 1933, 250 / Manby, T. YAJ 41, 1965, 352 / Radley, J. YAJ 46, 1974, 17 / Schmidt, P. & Burgess, C. 1981, 24 (No.18)
R2 *	A	Flat Axe	1	2500 - 2150	Ballybeg / Roseisle*	1/2	Gilling East	SE 61 77	C	8.0	Detector	Finder - grid reference centred on village	2009	Private		PAS: NCL-6EC1F5
R3	A	Flat Axe	1	2150 - 2000	Migdale	3	Lockton	SE 84 89	C	8.3		Village & Parish	Pre 1908	British Museum	WG.1794	Elgee, F & H. 1930, 78 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 44 (No.184)
R4	A	Flat Axe (D)	1	1900 - 1700	Bandon - Swinton	5	Swinton	SE 75 73	C	8.8		Village & Parish		Hull and East Riding Museum	KINCM:1980.567	Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 68 (No.380)
R5	Sp	Spearhead	1	1700 - 1500	Tanged	6	Cawthorn Camp	SE 78 89	LC	10.8		Found on the moor near Cawthorn Camp	1849	Sheffield Museum	J 93.458	Elgee, F & H. 1933, 245
R6 *	O	Bronze Ring	1	2500 - 1500		1-6	Cropton	Restricted	C		Detector	Finder - grid reference centred on parish		Private		PAS: YORYM142
R7	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy	7	Farndale	SE 67 97	LC-S.Bu&Bl.M	14.3		Topographic feature - valley		Hull and East Riding Museum	KINCM:1980.565	Burgess, C. 1968, 4 / Schmidt, P. & Burgess, C. 1981, 82 (No.489)
R8	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Bilsdale	SE 57 93	C	12.7		Topographic feature - valley		Hull and East Riding Museum	KINCM:1980.576	Schmidt, P. & Burgess, C. 1981, 101 (No.616)
R9 *	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome*	8	Amotherby	SE 74 75	C	12.7	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-D3EFF5
R10	A	Flanged Axe (L-S)	1	1400 - 1200	Findowrie	8-9	Kirkbymoorside	SE 69 86	C	10.5		Town & Parish	Pre 1933	Yorkshire Museum	YORYM : 1948.17	Elgee, F & H. 1933, 248 - listed as Palstave / Burgess, C. 1968, 33 / Schmidt, P. & Burgess, C. 1981, 112 (No.727)
R11	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Helmsley	SE 61 83	LC	8.5		Town & Parish		Yorkshire Museum	YORYM : 1948.1172	Elgee, F & H. 1933, 247 / Radley, J. YAJ 42, 1967, 18
R12 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Cropton	Restricted	LC-Bu.So.M	9.8	Detector	Finder - grid reference centred on parish	2000	Private		PAS: YORYM1430 / Davis, R. 2012, 81 (No.353)
R13	Di	Dirk	1	1550 - 1400	Group 1	7	Kirkdale	SE 67 85	C-Dam.Bu	17.3		Topographic feature / Found near Kirkdale caves in a bed of gravel under moss		Edinburgh, NMA	DK 39	Elgee, F & H. 1933, 248 / Burgess, C. & Gerloff, S. 1981, 8 (No.17)
R14	Di	Dirk	1	1550 - 1400	Group 1	7	Pickering	SE 79 83	C	23.4		Town & Parish		Leeds Museum		Burgess, C. & Gerloff, S. 1981, 10 (No.34)
R15	A	Socketed Axe	1	1140 - 1020	Fulford	10	Helmsley	SE 61 83	C	9.9		Town & Parish		Elgee lists as St. Albans Museum		Elgee, F & H. 1933, 247 / Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 177 (No.1004)
R16	A	Socketed Axe	1	1020 - 800	Everthorpe	11	Hovingham	SE 66 75	C	8.9		Village & Parish	Pre 1933	Yorkshire Museum	YORYM : 1948.15	Elgee, F & H. 1933, 248 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 219 (No.1312)
R17	A	Socketed Axe	1	950 - 800	Yorkshire	11	Hovingham	SE 66 75	C	8.6		Village & Parish	Pre 1933	Yorkshire Museum	YORYM : 1948.16	Elgee, F & H. 1933, 248 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 233 (No.1502)

Appendix A1.17 - River Rye Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Comments on find circumstances	Find Date	Present Location	Accession Number	Reference/s
R18	A	Socketed Axe	1	950 - 800	Yorkshire	11	Hartoft (Pigs Lug)	SE 74 92	LC-CE.Dam	7.9		Topographic feature - valley / Pig Lug is/was a house and park in Hartoft valley		Yorkshire Museum	YORYM : 1948.1257	Schmidt, P. & Burgess, C. 1981, 233 (No.1498)
R19	A	Socketed Axe	1	950 - 800	Yorkshire	11	Swinton	SE 75 73	LC-S.So.M	9.2		Village & Parish		Hull and East Riding Museum	KINCM:1942.900.53	Elgee, F & H, 1933, 244 / Schmidt, P. & Burgess, C. 1981, 235 (No.1542)
R20	A	Socketed Axe	1	950 - 800	Yorkshire	11	Boonhill - Gillamoor	SE 671 908			Ploughing	Topographic feature - 6 figure grid reference from Hayes	1966			Hayes, R. YAJ 42, 1967, 3
R21	A	Socketed Axe	1	950 - 800	Yorkshire	11	Great Barugh	SE 7484 7916	C	9.6		NGR from Mitchelson map (undated)		Yorkshire Museum	YORYM : 1948.1255	Schmidt, P. & Burgess, C. 1981, 237 (No.1565)
R22	A	Socketed Axe	1	800 - 700	Sompting	12	Broughton	SE 76 73	C	11.5		Village	Pre 1908	British Museum	WG.1998	Elgee, F & H. 1933, 245 / Burgess, C. YAJ 42, 1969, 267-271 / Schmidt, P. & Burgess, C. 1981, 241 (No.1577)
R23	A	Socketed Axe	1	800 - 700	Sompting - Gembling	12	Cold Kirby	SE 53 84	C	8.3		Village & Parish		Settle Museum		Elgee, F & H. 1933, 245 / Schmidt, P. & Burgess, C. 1981, 247 (No.1644)
R24	A	Socketed Axe	1	800 - 700	Sompting	12	Near Welburn	SE 68 84	C	10.7		Village & Parish		Driffield Museum	GC 24	Schmidt, P. & Burgess, C. 1981, 242 (No.1601)
R25 *	A	Socketed Axe	1	800 - 700	Sompting*	12	Appleton le Street	SE 74 75	C	12.9	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-54EB72
R26 *	A	Socketed Axe	1	1140 - 700		10 -	Cawton	Restricted	F-Pt.So		Detector	Finder - 6 to 10 figure grid reference	2008	Private		PAS: YORYM-CFA387
R27 *	A	Socketed Axe	1	1140 - 700		10 -	Cawton	Restricted	F-Pt.So		Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-D1E9F4
R28 *	A	Socketed Axe	1	1140 - 700		10 -	Appleton le Street	SE 73 75	F-Bl.EO	2.7	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-5574F6
R29 *	A	Socketed Axe	1	1140 - 700		10 -	Pickering	SE 79 82	LF-So&One.Fa.M	5.1	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-751719
R30	H.A	5 Sock Axes / Whetstone	6	950 - 800	4 Yorkshire, 1 South-Eastern	11	Keldholme	SE 706 863	All complete			Village	1824 c.	British Museum (2 axes and stone) / Leeds Museum (3 axes)	BM - WG.1931 & WG.1934 / Leeds 1465-47	Evans, J. 1881, 452 / Elgee, F & H. 1933, 248 / Schmidt, P. & Burgess, C. 1981, 231 (No.1464)
R31	H.A	Socketed Axes	4	950 - 800	1 Portree, 1 Yorkshire, 2 Unclassified	11	Welburn-by-Kirkdale	SE 68 84	3C, 1 LC-Pt.One.Face.M			Village & Parish	Pre 1933	Private		Elgee, F & H. 1933, 251 / Schmidt, P. & Burgess, C. 1981, 189 (No.1091)
R32	H.A/MW	Socketed Axes / Ingots	100+	900 - 800	1 Meldreth, 1 South-Eastern	11	Yearsley Moor	SE 58 75				Topographic feature / Found on Earsley Common, 12 miles north west of York	1735			Rev. Lort. SALA, 1779, 114 / Evans, J. 1881, 113 / Raistrick, A. YAJ 29, 1929, 359 - mis-attributed as Farsley Common / Elgee, F & H. 1933, 252 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 208 (1248B) - mis-attributed as Farsley Common / Manby, T. 1986, 114
R33	Sp	Socketed Spearhead	1	1140 -	Lunate Opening	10-	Kirkbymoorside	SE 69 86				Town & Parish				Radley, J. YAJ 42, 1967, 18

Appendix A1.17 - River Rye Catchment

Ref	*Type*	*Contents*	*Size*	*Date (BC)*	*Typology*	*Metal Ass.*	*Location*	Grid Reference	*Condition*	*Length (cm)*	*Method*	*Find-spot provenance / Comments on find circumstances*	*Find Date*	Present Location	Accession Number	Reference/s
R34	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	Harome	SE 6601 8316	LC-Bu.Hilt&TM	53.4	Ploughing	Topographic feature / Ploughed up on Soldier Plain	Pre 1880	Hull and East Riding Museum	KINCM:1980.625	Elgee, F & H. 1933, 247 / Burgess, C. 1968, 23, 68 / Colquhoun & Burgess 1988, 95 (No.519)
R35	H.A/Sw/Sp/MW	6 Sock Axes / Sword Hilt / Spearhead / 3 Ingots / Bronze Sheet	12	950 - 800	Axes - Yorkshire / Sw - Ewart Park	11	Boonhill - Gillamoor	SE 667 908	Sp-TO; Sw-Hilt.F			Topographic feature	1979			Pacitto, T. YAJ 52, 1980, 179 / Spratt, D. BAR 104, 1982, 284-5
R36 *	T	Socketed Hammer	1	1020 - 800		11	Kirkbymoorside	SE 69 86	C		Detector	Finder - grid reference centred on parish		Private		PAS: LVPL-89D1D3
R37 *	O	Gold Ribbon/Band	1	2150 - 800		1-11	Sproxton	Restricted	Bent		Detector	Finder - 6 to 10 figure grid reference (generalised)	2010	Private		PAS: LVPL-83FE92
R38	Da	Dagger	1	2150 - 1500		3-6	Lockton Warren	SE 84 91	C?	23 c.		Farm / Area		Yorkshire Museum	YORYM : 1948.?	Hayes, R. H. 1952, Anotated Record Map, Corr 6"
R39	Da	Dagger	1	2150 - 1500		3-6	Slape Wath	SE 5965 9832	C?	7.5 c.	Drainage?	Found protruding from a drain at a depth of 2 feet at Slape Wath, in the vacinity of the ruined sheep folds	1935-40	Lost		Hayes, R. H. 1955, Anotated Record Map, Corr 6"
R40	Da / Di	Dagger / Dirk	1	2150 - 1140		3-9	Saintoft	SE 791 891	LC?-TM	15 c.	Quarrying?	Discovered by a workman at the sand quarry	1963/64	Private		Hayes, R. YAJ 41, 1964, 172-3
R41	Sp	Socketed Spearhead	1	1500 -	Leaf	7-	Middleton	SE 78 85	F-Pt.SM			Village & Parish		Yorkshire Museum		BICC / Radley, J. YAJ 42, 1967
R42 *	Sp	Spearhead	1				Cropton	Restricted	F-TO	4.3	Detector	Finder - grid reference centred on parish	Pre PAS central database	Private		PAS: YORYM141
R43	Sp	Socketed Spearhead	1				Middleton	SE 78 85		21.9		Village & Parish		Hull and East Riding Museum	KINCM:1980.598	Mitchelson, N. 1950, Annotated Record Map, Corr 6"

Appendix A1.18 - River Derwent Catchment (upper - Vale of Pickering)

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Description	Find Date	Present Location	Accession Number	Reference/s
DU1	A	1	Flat Axe	2150 - 2000	Migdale	3	C	10.9	Norton	SE 79 71		Town & Parish		Malton Museum	P. 92.1	Schmidt, P. & Burgess, C. 1981, 43 (No.182)
DU2	A	1	Flat Axe (D)	2000 - 1900	Aylesford	4	C	12.3	Langton Wold	SE 81 68		Topographic feature	Pre 1908	British Museum	WG.1811	Elgee, F & H. 1933, 241 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 60 (No.312)
DU3	A	1	Flat Axe (D)	1900 - 1700	Bandon	5	LC-S.Bl.M	13.1	Box Hill - Irton Moor	TA 0064 8680	Surface	Found on the ground by two children playing	1947	Scarborough Museum	106.38	Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 66 (No.350)
DU4	A	1	Flanged Axe (L)	1700 - 1500	Arreton	6	C	13.2	Potter Brompton Carr	SE 97 78		Topographic feature		Scarborough Museum	924.38	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.414)
DU5	A	1	Flanged Axe (L)	1700 - 1500	Arreton	6	LC-S.Bl.M	12.5	Cayton Carr	TA 05 81		Topographic feature		Doncaster Museum / Manby lists as Yorkshire Museum, Brewster Coll.		Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.417)
DU6	A	1	Flanged Axe (L)	1700 - 1500	Arreton	6	C	14.3	Cayton	TA 05 83		Village & Parish		Private		Schmidt, P. & Burgess, C. 1981, 73 (No.424)
DU7	A	1	Flanged Axe (L)	1700 - 1500	Arreton	6	C	11.7	Staxton	TA 01 79		Village		Yorkshire Museum	YORYM : 1948.1106	Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 72 (No.411)
DU8	H.A	2	Flat Axe / Flat Axe (D)	2150 - 1900	Migdale - Decorated / Aylesford	4	C / LC-S.Bu.M	13.0 / 12.4	Place Newton - Wintringham	SE 88 72		Estate		Malton, Sherburn Museum		Brewster, T. YAJ 38, 1955, 450-452 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 46 (No.209B), 61 (No.317A)
DU9	H.A	2	Flat Axes (D)	2000 - 1900	Aylesford	4	C / C	15.8 / 14.0	Sherburn Carr	SE 95 77		Topographic feature	Pre 1881	British Museum & Ashmolean Museum, Oxford	WG.1803 / 1927.2363	Evans, J. 1881, 43 / Elgee, F & H. 1933, 242 / Britton, D. 1963, 300 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 61 (No.316A,316C)
DU10	Sp	1	Spearhead	1700 - 1500	Tanged	6			High Dalby	SE 85 88		Hamlet		Yorkshire Museum		Radley, J. YAJ 42, 1967, 18
DU11 *	Sp	1	Spearhead	1700 - 1500	Tanged	6	LC	7.5	Snainton	Restricted	Detector	Finder - grid reference centred on parish	2012	Private		PAS: LVPL-BFFB35
DU12	Da	1	Dagger		Tanged		LC-TM	12.3	Sherburn	SE 95 76		Village & Parish		Hull and East Riding Museum	KINCM:1942.900.42	BICC / Evans, J. 1881, 223 / Elgee, F & H. 1933, 242
DU13	A	1	Flanged Axe (E-S)	1550 - 1450	Kirtomy	7	C	15.0	Scampston	SE 86 75		Village & Parish	Pre 1908	British Museum	WG.1831	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 83 (No.500) - listed as Scampton
DU14	A	1	Flanged Axe (E-S)	1550 - 1450	Caverton	7	C	18.9	Lebberston Carr Farm	TA 0664 8139	Surface	Found approximately 335 metres west of Lebberston Carr Farm	Pre 1950	Yorkshire Museum (no record of axe in collections - December 2014) or Doncaster?		Brewster, T. YAJ 38, 1955, 448-451 / Burgess, C. 1968, 4 / Schmidt, P. & Burgess, C. 1981, 79 (No.452)
DU15 *	A	1	Flanged Axe (E-S)	1550 - 1400		6-7	C-HC	10.6	Seamer Parish	Restricted	Detector	Finder - grid reference centred on village	2006	Private		PAS: SWYOR-EE1667
DU16	A	1	Flanged Axe	1550 - 1450	North German	7	C	11.6	Norton	SE 79 71		Town & Parish		Yorkshire Museum	YORYM : 1948.1126	Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 89 (No.519)
DU17	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett	8	C	12.9	Staxton	TA 01 79		Village		Yorkshire Museum	YORYM : 1948.1121	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 102 (No.644)
DU18 *	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett*	8	C	13.5	Brooklands	SE 95 79	Detector	Finder - 6 to 10 figure grid reference	2007	Private		PAS: NCL-F9D767
DU19	A	1	Flanged Axe (L-S)	1450 - 1250	Lissett	8	C	12.2	Near Malton	SE 78 71		Town & Parish		Whitby Museum	A.E. 19/6	Elgee, F & H. 1933, 249 / Schmidt, P. & Burgess, C. 1981, 102 (No.641)
DU20	A	1	Flanged Axe (L-S)	1450 - 1250	Ulrome - Barmston	8	C	13.2	Willerby Carr	TA 00 79		Topographic feature		Scarborough Museum	823.38	Schmidt, P. & Burgess, C. 1981, 98 (No.602)
DU21	A	1	Flanged Axe (L-S)	1450 - 1250	Ulrome	8	C	10.7	Near Malton	SE 80 70		Found near to Malton at the foot of the Wolds		Whitby Museum	A.E.18/7	Elgee, F & H. 1933, 249 / Schmidt, P. & Burgess, C. 1981, 97 (No.577)
DU22	A	1	Flanged Axe (L-S)	1400 - 1200	Balcarry	8-9	C	16.2	Settrington	SE 83 70		Village & Parish	1879	Hull and East Riding Museum	KINCM:1980.581	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 108 (No.709)
DU23	A	1	Flanged Axe (S)	1550 - 1200	Unclassified	7-9	C	8.2	High Dalby	SE 85 88		Hamlet		Yorkshire Museum	YORYM : 1948.11.1	Schmidt, P. & Burgess, C. 1981, 114 (No.765)
DU24	A	1	Flanged Axe (S)	1550 - 1200		7-9			Seamer - Hud Hill	TA 0102 8272	Surface	Grid referene centred on field	1951 c.			North Yorkshire HER - MNY12612
DU25 *	A	1	Palstave (T)	1275 - 1140	Roundhay / Penrith*	9	LC-Bu.M	10.8	Brompton	SE 94 82	Detector	Finder - grid reference centred on parish	2011	Private		PAS: DUR-F4B4B2

Appendix A1.18 - River Derwent Catchment (upper - Vale of Pickering)

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Description	Find Date	Present Location	Accession Number	Reference/s
DU26	H.A	2	Flanged Axe (L-S)	1450 - 1250	Ulrome	8	C / C	9.5 / 9.5	Heslerton Carr	SE 92 77		Topographic feature / Found in the same field - same type and similar patina		Yorkshire Museum	YORYM : 1948.19 & 1948.20	Schmidt, P. & Burgess, C. 1981, 96 (No.570,571)
DU27	H.A	2	Flanged Axes	1550 - 1200		7-9			Coulsons Carr	TA 0538 8185 & TA 0533 8179		Topographic feature / Found near Coulsons Carr	1924/25 & 25/26			Archaeological Newsletter 3 (9), 1951
DU28	Sp	1	Socketed Spearhead	1500 - 1140	Wide	7-9	F-Bl.O	5.1	Scamridge	SE 89 85		Topographic feature	Pre 1908	British Museum	WG.2024	Elgee, F & H. 1933, 246 / Davis, R. 2012, 62 (No.191)
DU29	Sp	1	Socketed Spearhead	1500 - 1140	Looped, Flame	7-9	LC-Lp&So.Dam	14.6	Sawdon	SE 94 85		Village		Scarborough Museum	1954.530	Radley, J, YAJ 42, 1967, 18 / Burgess, C. 1968,4 / Davis, R. 2012, 72 (No.232)
DU30	Sp	1	Socketed Spearhead	1500 - 1140	Looped, Flame	7-9	LC-So&Bl.Dam	13.3	Cayton	TA 04 83		Village & Parish	Pre 1908	British Museum	WG.2037	Elgee, F & H. 1933, 245 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 73-4 (No.254)
DU31 *	Sp	1	Socketed Spearhead	1500 - 1140	Looped, Flame	7-9	C	12.7	Scarborough	Restricted	Detector	Finder - 6 to 10 figure grid reference	2014	Private		PAS: SWYOR-BF67A6
DU32	Sp	1	Socketed Spearhead	1500 - 1140	Looped	7-9			Allerston	SE 87 82		Village & Parish	?	Yorkshire Museum?		Radley, J. YAJ 42, 1967, 18
DU33	Sp	1	Socketed Spearhead	1500 - 1140	Looped, Leaf	7-9		8.3	Allerston - Warren House Farm	SE 8740 8467		The find-spot is marked on the 1958 Ordnance Survey map	1921	Yorkshire Museum	YORYM : 1974.55	BICC / YAJ 34, 1939, 4-5 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 100 (No.580)
DU34	Sp	1	Socketed Spearhead	1500 - 1140	Basal Looped, Flame	9-	C-Bl.Dam&T.bent	28.6	Flixton Carr	TA 03 80		Village & Parish	1936	Doncaster Museum	1992.68	BICC / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 122 (No.724)
DU35	Sp	1	Socketed Spearhead	1275 - 1140	Protected Opening, Leaf	9	LC-So.Dam	16.0	Brompton	SE 9438 8167	Drainage	Found whilst digging a drain near the new railway station at Brompton in 1881 / Burgess (1968, 21) locates this as Brompton near Northallerton but the corrct location is almost certinly Brompton by Sawdon as indicated by Mitchelson. The new station was opened in 1882 but Brompton by Swale station opened in the 1840's / 8 fig grid ref from map, Mitchelson 1949	1881	Yorkshire Museum	YORYM : 1948.1157	Elgee, F & H. 1933, 245 / Radley, J. YAJ 42, 1967, 18 / Burgess, C. 1968, 21, 68 / Needham, S. 1990, 268 / Davis, R. 2012, 158-9 (No.1019)
DU36	Di	1	Dirk	1550 - 1400	Group 1	7	C-Dam.Bu	20.4	Cayton	TA 04 83	Ploughing	Village & Parish	1846	Sheffield Museum	J. 93. 461	Burgess, C. 1968, 4 / Burgess, C. & Gerloff, S. 1981, 11 (No.41)
DU37	Di	1	Dirk	1550 - 1350	Group 2	7/8	C	18.6	Willerby Carr	TA 00 79		Topographic feature		Yorkshire Museum	YORYM : 1948.1231	Burgess, C. 1968, 4 / Burgess, C. & Gerloff, S. 1981, 29 (No.161)
DU38	Di	1	Dirk	1550 - 1350	Group 2	7/8	C-Dam.Bu	17.9	Rillington	SE 85 74		Village & Parish	1869	Hull and East Riding Museum	KINCM:1980.639	Burgess, C. & Gerloff, S. 1981, 39 (No.290)
DU39	Di/Ra	1	Dirk / Rapier	1400 - 1140	Group 4	8-9	F-Bl.S,T.End	8.1	Heslerton Carr	SE 92 77		Topographic feature	Pre 1908	British Museum	WG.2434	Burgess, C. & Gerloff, S. 1981, 104 (No.966)
DU40	Di	1	Dirk	1275 - 1100	Group 4 - notched butt	8-9	C	26.7	Flotmanby	TA 07 79		Hamlet	Pre 1921	Scarborough Museum	815. 38	Elgee, F & H. 1933, 239 / Burgess, C. 1968, 21, 67 / Burgess, C. & Gerloff, S. 1981, 84 (No.673)
DU41	A	1	Socketed Axe	1020 - 800	Welby	11	C	10.5	Wykeham Carr	SE 96 80		Topographic feature		Doncaster Museum		Schmidt, P. & Burgess, C. 1981, 222 (No.1349)
DU42	A	1	Socketed Axe	1020 - 800	Portree	11	C	6.6	Scamridge	SE 89 85		Topographic feature		Yorkshire Museum	YORYM : 1948.22	Elgee, F & H. 1933, 246 / Schmidt, P. & Burgess, C. 1981, 186 (No.1062)
DU43	A	1	Socketed Axe	1000 - 800	Gillespie	11	C	6.5	Harwood Dale	SE 96 95		Village & Parish		Yorkshire Museum	YORYM : 1948.1258	Schmidt, P. & Burgess, C. 1981, 195 (No.1142)
DU44	A	1	Socketed Axe	950 - 800	Yorkshire	11	C	5.8	Thornton-le- Dale	SE 83 82		Village & Parish	Pre 1941	Hull and East Riding Museum	KINCM:1942.900.73	Elgee, F & H. 1933, 251 / Schmidt, P. & Burgess, C. 1981, 232-33 (No.1489)
DU45	A	1	Socketed Axe	950 - 800	Yorkshire	11	C	8.3	Pickering Carr	SE 80 80		Topographic feature	Pre 1930	Yorkshire Museum	YORYM : 1948.1149	Schmidt, P. & Burgess, C. 1981, 233 (No.1500)
DU46	A	1	Socketed Axe	950 - 800	Yorkshire	11	C	7.8	Malton	SE 79 71		Town & Parish		Scarborough Museum	46.48	Schmidt, P. & Burgess, C. 1981, 233 (No.1490)
DU47	A	1	Socketed Axe	950 - 800	Yorkshire	11	C	8.5	Near Scampston	SE 88 74		Village & Parish	1850	Sheffield Museum	J. 93.510	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 233 (No.1501)
DU48	A	1	Socketed Axe	800 - 700	Sompting	12	C	11.3	Cayton Carr	TA 05 81		Topographic feature	Pre 1908	British Museum	WG.1997	Elgee, F & H. 1933, 245 / Burgess, C. YAJ 42, 1969, 267-271 / Schmidt, P. & Burgess, C. 1981, 242 (No.1596)

Appendix A1.18 - River Derwent Catchment (upper - Vale of Pickering)

Ref	Type	Size	Contents	Date (BC)	Typology	Metal Ass.	Condition	Length (cm)	Location	Grid Reference	Method	Description	Find Date	Present Location	Accession Number	Reference/s
DU49	A	1	Socketed Axe	800 - 700	Sompting	12	C	12.9	Seamer Carr	TA 02 81		Topographic feature	Pre 1881	British Museum	WG.1987	Evans, J. 1881, 124 / Elgee, F & H. 1933, 250 / Schmidt, P. & Burgess, C. 1981, 242 (No.1594)
DU50	A	1	Socketed Axe	800 - 700	Sompting	12	C	11.5	Seamer Carr	TA 02 81		Topographic feature	Pre 1908	British Museum	WG.1994	Elgee, F & H. 1933, 250 / Burgess, C. YAJ 42, 1969, 267-271 / Schmidt, P. & Burgess, C. 1981, 242 (No.1595)
DU51	A	1	Socketed Axe	1140 - 700	Ribbed	10-			Troutsdale	SE 92 88		Topographic feature - valley		Yorkshire Museum	YORYM : 1948.1152	Spratt, D. 1982, 284
DU52	A	1	Socketed Axe	1140 - 700		10-			Ruston	SE 95 83		Village		Yorkshire Museum?	Kirk Collection	Elgee, F. 1930, 170 / Spratt, D. 1982, 285
DU53	A	1	Socketed Axe	1140 - 700		10-			Kirkbymoorside - Apple Garth	SE 6973 8664		Village & Parish	Pre 1963			North Yorkshire HER - MNY1226
DU54 *	Sp	1	Socketed Spearhead	1140 -	Pegged, Leaf	10-	C-T.Bent	22.5 c.	Gristhorpe	TA 08 81	Detector	Finder - 6 to 10 figure grid reference		Private		PAS: YORYM-3D457F
DU55	H.Sp	2	Socketed Spearheads	1140 -	Pegged, Leaf	10-	C/C	17 ca.	Malton	SE 782 710	Quarrying	Found in a clay pit on the southern side of the River Derwent at Malton, very close to the river	1825 c.			Brewster, T. YAJ 39, 1957, 53-54 / Radley, J. YAJ 42, 1967, 18
DU56 *	Sw	1	Sword	1020 - 800	Ewart Park - N4**	10-	LC-2F,Hilt.M	c.55.0	Brompton-by-Sawdon	SE 94 82	Detector	Finder - grid reference centred on village / The detecting club is reluctant to divulge the precise find-spot	2011	Private		PAS: DUR-CBD092
DU57	Sw	1	Sword	1020 - 800	Ewart Park - N1	11	C	58.1	Sawdon	SE 94 85		Village		Yorkshire Museum	YORYM : 1948.1162	Colquhoun, I. & Burgess, C. 1988, 89 (No.460)
DU58	Sw	1	Sword	1020 - 800	Ewart Park - N2	11	C	46.9	Brompton-by-Sawdon	SE 94 82		Village & Parish / Found in a bed of gravel under moss at Brompton-by-Sawdon. A human jaw was also discovered near-by and may be associated	1829	Edinburgh, NMAS	DL or DM 41	Elgee, F & H. 1933, 245 / Colquhoun, I. & Burgess, C. 1988, 93 (No.500)
DU59	H.Sw/ Misc	2 c.	2 Swords / Chape / Human Bone	800 - 600	Gundlingen B	12	C-bent / LC-Bu.Hilt.M	70.5/61.1	Ebberston	SE 89 82		Village & Parish	1861	Sheffield Museum / Scarborough Museum	J.93.436 & 463 / 814.38	Elgee, F & H. 1933, 246 / Cowen, J.D. PPS 33, 1967 / Colquhoun, I. & Burgess, C. 1988, 117 (No.707)
DU60 *	Kn	1	Socketed Knife	1020 - 800	Thorndon - Double Edge	11	C-Bent		Staxton	TA 02 79	Detector	Finder - grid reference centred on village	2009	Private		PAS: DUR-850CB6
DU61	T	1	Sickle			11			Sawdon	SE 94 85		Village & Parish		Scarborough Museum		Spratt, D. 1982, 288
DU62 *	A	1	Axe				F-Bl.EO	2.2	Brompton	SE 94 82	Detector	Finder - grid reference centred on village		Private		PAS: DUR-F2F216
DU63	Sp	1	Socketed Spearhead						Seamer Carr	TA 02 81		Topographic feature	Pre 1881			Evans, J. 1881, 213
DU64 *	T	1	Chisel	1500 -	Tanged	7 -	LC?-Bl.E	4.7	Ebberston	Restricted		Finder - grid reference centred on village		Private		PAS: FAKL-ED5AC4
DU65	H.Sp/T	2	Spearhead / Chisel				Sp-TO / Ch-LC-Bl.O		Allerston	SE 8768 8175	Detecting & Excavation	The objects were located within 25m of each other. The spearhead was a surface find and Chisel was recovered from a depth of 10cm	1996	Private		Jessop, O. YAJ 76, 2004, 1-6

Appendix A1.19 - River Derwent Catchment (lower - Vale of York)

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Description	ProvType	Find Date	Present Location	Accession Number	Reference/s
DL1 *	A	Flat Axe	1	2500 - 2000		1-3	Dalby Cum Skewsby	SE 62 70	F-Bu&Bl.M	5.5	Detector	Finder - 6 to 10 figure grid reference		2011	Private		PAS: SWYOR-9C0454
DL2 *	A	Flat Axe	1	2500 - 2000		1-3	Pocklington	SE 80 49	F-Bu.M	4.0	Detector	Finder - grid reference centred on town		2010	Private		PAS: DUR-8DF7F1
DL3	A	Flat Axe	1	2150 - 2000	Migdale - Biggar	3	Leppington	SE 76 61	C	16.3		Village			Hull and East Riding Museum	KINCM:1942.900.37	Elgee, F & H. 1933, 241 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 47 (No.216)
DL4	A	Flat Axe	1	2150 - 2000	Migdale	3	Sheriff Hutton	SE 65 66	C			Village & Parish					Manby, Moorhouse & Ottaway, 2003
DL5 *	A	Flat Axe / Flat (D)	1	2150 - 1900	Migdale**	3	Fangfoss	Restricted	LF-Bu.E..M	7.0	Detector	Finder - 6 to 10 figure grid reference			Private		PAS: FAKL-3AAC83
DL6 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton*	6	High Catton	SE 71 53	C	8.0	Detector	Finder - grid reference centred on village		2009	Private		PAS: LVPL-004D33
DL7 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton*	6	Fangfoss	SE 75 52	C		Detector	Finder - 6 to 10 figure grid reference		2006	Private		PAS: LVPL-613611
DL8 *	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy**	7	Near Westow	Restricted	LC-HC	11.5	Detector	Finder - 6 to 10 figure grid reference		2009	Private		PAS: YORYM-54A587
DL9	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Bulmer	SE 69 67	C	14.7		Village & Parish		Pre 1908	British Museum	WG.1834	Elgee, F & H. 1933, 251 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 103 (No.656)
DL10	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Sutton upon Derwent	SE 70 47	C	14.5		Village & Parish			Hull and East Riding Museum	KINCM:1942.900.71	Elgee, F & H. 1933, 242 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 103 (No.655)
DL11	A	Palstave (E)	1	1500 - 1300	South-Western	7-8	Thornton-le-Clay	SE 68 65	C	16.3		Village & Parish		Pre 1908	British Museum	WG.1842	Burgess, C. 1968, 66 / Radley, J. YAJ 46, 1974, 19 / Schmidt, P. & Burgess, C. 1981, 142 (No.842)
DL12	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Wide	7-9	Pocklington - South Moor House	SE 808 468	C	12.1		Found at South Moor House		1966	Yorkshire Museum	YORYM : 1978.64	Radley, J. YAJ 42, 1967, 15-16 / Davis, R. 2012, 62 (No.178)
DL13 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Sheriff Hutton	Restricted	F-So&Upper.Bl/HC	9.1	Detector	Finder - grid reference centred on village		2005	Private		PAS: YORYM-CF6AE4
DL14	Di	Dirk	1	1550 - 1350	Group 2	7-8	Stamford Bridge	SE 71 55	C			Found in the River Derwent at Stamford Bridge					Manby, Moorhouse & Ottaway, 2003
DL15 *	Ra	Rapier	1	1500 - 1140		7-9	Yapham	Restricted	2 Adjoining Frags-Bl.S,T.End	8.6	Detector	Finder - 6 to 10 figure grid reference		2007	Private		PAS: YORYM-CFEE95
DL16 *	A	Socketed Axe	1	1000 - 800	South-Eastern	11	Pocklington	Restricted	C	10.2	Detector	Finder - grid reference centred on village		2008	Private		PAS: LANCUM-F700F7
DL17	A	Socketed Axe	1	950 - 800	Yorkshire	11	Foston	SE 69 65	C	8.2	?	Village & Parish			Yorkshire Museum	YORYM : 1948.1209	Schmidt, P. & Burgess, C. 1981, 233 (No.1497)
DL18	A	Socketed Axe	1	950 - 800	Yorkshire	11	Warter	SE 86 50	C	6.5	?	Village & Parish			Scarborough Museum	3-63	Schmidt, P. & Burgess, C. 1981, 236-37 (No.1562)
DL19 *	A	Socketed Axe	1	900 - 800	Meldreth*	11	Fangfoss	SE 75 52	C	10.7	Detector	Finder - 6 to 10 figure grid reference		2013	Private		PAS: YORYM-7E2440
DL20 *	A	Socketed Axe	1	1140 - 700		10-	Whenby	Restricted	LC - Lp.Br	7.3	Detector	Finder - 6 to 10 figure grid reference		1999	Private		PAS: YORYM268 (also YORYMB68 - duplicate record)
DL21 *	A	Socketed Axe	1	1140 - 700		10-	Bossall	Restricted	F-Bl.EO	2.5	Detector	Finder - 6 to 10 figure grid reference (centred on parish?)		2012	Private		PAS: LVPL-3D0A03

Appendix A1.19 - River Derwent Catchment (lower - Vale of York)

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Description	ProvType	Find Date	Present Location	Accession Number	Reference/s
DL22	H.A	Socketed Axes	6	950 - 800	5 Yorkshire, 1 Unclassified	11	Leppington	SE 76 61	C, LC & LF			Village			Hull and East Riding Museum	KINCM:1942.900.131-136	Elgee, F & H. 1933, 241 / Radley, J. YAJ 46, 1974, 21 - listed as Scrayingham / Schmidt, P. & Burgess, C. 1981, 228 (No.1420)
DL23	H.A	Socketed Axe	1+	950 - 800	Yorkshire	11	Acklam	SE 78 61	LF-Pt.So&Upp.Body.M	7.8		Village & Parish		1860	Hull and East Riding Museum	KINCM:1942.900.54	Elgee, F & H. 1933, 237 / Radley, J. YAJ 46, 1974, 20 - also lists single socketed axe / Schmidt, P. & Burgess, C. 1981, 235 (No.1539) - listed as single find
DL24	H.A	Socketed Axes	5	950 - 800	3 Yorkshire, 1 Everthorpe, 1 Welby	11	Pocklington	SE 796 485	C & LC		Surface?	Found on separate occasions in the same area of playing fields at West Green		1957 + 1973(3)	Yorkshire Museum	YORYM : 1957.2.1 / 1972.9.1 / 1972.9.2 / 1972.9.3	YPS Annual Report, 1957, 4 / YAJ 45, 1973, 200 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 234 (No.1524)
DL25 *	H.A/Misc	4 Sock Axes / Copper Wire	5	950 - 800	4 Yorkshire	11	Stamford Bridge	Restricted	2 C & F		Detector	Finder - 6 to 10 figure grif reference		2013	Pending outcome of treasure inquest		PAS: LVPL-92B6A6
DL26	H.A/T/O/MW/Misc	31 Axes / 6 Gouges / Sock Chisel / 2 Tanged Chisels / Tanged Knife / Ring / Fragments incl. casting jets (inside pottery vessel)	60 c.	900 - 800	Axes - 11 Yorkshire, 6 South-Eastern, 3 Everthorpe, 1 Meldreth	11	Westow	SE 762 651	Axes - 19 C & LC, 3 F (2 Bl.E.O & 1 So.&Upp.Body)		Construction	Found 10 inches below the surface whilst digging the foundation for a fence approximately 1/2 mile from Westow / 'not very far' from the 2 barrows located 1 mile east of Westow		1845	Yorkshire Museum / British Museum	YORYM : 1948.1202-1205,1155,1180,1208,1214-7,1219,1225-6,1228,1234-6,1240 / BM - WG.1898 - WG.1911	JBAA 3, 1848, 58-9 / Evans, J. 1881, 118-9 / Elgee, F & H. 1933, 243 / Radley, J. YAJ 46, 1974, 21 / Schmidt, P. & Burgess, C. 1981, 208 (1251)
DL27	H.A	Socketed Axes	?	1140 - 700		10-	Hanging Grimston	SE 80 60				Topographic feature - wold		1882			Elgee, F & H. 1933, 240 / Manby, T. 1980, 358
DL28	H.A	Socketed Axes	16	1140 - 700		10 -	Sheriff Hutton	SE 64 66				Village & Parish		1823	Lost		Radley, J. YAJ 46, 1974, 21 / Manby, T. 1980, 361
DL29 *	Sw	Sword	1	1140 - 1020	Wilburton	10	Buttercrambe	Restricted	F-Hilt & Shld		Detector	Finder - 6 to 10 figure grid reference		2006	Private		PAS: LVPL-60A047
DL30	Sw	Sword	1	1140 - 1020	Wilburton - G	10	Whenby	SE 62 69	C	53.6		Village & Parish		1945	Yorkshire Museum	YORYM : 1966.1	Wilmot, G. YAJ 42, 1967, 8 / Radley, J. YAJ 46, 1974, 20 / Colquhoun, I. & Burgess, C. 1988, 51 (No.224)
DL 31*	Sp	Socketed Arrowhead	1	1500 -	Leaf	7 -	Sheriff Hutton	SE 65206 66378	LC-Pt.So.M	3.4	Detector	Finder - grid reference centred on village		2009	Private		PAS: LANCUM-9BF990
DL 32*	Sp	Spearhead	1				Yapham	Restricted	F-TO	2.7	Detector	Finder - 6 to 10 figure grid reference		2010	Private		PAS: YORYM-853114
DL 33*	Sp	Socketed Spearhead	1				Barmby Moor	Restricted	F-TO	8.4	Detector	Finder - 6 to 10 figure grid reference		2006	Private		PAS: YORYM-A2E2F3 / YORYM-6DB701
DL 34*	Sp	Socketed Spearhead	1				Westow	Restricted	F-BS,TM	3.4	Detector	Finder - 6 to 10 figure grid reference		2010	Private		PAS: YORYM-1DCE14
DL 35*	Sp	Spearhead	1				Bossall	SE 71 60	F-TO	1.8	Detector	Finder - 6 to 10 figure grid reference		2008	Private		PAS: LVPL-AA96E0
DL 36*	T	Socketed Chisel - Side Loop	1	1200 - 700	Minature - Votive?	10 -	Barmby Moor	Restricted	C?		Detector	Finder - grid reference centred on parish		1998	Private		PAS: LVPL575
DL 37*	T	Chisel / Di or Ra Blade	1	2150 - 1500		3-6	Fangfoss	Restricted	F/LC ?		Detector	Finder - 6 to 10 figure grid reference		2008	Private		PAS: YORYM-3636F8

Appendix A1.20 - River Esk Catchment

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Description	Find Date	Present Location	Asc. Number	Reference/s
E1 *	A	Flat Axe (D)	1	2000 - 1900	Aylesford**	4	Egton	NZ 81 04	C	10.9	Detector			Private		PAS: YORYM-E50F92
E2	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Whitby	NZ 89 10	C	12.2		Town & Parish		Manchester Museum	O.9040	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.421)
E3 *	A	Flanged Axe (S)	1	1550 - 1200	Ulrome***	7-9	Whitby area	Restricted	F-Bu&CE.M	6.7	Detector		2005	Private		PAS: YORYM-4550B2
E4	A	Palstave (E3)	1	1500 - 1300	Low Flanged	7-8	Whitby	NZ 89 10	C	17.3		Town & Parish		Herts Co Museum, St Albans	Ball Coll. 43	Schmidt, P. & Burgess, C. 1981, 135 (No.812)
E5	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular	9	Whitby	NZ 89 10	F-Bl.S,mid	18.9		Town & Parish		Whitby Museum	ARC1102 / A.3.C.6	BICC / Radley, J. YAJ 42 1967, 18 / Burgess, C. 1968, 67
E6	D.Axe	Double Axe	1	1600 - 1200	Double Axe - Aegean	6-9	Whitby	NZ 89 10	C			Town & Parish		Skipton Museum	A 63	Schmidt, P. & Burgess, C. 1981, 70 (No.395)
E7	Da	Dagger	1	1500 - 1140	Continental - Cypriot?	7-9	Egton Moor	NZ 77 00	C			Topographic feature - found on Egton Moor by a shepherd		Whitby Museum		BICC / Manby, T. YAJ, 1964
E8	A	Socketed Axe	1	950 - 800	Yorkshire	11	Grosmont - Leaze Rigg	NZ 8232 0485	C	8.3	Ploughing	Ploughed up on Leaze Rigg	1941	Whitby Museum	A.E. 15	Schmidt, P. & Burgess, C. 1981, 226 (No.1390)
E9	A	Socketed Axe	1	950 - 800	Yorkshire	11	Whitby	NZ 89 10	C	8.2		Town & Parish		Whitby Museum	A.E. 17	Schmidt, P. & Burgess, C. 1981, 226 (No.1391)
E10	A	Socketed Axe	1	900 - 800	Meldreth - Westow	11	Post Gate Hill - Glaisdale	NZ 7595 0460	C	10.3		Found at Glaisdale End	Pre 1930	British Museum	WG.1923	Elgee, F & H. 1933, 247 / Schmidt, P. & Burgess, C. 1981, 208 (No.1252)
E11	A	Socketed Axe	1	900 - 800	Dowris	11	Whitby	NZ 89 10	C	8.3		Town & Parish		Whitby Museum	A.E. 16.9	Schmidt, P. & Burgess, C. 1981, 199 (No.1164)
E12	A	Socketed Axe	1	900 - 800	Dowris - Kilkerran	11	Whitby	NZ 89 10	C	5.3		Town & Parish		Whitby Museum	A.E. 18.10	Schmidt, P. & Burgess, C. 1981, 200 (No.1188)
E13	A	Socketed Axe	1	1140 - 700	Plain, Multiple mouth moulding	10-	Glaisdale - Quarry Hill	NZ 7743 0605			Surface	Found in disturbed shaley ground near the old quarries / Marked on 1958 ordanance survey map	1953	Private or Whitby Museum		YAJ 42, 1967, 112 / Spratt, D. BAR 104, 1982, 284
E14	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Whitby	NZ 89 10	C			Town & Parish		Whitby Museum		Radley, R. YAJ 42, 1967, 18 / Spratt, D. BAR 104, 1982, 282
E15	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf	10-	Whitby	NZ 89 10	LC-S.Dam	10.8		Town & Parish		Whitby Museum		BICC / Radley, J. YAJ 42, 1967, 18 / Spratt, D. BAR 104, 1982, 282
E16	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	Near Whitby	NZ 89 10	F-Bl.S,mid	20.8		Town & Parish		Whitby Museum		Spratt, D. BAR 104, 1982, 286 / Colquhoun, I. & Burgess, C. 1988, 99 (No.571)

Appendix A1.21 - North Yorkshire Coastal Plain

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	Reference/s
NYC1 *	A	Flat Axe (D)	1	1900 - 1700	Bandon / Aylesford*	5	Near Scarborough	Restricted	LC-Cu.E.M	11.5	Detector		2008	Private		PAS: YORYM-D1DA88
NYC2	A	Flat Axe (D)	1	1900 - 1700	Bandon	5	Scalby Beck	TA 02 90	LC-S.Bu.M	10.5		Topographic feature		Scarborough Museum	818.38	Elgee, F & H. 1933, 250 - listed as Flanged Axe / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 66 (No.355)
NYC3	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Near Scarborough	TA 03 89	LC	14.4		Town & Parish		Hull and East Riding Museum	KINCM:1980.572	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.418)
NYC4	A	Palstave (E1)	1	1500 - 1300	Shield Pattern	7-8	Filey	TA 11 80	LF-Bu.Dam	12.6		Town & Parish		Leeds Museum	O 245.1964	Elgee, F & H. 1933, 239 / Schmidt, P. & Burgess, C. 1981, 118 (No.781)
NYC5	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Southbeck House - Scalby	TA 007 899	C	13.8	Ploughing	Ploughed up in a field to the south of Southbeck House	1947-8	Scarborough Museum - cast	16.49	YPS Annual Report 1952, 22 / TSAHS (2) 16,1973 42 / Schmidt, P. & Burgess, C. 1981, 101 (No.628) - give find-spot as Scalby Beck but this appears to be axe that was ploughed up in a field east of Scalby in the late 1940's and presented to Scarborough Museum for identification in 1972
NYC6	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Newby	TA 015 895	C	12.2	Construction	Found in the back garden of a house on the newly constructed Newhighfield Estate, Newby	1952	Scarborough Museum	650.53	YPS Annual Report 1952, 21-2 / Schmidt & Burgess 1981, 101 (No.627)
NYC7	A	Palstave (T)	1	1275 - 1140	Shelf	9	Scarborough	TA 03 88	C	14.7		Town & Parish		Scarborough Museum	827.38	Elgee, F & H. 1933, 246 - listed as Ebberston / Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 146 (No.850)
NYC8	A	Socketed Axe	1	1020 - 800	Welby	11	Jackson's Bay - Scalby	TA 03 91	F-Bl.M	6.4		Topographic feature		Scarborough Museum	830.38	Schmidt, P. & Burgess, C. 1981, 221 (No.1337)
NYC9	A	Socketed Axe	1	1020 - 800	Welby	11	Near Scarborough	TA 03 89	C	10.0		Town & Parish		Scarborough Museum	47.68	Schmidt, P. & Burgess, C. 1981, 222 (No.1350)
NYC10 *	A	Socketed Axe	1	1000 - 800	South-Eastern*	11	Near Scarborough	Restricted	C	11.2	Detector		2008	Private		PAS: YORYM-D1A751
NYC11	Sp	Socketed Spearhead	1	1020 - 800	Barbed	11	Scarborough	TA 0457 8866			Construction	Found in a trench at a depth of 5 feet	1956	Scarborough Museum	96.56	Radley, J. YAJ 42, 1967, 18
NYC12	Sw	Sword	1	1020 - 800	Ewart Park - N1	11	Castle Hill - Scarborough	TA 0501 8912	C-2F	46.9	Excavation		1980	British Museum	1990,0301.1	Rigby, V. 2004, 217
NYC13	HA/T/Bl/ Sp/O/M W	4 Sock Axes / Awl / Sock Gouge / Sword fragment / 2 Spear fragments / Casting Jet / Ornaments - bronze rings & bracelets / Pins	18	950 - 800	Axe - 2 Yorkshire, 2 Unclassified	11	Castle Hill - Scarborough	TA 0516 8917	Sw - Hilt.frag; Axes - Yorks both C, Uncl. are small frags		Excavation	Bronzes scattered over the occupation surface of a Late Bronze Age - Early Iron Age promontory fort	1922	Scarborough Museum	374.39 - 390.39	Elgee, F & H. 1933, 250 / Schmidt, P. & Burgess, C. 1981, 229 (No.1433)
NYC14	HA/Sp/ Sw/T/M W	26 Sock Axes / 2 Spear fragments / Sword Hilt fragment / 2 Sock Gourges / 2 Ignots	33 c.	900 - 800	Axe - 17 Yorkshire, 1 Gillespie, 3 Meldreth, 1 Everthorpe, 1 Sompting, 1 Uncl. frag / Sw - Ewart Park (Uncl.) / Sp - Leaf Shaped	11	Scalby Ness	TA 0361 9086	Axes - 23 C & LC, 1 LF, 1 Bl.EO; Sw - F-Bu.Hilt; Sp - Bl.F		Surface	Found scattered on the beach after a cliff fall	1917	Hull & East Riding Museum / Scarborough / Yorkshire Museum		Elgee, F & H. 1933, 250 / Radley, J. YAJ 42, 1967, 18 / Schmidt, P. & Burgess, C. 1981, 229 (No.1427) / Colquhoun, I. & Burgess, C. 1988, 98 (No.566)

Appendix A1.21 - North Yorkshire Coastal Plain

Ref	*Type*	*Contents*	*Size*	*Date (BC)*	*Typology*	*Metal Ass.*	*Location*	*Grid Reference*	*Condition*	*Length (cm)*	*Method*	*Find-spot provenance / Circumstances of discovery*	*Find Date*	Present Location	Accession Number	Reference/s
NYCM1	Mould.A	Flat Axe	1	2150 - 2000	Migdale	3	Scarborough	TA 03 88				Town & Parish		Scarborough Museum	184.38	Britton, D. 1963, 299 / Schmidt, P. & Burgess, C. 1981, Plate 26, (No.306)

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY1	A	Flat Axe	1	2500 - 2150	Growton / Milton Moss	1-2	Beverley	TA 03 39	C	11.7		Town & Parish	Pre 1907	Hull and East Riding Museum	KINCM:1942.701.1	Elgee, F & H. 1933, 238 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 24 (No.12)
EY2	A	Flat Axe	1	2500 - 2150	Growton / Milton Moss	1-2	Driffield	TA 02 57	C	10.4		Found on a building site in Brickyard Lane, Driffield	1949	Hull and East Riding Museum	193	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981,24 (No.15)
EY3	A	Flat Axe	1	2500 - 2000	Unclassified - minature	1-3	Thixendale - Riggs Farm	SE 85 58	C	5.2		Farm		Hull and East Riding Museum	KINCM:1980.564	Elgee, F & H. 1933, 243 / Schmidt, P. & Burgess, C. 1981, 49 (No.255)
EY4	A	Flat Axe	1	2150 - 2000	Migdale - Biggar	3	Lissett	TA 14 58	C	13.6		Village & Parish		Yorkshire Museum	YORYM : 1948.1104	Elgee, F & H. 1933, 238 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 47 (No.222)
EY5	A	Flat Axe	1	2150 - 2000	Migdale	3	Patrington	TA 31 22	C	12.2		Village & Parish		Hull and East Riding Museum	KINCM:1980.662	Elgee, F & H. 1933, 242 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 43 (No.176)
EY6	A	Flat Axe	1	2150 - 2000	Migdale - Decorated	3	Hunmanby - Barf Farm	TA 10 75	C	16.2		Farm		Hull and East Riding Museum	KINCM:1980.655	Elgee, F & H. 1933, 240 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 46 (No.208)
EY7	A	Flat Axe	1	2150 - 1900	Unclassified	3-4	Atwick	TA 18 50	LC-S.Bl.M	7.2	Ploughing	Village & Parish	1919	Unknown - no record of this axe in York Museums Trust collections (December 2014) / Elgee lists as Hornsea Museum (ex Morfitt Collection?)		Elgee, F & H. 1933, 237 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 50 (No.266)
EY8 *	A	Flat Axe	1	2150 - 1700		3-5	Mappleton	Restricted	LC-Bu.M/HC	8.7	Surface		2010	Private		PAS: YORYM-DACCF1
EY9	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Middleton-on-the-Wolds	SE 94 49	C	10.8		Village & Parish	Pre 1928	Hull and East Riding Museum	KINCM:1942.900.41	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 60 (No.310)
EY10	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Wansford	TA 06 56	LC-S.Bl.M	9.3		Village & Parish / Found near the side of a stream		Hull and East Riding Museum	166 - a cast which has now disintegrated	Schmidt, P. & Burgess, C. 1981, 61 (No.315)
EY11	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Hutton Cranswick - Angram Farm	TA 05 49	C	9.6	Ploughing - surface	Farm		Driffield Museum	GC 23	Manby, T. YAJ 41, 1965, 345 / Schmidt, P. & Burgess, C. 1981, 61 (No.316)
EY12	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Near Skipsea	TA 16 55	C	14.8		Village & Parish		Malton Museum	P. 90.1	Elgee, F & H. 1933, 242 / Manby, T. 1965, 353 / Schmidt, P. & Burgess, C. 1981, 61 (No.316B)
EY13	A	Flat Axe (D)	1	2000 - 1900	Aylesford	4	Raisthorpe	SE 85 61	C	8.9		Hamlet	1867	Hull and East Riding Museum	KINCM:1942.900.39	Evans, J. 1881, 43 / Elgee, F & H. 1933, 239 / Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 60 (No.310A)
EY14	A	Flat Axe (D)	1	1900 - 1700	Scrabo Hill	5	Thwing	TA 05 70	C	14.2		Village & Parish		Yorkshire Museum	YORYM : 1948.1105	Elgee, F & H. 1933, 242 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 64 (No.345)
EY15	A	Flat Axe (D)	1	1900 - 1700	Bandon - Swinton	5	Bridlington	TA 18 67	C	9.2		Town & Parish		Hull and East Riding Museum	KINCM:1980.570	Elgee, F & H. 1933, 238 / Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 67 (No.377)
EY16	A	Flat Axe (D)	1	1900 - 1700	Bandon - Swinton	5	Driffield	TA 02 57	C	8.9		Town & Parish		Yorkshire Museum	YORYM : 1948.1100	Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 68 (No.378)
EY17	H.A	Flat Axes (D)	4	1900 - 1700	Falkland (3), Scrabo Hill (1)	5	Willerby Wold Farm	TA 0150 7613	C,C,C/C	14.8,18.6,14.8/16.6	Excavation	Found in a barrow, 8ft east of the centre and about 6 inches above the original ground surface. The axes were placed close together on their edges. The deposit appears to be contemporary with the construction of the mound	1889	British Museum	WG.1805 - 1808	Elgee, F & H. 1933, 243 / Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 64 (No.337)
EY18	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Gransmoor	TA 12 59	C-HC	13.8		Hamlet		Hull and East Riding Museum	KINCM:1942.900.9	Elgee 1933, 238 / Manby 1965, 354 / Schmidt, P. & Burgess, C. 1981, 72 (No.412)
EY19	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Watton Abbey	TA 02 49	C	12.2		Estate		Hull and East Riding Museum - cast	KINCM:1980.670	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 72-73 (No.413)
EY20	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Burstwick	TA 22 27	C	16.0		Village & Parish / Found south of Burstwick Grange	1842	Hull and East Riding Museum	KINCM:1980.566	Elgee, F & H. 1933, 238 / Manby 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.416)
EY21	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Swine	TA 13 35	C	14.1		Village & Parish		Hull and East Riding Museum	KINCM:1980.571	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 73 (No.422)
EY22 *	A	Flanged Axe (L)	1	1700 - 1500	Arreton*	6	Humbleton	Restricted	C	12.6	Detector			Private		PAS: YORYM-5BD437
EY23	A	Flanged Axe (L)	1	1700 - 1500	Arreton	6	Near Beeford	TA 12 53	C	12.0		Village	Pre 1965	Driffield Museum	Grantham Collection	Manby, T. YAJ 41, 1965, 345-6,354 / Schmidt, P. & Burgess, C. 1981, 73 (No.423) - listed as Holderness area
EY24 *	A	Flanged Axe (L?)	1	1700 - 1500		6	Humberside Beeford	Restricted	C	11.7	Detector		2001	Private		PAS: YORYM1785
EY25 *	A	Flat (D) / Flanged (L)	1	2000 - 1500		4-6	Bishop Burton	Restricted	F-Bu&Bl.M	5.0	Detector		2011	Private		PAS: YORYM-8FFF32

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY26	Sp	Spearhead	1	1700 - 1500	Tanged	6	Sherburn Wold	SE 96 74	LC-HC	15.1		Topographic feature	Pre 1881	British Museum	WG.2021	Evans, J. 1881 / Britton, D. 1963, 309 / Radley, J. YAJ 42, 1967, 18 / Burgess, C. & Coombs, D. 1979 / Davis, R. 2012, 34 (No.41)
EY27	Sp	Spearhead	1	1700 - 1500	Tanged	6	High Barwick - Hornsea	TA 164 518	LC-Bl.dam	24.4	Ploughing	Town & Parish	1976	Hull and East Riding Museum	KINCM:1977.22	Davis, R. 2012, 32 (No.10)
EY28	Sp	Socketed Spearhead	1	1700 - 1500	Looped	6	Carnaby	TA 1505 6530	LC-TM	12.8		Village & Parish		Yorkshire Museum	YORYM : 1948.1243	Elgee, F & H. 1933, 238 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 42 (No.62)
EY29	Ha/Da	Halberd / Dagger	1	EBA			Bridlington	TA 18 67	LF-Bu&T.M	19.2		Town & Parish		Hull and East Riding Museum	KINCM:1942.900.38	Elgee, F & H. 1933, 238
EY30	A	Flanged Axe (E-S)	1	1650 - 1450	Bannockburn	6-7	Ulrome	TA 16 56	C	16.5		Village & Parish		Hull and East Riding Museum	KINCM:1963.155 / KINCM:1942.900.1 - cast	Schmidt, P. & Burgess, C. 1981, 77 (No.436)
EY31 *	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood*	7	Barmston	Restricted	C	17.9	Detector			Private		PAS: YORYM-3D0961
EY32	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood - Savoch	7	Rudston	TA 09 67	C	13.7		Village & Parish		Yorkshire Museum	YORYM : 1948.25	Burgess, C. 1968, 4 / Schmidt, P. & Burgess, C. 1981, 81 (No.480)
EY33	A	Flanged Axe (E-S)	1	1550 - 1450	Cragg Wood - Savoch	7	River Humber	TA 17 21	C	12.1		Topographic feature		Scarborough Museum	821.38	Schmidt, P. & Burgess, C. 1981, 81 (No.481)
EY34	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy	7	Ulrome	TA 16 56	C	14.4		Village & Parish		Bridlington Museum	No reg	Schmidt, P. & Burgess, C. 1981, 82 (No.491)
EY35	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy - Arnhall	7	Ulrome	TA 16 56	C	13.3		Village & Parish		Yorkshire Museum	YORYM : 1948.1177	Schmidt, P. & Burgess, C. 1981, 84 (No.508)
EY36	A	Flanged Axe (E-S)	1	1550 - 1450	Kirtomy - Arnhall	7	Gransmoor	TA 12 59	C	17.8		Hamlet		Yorkshire Museum	YORYM : 1948.1117	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 84 (No.511)
EY37	A	Flanged Axe (S)	1	1550 - 1450	North German	7	Gransmoor	TA 12 59	C	10.0		Hamlet	1878	Hull and East Riding Museum	KINCM:1980.574	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 89 (No.519)
EY38	A	Flanged Axe (S)	1	1550 - 1450	North German	7	Duggleby	SE 87 67	C	10.2		Hamlet		Yorkshire Museum	YORYM : 1948.1110	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 88 (No.514)
EY39	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Kilnwick	SE 9998 4937	C	14.6		Village		Hull and East Riding Museum		Schmidt, P. & Burgess, C. 1981, 98 (No.598)
EY40	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Lockington	SE 99 47	C	13.6		Village & Parish		British Museum	WG.1829	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 96 (No.560)
EY41	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Ulrome	TA 16 56	C	14.2		Village & Parish	1918	Yorkshire Museum	YORYM : 2006.1326	Schmidt, P. & Burgess, C. 1981, 96 (No.573)
EY42	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome	8	Ulrome	TA 16 56	C	11.6		Village & Parish		Yorkshire Museum	YORYM : 1948.1177	Schmidt, P. & Burgess, C. 1981, 97 (No.579)
EY43	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome - Barmston	8	Barmston	TA 16 59	C	14.4		Village & Parish		Bridlington Museum	A 132	Schmidt, P. & Burgess, C. 1981, 98 (No.601)
EY44	A	Flanged Axe (L-S)	1	1450 - 1250	Ulrome**	8	Driffield	TA 02 57	C	8.4		Town & Parish		Hull and East Riding Museum	KINCM:1942.900.86	
EY45	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Beverley	TA 03 39	LC-Bl.Dam	15.4		Town & Parish		Leeds Museum		Elgee 1933, 238 - listed as Palstave / Schmidt, P. & Burgess, C. 1981, 101 (No.618)
EY46	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Lissett	TA 14 58	C	16.4		Found in the vacinity of Tithe (lane?), Lissett		Yorkshire Museum	YORYM : 1948.1104 (axe currently unlocated - December 2014) / Elgee lists as St. Albans Museum	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 101 (No.619)
EY47	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Pockthorpe	TA 04 63	C	13.6		Village		Yorkshire Museum	YORYM : 1948.1118	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 101 (No.630)
EY48	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Gembling	TA 10 57	C	14.9		Hamlet		Yorkshire Museum	YORYM : 1948.1119	Schmidt, P. & Burgess, C. 1981, 102 (No.637)
EY49	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Watton	TA 01 50	C	14.7		Village & Parish		Yorkshire Museum	YORYM : 1948.1116	Elgee, F & H. 1933, 243 / Schmidt, P. & Burgess, C. 1981, 102 (No.646)
EY50	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Flamborough	TA 22 70	C	13.3		Earthwork / From Danes Dykes		Yorkshire Museum	YORYM : 1948.21	Schmidt, P. & Burgess, C. 1981, 102 (No.649)
EY51	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Cranswick Common	TA 05 51	C	13.4		Topographic feature	Pre 1908	British Museum	WG.1832	Schmidt, P. & Burgess, C. 1981, 103 (No.657)
EY52	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Hutton Cranswick	TA 02 52	C	12.4		Village & Parish		Hull and East Riding Museum	KINCM:1980.646	Elgee, F & H. 1933, 240 / Schmidt, P. & Burgess, C. 1981, 103 (No.660)
EY53	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Burton Agnes	TA 10 63	C	11.2		Village & Parish		Hull and East Riding Museum	KINCM:1980.575	Schmidt, P. & Burgess, C. 1981, 104 (No.670)
EY54	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett - Baldersby	8	Gembling	TA 10 57	LC	8.3		Hamlet		Yorkshire Museum	YORYM : 1948.1113	Schmidt, P. & Burgess, C. 1981, 104 (No.673)
EY55	A	Flanged Axe (L-S)	1	1450 - 1250	Lissett	8	Sherburn Wold	SE 96 74	C	13.7		Topographic feature		Doncaster Museum	No reg	Schmidt, P. & Burgess, C. 1981, 102 (No.640)
EY56 *	A	Flanged Axe (L-S)	1	1450 - 1200	Kirklees**	8-9	Driffield area	Restricted	C	9.7	Detector	Town & Parish	1999	Private		PAS: YORYM1121
EY57	A	Flanged Axe (L-S)	1	1400 - 1200	Balcarry	8-9	Barmston Sands	TA 17 59	C	11.7	Surface	Topographic feature / Found on the beach at Barmston		Bridlington Museum	A.135	Schmidt, P. & Burgess, C. 1981, 108 (No.699)

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY58	A	Flanged Axe (L-S)	1	1400 - 1200	Balcarry	8-9	Kirk Ella	TA 02 29	C	13.0		Found east of Mill Farm		Hull and East Riding Museum	KINCM:1980.578	Elgee 1933, 241 - listed as Palstave / Schmidt, P. & Burgess, C. 1981, 108 (No.703)
EY59	A	Flanged Axe (L-S)	1	1400 - 1200	Findowrie	8-9	Thixendale	SE 84 61	C	11.6		Village & Parish		Hull and East Riding Museum	KINCM:1980.615	Schmidt, P. & Burgess, C. 1981, 112 (No.725)
EY60	A	Flanged Axe (L-S)	1	1450 - 1200	Unclassified	8-9	Near Driffield	TA (025) (575)	C	10.8		Found 2 miles south west of Driffield		Hull and East Riding Museum	KINCM:1980.568	Schmidt, P. & Burgess, C. 1981, 114 (No.766)
EY61	A	Flanged Axe (S)	1	1550 - 1200		7-9	Skipsea	TA 1486 5670			Excavation	Found during the excavation of the Bronze Age settlement / The axe was recovered from a wooden platform along with a socketed spearhead and other non metal artefacts		Private		Smith, R. Archaeologia 62, 1911, 593-610 / Challis, A. & Harding, D. BAR 20, 1974, 50, 59
EY62	A	Median Winged Axe	1	1200 - 1100	Continental - Import	9	Alexandra Dock - River Humber	TA 124 289	LF-Bu.M	12.2	Construction	Found during construction work on the Alexandra Dock, Hull	1884	Hull and East Riding Museum	KINCM:1980.599	Elgee 1933, 240 / Burgess 1968, 11 / Schmidt, P. & Burgess, C. 1981, 114 (No.768)
EY63	A	Palstave (Cont.)	1	1550 - 1450	Common North-European - Import	7	Driffield	TA 023 582	C	16.8		Doubt expressed by Sheppard (1924) as to whether this axe comes from a barrow. Manby (1980) suggests that this is probably the same Palstave as that recorded by J Brown as having been discovered with other objects and burials in 1856 when part of the motte (Moot Hill - Alfrid's Castle) was removed for gravel. The mound overlies a probable Anglo Saxon cemetary which may explain the reference to burials.		Scarborough Museum	825.38	Shepherd, HMP, 1924 / Manby, T. BAR 83, 1980, 369 / Schmidt, P. & Burgess, C. 1981, 90 (No.522)
EY64	A	Palstave (Irish)	1	1500 - 1300	Irish - A	7-8	Cowlam	SE 96 65	C	14.5		Village		Yorkshire Museum	YORYM : 1948.1120	Elgee, F & H. 1933, 238 - listed as Flanged Axe / Schmidt, P. & Burgess, C. 1981, 166 (No.948)
EY65	A	Palstave (E1)	1	1500 - 1300	Shield Pattern	7-8	Woodlands - Lowthorpe	TA 08 60	C	14.0		Village		Malton Museum	P.93-1	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 118-19 (No.787)
EY66	A	Palstave (E3)	1	1500 - 1300	Low Flanged (Gloddaeth)	7-8	Watton	TA 01 50	C	16.7		Village & Parish		Private		Schmidt, P. & Burgess, C. 1981, 138 (No.824)
EY67	A	Palstave (T)	1	1275 - 1140	Roundhay	9	Hutton Cranswick	TA 02 52	C	10.6		Village & Parish		Hull and East Riding Museum	KINCM:1980.650	Elgee 1933, 240 / Burgess 1968, 66 / Schmidt, P. & Burgess, C. 1981, 150 (No.892)
EY68	A	Palstave (T)	1	1275 - 1140	Roundhay	9	Barmston Cliff	TA 17 59	C	14.5		Topographic feature		Bridlington Museum	A.134	Burgess, C. 1968, 65 / Schmidt, P. & Burgess, C. 1981, 150 (No.897)
EY69	A	Palstave (T)	1	1275 - 1140	Shelf	9	Watton Carr	TA 05 49	C	13.0		Topographic feature		Hull and East Riding Museum	KINCM:1980.584	Elgee, F & H. 1933, 243 / Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 148 (No.870)
EY70	A	Palstave (T)	1	1275 - 1140	Shelf	9	Driffield	TA 02 57	C	14.9		Town & Parish		Hull and East Riding Museum	KINCM:1980.588	Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 148 (No.869)
EY71	H.A	Flanged Axes	2	1550 - 1200		7-9	Wansford	TA 06 56				Village & Parish		Hull and East Riding Museum		Sheppard, HMP, 1935
EY72	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Kite	7-9	Arnold	TA 12 41	C	22.6		Hamlet / Found in a field at Arnold, Long Riston		Hull and East Riding Museum	KINCM:1980.604	Sheppard, HMP, 1930 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 48 (No.85)
EY73	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Skipsea	TA 16 55	C-HC	11.8		From clay cliff		Yorkshire Museum	YORYM : 1948.1248	BICC / Elgee, F & H. 1933, 242 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 87 (No.420)
EY74	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Hutton Cranswick	TA 02 52	C	12.7		Village & Parish		Hull and East Riding Museum	KINCM:1980.642	BICC / Elgee, F & H. 1933, 240 / Radley, J. YAJ 42, 1967, 18 / Davis 2012, 74 (No.266)
EY75	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Flame	7-9	Kirby Grindalythe	SE 90 67	LC-TM	14.0		Village & Parish		Hull and East Riding Museum	KINCM:1969.100.1	Davis, R. 2012, 78 (No.299)
EY76	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Wide	7-9	Ulrome	TA 16 56	C	10.3		Village & Parish		Yorkshire Museum	YORYM : 1948.1178	BICC / Elgee, F & H. 1933, 243 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 62 (No.187)
EY77	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Wide	7-9	Ulrome	TA 16 56	LC-HC.Bl	16.9		Village & Parish		Yorkshire Museum	YORYM : 1948.1247	BICC / Elgee, F & H. 1933, 243 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 60-1 (No.162)
EY78	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Unclassified	7-9	Atwick	TA 18 50	LF-HC&Dam	10.4	Surface	Found on the beach at Atwick after a cliff fall	1906	Yorkshire Museum		BICC / Elgee, F & H. 1933, 237 / Radley, J. YAJ 42, 1967, 17 / Davis, R. 2012, 105 (No.632)
EY79	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Unclassified	7-9	Cottam	SE 977 667	F-Bu.So.M/HC	5.7	Detector		1990	Private		Davis, R. 2012, 106 (No.653)
EY80 *	Sp	Socketed Spearhead	1	1500 - 1140	Looped, Leaf	7-9	Humberside Skidby	Restricted		12.3			1998	Private		PAS: YORYM445
EY81	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Barmston	TA 1700 5862			Excavation	From Barmston settlement site. Found attached to a collapsed building timber	1960/61	Yorkshire Museum? / Elgee lists as Hornsea Museum - ex Morfitt Collection?		Radley, J. YAJ 42, 1967, 17 / East Riding Archaeologist 1, 1968, 11-25
EY82	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Tibthorpe/Kirkburn	SE 97 55	F-So&Up.Bl	8.7		Village & Parish		Hull Museum		BICC

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References/s
EY83	Sp	Socketed Spearhead	1	1500 - 1140	Looped	7-9	Harpham	TA 096 605			Detector		1998			BICC
EY84	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped	7-9	Lowthorpe	TA 08 60				Village		British Museum?		Elgee, F & H. 1933, 241 / Radley, J. YAJ 42, 1967, 18
EY85	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped, Leaf	7-9	Barmston	TA 16 59	LC-Lp&So.Dam	16.0	Surface	Village & Parish / Found in a rabbit role	1917	Yorkshire Museum		BICC / Elgee, F & H. 1933, 237 / Davis, R. 2012, 131 (No.820)
EY86	Sp	Socketed Spearhead	1	1500 - 1140	Basal Looped, Flame	7-9	Arram	TA 0448 4394	LF-Bl.O	14.8	Ploughing / Surface	Found on the surface of a ploughed carr land field, approximately 200 yards east of Lodge Farm, Arram / BICC states the find-spot as Ordanance Survey field 75	1954	Private		BICC / Brewster, T. YAJ 38, 1955, 446 / Radley, J. YAJ 42, 1967, 18 / Davis, R. 2012, 123 (No.745)
EY87 *	Sp	Socketed Spearhead	1	1500 - 1140	Basal looped, Flame	7-9	Langtoft	TA 00 67 *	2LFs	12.4 / 6.0	Detector		2013	Private		PAS: YORYM-9976A6 / YORYM-17F9E2
EY88	Sp	Socketed Spearhead	1	1275 - 1140	Basal Looped, Triangular	9	Brigham	TA 07 53	C-T.Bent	17.2		Village		Yorkshire Museum	YORYM : 1948.1246	Radley, J. YAJ 42, 1967, 17 / Burgess, C. 1968, 67 / Davis, R. 2012, 144 (No.925)
EY89 *	Sp	Socketed Spearhead	1	1275 - 1140	Protected Opening	9	Bishop Burton	SE 96 39 *	F-Bl.S,TM	11.6	Detector		2011	Private		PAS: SWYOR-1F7502
EY90	Di	Dirk	1	1550 - 1350	Group 2	7/8	Hutton Cranswick - Scurf Dyke Farm	TA 04 50	LC-Dam.Bu	16.5		Farm - Scarf Dyke Farm (Scurf Dyke)		Hull and East Riding Museum	KINCM:1947.54	Burgess, C. & Gerloff, S. 1981, 28 (No.156)
EY91	Di	Dirk	1	1550 - 1350	Group 2	7/8	Bridlington	TA 18 67	LC-Dam.Bu	16.7		Town & Parish		Leeds Museum	Holmes Coll. 258	Elgee, F & H. 1933, 238 / Burgess, C. & Gerloff, S. 1981, 39 (No.293)
EY92	Di	Dirk	1	1550 - 1350	Group 2	7/8	Watten Beck - Wilfholme Landing	TA 061 474	C		Drainage	Found in dyke clearings from the Watton Beck at Wilfholme Landing	1975 c.	Private		Trump, B. YAJ 57, 1985, 7-9
EY93	Di / Ra	Dirk / Rapier	1	1400 - 1140	Group 4	7-9	Walkington	SE 9613 3583	F-Hilt&Up.Bl	8.7	Excavation	Found during excations of a prehistoric earthwork bank and ditch / Found during excavations outside a barrow - Burgess 1981	1968	Hull and East Riding Museum	KINCM:1969.5.601	Elgee, F & H. 1933, 243 / Burgess, C. & Gerloff, S. 1981, 101 (No.913)
EY94	Ra	Rapier	1	1400 - 1140	Group 4	7-9	Watton Carr	TA 05 49	F-Bl.S,T.End	18.7		Topographic feature		Preston Museum	A. 138	Burgess, C. & Gerloff, S. 1981, 100-01 (No.912)
EY95 *	T	Chisel	1	1500 - 1140	Tanged, Collared	7-9	East Riding of Yorkshire	Restricted	C	12.5	Detector		1998	Private		PAS: NLM392
EY96 *	T	Chisel	1	1500 - 1140			Bishop Burton	SE 96 38	LC	5.2	Detector		2011	Private		PAS: YORYM-565484
EY97 *	H.O/Misc ?	Pins	2	1400 - 1200			Cottam	SE 97 66	LC / H.O		Detector					PAS: YORYM-BDE2E4 / YORYM-BDD143
EY98	A	Palstave (Irish)	1	1150 - 1000	Irish - D	10	Leven	TA 10 45	C	13.1		Village & Parish		Yorkshire Museum	YORYM : 1948.1131	Elgee 1933, 241 / Burgess 1968, 33 / Schmidt, P. & Burgess, C. 1981, 170 (No.970)
EY99	A	Socketed Axe	1	1140 - 1020	Fulford	10	Leven Carr	TA 07 45	C	9.0		Topographic feature		Hull and East Riding Museum	162	Schmidt, P. & Burgess, C. 1981, 177 (No.1005)
EY100	A	Socketed Axe	1	1140 - 1020	Highfield	10	Harpham	TA 08 61	C	7.6		Village & Parish	1876	Yorkshire Museum	YORYM : 1948.1143	Elgee, F & H. 1933, 240 / Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 182 (No.1026)
EY101	A	Socketed Axe	1	1140 - 1020	Wilburton	10	Leven	TA 10 45	LC-S.So.M	10.0		Village & Parish		Yorkshire Museum	YORYM : 1948/1140	Burgess, C. 1968, 15, 66 / Schmidt, P. & Burgess, C. 1981, 178 (No.1008)
EY102	A	Socketed Axe	1	1020 - 800	Welby	11	Rolston	TA 21 45	C	8.5	Ploughing	Hamlet		Hull Museum / Elgee lists as Hornsea Museum	Morfitt Collection	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 221 (No.1336)
EY103	A	Socketed Axe	1	1020 - 800	Welby	11	Leven	TA 10 45	C	9.6		Village & Parish		Yorkshire Museum	YORYM : 1948.1142	Schmidt, P. & Burgess, C. 1981, 222 (No.1353)
EY104	A	Socketed Axe	1	1020 - 800	Welby	11	Skirlaugh	TA 14 39	C	9.3		Village & Parish		Hull and East Riding Museum	KINCM:1942.900.58	Schmidt, P. & Burgess, C. 1981, 222 (No.1354A)
EY105	A	Socketed Axe	1	1020 - 800	Rectangular	11	Barmston	TA 16 59	LC	6.4		Village & Parish		Yorkshire Museum	YORYM : 1994.2293	Elgee, F & H. 1933, 237 / Schmidt, P. & Burgess, C. 1981, 218 (No.1301)
EY106	A	Socketed Axe	1	1020 - 800	Portree	11	Skipsea	TA 16 55	C-HC	6.6		Village & Parish		Yorkshire Museum	YORYM : 2006.1324	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 186 (No.1062)
EY107	A	Socketed Axe	1	1020 - 800	Everthorpe	11	Driffield	TA 02 57	LC-S.Bl.M	8.3		Town & Parish		Hull and East Riding Museum	KINCM:1942.900.80	Schmidt, P. & Burgess, C. 1981, 219 (No.1310)
EY108	A	Socketed Axe	1	1020 - 800	Everthorpe	11	Nafferton	TA 05 59	C	7.5		Village & Parish		Hull and East Riding Museum	KINCM:1942.900.69	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 219 (No.1314)
EY109 *	A	Socketed Axe	1	1000 - 800	South-Eastern*	11	Cottam	Restricted	C	9.7	Detector			Private		PAS: YORYM-87C482
EY110 *	A	Socketed Axe	1	1000 - 800	South-Eastern*	11	Skirlaugh	Restricted	C	8.2	Detector		1999	Private		PAS: YORYM-F1D686
EY111	A	Socketed Axe	1	1000 - 800	South-Eastern - Isle of Harty	11	Barmston	TA 16 59	C	7.5		Village & Parish		Yorkshire Museum	YORYM : 1994.2304	Elgee, F & H. 1933, 237 / Schmidt, P. & Burgess, C. 1981, 213 (No.1269)
EY112	A	Socketed Axe	1	1000 - 800	South-Eastern	11	Wawne	TA 09 36	C	7.8		Village & Parish	Pre 1907	Hull and East Riding Museum	KINCM:1980.592	Elgee, F & H. 1933, 243 / Schmidt, P. & Burgess, C. 1981, 215 (No.1286)
EY113	A	Socketed Axe	1	1000 - 800	Gillespie - Leith	11	Rickle Pits	TA 0374 5414	C	10.1	Construction	Found when digging a post-hole in the stack-yard at Ricol Pits (Rickle Pits), Skerne		Driffield Museum	GC 25	Schmidt, P. & Burgess, C. 1981, 194 (No.1129)
EY114	A	Socketed Axe	1	950 - 800	Yorkshire	11	South Dalton	SE 96 45	C	8.5		Village	Pre 1907	Hull and East Riding Museum	KINCM:1980.629	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 226-27 (No.1398)
EY115	A	Socketed Axe	1	950 - 800	Yorkshire	11	Easington Beach	TA 407 189	C	7.5	Surface	Found on the beach below the cliffs / Find-spot marked on Ordnance Survey map	1969	Hull and East Riding Museum	KINCM:1969.83	Bartlett, J. YAJ 42, 1970, 390 / Schmidt, P. & Burgess, C. 1981, 234 (No.1513)

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY116	A	Socketed Axe	1	950 - 800	Yorkshire	11	Beverley	TA 03 39	C	7.6		Town & Parish		Hull and East Riding Museum	KINCM:1980.628	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 226 (No.1395)
EY117	A	Socketed Axe	1	950 - 800	Yorkshire	11	Burstwick	TA 22 27	C	8.1	Quarrying	Found in the upper part of a gravel pit, most likely on Kelsey Hill	1899	Hull and East Riding Museum	KINCM:1980.636	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 226 (No.1396)
EY118	A	Socketed Axe	1	950 - 800	Yorkshire	11	Ulrome	TA 16 56	C	7.8		Village & Parish		Bridlington Museum	A 135	Schmidt, P. & Burgess, C. 1981, 234 (No.1508)
EY119	A	Socketed Axe	1	950 - 800	Yorkshire	11	Lowthorpe	TA 08 60	C	8.7		Village	Pre 1908	British Museum	WG.1938	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 234 (No.1512)
EY120	A	Socketed Axe	1	950 - 800	Yorkshire	11	Lissett	TA 14 58	C	8.5		Village	1940	Hull and East Riding Museum	KINCM:1942.900.18	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 234 (No.1514)
EY121	A	Socketed Axe	1	950 - 800	Yorkshire	11	Swine	TA 13 35	C	8.4		Village & Parish		Yorkshire Museum	YORYM : 1948.1256	Schmidt, P. & Burgess, C. 1981, 234 (No.1520)
EY122	A	Socketed Axe	1	950 - 800	Yorkshire	11	Grindale - Eats Leys Farm	TA 152 710	C	8.8		Found in a field centred on TA 152 710	1971	Bridlington Museum	No reg	Schmidt, P. & Burgess, C. 1981, 235 (No.1536)
EY123	A	Socketed Axe	1	950 - 800	Yorkshire	11	Aike	TA 04 45	C	8.4		Village		Hull and East Riding Museum	KINCM:1942.900.77	Schmidt, P. & Burgess, C. 1981, 235 (No.1540)
EY124	A	Socketed Axe	1	950 - 800	Yorkshire**	11	Aike	TA 04 45	C	9.8		Village		Hull and East Riding Museum	KINCM:1980.595	BICC
EY125	A	Socketed Axe	1	950 - 800	Yorkshire	11	Swine	TA 13 35	LC-Bl.Dam	7.8		Village & Parish		Carlisle, Tullie House Museum	O.M. 408	Elgee, F & H. 1933, 243 / Schmidt, P. & Burgess, C. 1981, 237 (No.1570)
EY126	A	Socketed Axe	1	950 - 800	Yorkshire	11	Burdale	SE 87 62	LC	8.0		Hamlet / Topographic feature		Yorkshire Museum	YORYM : 1948.1141	Schmidt, P. & Burgess, C. 1981, 235 (No.1534)
EY127	A	Socketed Axe	1	950 - 800	Yorkshire	11	Hull - South Park Battery	TA 09 28	C	8.8				Yorkshire Museum	YORYM : 1948.18	BICC / Elgee, F & H. 1933, 240 / Schmidt, P. & Burgess, C. 1981, 233 (No.1499)
EY128	A	Socketed Axe	1	950 - 800	Yorkshire	11	Bridlington - North Street	TA 1841 6690	C	8.2		Found at North Street, Bridlington	1932			Schmidt, P. & Burgess, C. 1981, 235 (No.1543)
EY129	A	Socketed Axe	1	950 - 800	Yorkshire*	11	Swine	TA 13 35	C	7.9		Village & Parish		Hull and East Riding Museum	KINCM:1959.95.1	
EY130	A	Socketed Axe	1	950 - 800	Yorkshire**	11	Swine	TA 13 35	LC-Bl.Dam/HW	7.5		Village & Parish		Hull and East Riding Museum	KINCM:1959.95.2	
EY131 *	A	Socketed Axe	1	900 - 800	Meldreth*	11	Brandesburton	Restricted	C	10.6	Detector		2010	Private		PAS: YORYM-A0A835
EY132*	A	Socketed Axe	1	900 - 800	Meldreth*	11	Beeford	Restricted	C		Detector		2009	Private		PAS: YORYM-9B87F6
EY133	A	Socketed Axe	1	900 - 800	Meldreth	11	Patrington	TA 31 22	C	10.5		Village & Parish		Hull and East Riding Museum	KINCM:1980.631	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 205 (No.1225)
EY134	A	Socketed Axe	1	900 - 800	Meldreth - Aylsham	11	Catwick	TA 13 45	C	10.0		Village & Parish		Hull and East Riding Museum	KINCM:1980.632	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 207 (No.1242)
EY135	A	Socketed Axe	1	800 - 700	Sompting	12	Givendale - Fordhams Farm	SE 82 57	C	10.5		Found on Fordens Farm (Fordhams Farm), Givendale	Pre 1875	British Museum	1875,0403.168	BICC / Evans 1881, 127 / Elgee 1933, 240 / Schmidt, P. & Burgess, C. 1981, 242 (No.1597)
EY136	A	Socketed Axe	1	800 - 700	Sompting	12	Riston	TA 12 42	C	11.8		Village & Parish		Hull and East Riding Museum - cast	No reg	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 242 (No.1600)
EY137	A	Socketed Axe	1	800 - 700	Sompting - Gembling	12	Gembling	TA 10 57	C	11.0		Hamlet	Pre 1908	British Museum	WG.1999	Evans, J. 1881 / Elgee, F & H. 1933, 237 / Schmidt, P. & Burgess, C. 1981, 247 (No.1645)
EY138	A	Socketed Axe	1	800 - 700	Sompting - Roseberry Topping	12	Watton Carr	TA 038 492	C	10.8		Found east of Bridge Farm	1899	Hull and East Riding Museum	KINCM:1980.630	Schmidt, P. & Burgess, C. 1981, 244 (No.1617)
EY139	A	Socketed Axe	1	800 - 700	Sompting	12	Burton Agnes - Turtle Hill	TA 11 60	C	12.4		Topographic feature		Hull and East Riding Museum - cast	KINCM:1980.591	Elgee, F & H. 1933, 238 / Schmidt, P. & Burgess, C. 1981, 241 (No.1579)
EY140	A	Socketed Axe	1	800 - 700	Sompting	12	Middleton-on-the-Wolds	SE 94 49	C	13.1		Village & Parish		Scunthorpe Museum	Routledge 128	Schmidt, P. & Burgess, C. 1981, 243 (No.1603)
EY141	A	Socketed Axe	1	800 - 700	Sompting	12	Driffield - Nafferton Road	TA 061 563	C	11.3		Found at the brickyard in Nafferton Road, Driffield		Hull Museums - missing	M 24 - missing in 1974	Elgee, F & H. 1933, 241 / Schmidt, P. & Burgess, C. 1981, 243 (No.1607)
EY142	A	Socketed Axe	1	800 - 700	Sompting	12	Skipsea Brough	TA 16 55	C	11.6		Village & Parish		Yorkshire Museum	YORYM : 1948.1139	Schmidt, P. & Burgess, C. 1981, 245 (No.1624)
EY143	A	Socketed Axe	1	800 - 700	Sompting - Gembling	12	Rudston	TA 09 67	C	10.3		Village & Parish		Hull and East Riding Museum	KINCM:1980.633	Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 247 (No.1643)
EY144	A	Socketed Axe	1	800 - 700	Sompting	12	Fraisthorpe	TA 15 61				Village		Private		Manby, T. BAR 83, 1980, 370
EY145	A	Socketed Axe?	1	800 - 700	Sompting?	10-	Thixendale	SE 84 61				Village & Parish	Pre 1933	Yorkshire Museum		Elgee, F & H. 1933, 243
EY146	A	Socketed Axe	1	1020 - 700	Unclassified - Welby / Yorkshire**	10-	Eske	TA 05 43	LC.S.So.M	9.0		Hamlet	1919	Hull and East Riding Museum	KINCM:1942.900.70	BICC / Schmidt, P. & Burgess, C. 1981, 250 (No.1667)
EY147 *	A	Socketed Axe (minature)	1	1140 - 700	Minature	10-	Near Driffield	Restricted	C	3.0	Detector		2005	Private		PAS: YORYM-9A3076
EY148 *	A	Socketed Axe	1	1140 - 700		10-	Paull	TA 17 26 *	F-Bl.EO	2.0	Detector		2006	Private		PAS: YORYM-E09577
EY149 *	A	Socketed Axe	1	1140 - 700		10-	Skidby	Restricted	F-So.E		Detector		2002	Private		PAS: NLM6786

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY150 *	A	Socketed Axe	1	1140 - 700		10-	Ulrome	Restricted	F-So.F		Detector			Private		PAS: YORYM-3DB3F3
EY151 *	A	Socketed Axe	1	1140 - 700		10-	Halsham	Restricted	F-Bl&Bo	4.9	Detector			Private		PAS: YORYM-C1CAE2
EY152 *	A	Socketed Axe	1	1140 - 700		10-	Middleton on the Wolds	SE 93 48 *	F-Bl.EO	1.2	Detector		2011	Private		PAS: NCL-160545
EY153 *	A	Socketed Axe	1	1140 - 700		10-	Bishop Burton	SE 95 39 *	F-Bl.EO	2.2	Detector		2011	Private		PAS: SWYOR-D822A5
EY154 *	A	Socketed Axe	1	1140 - 700		10-	Hunmanby	Restricted	F-Bl.EO	2.8	Detector			Private		PAS: YORYM-535478
EY155 *	A	Socketed Axe	1	1140 - 700		10-	Skidby	TA 02 33 *	F-Bl.EO	5.2	Detector			Private		PAS: YORYM-89A592
EY156 *	A	Socketed Axe	1	1140 - 700		10-	Bishop Burton	SE 97 40 *	F-Bl.EO	3.5	Detector		2011	Private		PAS: YORYM-8ED426
EY157 *	A	Socketed Axe	1	1140 - 700		10-	Bishop Burton	SE 96 38 *	F-Bl.EO	2.7	Detector		2011	Private		PAS: YORYM-58D0A7
EY158	A	Socketed Axe	1	1140 - 700	Unclassified	10-	Near Driffield	TA 02 57	F-Bl.EO	3.6		Town & Parish		Hull and East Riding Museum	KINCM:1942.900.85	Schmidt, P. & Burgess, C. 1981, 251 (No.1678)
EY159	A	Socketed Axe	1	1140 - 700	Unclassified	10-	Harpham	TA 08 61	F-SM	7.4		Village & Parish	1872	Yorkshire Museum	YORYM : 1948.1138	Schmidt, P. & Burgess, C. 1981, 252 (No.1702)
EY160	A	Socketed Axe	1	1140 - 700		10-	Winestead	TA 29 24				Village - Found in a pit	Pre 1898	Hull and East Riding Museum		TERAS, 1907 / Elgee, F & H. 1933, 243
EY161	A	Socketed Axe	1	1140 - 700		10-	North Frodingham	TA 10 53				Village & Parish		Hull and East Riding Museum		Evans, J. 1881, 113 / Elgee, F & H. 1933, 239
EY162	H.A	Socketed Axes	3	1140 - 1020	1 Fulford, 1 Rope-moulded mouth, 1 Unclassified	10	Danes Dyke	TA 21 71	C, C			Earthwork - Danes Dyke, Flamborough / Grid reference taken from central point along earthwork		Yorkshire Museum	YORYM : 1948.23 / 1948.1147 / 1948.1153	Elgee, F & H. 1933, 239 / Burgess, C. 1968, 15, 61 / Schmidt, P. & Burgess, C. 1981, 176-77 (No.997)
EY163	H.A	Socketed Axes	2	1020 - 800	Wilburton / Everthorpe	11	Lowthorpe	TA 08 60	C, C			Village		Hull and East Riding Museum	KINCM:1980.593 & 1980.634	Schmidt, P. & Burgess, C. 1981, 178 (No.1009)
EY164	H.A	17 Sock Axes, Palstave (L)	18	950 - 800	P - Worthing / S - 4 South-Eastern, 1 Everthorpe, 3 Welby, 3/4 Yorkshire	11	Sproatley	TA 192 346	All C & LC			Found 300 yards south of the church at a depth of 2 feet / The axes appear to have been placed in a wooden box	1852	British Museum / Hull & East Rising Museum / Cambridge University / Private	WG.2140-2148	Bowman 1855 / Elgee, F & H. 1933, 242 / Schmidt, P. & Burgess, C. 1981, 160 (No.916)
EY165	H.A	Socketed Axes	3	950 - 800	Yorkshire	11	Hutton Cranswick	TA 02 52	C,C,LC			Village & Parish		Hull and East Riding Museum	1942.900.78 / 1942.900.79	Elgee, F & H. 1933, 240 / Schmidt, P. & Burgess, C. 1981, 234 (No.1521)
EY166 *	H.A?	Socketed Axes	2	950 - 800	Yorkshire	11	Near Grindale	Restricted	C,LC		Detector			Private		PAS: YORYM-82F3A7 / YORYM-82CB62
EY167	H.A	Socketed Axes	7	950 - 800	4 Yorkshire, 2 Everthorpe, 1 Uncl.	11	Riplingham Park Farm	SE 9665 3551			Detector	Finder	1994	Hull and East Riding Museum	KINCM:1997.50.1-7	Halkon, P. et al, 2009, 23
EY168	H.A	Socketed Axes	6	950 - 800	2 Yorkshire, 2 South-Eastern, 1 Everthorpe, 1 Meldreth	11	Jillywoods, Cottingham	TA 03492 35270	C & LC		Detector	Discovered in ploughsoil during a metal detector survey. The find-spot is located in an area of ground that appears to have been formerly occupied by open water or bog land	2001	Sewerby Hall Museum, Bridlington	ERYMS 2001/14	Diamond, S. Dickson, A. & Palmer, F. 2001, 30-2, 154-9
EY169	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf Shaped	10-	West Furze - Ulrome	TA 161 566			Excavation	Found between two timber floors of a Lake Dwelling	1880-81	British Museum		Smith, R. Archaeologia 62, 1911, 593-610 / Manby, T. BAR 83, 1980, 363
EY170	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf Shaped	10-	Swine	TA 13 35	C	12.8		Village & Parish		Hull and East Riding Museum	KINCM:1980.626	BICC / Elgee, F & H. 1933, 243 / Radley, J. YAJ 42, 1967, 18
EY171	Sp	Socketed Spearhead	1	1140 -	Pegged, Leaf Shaped	10-	Easington Beach	TA 40598 19450	LC		Surface	Found on the beach at Easington		Hull and East Riding Museum	KINCM:1964.123	Radley, J. YAJ 42, 1967, 18
EY172	Sp	Socketed Spearhead	1	1140 -	Pegged	10-	Ruston Parva	TA 06 61	C		Quarrying	Village / BICC states provenance as Little Reaston (between Bridlington and Driffield, from a pit 20 feet down, enclosed in lump of chalk) This must equate to Ruston Parva, the Latin word Parva meaning small. The village lies directly between Bridlington and Driffield and there are numerous disused pits, as well as a working chalk quarry, in the near vacinity.		Reading Museum - Backhouse Collection	361:57:00	BICC
EY173	Sp	Socketed Spearhead	1	1140 -	Lunate Opening	10	Watton - Bridge Farm	TA 034 493	C	24.4	Ploughing / Surface	Found on the surface of a ploughed field / NGR centred on field	1934	Originally at Watton Priory - given to Pexton by finder. Yorkshire Museum or Private		Brewster, T. YAJ 38, 1955, 446-8 / Radley, J. YAJ 42, 1967, 18 / Burgess, C. 1968, 68
EY174	H.A/Sp	5 Sock Axes / 1 Palstave / 1 Spearhead	7	1140 -	Axe - multiple mouth mouldings / Palstave - late type / Sp - Lunate opening	10	Skidby West - Platwoods Farm	TA 025 350				Grid reference centred on farm				Burgess, C. 2012, 150
EY175	H.A/Sp	6-8 Sock Axes / 2 Spearheads	8-10	950 - 800	Axe - 6 Yorkshire / Sp - Pegged, Leaf Shaped	11	Middleton-on-the-Wolds	SE 94 49	Sp - C / F-Bl.O	Sp - C-22.1 / F-17.8	Quarrying?	Village & Parish / Found in a gravel pit	1838 or 1858	Hull & East Riding Museum / Cambridge University Museum / British Museum / Ashmolean Museum	M.29 - M.32 / WG 1935, 1937	BICC / Evans, J. 1881, 118 / Elgee, F & H. 1933, 241 / Radley, J. YAJ 42, 1967, 18 / Schmidt, P. & Burgess, C. 1981, 230-31 (No.1458)
EY176	Sw	Sword	1	1140 - 1020	Wilburton - B	10	Corps Landing	TA 063 529	C-TM	58.5		The finder indicated the approximate find-spot	1903 or 1948	Yorkshire Museum	YORYM : 1948.1266	Manby, T. BAR 83, 1980, 366 / Colquhoun, I. & Burgess, C. 1988, 45 (No.176)

Appendix A1.22 - East Yorkshire

Ref	Type	Contents	Size	Date (BC)	Typology	Metal Ass.	Location	Grid Reference	Condition	Length (cm)	Method	Find-spot provenance / Circumstances of discovery	Find Date	Present Location	Accession Number	References
EY177	Sw	Sword	1	1140 - 1020	Wilburton - Uncl.	10	Rudston	TA 09 67	F-BS,mid	12.0		Village & Parish		Hull and East Riding Museum	900. 42/45	Elgee, F & H. 1933, 242 / Colquhoun, I. & Burgess, C. 1988, 53 (No.247)
EY178	Sw	Sword	1	1020 - 800	Ewart Park - N2	11	Leven	TA 10 45	C	59.0		Village & Parish / Found in peat		Hull and East Riding Museum	KINCM:1942.700	Elgee, F & H. 1933, 241 / Colquhoun, I. & Burgess, C. 1988, 91 (No.479)
EY179	Sw	Sword	1	1020 - 800	Ewart Park - N2	11	Leven - Linley Hill Farm	TA 06 46	C-2F	59.0		Farm	1963	Hull and East Riding Museum	KINCM:1963.95	Colquhoun, I. & Burgess, C. 1988, 92 (No.484)
EY180	Sw	Sword	1	1020 - 800	Ewart Park - N2	11	Leven	TA 10 45	C-TM	54.2		Village & Parish		Yorkshire Museum	YORYM : 1948.1245	Elgee, F & H. 1933, 241 / Colquhoun, I. & Burgess, C. 1988, 94 (No.503)
EY181	Sw	Sword	1	1020 - 800	Ewart Park - Uncl.	11	Leven Carrs	TA 07 45	2F-T.End	43.7		Topographic feature	1947	Hull and East Riding Museum	KINCM:1957.44	Colquhoun, I. & Burgess, C. 1988, 99 (No.574)
EY182	Sw	Sword	1	1020 - 800	Ewart Park - N2	11	Lowthorpe	TA 08 60	LC-2F/Low.Bl&TM	48.1	Drainage	Village / Found whilst making a drain. The two sections of sword and 12 axes (battle-axes of bronze) were found lying next to one another	1843	British Museum	WG.2233	Elgee, F & H. 1933, 241 / Colquhoun, I. & Burgess, C. 1988, 94 (No.504)
EY183	Sw	Sword	1	850 - 700	Carp's Tongue	12	Withernwick - North End Farm	TA 19 41	C-3F,TM	54.2		Farm	1965	Private		Colquhoun, I. & Burgess, C. 1988, 108 (No.670)
EY184	H.A/Sw	Sock Axes / Sword frags	?	950 - 800	Yorkshire	11	Driffield	TA 02 57	Sw: Frags			Town & Parish / Found with other celts and broken leaf-shaped swords		British Museum	1873,1219.173	Schmidt, P. & Burgess, C. 1981, 233 (No.1492)
EY185*	H.A/Sw/Kn/MW/Misc	5 Sock Axe / 19 Sword frags / Knife frag / MW / Vessell frag / Ingots	35	950 - 800	Yorkshire	11	Near Bridlington	Restricted			Detector	Finder - 6 to 10 figure grid reference				PAS: YORYM-0E2F72 / YORYM-AF3DE8
EY186 *	H.A/Sw/Sp/Misc	19 Sock Axes / Sword frag / 2 Spearheads / 1 Misc	23+	950 - 800	8 Yorkshire, 5 Everthorpe, 1 Meldreth, 1 Portree, 4 Uncl / Sw-Antennae pommel / Sp-Uncl	11	Cherry Burton	TA 00 42	Sw: Hilt frag		Detector	Finder - 6 to 10 figure grid reference	2013	Treasure request in process		PAS: YORYM-958D05
EY187	T	Chisel	1	1020 - 800	Tanged, Collared	11	Thixendale	SE 84 61				Village / Parish	Pre 1883	British Museum	WG.2029	Evans, J. 1883, 168 / Elgee, F & H. 1933, 242
EY188 *	T	Socketed Gouge	1	1140 - 800		10-	Molescroft	Restricted	LC-So.Dam	6.1	Detector		2007	Private		PAS: YORYM-E08851
EY189 *	Kn	Knife	1	1020 - 800	Tanged - Double Edge	11	Driffield-Langtoft	TA 02 58 *	C	14.5	Detector	Between Driffield and Langtoft	2005	Private		PAS: NCL-F3D0E3
EY190 *	T	Razor	1	1140 - 800	Tanged, Leaf	10-	Wold Newton	TA 04 72 *	LC	5.4	Detector		2009	Private		PAS: DUR-E58572
EY191 *	T	Razor	1	1140 - 800	Tanged, Leaf	10-	North Dalton	SE 94 51 *	LF	3.6	Detector		2007	Private		PAS: NCL-E94708
EY192*	T	Razor	1	1140 - 800	Tanged, Leaf	10-	Routh	TA 10 43 *	C-Bent over	9.0	Detector			Private		PAS: YORYM-4525A3
EY193*	O	Gold Ring	1	1140 - 800		10-	Thwing	Restricted	C		Detector		2003	Hull & East Riding Museum		PAS: YORYM-EAA901
EY194	O	Gold Bracelet	1	LBA	Pennanular	11-	High Hunsley	SE 9560 3583			Ploughing		1967	Hull & East Riding Museum		YAJ 42, 1968, 113 / Challis, A. & Harding, D. BAR 20, 1975, 35
EY195	H.O?	Gold Bracelets	4	LBA	Pennanular	11-	Cottingham	TA 0515 3254			Ploughing	Found at Wanlass whilst ploughing a boggy field / Challis & Harding state that finds were made in 1862 & 1884	1864 & 1868	British Museum	WG.5 / WG.6 / 1862,1114.1 / 1893,1017.1	Elgee, F & H. 1933, 238 / Challis, A. & Harding, D. BAR 20, 1975, 35
EY196*	A	Axe	1				Watton	TA 01 49 *	F-Bl.O	2.9	Detector		2006	Private		PAS: YORYM-E2C571
EY197*	A	Axe	1				Wold Newton	TA 05 73 *	F-Bl.O	3.0	Detector			Private		PAS: YORYM-C17918
EY198	A	Axe	1				Brandesburton	TA 11 47				Village & Parish	1899 pre			Associated Architectural Societies' reports and papers 25, 1899, 248
EY199	Sp	Socketed Spearhead	1		Leaf Shaped	7-	Swine	TA 13 35				Village & Parish		Elgee lists as Hull Museum / Radley lists as Yorkshire Museum		Elgee, F & H. 1933, 243 / Radley, YAJ 42, 1967, 18
EY200	Sp	Socketed Spearhead	1		Leaf Shaped	7-	Ulrome	TA 16 56				Village & Parish		British Museum? / Yorkshire Museum?		Radley, J. YAJ 42, 1967, 18
EY201	Sp	Socketed Spearhead	1			7-	Beverley	TA 03 39	F-Bl.O			Town & Parish		British Museum	WG.2025	Radley, J. YAJ 42, 1967, 17
EY202 *	Sp	Spearhead	1			7-	Wetwang	SE 90 59 *	F-TO	4.7	Detector		2010	Private		PAS: SWYOR-0A11C3
EY203*	Sp	Socketed Spearhead	1			7-	Weaverthorpe	Restricted	F-Bl.O	6.7	Detector		2001	Private		PAS: YORYM-CBA983
EY204*	Sp	Spearhead	1			7-	Butterwick	Restricted	F-TO	2.0	Detector		2007	Private		PAS: YORYM-7192C4
EY205	Sp	Spearhead	1			7-	Rudston	TA 09 67	F			Village & Parish		Hull & East Riding Museum		Radley, J. YAJ 42, 1967, 18
EY206	Sp	Socketed Spearhead	1			7-	Skipsea	TA 1486 5670			Excavation	Excavation of settlement platform	1900's			Smith, R. Archaeologia 62, 1911, 593-610
EY207 *	T	Awl	1	1275 - 800	Square section	9-	Tibthorpe	Restricted	C	5.4	Detector		2008	Private		PAS: YORYM-07C135

Appendix A1.22 - East Yorkshire

Ref	*Type*	*Contents*	*Size*	*Date (BC)*	*Typology*	*Metal Ass.*	*Location*	Grid Reference	*Condition*	*Length (cm)*	*Method*	*Find-spot provenance / Circumstances of discovery*	*Find Date*	Present Location	Accession Number	Reference/s
EY208*	T	Awl	1	1275 - 800	Square section	9-	Near Bridlington (Thwing)	Restricted	C	4.9	Detector		2004	Private		PAS: NCL-36BD54
EY209 *	T	Chisel	1				Boynton	TA 14 68 *			Detector		2000?	Private		PAS: YORYMB927
EY210	T	Chisel	1				Lowthorpe	TA 08 60				Village		Hull & East Riding Museum	KINCM:1980.583	
EY211*	H.Ing	Ingots	5	1500 - 800			Bishop Burton Area	Restricted			Detector		2011	Processing as treasure		PAS: DENO-B9BB65
EYM1	H.Mould	Sock Axes, Sword, Sock Spearhead, Chapes + animal bone, carbonised wood	12	1140 -	Sw-Wilburton	10-11	Fimber	SE 88 60	F		Excavation	Found during the excavtion of a pit that is cut through the southern end of the earthwork bank that runs from Wandale to Haggdale Cliff	1869	Hull & East Riding Museum		Mortimer, 1905, 188-9 / Burgess, C. 1968, 32, 63-4 / Manby, T. BAR 83, 1980, 358 / Schmidt, P. & Burgess, C. 1981

Appendix A2

General Provenance / Not Original Context

Region / County	Type	Contents	Type	Date	Location	Details	Present Location	Accession Number	Reference
North'land	A	Flat - Flanged (L)		EBA	Newcastle		Bolton (Castle?)		Annable, R. BAR 160, 1987, 433
North'land	A	Flanged Axe		E-MBA	Rede Valley				PSAN (2) 3, 1889, 321 / Annable, R. BAR 160, 1987
North'land	A	Socketed Axe	Yorkshire	LBA	Northumberland?		Newcastle, Great North Museum: Hancock	NEWMA : 1835.5	Burgess, C. 1968, 31 / Schmidt, P. & Burgess, C. 1981, 233 (No.1504)
North'land	A	Socketed Axe	Ribbed	LBA	North Tynedale/Tyneside?		Newcastle, Great North Museum: Hancock	NEWMA : 1925.14.3	Burgess, C. 1968, 30
North'land	A	Socketed Axe	Unclassified	LBA	Hebburn	Found on a ballast heap			BICC / Schmidt, P. & Burgess, C. 1981, 253 (No.1710)
North'land	W	Spearhead	Looped	MBA	Redewater				Rome-Hall, G. Archaeologia 45, 1880, 371 / PSAN (2) 6, 1895, 26 / Annable, R. BAR 160, 1987
North'land	Sp	Socketed Spearhead	Protected Opening	MBA	Northumberland		Alnwick Castle Museum	248	Bruce, J. 1880 / Davis 2012, 158 (No.1016)
North'land	Da	Dagger		EBA	River Blyth	Details regarding find and provenance are uncertain			http://archaeologydataservice.ac.uk/archsearch/record.jsf?titleId=966170
North'land	Di	Dirk		MBA	Hadrians Wall	Apparently found along the Northumberland stretch of Hadrians Wall			PAS: NCL-35C411
North'land	Sw	Sword	Hilt fragment	LBA	Northumberland	PAS record is inconsistent - states find-spot as Norflok but gives an NGR centred on Widdrington parish, Northumberland	Private		PAS: KENT683
North'land	Sw	Sword		LBA?	Chew Green Camp	Purportedly found during drainage work at Chew Green Roman camp	Lost		HBNC 10, 1882-4, 17 / Annable, R. 1987
North'land	H.M?	4 Sock Axes, Sword frag, Axe Mould		LBA	Northumberland		Newcastle, Great North Museum: Hancock	1967.5.A	
Durham	A	Socketed Axe	Armorican	LBA	Chester-le-Street	Disinterred with Roman remains at Chester-le-Street	Newcastle, Great North Museum: Hancock		Evans, J. 1881, 116
Durham	Sp	Socketed Spearhead	Looped, Leaf	MBA	Lartington	Found in a pile of rubbish and refuse in The Old Mithy in Lartington village during building works for a residential conversion			Durham HER - H5607
Durham	Sp	Spearhead	Looped	MBA	Weardale		Newcastle, Great North Museum: Hancock		AA (4) 31, 1953, 15 / Annable, R. BAR 160, 1987, 445
North Yorks	A	Flat Axe	Unclassified	EBA	Near Scarborough 'on the moors'		Sheffield Museum	J. 93.478	Elgee, F & H. 1933, 250 / Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 50 (No.263)
North Yorks	A	Flat Axe	Growton / Middleton Moss	EBA	Yorkshire	Schmidt & Burgess list as North Riding? / Manby lists as perhaps East Yorkshire	Yorkshire Museum	YORYM : 1948.1263	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 24 (No.11)
East Yorks	A	Flat Axe	Ballybeg / Roseisle	EBA	East Yorkshire		Yorkshire Museum	YORYM : 1948.1108	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 27-28 (No.29)
Yorkshire	A	Flat Axe	Ballybeg / Roseisle	EBA	Yorkshire?		Yorkshire Museum	YORYM : 1948.1103	Manby, T. YAJ 41, 1965, 352 / Schmidt, P. & Burgess, C. 1981, 28 (No.32)
Yorkshire	A	Flat Axe	Migdale	EBA	Yorkshire Wolds		Yorkshire Museum	YORYM : 1948.1181	Schmidt, P. & Burgess, C. 1981, 43 (No.171)
Yorkshire	A	Flat Axe	Migdale - Decorated	EBA	Yorkshire		Hull Museum	126	Schmidt, P. & Burgess, C. 1981, 46 (No.204)
Yorkshire	A	Flat Axe	Migdale - Biggar	EBA	Yorkshire (probably)		Yorkshire Museum	YORYM : 1948.1184	Schmidt, P. & Burgess, C. 1981, 47 (No.217)
Yorkshire	A	Flat Axe	Migdale - Biggar	EBA	Yorkshire				Schmidt, P. & Burgess, C. 1981, 48 (No.241)
Yorkshire	A	Flat Axe	Unclassified	EBA	East Yorkshire		Yorkshire Museum	YORYM : 1948.1107	Schmidt, P. & Burgess, C. 1981, 50 (No.265)
Yorkshire	A	Flat Axe (D)	Falkland	EBA	Yorkshire?		British Museum	SL 249	Manby, T. YAJ 41, 1965, 353 / Schmidt, P. & Burgess, C. 1981, 63 (No.332)

Appendix A2

Region / County	Type	Contents	Type	Date	Location	Details	Present Location	Accession Number	Reference
North Yorks	A	Flat Axe (L)	Balbirnie	EBA	Yorkshire Moors				Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 71 (No.407A)
North Yorks	A	Flat Axe / Flanged (L)		EBA	Dalton	Two Daltons in North Yorkshire			Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 246
North Yorks	A	Flat Axe / Flanged (L)		EBA	Steeton	Steetons in Noth and West Yorkshire			Raistrick, A. YAJ 29, 1929, 359 / Elgee, F & H. 1933, 258
Yorkshire	A	Flanged Axe (E-S)	Bannockburn	E-MBA	Yorkshire	Found on a scrap heap in Northallerton	Newcastle, Great North Museum: Hancock	NEWMA : 1814.2	Schmidt, P. & Burgess, C. 1981, 77 (No.433)
Yorkshire	A	Flanged Axe (E-S)	Kirtomy	MBA	Probably Yorkshire		Yorkshire Museum	YORYM : 1948.1187	Schmidt, P. & Burgess, C. 1981, 82 (No.490)
East Yorks	A	Flanged (S)	North German	MBA	East Yorkshire		Yorkshire Museum	YORYM : 1948.1109	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 88 (No.513)
Yorkshire	Axes (4+)	Flanged (S & LS)	North German / Ulrome	MBA	North Yorkshire?	Found on a metal scrap heap at Pickering with socketed axes and a winged celt	Herts. Co. Museum	Ball Collection	Manby, T. YAJ 41, 1965, 354 / Schmidt, P. & Burgess, C. 1981, 88 (No.517), 98 (No.593)
Yorkshire	A	Flanged Axe (L-S)	Ulrome	MBA	Yorkshire		Cambridge, Museum of Archaeology and Ethnology	FB 10/PB 15	Schmidt, P. & Burgess, C. 1981, 96 (No.562)
Yorkshire	A	Flanged Axe (L-S)	Ulrome	MBA	Yorkshire Moorlands		Yorkshire Museum	YORYM : 1948.1124	Schmidt, P. & Burgess, C. 1981, 96 (No.569)
Yorkshire	A	Flanged Axe (L-S)	Ulrome	MBA	On the Wolds - near Driffield		Hull Museum	21	Schmidt, P. & Burgess, C. 1981, 96 (No.572)
North Yorks	A	Flanged Axe (L-S)	Lissett	MBA	Brompton	Unclear which of the two Bromptons in North Yorskhire this axe orignates from	British Museum	WG.1827	Elgee, F & H. 1933, 245 / Radley, J. YAJ 46, 1974, 18 / Schmidt, P. & Burgess, C. 1981, 103 (No.653)
East Yorks	A	Flanged Axe (L-S)	Lissett	MBA	Holderness		Hull Museum	24	Schmidt, P. & Burgess, C. 1981, 102 (No.648)
Yorkshire	A	Flanged Axe (L-S)	Lissett	MBA	Yorkshire		Private		Schmidt, P. & Burgess, C. 1981, 103 (No.665)
East Yorks	A	Flanged Axe (L-S)	Lissett - Baldersby	MBA	East Yorkshire		Hull Museum	M 10	Schmidt, P. & Burgess, C. 1981, 105 (No.685)
North Yorks	A	Flanged Axe (L-S)	Balcarry	MBA	The moors, near Scarborough		Sheffield Museum	I.93.483	Schmidt, P. & Burgess, C. 1981, 108 (No.702)
North Yorks	A	Flanged Axe (S)	Unclassified	MBA	North Yorkshire		Middlesborough Museum	3/65	Schmidt, P. & Burgess, C. 1981, 114 (No.757)
Yorkshire	A	Flanged Axe (S)	Unclassified	MBA	Yorkshire		Hull Museum		Schmidt, P. & Burgess, C. 1981, 114 (No.760)
East Yorks	A	Flanged Axe (S)	Unclassified	MBA	Wolds		Hull Museum	22.900-42/86	Schmidt, P. & Burgess, C. 1981, 114 (No.764)
North Yorks	A	Flanged Axe		MBA	Snape District	Artefact was purchased in a farm sale during the 1930s - provenance is believed to be Snape district	Private		BAGB 11, 1966, 106
East Yorks	A	Median Winged Axe	Continental - Import	MBA	East Yorkshire		Yorkshire Museum	YORYM : 1948.24	Schmidt, P. & Burgess, C. 1981, 114 (No.769)
Yorkshire	A	Palstave (E2)	Early Midribbed - Coed Llan	MBA	Yorkshire?		Doncaster Museum	138.64	Schmidt, P. & Burgess, C. 1981, 128 (No.797)
Yorkshire	A	Palstave (T)	Shelf	MBA	Yorkshire		Belfast Museum	3991.9-23	Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 147 (No.859)
North Yorks	A	Palstave (T)	Penrith	MBA	North Yorkshire		Yorkshire Museum	YORYM : 1948.1127	Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 152 (No.911)
East Yorks	A	Palstave (L)	Isleham	LBA	Yorkshire Wolds		Hull Museum	M 16	Schmidt, P. & Burgess, C. 1981, 161 (No.927)
Yorkshire	A	Palstave (T/L)	Unclassified	M-LBA	Yorkshire				Schmidt, P. & Burgess, C. 1981, 164 (No.936)
East Yorks	A	Palstave (Irish)	Irish - D	LBA	East Yorkshire?		Yorkshire Museum	YORYM : 1948/1125	Schmidt, P. & Burgess, C. 1981, 170 (No.971)
Yorkshire	A	Palstave (Irish)	Irish - D	LBA	Yorkshire Moors		Private		BICC / Burgess, C. 1968, 66 / Schmidt, P. & Burgess, C. 1981, 170 (No.973)
Yorkshire	A	Palstave		M-LBA	Yorkshire?		Formerly in Herts. Co. Museum	Lost	BICC / Burgess, C. 1968, 66
Yorkshire	A	Socketed Axe	Portree - Kalemouth	LBA	Yorkshire		Ripley Castle - cast in Harrogate Museum	59-1	Schmidt, P. & Burgess, C. 1981, 187 (No.1070)
Yorkshire	A	Socketed Axe	Portree - Alford	LBA	Yorkshire?		Huddersfield Museum		Schmidt, P. & Burgess, C. 1981, 189 (No.1088)

Appendix A2

Region / County	Type	Contents	Type	Date	Location	Details	Present Location	Accession Number	Reference
North Yorks	A	Socketed Axe	Meldreth - Embellished	LBA	Hambleton Hills		Lost		Schmidt, P. & Burgess, C. 1981, 209 (No.1257)
East Yorks	A	Socketed Axe	Everthorpe	LBA	Holderness		Cambridge, Museum of Archaeology and Ethnology	FB 40/PB 84	Schmidt, P. & Burgess, C. 1981, 219 (No.1316)
Yorkshire	A	Socketed Axe	Everthorpe	LBA	Yorkshire		Hull Museum	Lost	Schmidt, P. & Burgess, C. 1981, 220 (No.1334)
East Yorks	A	Socketed Axe	Yorkshire	LBA	Yorkshire Wolds		Hull Museum	18	Schmidt, P. & Burgess, C. 1981, 226 (No.1397)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire?		Yorkshire Museum	YORYM : 1948.1150	Schmidt, P. & Burgess, C. 1981, 233 (No.1505)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire		Sheffield Museum	Missing - J.93.507	Radley, J. YAJ 46, 1974, 19 - listed as York / Schmidt, P. & Burgess, C. 1981, 233 (No.1506) / Manby, T. 1986, 114
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire		Private		Schmidt, P. & Burgess, C. 1981, 236 (No.1550)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Hutton Moor	Common place name and no exact provenance given	Leeds Museum		Schmidt, P. & Burgess, C. 1981, 237 (No.1564)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire		Private		Schmidt, P. & Burgess, C. 1981, 237 (No.1567C)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire		Private		Schmidt, P. & Burgess, C. 1981, 237 (No.1567D)
Yorkshire	A	Socketed Axe	Yorkshire	LBA	Yorkshire?		Barnard Castle Museum		Schmidt, P. & Burgess, C. 1981, 237 (No.1567)
North-East England	A	Socketed Axe	Yorkshire	LBA	North-East England?	No provenance given but Schmidt & Burgess suggest that it is probably a local find	Barnard Castle Museum		Schmidt, P. & Burgess, C. 1981, 235 (No.1538)
Yorkshire	A	Socketed Axe	Somtping	LBA	Probably near Leeds		Yorkshire Museum	YORYM : 1948.1213	Schmidt, P. & Burgess, C. 1981, 243 (No.1605) / Manby, T. 1986, 93
Yorkshire	A	Socketed Axe	Somtping	LBA	Yorkshire? / York area?		Sheffield Museum	J 93.505	Schmidt, P. & Burgess, C. 1981, 245 (No.1620) / Manby, T. 1986, 93
North-East England	A	Socketed Axe	Somtping	LBA	North-East England		Private		Schmidt, P. & Burgess, C. 1981, 245 (No.1630)
Yorkshire	A	Socketed Axe	Armorican	LBA	Yorkshire?		St Albans Museum		Schmidt, P. & Burgess, C. 1981, 249 (No.1655)
Yorkshire	A	Socketed Axe	Unclassified	LBA	Yorkshire?		Belfast Museum	6-139	Burgess, C. 1968, 66 - listed as Transitional Palstave / Schmidt, P. & Burgess, C. 1981, 252 (No.1699)
North Yorks	A	Socketed Axe	Unclassified	LBA	North Yorkshire?		Yorkshire Museum	YORYM : 1948.1260	Schmidt, P. & Burgess, C. 1981, 252 (No.1703)
North Yorks	A	Socketed Axe		LBA	North Yorkshire		Private		PAS: SWYOR-A7C064
Yorkshire	Sp	Spearhead	Tanged	EBA	Yorkshire		Middlesborough Museum	MIDDM : A1976.149	
Yorkshire	Sp	Socketed Spearhead	Looped, Flame	MBA	Yorkshire		Yorkshire Museum	YORYM : 2006.1328	Radley, J. YAJ 42, 1967, 19 / Davis 2012, 84 (No.385)
Yorkshire	Sp	Socketed Spearhead	Basal Looped, Flame	MBA	Yorkshire		Yorkshire Museum	YORYM : 1948.1264	Radley, J. YAJ 42, 1967, 19 / Davis 2012, 123 (No.737)
North Yorks	Sp	Socketed Spearhead	Basal Looped, Projecting	MBA	Whitby?	Provenance uncertain	Whitby Museum	ARC1102	Burgess, C. 1968 / Davis 2012, 149 (No.969)
East Yorks	Sp	Socketed Spearhead	Basal Looped, Triangular	MBA	Yorkshire Wolds		Hull Museum	36	Burgess, C. 1968, 67
North Yorks	Sp	Socketed Spearhead		M-LBA	Northallerton Parish	Uncertain provenance - artefact was purchased from another detectorist	Private		PAS: SWYOR-C57356
East Yorks	Sp	Socketed Spearhead	Pegged	LBA	East Riding		Bolton Castle		Burgess, C. 1968, 33 & 68
North Yorks	Sp	Socketed Spearhead	Looped, Flame	MBA	Malham Dale	Apparently found in the filling of an old enclosure wall	Yorkshire Museum	YORYM : 1955.6.2	Radley, J. YAJ 42, 1967, 19 / Davis 2012, 84 (No.381)
North Yorks	Sp	Socketed Spearhead	Pegged, Leaf	LBA	Malham Dale		Yorkshire Museum	YORYM : 1955.6.1	Burgess, C. 1968, 33 & 69
East Yorks	Sw	Sword	Ballintober	MBA	Holderness				Burgess, C. 1968, 24
East Yorks	Sw	Sword	Ewart Park - N(Uncl.)	LBA	Holderness		Yorkshire Museum	YORYM : 1948.1168	Colquhoun, I. & Burgess, C. 1988, 95 (No.520)
East Yorks	Sw	Sword	Ewart Park - N(Uncl.)	LBA	Bridlington area?	Found with some flints in the rear of a demolished house in Bridlington	Bridlington Museum	A 132.78	Colquhoun, I. & Burgess, C. 1988, 97 (No.550)
Yorkshire	Sw	Sword	Ewart Park - Caledonian(2)	LBA	Yorkshire?		Ipswich Museum	R. 1978. 40	Colquhoun, I. & Burgess, C. 1988, 101 (No.593)

Appendix A2

Region / County	Type	Contents	Type	Date	Location	Details	Present Location	Accession Number	Reference
North Yorks	Sw	Sword		LBA?	Lindrick and Studley Royal	A large bronze sword found near some broken ground at Lindrick farm before 1857. Discarded by finder.	Lost		Manby, T. 1986, 117
East Yorks	Ra	Rapier	Group 3 - unclassifed	MBA	Holderness		Yorkshire Museum	YORYM : 1948.1167	Burgess, C. & Gerloff, S. 1981, 57 (No.423)
East Yorks	H.A/Sp	Palstave (E3) / Spearhead	Pal-Low Flanged (Harlech)	MBA	Between Beverly and Hull - OR - Harlech (Wales)	Burgess suggests these artefacts may be from the dispersed Harlech hoard along with a number of other unprovenanced Harlech type palstaves in the Yorkshire Museum	Bolton Castle		Schmidt, P. & Burgess, C. 1981, 137 (No.821)
Yorkshire	H.A/Mould	Socketed Axes / Moulds	Meldreth, Ulleskelf	LBA	Yorkshire	From a stone quarry			Schmidt, P. & Burgess, C. 1981, 209 (No.1254)

Probable Forgeries

Region / County	Type	Contents	Type	Date	Location	Present Location / Accession Number	Reference
West Yorks	Sp	Socketed Spearhead	Looped	MBA	Bingley	Leeds, City Art Gallery - 242	BICC / Raistrick, A. YAJ 29, 1929 / Radley, J. YAJ 42, 1967 / Davis 2012
North Yorks	A	Palstave (Uncl.)	Unclassified	M-LBA	Whitby - East Cliff	Leeds Museum	Schmidt, P. & Burgess, C. 1981, 164 (No.937)

Miscellaneous Finds

Region / County	Type	Contents	Date	Location	Details	Present Location	Reference
North'land	Sp?	Rod shaped object		Callaly	MD	Private	PAS: NCL-ADCFD5
North'land	Sp	Spearhead	BA-Roman	Humshaugh	MD - other finds from the same field were Roman	Private	PAS: NCL-5A3534
Durham	A?	Flat Axe?	EBA	Ferryhill	MD	Private	Durham HER - H3924
North Yorks	MWD	Casting Gate		Well	MD	Private	PAS: YORYM-29AC91
North Yorks	Bl	Blade Fragment (Spear?)		East Tanfield	MD	Private	PAS: YORYM-19BEC8
North Yorks	Misc Met.	Chape fragment?		Saxton	MD	Private	PAS: FAKL-0F3346
North Yorks	T	Awl	BA-Med	Towton	MD	Private	PAS: SWYOR-320717
North Yorks	T/Sock.A	Blade Fragment		Near Tockwith	MD	Private	PAS: YORYM-0171A8
North Yorks	O	Circular Hoop	BA-Med	TBKA Towton	MD	Private	PAS: SWYOR-A0C2D2
North Yorks	O	Gold Loop	BA?	Brafferton	MD	Private	PAS: NCL-C42B73
North Yorks	O	Bead	BA-Med	York	MD	Private	PAS: LVPL-37ACD4
North Yorks	MWD	MW Debris	BA-Med	Crayke	MD	Private	PAS: LANCUM-8B8EE1
North Yorks	Misc Met.	Large Ring	BA/IA	Cawood	MD	Private	PAS: SWYOR-3FF370
North Yorks	MWD	Casting Gate/Jet	BA-Med	Selby	MD	Private	PAS: NLM-6E5052
North Yorks	MW	Ingot Bun	BA-Med	Leavening	MD	Private	PAS: SWYOR-9226F6
North Yorks	MWD	MW Debris	BA-Post Med	Middleham	MD	Private	PAS: LVPL-865D42
North Yorks	O?	Moustache Object	BA/IA	Folkton	MD	Private	PAS: YORYM-1AA0C5
North Yorks	A	Socketed Axe	LBA	TBKA York Minster	?	Private	PAS: LANCUM-244C73
West Yorks	T	Razor	BA	TBKA West Yorkshire	Purchased off metal detectorist with provenance of Bramham	Private	PAS: LVPL982
East Yorks	Misc Met.	Unidentified Fragment		Wetwang	MD	Private	PAS: SWYOR-206D77
East Yorks	MW	Ingot Cake		Shipton Thorpe	MD	Private	PAS: CAM-23B333
East Yorks	Bl	Blade Fragment		Middleton-on-the-Wold	MD	Private	PAS: NCL-1C7BE5
East Yorks	Bl?	Blade Fragment	BA-Roman	Bishop Burton	MD	Private	PAS: YORYM-581E13
East Yorks	Bl	Blade Fragment	BA	Bishop Burton	MD	Private	PAS: YORYM-680D58