



# DOE POT CAVE, CHAPEL-LE-DALE, NORTH YORKSHIRE

## Assessment of Archaeological Potential



**Oxford Archaeology North**

December 2008

**Yorkshire Dales National Park  
Authority**

OA North Job No: L10088

Issue Number: 2008-9/890

**Document Title:** DOE POT CAVE, CHAPEL-LE-DALE,  
NORTH YORKSHIRE

**Document Type:** Assessment of Archaeological Potential

**Client Name:** Yorkshire Dales National Park Authority

**Issue Number:** 2008-9/890  
**OA Job Number:** L10088

Prepared by: Alastair Vannan Tom Lord  
Position: Supervisor University of Lancaster  
Date: December 2008 December 2008

Checked by: Jamie Quartermaine Signed.....  
Position: Project Manager  
Date: December 2008

Approved by: Alan Lupton Signed.....  
Position: Operations Manager  
Date: December 2008

**Oxford Archaeology North**  
Mill 3  
Moor Lane Mills  
Moor Lane  
Lancaster  
LA1 1GF  
t: (0044) 01524 848666  
f: (0044) 01524 541000

**© Oxford Archaeological Unit Ltd (2008)**  
Janus House  
Osney Mead  
Janus House  
Oxford  
OX2 0EA  
t: (0044) 01865 263800  
f: (0044) 01865 793496

w: [www.oxfordarch.co.uk](http://www.oxfordarch.co.uk)  
e: [info@oxfordarch.co.uk](mailto:info@oxfordarch.co.uk)

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## SUMMARY

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A recent discovery of prestige Roman metal artefacts within Doe Pot cave, which lies to the south of Chapel-le-dale, North Yorkshire, has highlighted the potential for this, and other caves in the area, for further archaeological remains. As a consequence the Yorkshire Dales National Park Authority has commissioned Oxford Archaeology North (OA North) to undertake an initial archaeological assessment of the sites significance, potential, and the threats to the deposits within the cave.

The assessment of the cave has indicated that it is a site of national importance that has potential to contain further remains relating to the Romano-British period. In addition to such remains, the cave might also contain remains relating to later prehistoric cave use. It was also recognised that many of the other caves in the environs may also contain archaeological remains. The site has the potential to inform us about the changing nature of cave use through time in the region, as well as providing information relating to the degree of continuity of cultural and / or ritual traditions that might exist in relation to the role of caves in North Yorkshire.

The cave is considered to be at risk from threats relating to future use by cavers and water-erosion, and if the knowledge of its discovery becomes wide-spread there exists the possibility that it could be targeted by illicit antiquities collectors. Archaeological recommendations for the preservation of the site include the need for regular monitoring of Doe Pot, and the other pot holes in the vicinity, and the excavation of deposits within the cave that are at risk of continuous erosion and damage. It is also recommended that the location of the site be kept confidential to deter antiquity collectors.

## ACKNOWLEDGEMENTS

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Oxford Archaeology North (OA North) would like to thank Rob White, Yorkshire Dales National Park for commissioning the project. Thanks are also due to Tom Lord at the Centre for North West Regional Studies, University of Lancaster, and to John Thorp of the Red Rose Cave and Pot-hole Club.

The assessment was undertaken by Alastair Vannan and Tom Lord with contributions by John Thorp. The drawings were produced by Anne Stewardson and the survey profile was by John Thorp; Figure 3 was produced by Tom Lord. The project was managed by Jamie Quartermaine, who also edited the report.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 A recent discovery of prestige Roman metal artefacts within Doe Pot cave, which lies to the south of Chapel-le-dale, North Yorkshire (Fig 1), has highlighted the potential for this, and other caves in the area, for significant archaeological remains. As a consequence the Yorkshire Dales National Park Authority has commissioned Oxford Archaeology North (OA North) to undertake an initial archaeological assessment of the sites significance, potential, and the threats to the deposits within the cave.

### 1.2 SITE LOCATION AND TOPOGRAPHY

- 1.2.1 Doe Pot is one of the numerous pot-holes / caves situated on the limestone uplands between Ingleborough Hill and Chapel-le-Dale, in the Craven District of North Yorkshire (Fig 1). The pot-holes occupy a natural, raised terrace that slopes gently to the north-west and which lies between 350m and 400m AOD.
- 1.2.2 The land around Ingleborough is defined by the glaciated karst landscape of the Great Scar Limestone. This carboniferous limestone is the dominant rock type in the area and is overlain by sedimentary 'Yoredale Facies', which in-turn are overlain by Millstone Grit at the tops of the higher hills (Countryside Commission 1998, 77). The area is dominated by extensive limestone pavement and numerous pot-holes.

### 1.3 EXPLORATION OF DOE POT

- 1.3.1 Exploration of the cave at Doe Pot by cavers had begun prior to 1967, when the Gritstone Club excavated a small shaft at the base of the daylight chamber; the risings from this excavation are likely to correspond with the area of sediments from which the recent Romano-British finds have been recovered (J Thorp pers comm). This excavated shaft subsequently slumped and became impassable and, in 1998, parties from the Red Rose Cave and Pothole Club and the Northern Cave Club inspected and reopened the shaft. This involved the removal of rocks and the erection of wooden shoring, which was held in place by scaffold bars.
- 1.3.2 In 2008, cavers John Thorp, an experienced amateur archaeologist, Simon Wilson, and Peter Kellaway investigated this pot-hole and noted the presence of bone fragments within the spoil generated by the earlier shaft excavations. A subsequent trip, in October 2008, resulted in large, non human, mammal bones being recovered from the spoil accumulations (T Lord pers comm). A survey of the profile of the cave was undertaken by John Thorp and Peter Kellaway on the 12<sup>th</sup> October 2008 (Fig 2) and during this visit several fragments of animal bone were retrieved from the area adjacent to the top of the cavers' shaft, as well as from the lower deposits through which the shaft had been excavated, and from the lower chamber, which the shaft provided access to (J Thorp pers comm).
- 1.3.3 On the 12<sup>th</sup> and 13<sup>th</sup> October, the spoil that had been generated by the previous shaft excavations was transferred from the environs of the shaft entrance to a separate part of the cave where a retaining wall of boulders had been constructed.

Recognising the potential for archaeological deposits within this spoil, the covers examined the deposits for the presence of bones or any other items of interest. What was initially thought to have been a bone was then found, following cleaning, to be a red-enamelled copper-alloy fitting (Plates 1 and 2), and then on the 17<sup>th</sup> October a large Roman copper-alloy dish (Plates 3 and 4) was also found. Quantities of animal bone have been recovered from the cave (Plate 5), and an initial inspection by Tom Lord suggests that they derive from sheep, cow, red deer, and roe deer (T Lord pers comm).

- 1.3.4 **Artefacts Recovered from Doe Pot:** two significant objects were recovered from the cave. Provisional identification of both has been made from scaled photographs. Both are well-preserved, and both, from the photographic evidence, appear to be of copper alloy. Both seem most likely to be of Roman or Romano-British origin.
- 1.3.5 The first item is an ornate enamelled harness fitting, c75mm in length. It is complete, although there has been some loss of the original surface as a result of corrosion. It comprises a central bar, one end of which has a wedge-shaped terminal, whilst the other end is largely plain. There are two integral loops to the rear of the object, one at each end. The majority of the upper surface of the piece is decorated with enamelling, a decorative scheme of opposed triangles of red enamel. The upper terminal is more complex, and features a circular concavity, again enamelled red, but with a small opaque blue droplet of glass in its centre. The heavy use of enamel, and especially red enamel, points to a possible 'native' origin for the piece, or at least considerable 'native' influence, as can be seen, for instance, in the development of enamelled bow brooches in the north of England. As yet, no precise parallel has been found for the piece, but it is worth noting that enamelling was probably at the height of its popularity in the second century AD, and thus, it seems reasonable to suggest a broadly similar date for this object.
- 1.3.6 The second is a large, shallow vessel with a flat base and low, slightly bulging walls. The form of the rim is not clear from the available photographs, but appears to be rolled outwards. Most of the wall is missing, but enough survives for a complete profile. The underside of the vessel has a number of concentric ridges, probably intended to add strength to the piece. From its size (c 300 mm in diameter) it seems most likely to have served as a tray. It is an unusual object, and apparently of high quality workmanship, which might suggest a military origin, although this would need to be confirmed in the course of further research.

## 1.4 CAVE DESCRIPTION

- 1.4.1 The primary chamber of Doe Pot cave is a narrow, but deep, linear chamber formed by the expansion of a vertical fault through the limestone. The surveyed extent of the cave is 19m deep (Fig 2). At the top are a series of small, linear apertures between limestone pavement grikes. While they are up to a metre long, they are no more than 0.3m wide and would not have afforded physical access for a person, but items, such as the artefacts, so far recovered, could have been dropped through them. Below these skylights is a 6.5m deep open drop.
- 1.4.2 The present access into the cave is a narrow aperture at one end of the linear chamber, and this leads down into a short, but steep drop which requires some climbing skills to descend. This entrance has clearly been expanded in recent years and may have been blocked at the time that the artefacts were deposited. If so then

the only way of depositing the artefacts would have been to drop them through the skylights into a dark void. If confirmed, this would support the view that the articles were votive. It is important, therefore, to establish when, and to what extent, the present aperture has been expanded.

- 1.4.3 Directly underneath the skylights is a moderately, sloped, rocky cave floor which drops down towards a low point that coincides with the top of the recently excavated shaft (the scaffold shored shaft marked on Fig 2). Prior to the excavation of the shaft this was a local low point and any material cast through the skylights would have been washed down and been permanently deposited in this location, which is *c* 9.5m below the surface.
- 1.4.4 The artefacts were recovered from the spoil produced from the excavation of a 1.5m deep shaft through archaeological deposits, and it is not presently known at what depth in these deposits, that the artefacts originated.



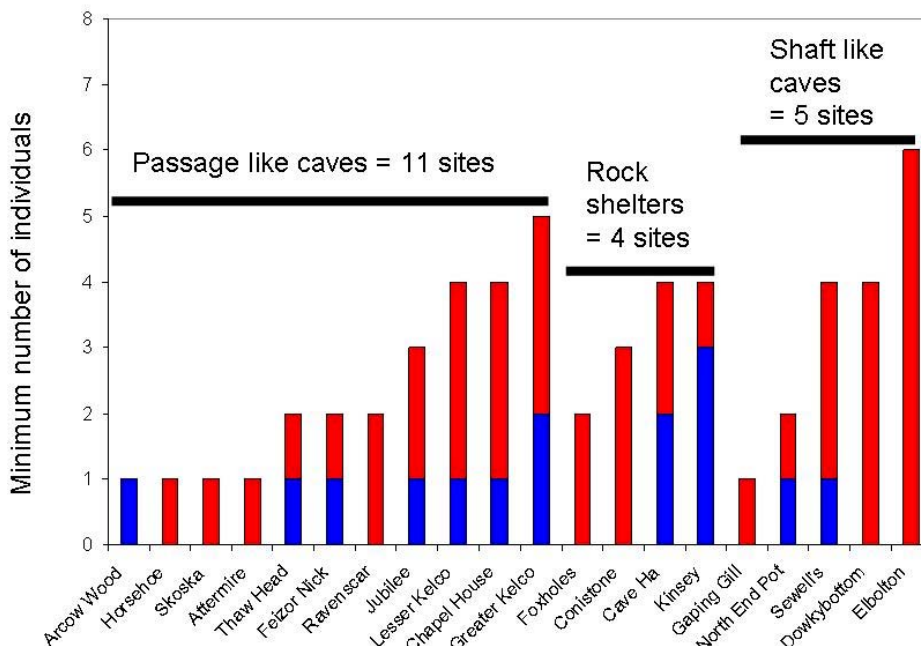
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## 2. ARCHAEOLOGICAL BACKGROUND

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### 2.1 ARCHAEOLOGICAL BACKGROUND

- 2.1.1 ***Prehistoric Cave Archaeology in Craven:*** radiocarbon dating and modern taphonomic analysis of early cave excavations are generating a much better understanding of prehistoric cave activity and its chronology (Leach 2008b). The earliest human presence in the area during the Late Upper Palaeolithic and is now attested to the first part of the Late Glacial Interstadial with a cut-marked wild horse bone demonstrating a human butchery event in the vicinity of Victoria Cave dated to *c* 12,300 BC (Lord *et al* 2007; Jacobi *et al in press*). Carnivore activity, especially brown bear hibernation and wolf denning are now clearly identified as the principal process means of which large mammal bone assemblages accumulated in caves during the Late Glacial period; a similar pattern might be present during the Early Holocene. The few lithic pieces attributable to the Late Upper Palaeolithic and Early Mesolithic from the Craven caves appears to be a genuine reflection of low level cave use during these times and not a result of poor excavation practice. For example thorough excavations in the 1970s in Raven Scar Cave, in Chapel-le-Dale, has produced a single Late Upper Palaeolithic stone tool and a single Early Mesolithic microlith (RM Jacobi pers comm) in a basal horizon that contains brown bear remains, with a specimen that has recently been dated to the early Holocene (T Lord pers comm).
- 2.1.2 Although Later Mesolithic sites are relatively abundant in the wider region (Manby 2003, 33), Later Mesolithic cave usage appears to have generated only finds of microliths and charcoal as revealed by recent excavation at Chapel House Cave which employed wet sieving (Donahue and Lovis 2006a; 2006b). Later Mesolithic human bone and processed animal bone has yet to be identified in the Craven caves, and fits a much wider regional pattern where inland caves in England and Wales seem to be devoid of these materials. Natural shaft-like caves in Craven also acted as natural traps for carnivores and herbivores during the Late Glacial and Early Holocene, and these are a valuable and rare palaeoenvironmental resource. Archive enhancement of early cave excavations as part of the North Craven Historical Research Group 'Giggleswick Scar Project' undertook a program of AMS dating of animal bones which detected Early Holocene roe-deer and capercaillie from the 1920s-1930s excavations at Kinsey Cave.
- 2.1.3 ***Neolithic:*** radiocarbon dating of human bones by Stephany Leach has identified a significant phase of Early Neolithic human bone deposition in caves across the region from about 3900 cal BC to about 3300 cal BC, which, prior to this dating programme, had been considered to be of Late Neolithic date (Leach 2008a). Thaw Head Cave, on the north side of Chapel-le-Dale, has produced an radiocarbon assay, of a partial skeleton of a young woman that dates in the range *c* 3960-3710 cal BC. Stephany Leach's work suggests that the placing of human remains in caves during the Early Neolithic was not a general or expedient practice, but a minority rite for particular individuals who suffered disfiguring illness or trauma; the woman from Thaw Head Cave, for example, apparently died of trauma during late pregnancy (*ibid*). Even when taking the estimates for the numbers of individuals placed in caves throughout the whole of the Neolithic, it appears that each cave might contain relatively few individuals (see table below).



**Estimates of the minimum numbers of Neolithic people (adults to peri-natal infants) represented by human skeletal elements at each cave site. Blue indicates individuals directly AMS dated: 15 individuals from a possible sample of 56 = 27%.**

2.1.4 Early Neolithic human bone deposition may be characterised as follows: mortuary activity takes place in passage caves, rock shelters and the more accessible cave shafts, which includes men, woman and children; this activity comprised partly skeletonised corpses (PSCs), ie skulls with or without mandibles and bits of post-cranial bone (ie non cranial bones). To prevent scavenging by pigs and large carnivores, these PSCs were placed in caves with small, and therefore easily blocked, entrances, vertical entrances, or parts of caves with easily blocked up recesses. Osteological analysis of the skeletal remains of the PSCs indicates evidence of disabling diseases, disfigurement or trauma at around the time of death. Subsequent to the initial deposition, the skeletonised remains of PSCs were occasionally re-arranged, bits were taken away, or were mingled with other human remains and animal bones; the skulls were often found in different locations to the rest of the PSCs. Later Neolithic human remains possibly with peri-mortem trauma, AMS dated to *c* 2700 BC have been recovered from the base of the rubble-filled shaft-like cave entrance of North End Pot (Leach 2005). Higher in the section a layer of juvenile domestic cattle bone possibly represents animal sacrifice from *c* 2200 cal BC (T Lord pers comm).

2.1.5 **Bronze Age:** Stephany Leach has identified Later Bronze Age cult activity in the nearby Raven Scar Cave with radiocarbon dates on human remains from *c* 1000 BC (Leach 2005). The Later Bronze Age human remains include evidence for sharp blade trauma and cult activity, which involved the temporary deposition of heads of people in the entrance chamber (*ibid*). Iron Age cult activity in caves is demonstrated by the upper bone deposits the deep shaft-like cave of North End Pot, and in the innermost part of the passage-like caves called Dead Man's Cave on Giggleswick Scar recently surveyed as part of the North Craven Historical Research Group's 'Giggleswick Scar Project' (*ibid*).

- 2.1.6 **Iron Age:** the many field systems and nucleated settlement sites in the Craven area that have often been ascribed to the Iron Age, but which are likely to pre-date this period, are well preserved on the dale sides and extend onto the higher limestone ground; for example in the upper Wharfedale and Ribblesdale areas (Manby *et al* 2003, 103) and more particularly there is a putative settlement to the north of Clapham (NYHER SD76NE12). It is also clear that some of the locales of the ‘Celtic field systems’ in the wider area were in use during the Bronze Age, as demonstrated by a Beaker period inhumation at High Close, Grassington, and suggested by the presence of typically Bronze Age monuments, such as ring works and stone circles (*ibid*). The activity on the limestone uplands during the later prehistoric period is highlighted by the presence of the large Ingleborough Hillfort to the south of the current study area. A group of five Iron Age burials (NYHER SD76NE8), to the east of the study area, occupy raised land that is above 250m AOD.
- 2.1.7 **Romano-British Sites in Craven:** the study area lies to the north-east of the Romano-British settlement at Broadwood (Johnson 2004), and to the north of the key cross-Pennine communication route of the Craven Gap. Romano-British pottery has been recovered from the putative Iron Age hillfort at Ingleborough, which lies to the south of the study area (Howard 2004, 10) and finds of Romano-British metalwork have been found within caves, and in open areas, in the Craven limestone uplands (Fig 1). A Roman road extended to the west of Doe Pot, running through Chapel-le-Dale, between forts at Bainbridge, and ultimately Lancaster. A fort is also located to the west at Burrow in the Lonsdale, and there is a marching camp located to the east, at Malham (Butlin 2003, 50).
- 2.1.8 **Doe Pot and Romano-British Cave Activity in Craven:** the recent discovery in Doe Pot, Chapel-le-Dale, of a large Roman copper-alloy dish (Plates 3 and 4) and a red-enameled copper alloy fitting (Plates 1 and 2) is extremely significant. These finds were retrieved from spoil produced by the excavation of a cavers’ exploratory shaft in 1967 (Plate 6), and is the first report of Romano-British metal objects being found in a cave in the Craven area of the Yorkshire Dales National Park since the exploration of Sewell’s Cave on Giggleswick Scar in 1933 (Raistrick 1936). Despite a perception that the Craven Caves are rich in Romano-British artefacts, in reality they are quite rare, represented notably by Victoria Cave (Dearne and Lord 1998) and Attermire Cave (King 2007). Despite some 160 years of documented cave exploration and investigation, which has made the Craven area one of the most intensively explored karst landscapes in the world, Romano-British metal objects were only known from eight caves prior to the recent finds in Doe Pot (Fig 3).
- 2.1.9 Before the new discoveries in Doe Pot, all of the caves that had produced finds of Romano-British metalwork had been subject to extensive excavations during the nineteenth and early twentieth centuries. Our understanding of these sites, therefore, relies on investigations that had been undertaken before the advent of modern archaeology. It is doubtful now that significant Romano-British deposits survive at these Craven caves, with the possible exception of the ancient pool deposits in the interior of Attermire Cave (Plate 7). The reassessment of early archives has proved very valuable in reconstructing the position of finds and the topography of caves during the Romano-British period at sites such as Victoria Cave (Dearne and Lord 1998) and Sewell’s Cave (Lord 2003), but generally there is a lack of finer contextual information and details about the cave sediments that contain Romano-British materials. This fundamentally limits an understanding of these caves,

especially as to how cultural activities and natural processes interact to give rise to the complex formation processes evident in these deposits.

- 2.1.10 The reassessment of excavation archives can enable the detection of variability in patterns of activity between caves and even in different parts of the same cave, yet understanding these patterns is not easy. The reassessment of archives has, for example, revealed that during the Romano-British period people may have searched through earlier cave sediments in the interior of Victoria Cave in order to recover Ice Age bear bones, as Ice Age bear phalanges have been found within Romano-British deposits outside Sewell's Cave (Lord *et al* 2007). In Attermire Cave, a shallow pool in the totally dark interior of the cave (Plate 7) was the focus for small votive offerings; these included the spectacular copper-alloy dragonsque brooch (Plate 8) found by James Simpson in 1930 following the removal of part of the stalagmitic floor. Whereas a hoard of larger pieces of metal work, including a Roman iron lamp holder and stand and a sheet lead bowl (Plate 9), were buried in scree on the ledge outside the cave (King 2007).
- 2.1.11 In caves where Romano-British metal objects have been found there is usually some evidence for prehistoric activity during the Neolithic and Bronze Ages, but Iron Age activity is typically rare (Raistrick 1939). There are no Iron Age precedents in Craven for the placing of metalwork in caves, instead Iron Age cave activity in Craven appears to involve only the deposition of human and animal remains. Iron Age activity is recorded from cave shafts, such as North End Pot (Plate 10), where the skull of a person aged about 14 to 18 years old at death was radiocarbon dated in the 1980s as part of a police forensic investigation (759–3 cal BC at two sigma, with an 89% probability of being 759-03 cal BC (2260 ± 130BP; HAR-8056)) (Leach 2007), and passage caves, such as Dead Man's Cave on Giggleswick Scar, where a fragment of human femur (Plate 11) was found recently in spoil generated by cave explorers and dated by radiocarbon determination as part of the Giggleswick Scar Project (511–376 cal BC (2342 BP ± 29; OxA-16395)).
- 2.1.12 Dating evidence for the caves with Romano-British metalwork has also been provided by finds of pottery, jewellery, and coins (Allen 1994); this suggests that these caves underwent repeated use more or less throughout the Romano-British period. Reassessment of the archive from the nineteenth- and early twentieth-century excavations at Victoria Cave, and the production of a comprehensive finds corpus, make it very clear that the use of this cave during the Romano-British period involved cult activity and ritual deposition (Dearne and Lord 1998). Comparing the finds assemblages from the other caves which have produced Romano-British metalwork with the much larger Victoria Cave assemblage, reveals further evidence for cult activity and ritual deposition (King 2007). Distinctive characteristics of the assemblages, notably the types of pottery, the presence of coins, and Roman military accoutrements reveal that these caves were used by people who were either part of the Roman military or closely connected with it, particularly in the late first and second centuries (Dearne and Lord 1998). The third- and fourth-century assemblages from the caves generally lack brooches and Roman military fittings, though how much this is due to changes in fashion and military organisation, rather than changes in the groups who participated in cave activity, is difficult to say. It may be significant that the two radiocarbon dates produced for processed Romano-British animal bone are attributable to the third century. These comprise a processed horse bone from the scree at the entrance to Victoria Cave, excavated in 1870 (174–410 cal AD (1740 BP ± 40; OxA-6634)), and a horse

metacarpal, possibly part of a horse ‘head and hooves’ burial, from the scree outside Kinsey Cave, excavated in the 1920s (Lord *et al* 2007, 127–324 cal AD (1807 BP ± 31; OxA-14797).

- 2.1.13 There is evidence from at least three of the caves that have produced finds of Romano-British metalwork - Victoria Cave, Sewell’s Cave, and Kinsey Cave - that the interiors of the caves were deliberately re-opened during the Romano-British period, following long periods when the entrances had been blocked, either by natural build up of scree or by human agency, and so was inaccessible during the Iron Age (Lord *et al* 2007). The exploration and re-opening of caves is an important aspect of Romano-British cave use that has yet to be studied in detail. It is likely that many caves have been explored at different times in the past without leaving much evidence, nevertheless where there is evidence for a specific phase of cave exploration, such as at the beginning of the Romano-British period in Craven, it is important to examine the reasons that might lie behind such activity.
- 2.1.14 **Possible Romano-British Mining in Craven:** it is possible that Romano-British cave exploration in Craven may have been driven by the exploration of minerals. Where caves have developed along mineralised joints in limestone (Worley and Ford 1977), metal ore can be accessible without recourse to mining and such deposits could have been worked at an early date (Ford and Rieuwerts 1968). Vein mineralisation occurs in shallow joints in the limestone in the Arncliffe Clouder and Hawkswick Clouder areas and in the escarpments close to the Craven fault in the vicinity of Attermire Scar and Grizedale; there are also traces at the northern end of Giggleswick Scar and at Lead Mine Moss. Lead is the main metal ore, with smaller amounts of copper ore being present and, at the northern end of Giggleswick Scar, some iron ore.
- 2.1.15 Evidence of early mineral extraction in the form of excavated surface veins and shallow mining is present in all of these areas, although such evidence is notoriously difficult to date. It is possible, however, that the place-name element ‘cloud’ might be indicative of Romano-British mining. This element is clearly recognisable in the Arncliffe Clouder and Hawkswick Clouder place-names (Luke 2005). It is very noticeable that all of the cave sites that have produced Romano-British metal finds are located close to areas of vein mineralisation (Fig 1). The proximity of the Doe Pot site to Lead Mine Moss might, therefore, be significant, as there is abundant evidence of shallow mining activity in the area, but this is of uncertain date. Similarly, Dowkabottom Cave (Plate 12), which also has a shaft-like entrance, is located close to the workings of veins at Hawkswick Clouder. This cave also produced finds of Romano-British date, with coin evidence suggesting that cave use began in the late first century. It is possible, therefore, that some Romano-British cave exploration might have been the result of prospecting for, and extracting, metal ores.
- 2.1.16 Finds of dated Roman lead pigs from the Yorkshire Dales testify to Roman lead production operating soon after the conquest of northern England, in the early AD 70s (Bayley 2002; Raistrick 1930). The occurrence of lead production so soon after the conquest suggests that the organisation of lead mining in the Yorkshire Dales at this time was associated with the Roman military. In this context, it may be significant that Romano-British cave use in the Yorkshire Dales appears to have begun by the last decade of the first century (Dearne and Lord 1998) and that some of the Romano-British artefacts recovered from the caves suggest a Roman military

connection (Plate 13). Although evidence for Iron Age lead production has been discovered at Meare and Glastonbury in the Mendips (Butcher and Ponting 2005), such activity has not yet been paralleled in the Yorkshire Dales and the deposition of Iron Age metalwork in caves in the region has not been identified.

- 2.1.17 In the second century AD, Noricum, in the region of Austria and Slovenia, was an Imperial mining district and an important producer of iron, silver, and lead (Dušanic 2004). The name Annamus is local to this area and the first example of this name in Britain (Tomlin and Hassall 1998) occurs cut into the outside of a samian bowl dating to the reign of the Emperor Trajan (AD 98-117) and found in Victoria Cave during the 1870s (Plate 14). It might, therefore, be tentatively suggested that the implied presence of this man in the vicinity of the caves was in association with local mining activity. Dušanic (2004, 264) suggests that the fraught and dangerous lives of Romano-British miners might have made them particularly superstitious. Prospecting and extracting metal ore from the Craven uplands might, therefore, have required the beneficence of the underworld deities and have involved propitiation (Henig 1984) and this might be one explanation for the deposition of metalwork in this area during the Romano-British period.
- 2.1.18 **Indigenous belief systems:** caves were widely regarded as entrances to the underworld during the Romano-British period and might, therefore, represent obvious places to make offerings to an underworld pantheon (Flint *et al* 1999; Ogden 2001). In addition to any supernatural associations with caves that may have been brought into northern Britain with the arrival of the Roman military, there may also have been enduring local traditions associated with such natural places. In the Yorkshire Dales, finds of Neolithic and Bronze Age date have been found within caves where Romano-British artefacts have been recovered, although finds of Iron Age date from caves in the region are rare and have generally been restricted to human and animal bones. It is, therefore, possible that such caves were more often associated with funerary practices during the Iron Age, rather than ritual deposition. This impression could, however, be a result of changes in the nature of votive deposits in the area. If, for example, organic objects, such as wooden artefacts or food items that might be prone to decay, had been used as votive offerings during the Iron Age, these might not have been identified during the early excavations of cave sites. Although undated, there have been animal bones found within the cave at Doe Pot representing sheep, red and roe deer, and cattle. It is possible that some of these could represent deliberate depositions.
- 2.1.19 That metal objects were used as votive deposits in Craven during the Iron Age is suggested by the discovery of an Iron Age bronze cauldron, which was found in a dried-up tarn near Wharfe, to the south-east of Chapel-le-dale (NYHER SD76NE4591). The location of this item within a former tarn suggests that it may have formed a deliberate deposition in a watery place, as has been suggested for many other finds from similar contexts throughout the prehistoric period (Middleton 1996, 45). There could, however, have been a distinction between ‘dry’ and ‘wet’ deposition in the region during the Iron Age, and different object-types may have been deemed suitable for deposition in different contexts.
- 2.1.20 It is also possible that the occurrence of Iron Age human remains might not necessarily represent funerary activity and that the remains might have played a role as dedicatory offerings. Fissures known as ‘Windypits’ in the limestone of the North Yorkshire Moors, at Antofts, Slip Gill, and Bucklands, have produced

evidence of the deposition of human remains from the early Iron Age, through to the later Iron Age and into the second century AD (Leach 2008b). A significant aspect of these depositions is that many of the bones appeared to have been purposefully disarticulated, including decapitation (*ibid*). An early Iron Age disarticulated tibia from Antofts had been subject to the removal of the calf muscle by a blade. Also the remains of a young man of late Iron Age date from Slip Gill suggested decapitation, and several disarticulated human skulls from Bucklands displayed evidence of attack with blunt weapons. While it is possible that these reflect casual burials of individuals that have sustained a brutish death, it is also possible that the bones represented deposits of a ritual or dedicatory nature (*ibid*). In the Craven area, disarticulated human and animal remains have been discovered in Dead Man's Cave, where a femur was dated to the Iron Age (OxA-16395 = 2342 BP  $\pm$  29, 511–376 cal BC at two sigma). While it is not from a cave context, the recovery of the well preserved Lindow man from a peat bog in Cheshire, has also raised the possibility of a sacrificial or ritual internment during the Iron Age, given that he had a ligature around his neck indicating that he had been executed (Turner and Scaife 1995).

- 2.1.21 The range of cave artefacts from Craven has two particular implications for the material at Doe Pot. Firstly, the difference between the types of artefacts and ecofacts from different periods, which have been recovered from local caves, could represent changes in the choice of material for deposition, but could still represent the continuity of indigenous practices or belief systems. Secondly, the potential exists for the recovery of human remains within the Romano-British archaeological horizons at Doe Pot.
- 2.1.22 Understanding the differing influences of indigenous and incoming cultural traditions on rituals and belief systems during the Romano-British period can be a complex issue. The high potential for two-way cultural diffusion, in relation to belief systems, is evident in the high number of native British gods that were worshipped by members of the Roman military stationed on Hadrian's Wall (Breeze and Dobson 2000, 277–90). The pre-Roman association of caves and fissures with the underworld is strongly suggested by the occurrence of body parts within such contexts in North Yorkshire during the Iron Age (Leach 2008a), and also by the construction of votive shafts in the south-east of England (Ross 1996, 51–3; Green 2004, 122–3). These shafts often contain human and animal remains (Green 2003, 123) and might represent the deliberate creation of underworld entrances where natural caves were not available. A widespread association between the supernatural forces of the underworld with caves and shafts appears, therefore, to have existed across Iron Age Britain and might have influenced both native and Roman populations during the Roman period.
- 2.1.23 Indigenous belief systems could also have been influenced by the introduction of underworld deities from elsewhere in the Roman world, such as those from the mining region of Illyricum, or the cult of Mithras, which was popular in the Roman military and included semi-subterranean temples that were built to mimic the cave of the god (Breeze and Dobson 2000, 285–6). The potential survival of stratified deposits within Doe Pot may, therefore, represent a rare opportunity to explore the relationship between prehistoric and Romano-British uses of caves and may present an insight into the complex nature of religious belief during the Romano-British period.

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### 3. SIGNIFICANCE OF THE REMAINS

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#### 3.1 THE SIGNIFICANCE OF THE REMAINS AT DOE POT

- 3.1.1 The potential survival of stratified deposits within Doe Pot is a rare opportunity to explore the Romano-British usage of caves, which may present an insight into the complex nature of religious belief, and their expression, during the Romano-British period. The only known artefacts recovered from the cave comprise Romano-British metalwork that was retrieved by cavers. This is likely to represent some of the most conspicuous material from the cave and other artefacts and ecofacts might also be present that represent Romano-British activity and potentially also late prehistoric activity. Doe Pot represents one of the few opportunities to explore the use of such caves in Craven, making use of modern techniques of excavation and scientific analyses. It is not yet known whether the finds from Doe Pot represent dedicatory offerings, or, for example, accoutrements used during the execution of rituals. The large shallow dish could, for example, have been used to hold and pour liquids, and a similar dish is known from the Roman fort at South Shields, which was inscribed with a dedication to ‘Apollo the great protector’ (Henig 1984, Fig 56). On the other hand the copper alloy artefact has been provisionally interpreted as a first to second century horse fitting, and if this were confirmed it is unlikely to have served as part of a ceremony.
- 3.1.2 In addition to the investigation of probable prehistoric and Romano-British ritual activity, Doe Pot may also present an opportunity to explore the possibility of Romano-British lead mining in the Craven area. Despite suggestions that shallow surface workings in different parts of the Yorkshire Dales date to the Romano-British period, this is not archaeologically demonstrable (White 1988). Place-name evidence in the form of the element ‘cloud’ suggests that lead mining may have occurred in areas such as Arncliffe and Hawswick Clouders (Luke 2005), but this has not been corroborated by archaeological evidence. Any Roman mining of the shallow surface metal ores in the Craven uplands is likely to have been impacted upon by later workings, and dating evidence is, therefore, likely to be elusive. It is, however, possible that evidence associated with Romano-British mining might survive within caves that were also used for cult purposes.
- 3.1.3 The significance of the site has been determined with reference to the ‘Secretary of State’s criteria for scheduling ancient monuments’, which is included as Annex 4 of Planning Policy Guidance 16 (Department of the Environment 1990). This recommends the consideration of period, rarity, documentation, group value, survival/condition, fragility/vulnerability, diversity and potential. The site retains the potential to contribute to studies of cave use and ritual deposition from diverse periods such as the Neolithic, Bronze Age, Iron Age, and Romano-British period. The site represents one of the few known caves in the Craven area where such deposits have been identified, which was not been subject to excavation prior to the advent of modern techniques and is, therefore, extremely rare. The cave has the potential, not only to provide context-specific data relating to the nature and longevity of use of the site, but also to provide additional information that might enable us to reconsider the results of early cave excavations in the locale and reassess the nature of cave exploitation in the Yorkshire Dales.



- 3.1.4 Whilst it is acknowledged that there has been some disturbance to the cave deposits as a result of the excavation of the shaft, a substantial proportion of the deposits would appear to be intact. Given that these appear to be intact Roman votive deposits, which are extremely rare and would have the potential to provide an invaluable insight into religious practice during this period, Doe Pot is considered to be a site of national importance.
- 3.1.5 **Research Priorities:** the English Heritage cave strategy document (2003) highlights that cave deposits are recognised as being of national significance, and that the significance of caves reflects not only the condition of the remains but that they are a palimpsest of different activities over a broad time range. The publication of key sites has been recognised as a priority for the Palaeolithic and Mesolithic periods (Gamble 1999).
- 3.1.6 The cave strategy highlights the need for a national audit and that there is a particular need for such an audit of the cave resources of the Yorkshire Dales, where there are estimated to be *c* 1500 caves which represents *c* 42% of the total number in the country (English Heritage 2003). Of these it is recognised that as much as 10-20% of them could contain archaeological deposits based upon work undertaken across the Malham Plateau (Trent and Peak Archaeological Trust 1993).

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## 4. IMPACT ASSESSMENT

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### 4.1 THE IMPACT OF THREATS TO THE SITE

4.1.1 **Threats and Impacts:** there are several different factors that present serious threats to the cave deposits:

1. The shaft that was dug through the clastic sediment floor of the main chamber during earlier cave explorations is at risk of collapse, which would damage the stratigraphic integrity of the surviving deposits. Indeed, this shaft has already been subject to collapse, following its initial excavation in 1967 (J Thorpe pers comm). Even if further complete collapse did not occur, the disturbance of the deposits behind the shoring, as a result of general activity and movement through the cave by cavers could disturb the deposits and lead to their gradual slumping and tumbling into the lower chamber.
2. The exposure of cross-sections of the cave floor of the upper chamber, which are now superficially concealed by shoring, but not sealed to the elements, means that water-erosion is now a threat to the deposits. Prior to the digging of the shaft water could collect within the chamber and perhaps percolate through fissures into deeper recesses. The shaft provides the water with an exit route into the deeper chambers, which means that running water is now a threat, both to the upper part of the cave floor and to the deposit forming the sides of the shaft.
3. As the cave is open to the surface it is vulnerable to renewed episodes of intrusive exploration. This could result in further digging by cavers who are unaware of the significance of the site.
4. Even without further intrusive works, the saturated state of the cave interior means that those passing through the cave will be unable to avoid disturbing the cave floor with their feet. The damage from boots becoming bogged in the cave floor could range from the gradual mixing of previously stratified deposits to the direct damage of artefacts or ecofacts within these deposits. This coupled with water action could result in significant erosion out from the faces of the shaft and on the cave floor.
5. While it is intended that the discovery and its location should be, if at all possible, kept secret, there remains the possibility that the knowledge of the discovery becomes more widely known, particularly within the caving community. This has the potential to attract undue attention and the site could be substantially damaged by a tiny minority of individuals seeking further discoveries. The impact of such illicit activity could result in the destruction of the archaeological deposits and the loss of important votive artefacts.

4.1.2 The assessment of the potential threats to the site suggests that there are currently at least five factors that are likely to cause very large adverse effects to the deposits within Doe Pot.

1. Damage from collapse of sediments in the proximity of the current aperture through the cave floor;
2. Damage from water erosion as a result of the creation of the current aperture

3. Damage from future cave exploration;
  4. Damage by continued use of the cave by cavers;
  5. Damage by illicit metal detectorists or antiquities hunters
- 4.1.3 The first threat is real but given that the sides of the trench are now shored and the shaft has been open since the late 1960s it is considered that this is a long term threat rather than an imminent one.
- 4.1.4 The second and fourth threats are real but are long term, steady threats of damage rather than imminent catastrophic ones.
- 4.1.5 The third threat is possible, indeed probable, but, given that there is an open portal to the lower parts of the cave, further exploration is likely to occur at the present limits of the cave complex and below the level of the identified archaeological deposits.
- 4.1.6 Finally, the fifth threat is potentially imminent if the knowledge becomes more commonly known and could be catastrophic. This is the most unpredictable of all the threats as it is subject to the erratic whims of a minority of treasure hunting individuals.

## 4.2 RECOMMENDATIONS

- 4.2.1 **Preservation in situ:** with sites of national importance, it is always preferable, wherever possible, to ensure their preservation *in situ*, and excavation is discouraged, whether archaeological or otherwise, as it will damage the site. However, if the destruction of a site can not be avoided then the archaeological techniques necessary to record the site must be of the highest standard possible. It is therefore preferable that the deposits within Doe Pot be preserved *in situ*, and subject to a regular programme of monitoring to ensure that any erosion is within acceptable levels. Given that the main perceived threat is from people searching for antiquities, there is a need to keep the existence and location of the cave secret. To this end the original name and the precise location of the cave are not defined within this report. While the site is of probable national importance (English Heritage 2003) it is recommended that the site is not scheduled, as this would draw attention to the existence of the site and would not provide protection from the casual visitor.
- 4.2.2 **Monitoring of Erosion:** it is proposed that a monitoring programme be established with the help of local cavers to identify if there is any change in condition, and is in accord with the English Heritage strategy for caves which recommends cooperation with caving groups (2003). The cavers of the Red Rose Cave and Pot-holders Club have already proved extremely responsible with regard to their recognition of the potential archaeological importance of these deposits and subsequent consultation with archaeologists. Monitoring would entail regular visits and taking fixed point photographs to determine if there has been any subtle deterioration in condition.
- 4.2.3 **Archaeological Survey:** a full detailed survey of the cave should be undertaken, with the generation of plans and additional cross-sections. In particular, the area of the cave floor containing the archaeological deposits should be planned in detail using a reflectorless instrument. This will allow the accurate recording of the cave interior and the context of the deposits, prior to any further disturbance and to assist with monitoring. A detailed photographic survey should be undertaken.

- 4.2.4 ***Analyses of the Remainder of Spoil from Cave Exploration:*** the spoil produced during the excavation of the shaft by cavers in the 1960's is where the recovered artefacts were found. Being loose material it is particularly vulnerable to water erosion. It is recommended that the remainder of this material be removed from the cave and subject to wet sieving in order to recover any further artefacts or ecofacts. The animal bones present within the cave should be removed for further analysis, as their dates of deposition are currently unknown and they have not been subject to any detailed assessment of potential.
- 4.2.5 ***Archaeological Excavation:*** in keeping with the over-arching aim of preservation *in situ*, it is not proposed to implement a programme of excavation of the undisturbed deposits. However, excavation would need to be a mitigative contingency in the event that there is a significant deterioration in the condition of the cave deposits. Such a contingency may need to be brought to bear at short notice, if for example, there is identified an episode of robbing of artefacts. To this end it is proposed that a project design be produced in anticipation of the need for mitigative recording of the deposits within Doe Pot. This should be produced in the short-term, in order to ensure that if the requirement for such works is recognised that this work should not be subject to any unnecessary delays, which could allow further deterioration to occur. Given the significance and rarity of the site, and the fragility of the deposits within the cave, it is imperative that any ongoing erosion as a result of human agency should be averted by preservation by record.
- 4.2.6 ***Extensive Survey:*** it is recognised that this cave is one of many across the raised bench on the north and western side of Ingleborough and that there may be others that have also been used for such votive deposition or other activities. It is therefore proposed that a programme of survey be implemented across the area, and is in accordance with the English Heritage cave strategy that recommends a national audit of cave resources (2003). The identification of archaeological deposits would entail investigation of recently disturbed deposits and the collection and corresponding analysis of any faunal material. Given that there is potential for further metalwork finds, there is a possibility that this could be identified using a metal detector set to respond to non-ferrous metals. Even so, there may be considerable amounts of metal debris brought into the caves by pot holers which would make the technique impractical and it should therefore be trialed.
- 4.2.7 If any other archaeological sites are discovered they should be brought into the monitoring programme. The monitoring and extensive survey would be undertaken by local cavers, who would be closely monitored by archaeologists, and be preceded by an appropriate level of training for those involved. One major concern with such a scheme is that the monitoring of sites of known archaeological potential should be kept to a very restricted group of amateurs. If such information was too freely dispersed the risk of damage to such sites by antiquities seekers could be greatly increased. The mechanisms for such a scheme should, therefore, be very carefully considered and devised.

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## 5. BIBLIOGRAPHY

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### 5.1 SECONDARY SOURCES

- Allen, SJ, 1994 *Romano-British usage of caves at Settle, Yorkshire*, unpubl M Phil thesis, University of Manchester
- Bayley, J, 2002 Non-ferrous metalworking in Roman Yorkshire, in P Wilson, and J Price (eds) *Aspects of industry in Roman Yorkshire and the North*, Oxford, 101–108
- Branigan, K, and Dearne, MJ, 1991 *A gazetteer of Romano-British cave sites and their finds*, Sheffield
- Breeze, DJ, and Dobson, B, 2000 *Hadrian's Wall*, London
- Butcher, K, and Ponting, M, 2005 The Roman denarius under the Julio-Claudian emperors: mints, metallurgy, and technology, *Oxford J Archaeol*, **24**, 2, 163–197
- Butlin, RA, 2003 *Historical atlas of North Yorkshire*, Otley
- Countryside Commission, 1998 *Countryside character volume 2: North West*, Northampton
- Dearne, MJ, and Lord, TC, (eds) 1998 *The Romano-British archaeology of Victoria Cave, Settle: researches into the site and its artefacts*, BAR Brit Ser 278, Oxford
- Department of the Environment, 1990 *Planning Policy Guidance 16: Archaeology and Planning* (PPG 16)
- Donahue, RE, and Lovis, WA, 2006a Regional settlement systems in Mesolithic northern England: Scalar issues in mobility and territoriality, *J Anthropological Archaeol*, **25**, 248–58.
- Donahue, RE, and Lovis, WA, 2006b Regional Sampling and Site Evaluation Strategies for Predicting Mesolithic Settlement in the Yorkshire Dales, England. In E Rensink and H Peeters (eds), *Preserving the early past: Selection and preservation of Palaeolithic and Mesolithic sites and landscapes*, Amersfoort, 13–24
- Dušanic, S, 2004 Roman mining in Illyricum: historical aspects, in G Urso (ed) *Dall 'Aariatico al Danubio. L'Ilirico nell' eta greca e romana: atti del Convegno int Cividale del Friuli, 2003*, Milan, 247–70
- English Heritage, 2003 *The archaeology of English Caves and rock shelters: A strategy Document*, unpubl rep
- Flint, V, Gordon, R, Luck, G, and Ogden, D, 1999 *Witchcraft and magic in Europe, Volume 2: Ancient Greece and Rome*, London
- Ford, TD, and Rieuwerts, JH, (eds) 1968 *Lead Mining in the Peak District*, Bakewell
- Gamble, C, 1999 *Research framework for the Palaeolithic and Mesolithic of Britain and Ireland, a report for the working party for the working party for the Palaeolithic and Mesolithic annual day meeting and the council of the Prehistoric Society*, Salisbury
- Green, MA, 2003 *Dying for the Gods: human sacrifice in Iron Age and Roman Europe*, Stroud
- Green, MA, 2004 *The gods of the Celts*, Stroud
- Howard, C, 2004 Historical overview, in Johnson 2004, 8–22

- Henig, M, 1984 *Religion in Roman Britain*, London
- Jacobi, RM, Higham, TFG, and Lord, TC *in press* Improving the chronology of the human occupation of Britain during the Late Glacial period
- Johnson, D (ed), 2004 *Excavation of Broadwood enclosure, Thornton in Lonsdale, North Yorkshire*, Ingleton
- King, A, 2007 Reports on Romano-British and other objects from Attermire Cave, Settle, Yorkshire, in P Cherry (ed) *Studies in Northern Prehistory, essays in memory of Claire Fell*, Cumberland Westmorland Antiq Archaeol Soc, Extra Ser, **33**, Kendal, 249–72
- Leach, S, 2005 Heads shoulders, knees and toes. Human skeletal remains from Raven Scar Cave in the Yorkshire Dales, in Zakrzewski, S, and Clegg, M, (eds), *Proceedings of the Fifth Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology* (BAR Int Ser 1383), Oxford, 59–68
- Leach, S, 2007 *Going underground: taphonomic and anthropological reanalysis of human skeletal remains from caves in Northern Yorkshire*, Unpubl PhD thesis, University of Winchester
- Leach, S, 2008a Odd One Out? Earlier Neolithic Deposition of Human Remains in Caves and Rock Shelters in the Yorkshire Dales, in Murphy, EM (ed), *Deviant burial in the Archaeological Record; Studies in Funerary Archaeology* Vol 2, Oxford, 35–56
- Leach, S, 2008b *Life and Death in the Ryedale Windypits Near Helmsley, North Yorkshire*, [www.prehistory.yas.org.uk/content/windypits.html](http://www.prehistory.yas.org.uk/content/windypits.html), accessed on 10<sup>th</sup> November 2008
- Lord, TC, 2003 *A preliminary reappraisal of the 1933–34 excavations at Sewell’s Cave, Settle*, Settle
- Lord, TC, O’Connor, TP, Siebrandt, DC, and Jacobi, RM, 2007 People and large carnivores as biostratigraphic agents in Late Glacial cave assemblages, *J Quat Sci*, **22**, 7, 681–94
- Luke, Y, 2005 Forgotten ‘clouds’ and mining landscapes of the first Millennium AD, *Memoirs of the Northern Mine Research Society, British Mining*, **78**, 149–80
- Manby, TG, 2003 The Late Upper Palaeolithic and Mesolithic periods in Manby *et al* 2003, 31–34
- Manby, TG, Moorhouse, S, and Ottaway, P (eds), 2003 *The archaeology of Yorkshire, an assessment at the beginning of the 21st century*, Yorks Archaeol Soc Pap, **3**, Leeds
- Middleton, R, 1996 The Neolithic and Bronze Age, in R Newman (ed), *The archaeology of Lancashire, present state and future priorities*, Lancaster, 35–60
- Ogden, D, 2001 *Greek and Roman necromancy*, Princetown and Oxford
- Raistrick, A, 1930 A pig of lead with a Roman inscription in the Craven Museum, *Yorkshire Archaeol J*, **30**, 181–2
- Raistrick, A, 1936 Excavations at Sewell’s Cave, Settle, West Yorkshire. *Proc Univ Durham Philos Soc*, **9**, 191–204
- Raistrick, A, 1939 Iron Age settlements in West Yorkshire, *Yorkshire. Archaeol J*, **134**, 115–50
- Ross, A, 1996 *Pagan Celtic Britain*, Chicago
- Tomlin, RSO, and Hassall, MWC, 1998 Victoria Cave, Roman Britain in 1997, inscriptions, *Brittania*, **29**, 439

Trent and Peak Archaeological Trust 1993 *Manifold Valley, Staffordshire, Cave Survey, Nottingham*, unpubl rep

Turner, R, and Scaife, RG, 1995 *Bog bodies: new discoveries and new perspectives*, London

White, RWF, 1988 A Pennine gap? The Roman period in the North Yorkshire Dales, in J Price and PR Wilson (eds) *Recent research in Roman Yorkshire*, BAR Brit ser, **193**. Oxford, 197–217

Worley, N, and Ford, TD, 1977, Minerals and mines, in TD Ford (ed) *Limestones and caves of the Peak District*, Norwich, 143–65

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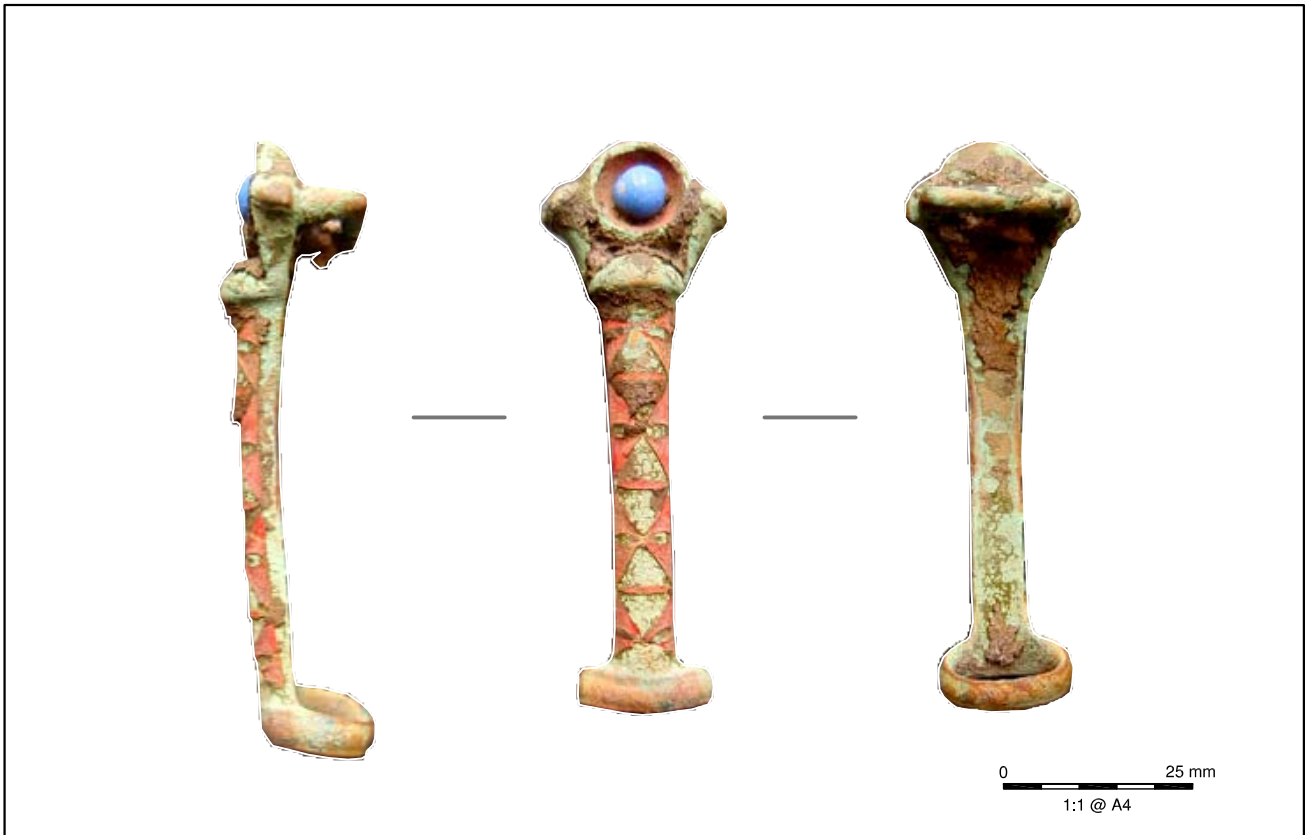


Plate 1: The Roman Horse Fitting



Plate 2: Detail of horse fitting decoration

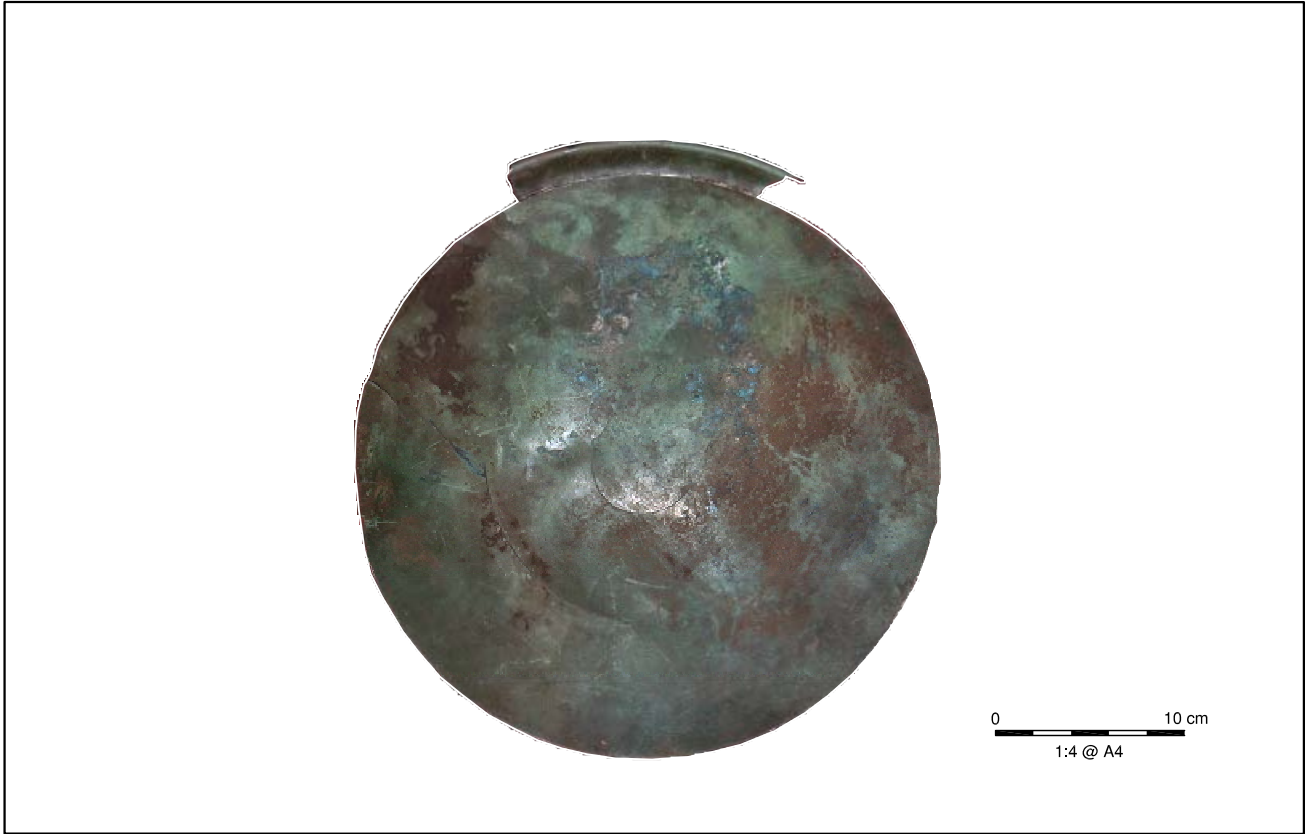


Plate 3: The copper alloy bowl, internal surface



Plate 4: The copper alloy bowl, external surface



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Plate 6: The shaft excavated through the cave deposits at Doe Pot

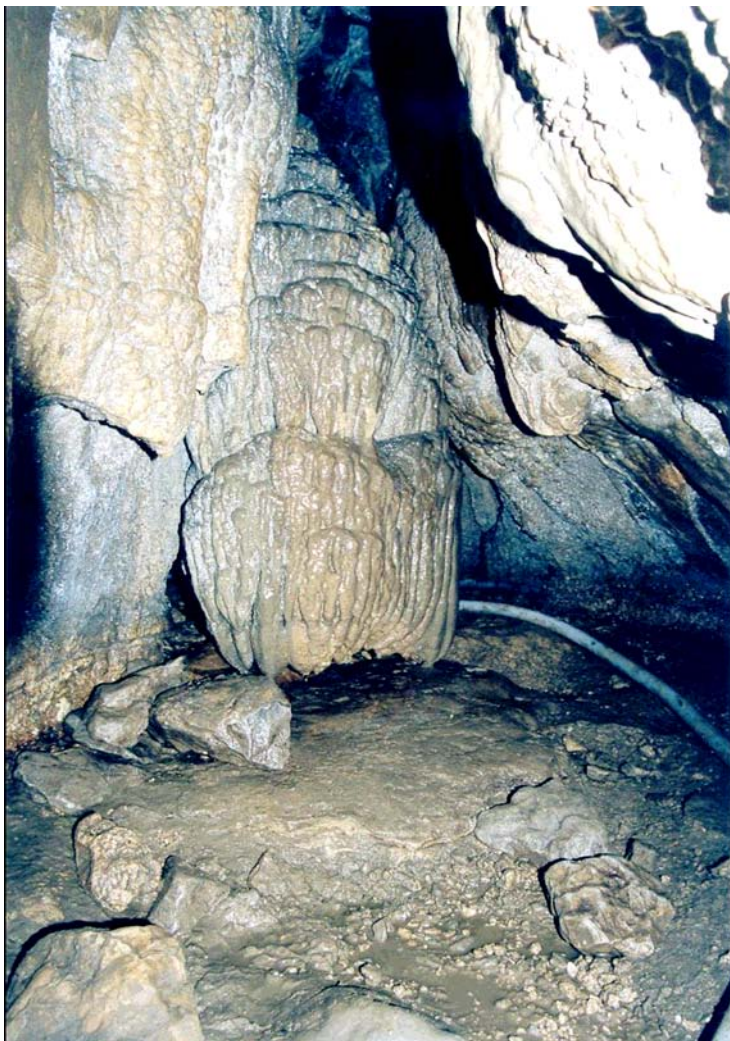


Plate 7: The interior of Attermire Cave



Plate 8: Late first or early second century copper-alloy Romano-British dragonesque brooch from Attermire Cave.

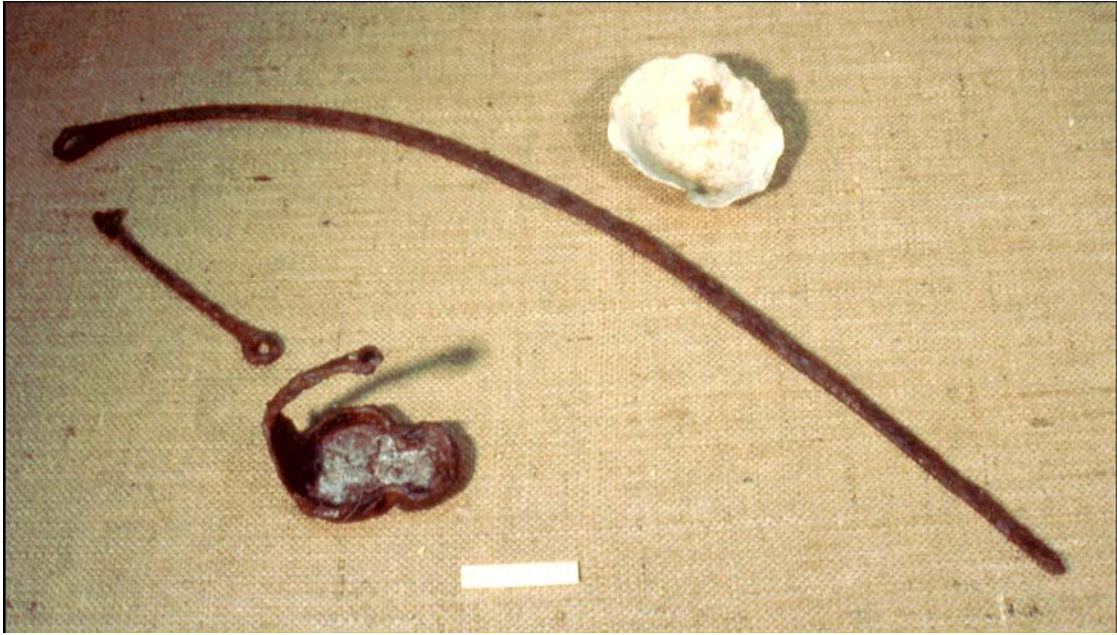


Plate 9: Roman iron lamp holder and stand and sheet lead bowl (top right) found together with iron wheel and bucket fittings in the scree on the ledge outside Attermire Cave in 1947 (the scale bar is c 60mm)



Plate 10: The entrance to the shaft cave of North End Pot

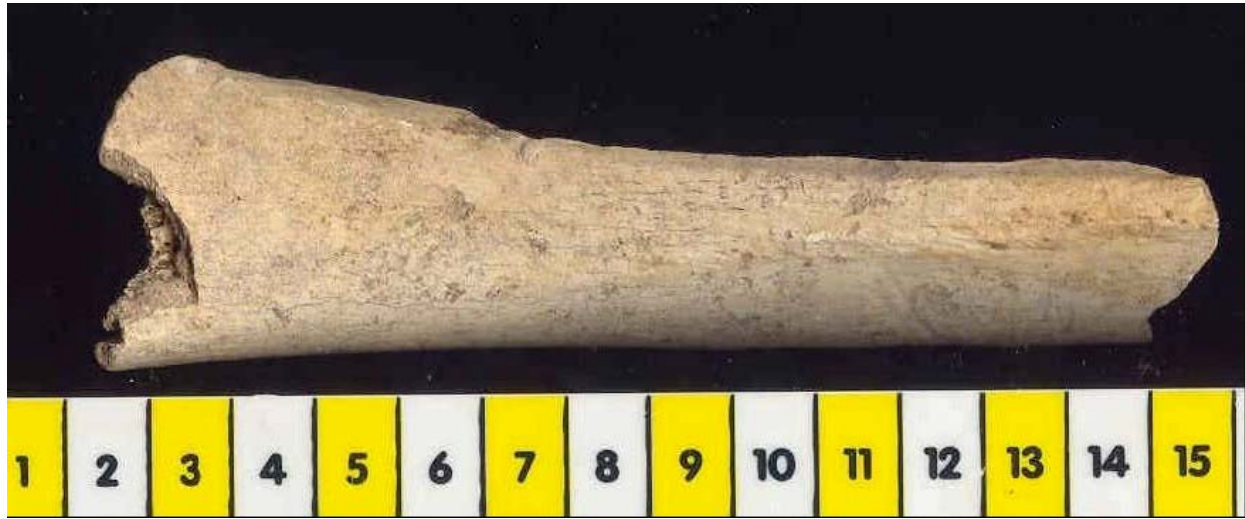


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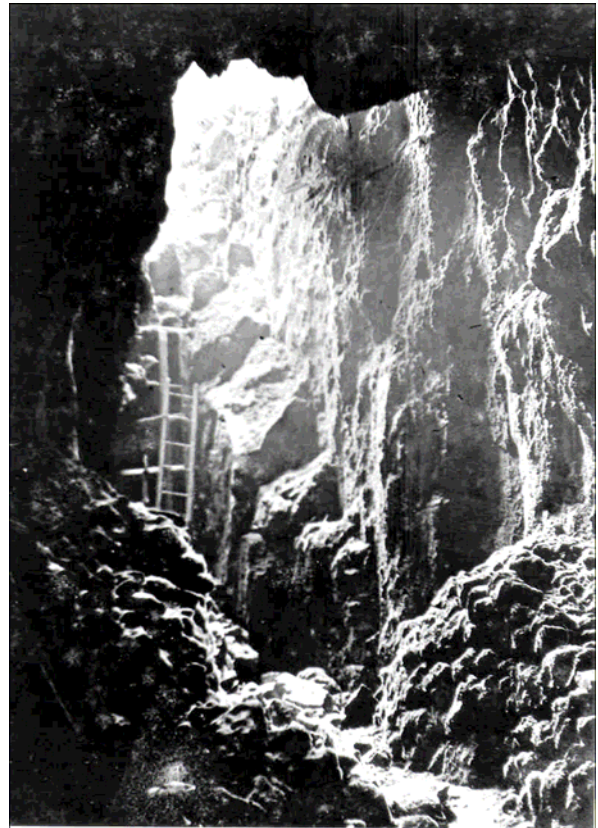


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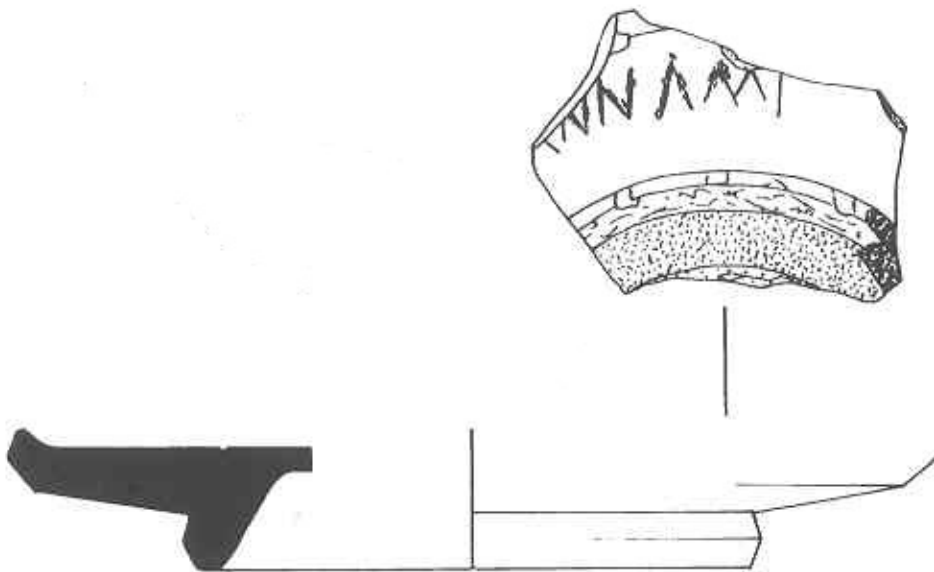


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