Brown bears in burials and entertainment in later prehistoric to modern Britain (c. 2400 BC – AD 1900s)

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Keywords: Bear baiting, iconography, prehistory, medieval, cremations, graves, Britain, Ursus arctos, brown hear

Abstract: The brown bear, Ursus arctos, was a native British mammal, but is now extinct. This chapter briefly explores the history of the native brown bear before turning to the anthropogenic evidence for bears in prehistoric and later Britain. There are two main foci – bears in burials and bears in entertainment. Bear remains are very rare in Britain, but their phalanges are found in human cremations in the Bronze Age, late Iron Age and early medieval periods. The role of the bear in each period is discussed, concluding that there is unlikely to be a single association between bears and cremations that endured. Rather, bear remains are likely evidence of long-distance trade in high status Bronze Age and Iron Age cremations, and a possible indication of ancestral identity in the early medieval period. Roman and Viking bear iconography is also considered. In the Roman period jet bear figurines are associated with the graves of infants, while in the Viking Age bears are carved on stone "hogback" grave covers. Both may indicate some sort of protection in the afterlife. In contrast bear iconography in the medieval and post-medieval period is often associated with bear-baiting, where dogs were induced to attack tethered bears as a form of public (and royally sanctioned) entertainment. Some of the extensive documentary evidence for this "sport" is discussed, as is the practice of dancing bears, which continued in Britain into the early 20th century.

BEARS IN HOLOCENE BRITAIN

The brown bear (*Ursus arctos*) has had a long history in Britain, as a native wild mammal, and as a tamed creature imported for human entertainment. The species was present in all mid to late Pleistocene interglacials, and some glacial periods, as well as the Holocene (Turner 2009; Schreve 2019). However, brown bears are unlikely to have been present in the coldest periods, particularly as much of the British Isles was ice-covered. For example, Leonard et al. (2013) modelled brown bear survival during the Last Glacial Maximum (27,000–15,000 BP) in Ireland, and concluded that bears were unlikely to have remained *in situ*, but would have recolonised once the ice sheets had retreated. An ancient DNA study by Edwards et al. (2014) of brown bears from the Yorkshire Dales indicates that the same mitochondrial haplotypes are present before and after the later cold period of the Younger Dryas (12,900–11,700 BP; cf. Rasmussen et al. 2014), which ended at the start of the Holocene. Their results suggest that either the brown bear was able to survive the Younger Dryas in a refugium in southern England or was able to recolonise from elsewhere in Europe very shortly after it had ended.

The evidence for brown bears in the Mesolithic (9600-4000 BC, cf. Table 1) is relatively sparse, with only six localities identified so far, in Berkshire, Yorkshire, and Scotland. One is from a riverbank deposit at Eton Rowing Lake (ALLEN et al. 2013), and three are from caves (O'REGAN 2018). None have clear evidence of anthropogenic influence. The remaining two sites are the well-known lakeside hunter-gatherer camp of Star Carr (EDWARDS et al. 2014) and a midden in the An Corran rock shelter on the Isle of Skye (Bartosiewicz 2012). There are more bear specimens suggested to date to the Neolithic (4000-2400 BC), but the only secure dates are for bears from archaeological sites (YALDEN 1999; O'REGAN 2018). One of the key issues with examining bear remains in Britain is that many have been found in cave sites, and caves are particularly prone to bioturbation, water sorting, and other taphonomic processes that can mix up material from different periods. Therefore, it is hard to take at face value the suggested dates for any bears that are not from archaeological sites, unless they have been directly radiocarbon dated. However, even with a radiocarbon date a bear specimen from a cave need not necessarily preclude an anthropogenic influence. For example, a bear canine from Greater Kelco Cave and two terminal phalanges from Sewell's Cave (both Yorkshire) were found with Roman material, but were radiocarbon dated to the Lateglacial (EDWARDS et al. 2014). The authors suggested that as these were the only remains of bears from these caves they could have been collected as curiosities by the Romans and deposited later (EDWARDS et al. 2014, 134). The securely dated Neolithic bears, always represented by a single bone or tooth, are largely from pits or ditches, and the sites cluster in East Anglia and southern England (Wiltshire and Dorset; O'REGAN 2018). One of the most intriguing specimens in terms of considering human-bear interactions in this period is a single ulna from pit 11a at Down Farm on Cranborne Chase (Legge 1991). This ulna was found in a pit fill with a large number of animal bones, including a complete cattle (Bos taurus) cranium, which could suggest that these bones were part of a placed or structural deposit (i.e. it was not simply rubbish disposal, but had some ritual purpose or context to it; Legge 1991). However, along with other bones in the pit, the bear ulna had been gnawed, probably by dogs (Canis familiaris), which suggests that the bear bone was not treated with any particular reverence. Although it is only a single example, it makes an interesting contrast with ethnographic records from northern Eurasia and North America, where bear remains were often treated as important and specifically kept away from scavengers (HALLOWELL 1926).

A key question that is currently unanswered is when brown bears became extinct in Britain. They have been extirpated from a number of other European countries including Denmark, Ireland, Germany, and Switzerland (Pasitschniak-Arts 1993; Klassen/Gregersen, this volume; Schmölcke, this volume), likely through a combination of deliberate hunting and habitat loss. There appears to have been a staggered loss of large carnivores in Britain, with lynx (Lynx lynx) becoming extinct in the early medieval period (HETHERINGTON et al. 2006) and wolf (Canis lupus) most likely in the medieval to early modern period (YALDEN 1999), but the extirpation date of the brown bear is unknown. O'REGAN (2018) examined the bear record in Britain and identified two plausible scenarios for extinction. In the first, bears became extinct in the late Neolithic/early Bronze Age (i.e. between 3000-1500 BC), while in the second, they became extinct in the first part of the early medieval period (~AD 410-700). The reason for these different scenarios is the almost total lack of bear remains in the British Bronze Age and Iron Age. The second scenario is supported by a single early medieval radiocarbon date on a bear bone from a cave in North Yorkshire, which could indicate that bears were still present in the wild at this point. However, body part analysis conducted by O'REGAN (2018) found that the bones present at Bronze Age (2400-800 BC), Iron Age (800 BC - AD 43) and most early medieval sites were likely to have come from skins, but that living bears appear to have been present in the Roman (AD 43-410), medieval (AD 1066-1485) and post-medieval (AD 1485 to present) periods. This pattern was used to suggest that wild bears were either extinct or at a very low level during the Roman period, and that the bones that have been identified are likely to be from live bears that had been imported. O'REGAN'S (2018) review of bears in Britain also identified two topics that are worth exploring further – the potential link between bears and human burials, and the role of bears in Roman and later entertainment. The rest of this chapter focusses on these two topics.

BEARS AND BURIALS

While there is very limited evidence of bears in Britain in the Bronze and Iron Age, all of the anthropogenic examples that are present have been found with human cremations (cf. Fig. 3). Bear bones are also present in human cremations in the Anglo-Saxon period (Bond/Worley 2006; Squires 2011). In contrast, there are no physical remains of bears identified from Roman period burials, but bear figurines have been found in a number of graves (Crummy 2010). I am not aware of bear bones or figurines associated with burials of any period from Scotland or Wales, although it must be noted that owing to soil chemistry the burial record for both these countries is limited, so this absence may not be an accurate reflection of original practices.

The Bronze Age

In the Bronze Age, only one grave has been identified as containing a bear specimen. This item is particularly unusual as it is a preserved pelt (Fig. 1), and is the only non-osseous bear specimen in the British archaeological record. A human cremation was found wrapped within the pelt, and placed in an early Bronze Age cist at Whitehorse Hill, Dartmoor, Devon (Jones 2016). The cremated individual (which could not be sexed) of approximately 15-25 years of age (MAYS 2016) was buried with a number of high-status objects including a copper alloy pin, a composite necklace with beads of tin, shale, amber and clay (SHERIDAN 2016), two pairs of ear studs (labrets) made from spindle wood, as well as a woven basket and a single flint flake (Jones 2016). Dartmoor is an upland landscape, and the cist had been cut into a hummock of peat which effectively preserved the fur, but not the skin, of the animal. The fur was examined and identified as a bear (Family Ursidae), using proteomic analysis of the hair fibres (Solazzo 2016). The pelt was from the rear portion of the bear, and likely to be from one side only (i.e. it was a portion extending from the midline of the back to the belly), and would have measured some 56 x 39 cm when unfolded (CAMERON/MOULD 2016). Relatively few animal skins have been identified in British Bronze Age barrows, although this apparent absence may be partly due to taphonomic factors, as skins are likely to decay in the absence of very specific burial conditions (e.g. anaerobic, very cold or very dry deposits). Jones (2016, table 21.2) summarised all known Bronze Age barrow burials and cremations that contained textiles, leather/skins, matting and basketry. Eighteen sites contained animal skins or pelts, and of these, 16 were inhumations and two were cremations, indicating that even where conditions appear favourable for skin preservation, skins are less common in cremations than inhumations. Where skins have been identified, they have almost all been from cattle, with the exception of one possible sheepskin, and three sites that have yielded wild taxa - a pine marten (Martes martes) and a red fox (Vulpes vulpes) from Gristhorpe, Yorkshire, a stoat (Mustela erminea) or red fox from Dysgwylfa Fawr, Cardiganshire, Wales, and a possible stoat from Cuninghar, Clackmannanshire, Scotland (CAMERON/MOULD 2016). However, only the Gristhorpe identifications are confirmed, as the Welsh and Scottish finds were found in the late 19th or early 20th century and have not been subject to modern scientific analysis. All of the above small carnivores can be used for their pelts, but no large carnivores have been identified other than at Whitehorse Hill. Intriguingly, Dysgwylfa Fawr and Whitehorse Hill are the only cremations in the dataset, both contained the skins of non-domestic taxa, and they are of very similar date (Whitehorse Hill dated to 1740–1560 cal. BC; Dysgwylfa Fawr dated to 1760–1410 cal. BC (see Jones 2016 for full details). This could hint at an association between cremation and carnivore pelts in the early-middle Bronze Age, but with only two sites, and such very different taxa, this cannot be explored further at present.

A key question is whether or not the individuals creating the Whitehorse Hill assemblage would have recognised the pelt as bear, and if that recognition would have had significance for them, rather than it simply being an exotic pelt instead of the more common cattle skin. It must have been clear to the mourners that the pelt was different – the fur was thicker and curlier, but unless bears were known animals, in the absence of any claws or canines to clearly mark the pelt as that of a carnivore, a piece of skin, which when unfolded would only have been 56 cm x 39 cm, may have been valued for its expense, utility and the distance it had travelled, rather than the species it was made from.

There are two other potential Bronze Age bears from burials in the archaeological literature. The first is a very fragmentary canine that was found in the tertiary fill of a ditch surrounding a late Neolithic (2900-2350 cal. BC) long barrow in Eynesbury, Cambridgeshire (Ellis 2004). Only six other identifiable bones were found in the tertiary fills - one red deer (Cervus elaphus) bone and five antler fragments (SYKES 2004). Radiocarbon dating of the bear canine failed, owing to lack of collagen, so the date of this specimen remains unknown (O'REGAN/DEVIÈSE in prep.). We could assume that it is late Neolithic or later, but given the Lateglacial radiocarbon dates on specimens that were thought to be Roman (EDWARDS et al. 2014), it is always possible that it could be from a much older animal. Whatever its date we can be sure that, given the rarity of bears in Holocene Britain, the deposition of this specimen in the barrow ditch was a deliberate act by the people who placed it there. The second potentially Bronze Age example is two reported bear claws from the lower ditch fill of an early Bronze Age cremation and cairn at Sant-y-Nyll, Glamorgan, Wales (SAVORY 1960). The specimens are unfortunately missing from the site archive at the National Museum of Wales, Cardiff, but the photographs included in SAVORY (1960, plate VII) clearly show that they are not bear claws. They look much more like the canines from very young animals (just an enamel cap with little root development or dentine), and it is not possible to confidently identify them from the photographs.

In summary, there is almost no evidence for bears in Britain in the Bronze Age, and only one grave which can demonstrably be said to have a direct link between a bear and a cremation – that of Whitehorse Hill. It is therefore unlikely that bears played any significant role in Bronze Age mortuary rituals.

The Iron Age

There are only two Iron Age sites with bear remains in Britain, and they are both graves - Welwyn Garden City (STEAD 1967) and Baldock (STEAD/RIGBY 1986). They are late Iron Age high status cremation burials, with a considerable number of imported items including amphorae. SEALEY (2009) used the amphorae and other pottery to date the Baldock cremation to 100-75 BC, and Welwyn Garden City to ~25-15 BC (Fig. 2a-b). The amphorae would have come from Italy (FITZPATRICK/TIMBY 2002) and therefore demonstrate considerable trading links for these individuals and their societies. At both sites the bear remains are terminal phalanges that had been burned, and they were found mixed into the human cremation deposit (Fig. 2b); three phalanges at Baldock and six at Welwyn. The Welwyn grave, of an individual identified as "probably male, probably over 25" (Powers 1967, 40-41), also contained evidence of a carnivore pelt, which had been preserved through association with a decaying bronze platter. Based on the presence of fine medullary hairs, Michael L. Ryder (cited in STEAD 1967) suggested this pelt might be from a stoat. The Baldock cremation, although heavily disturbed prior to formal excavation, appeared to have had only a "token" amount of the cremated individual interred, with a total weight of cremated bone of 10.5 g (STEAD/RIGBY 1986). Despite this, three bear phalanges were included in the "token" deposit, perhaps suggesting that they were of particular importance. No further age or sex information is available for the Baldock individual. There is also a record of a bear phalange from Fishbourne Roman Palace, on the south coast, a site that has produced considerable quantities of continental imports from Iron Age deposits (Manley et al. 2005). The proximal bear phalange is from a ditch deposit dated to the Iron Age to Romano-British transition (AD 40–79; Busby 2017). There are three cutmarks towards the distal end of the phalange, which perhaps indicate its removal during skinning, although Kirkinen's (2017) study suggests that only the terminal and part of the intermediate phalanges are likely to be retained in a skin. Busby (2017) suggested that the presence of the phalange could be evidence that a bear was skinned on site, but it may also have come from an imported skin.

Iron Age cremations with bear phalanges are rare in Britain, but Schönfelder (1994) identified a number of other late Iron Age burials with bear toe bones, largely in Germany, with outliers in Britain (n = 2, described above), Luxembourg (n = 1) and the Czech Republic (n = 2). This suggested the two British burials could be grouped with other Germanic burials, through the presence of the bear phalanges. However, a key point to consider is that bears were still extant in much of Germany in the Iron Age (Schmölcke, this volume), making the statement that their presence in graves "display[s] the ability of the dead to hunt and protect the village economy" (SCHÖNFELDER 1994, 224), much more plausible for these sites than it is for central England, where bears are likely to have been extinct for at least two thousand years (O'REGAN 2018). For the inclusion of bear within these graves to have a protective meaning, people must have been aware of bears and their potential power. As briefly discussed by O'REGAN (2018), while there are statuettes of wild boars and wolves from Iron Age East Anglia, there are no recorded statues of bears, and images of bears on coins are very rare and limited to the regions closest to the English Channel. STEAD (1967) catalogued seven other sites with similar grave goods to those from the cremation with the bear phalanges from Welwyn Garden City, and listed another eight "Welwyn-type" sites that were found in the 18th and 19th centuries, two of which were confirmed to be burials. This suggests that there are multiple ways of characterising the Welwyn Garden City and Baldock graves - if only the bear phalanges are considered, then they can be grouped with the Germanic graves, as suggested by SCHÖNFELDER (1994). However, if the other grave goods such as amphorae and metal firedogs are taken into consideration, they are more similar to graves from England and Gaul rather than Germany (SEALEY 2009).

A key point when looking at the prehistoric findings of bears is that very few graves have bear remains, but it is true to say that the three that do have bears are all high status and associated with imported goods. Therefore it seems reasonable to say that high status people in prehistoric Britain did not necessarily have bears in their graves, but the presence of bear remains is an indication of high status.

Early medieval

The early medieval record of bears in burials is rather different. Eleven cremation cemeteries from the 5th-7th centuries AD have been identified in eastern England in a region extending from Yorkshire to Norfolk (Squires 2011). While the human remains from most of these sites have received attention, there has been much less work on the non-human remains. However, there are records of bear bones from four of the eight sites that have been studied – Sancton I, Spong Hill, Elsham Wold (Bond/Worley 2006), and Cleatham (Squires 2011) (Fig. 3). A relationship between bears and the dead is widely seen in Scandinavian practices in the early Medieval period (Lindholm/Ljungvist 2016; Kirkinen 2017), with people being buried with full skins or being cremated with bear skins or isolated claws as part of the funerary rite (inferred from the presence of bear terminal phalanges in cremation deposits; Grimm 2013). The majority of phalanges from the English sites are also terminal (Bond 1996; Bond/Worley 2006; Squires 2011), but proximal and intermediate phalanges are reported from Elsham Wold and Cleatham, along with a possible long-bone diaphysis fragment (Squires 2011; cf. Fig. 4). It seems most likely, given the paucity of other bone elements, that the phalanges from the cemeteries represent bear skins that were cremated along with the humans on the pyre. At Elsham Wold, bear bones were only found in adult cremations (n = 6), one of which was

identified as male, one as female, and four could not be sexed. In terms of grave/pyre goods, the most common items were fragments of bone combs, found in five of the six cremations containing bear. The sixth cremation had no comb fragments but did have glass globules, copper alloy globules, and an ivory fragment (SQUIRES 2011, appendix 1). In contrast, at Cleatham, out of ten cremations with bear bones, no individuals could be sexed, and only eight could be aged (a child [5-12 years], two adolescents [12-18 years] and five adults [19+ years]). In terms of status, the cremated individuals with bear remains at Cleatham had pyre and grave goods ranging from an ivory ring and melted copper alloy (two cremations), gaming counters (two cremations), to no goods at all (four cremations; see SQUIRES 2011, appendix 2 for full details). The differing ages, sexes, and levels of grave goods at these two sites suggests a variety of statuses for the individuals with bear phalanges, and could potentially indicate a family relationship rather than a social rank (SQUIRES 2013). A role for bear skins rather than live bears in early medieval Britain can be supported by the fact that the only other bear bones dated to this period are also from the foot - two or more terminal phalanges from Viking Age York (O'CONNOR 1989), a metapodial from the Anglo-Saxon settlement at West Stow (CRABTREE 1989), and a single phalange from the early medieval monastery at Eynsham Abbey (HARDY et al. 2003; see Fig. 3 for locations).

However, the ethnographic and archaeological record from North America offers an alternative explanation for sites where metapodia and proximal and intermediate phalanges are found – the possibility of bear paw amulets, or of bear paw feasting (see Waselkov/Funkhouser 2020, and references therein). Given the probable extinction of bears in Britain by this time, feasting is perhaps less likely, but the possibility of paws preserved as amulets could be considered. Indeed Bond/Worley (2006) tentatively suggested that the inclusion of bear and other wild animal remains in the cremations could relate to shamanistic practices, or certainly symbolism of the bear, given its human-like appearance (Lapham 2020). They also commented on the presence of both bear and fox bones in a single cremation from Spong Hill (no. 2890) and a single cremation at Sancton I (no. MS202, which also contained a horse). Both bear and fox are rare inclusions in the cremations, leading to the suggestion that there may be some additional but unknown significance to their placement together.

Locating the bears

Assuming that, as discussed above, the bear was likely extinct (or nearly so) in Britain; where might the bear remains in burials have come from? The young adult (15–25 years old) in the Bronze Age Whitehorse Hill cremation was interred with a necklace of amber, tin, shale, and clay beads. The amber could have been picked up from beaches on the east coast of England, although it will have originated in the Baltic (Sheridan 2016), while the nearest shale deposit is Kimmeridge, 130 km east of Dartmoor. The finished items were probably traded to Dartmoor via Wessex, over 180 km away (Jones 2016). Analysis of the amber beads found that three out of the seven were chipped or worn, indicating that they were not new when deposited in the grave (Sheridan 2016). The age of the beads contrasts with the age of the bear skin which was likely to be fairly new when deposited, as the radiocarbon dates were similar to those of the purple moorgrass (Mollina caerulea) that had been used as matting at the base of the cist (Marshall et al. 2016). It is evident then, that the cremated individual and the people that created the cist burial were linked into a wide trading network, which spread well into central England and beyond. By the late Iron Age, the artefacts found in the graves of the individuals at Baldock and Welwyn Garden City demonstrate that they had links that stretched as far as the Mediterranean.

Recent overviews on the genetics and biogeography of brown bears in Holocene Europe demonstrate that brown bears were already scarce in the regions closest to southern Britain by the middle Bronze Age (Crees et al. 2016; Albrecht et al. 2017; Ersmark et al. 2019). Certainly by the late Iron Age it is likely that any bear specimens would have had to have been traded over considerable

distances. It is also important to note that the published distributions of European bears are models based on a database of archaeological sites (e.g. SOMMER/BENECKE 2005; CREES et al. 2016; ALBRECHT et al. 2017). Given the potential for trade in bears and bear parts, linking their distribution to anthropogenic sites may overestimate where wild bears could be found, especially in the case of islands such as Britain (O'REGAN 2018). For example, the study of ALBRECHT et al. (2017) on the European Holocene found that bear remains were most likely to be identified in castles and burial sites. For burials, the many Scandinavian graves that contained bears in the Roman Iron Age and medieval periods may have influenced this result (e.g. GRIMM 2013; LINDHOLM/LJUNGKVIST 2016; KIRKINEN 2017; see different contributions, this volume), while the data from castles may indicate animals that had been killed by the occupants (see Oehrl 2013 for a discussion of aristocratic bear hunting), or skins that had been traded from elsewhere. A modern comparator would be the presence of stuffed bears and bear skins in many British aristocratic residences in the 19th and 20th century. These bears did not live in the wild in Britain, but live animals were kept in menageries and there was a huge taxidermy trade in skins and hunting trophies (O'REGAN 2020).

Where the early medieval bears were traded from is a very interesting question, and will likely only be answered with ancient DNA analysis. Viking Age Coppergate in York had wide trade networks, so the origin of the bear remains cannot be determined (O'Connor 1989), while the phalanges from the cremation cemeteries in Yorkshire, Lincolnshire and Norfolk demonstrate clear similarities between the populations. Squires (2016) performed a comparison between English and German early medieval/migration period cremation cemeteries. The earlier Roman period cremation cemeteries in Germany had a very high number of cremations with animal remains (74 %), but showed a marked reduction in the migration period to only 7 %, while the early medieval cremations from England were intermediate with 29 % (Squires 2016, 125). This pattern suggested that there are links between the cremation rites of the two countries and that these customs were probably imported into England during the early migration period and continued after they had declined in Germany (Squires 2016).

Bear material culture and graves

In contrast to the Iron Age and early medieval records of bear phalanges in cremations, there are no bear bones from Romano-British burials. However there is still an association between bears and burials, as jet bear figurines (Fig. 5) have been found in five infant graves (or probable graves) and in a probable votive deposit in eastern England, and at two sites in Germany (Trier and Cologne). The bear figurines are associated with multiple other grave goods in each case, such as jet or glass beads, lunulae, coins and other items, which together indicate an intention to protect the infants (CRUMMY 2010). The jet bears are small (<4 cm long) and are often pierced between the legs, or in one case through the shoulder hump, to form a bead or pendant and were probably amulets. CRUMMY (2010) has comprehensively described each grave and figurine, and discussed their potential importance as a symbol of protection for infants in the underworld. She notes that the richness of two graves from Colchester indicates that the families of those individuals were wealthy, but that examples of damaged or worn bears (from Malton and York) may indicate the importance of them as amulets rather than being indicative of wealth (CRUMMY 2010, 78). As well as the overall iconography of the bear, PARKER (2018) has noted a potential link between the bears and magic in the Roman period, and particularly the carvings on the backs of three of the figurines, which appear to form a star shape (Fig. 5). These markings have previously been identified as renderings of fur, but PARKER (2018) suggests that they could be a genuine attempt to link the bears with the constellations of Ursa major and Ursa minor, or the great and the little bear. This, and the ability of jet to form static electricity could indicate a magical element, especially given the heavily abraded or rubbed appearance of the bears from Malton and St Stephen's, Fishergate, York (PARKER 2018). A second aspect that may have been

overlooked regarding the bears is that where there is information on the burials that were found, two of the three infants had been cremated (Crummy 2010). This is interesting for two reasons – firstly, as they are late Roman burials, inhumation was becoming the dominant rite, and secondly, as discussed above, there is a link between bears and cremations in both the late Iron Age and the early Anglo-Saxon period, in the same region of England that the bear figurines have been found (cf. Fig. 3). A key difference is that the bear figurines were clearly not pyre goods, while the Iron Age and Anglo-Saxon bear bones are burned.

Small copper-alloy bear figurines are also rare finds from the Roman period in Britain, Switzerland and Germany. The best-known example from near Berne shows a seated figure interpreted as the goddess Artio holding a bowl of fruit and facing a bear with a raised paw (Schmölcke et al. 2017). An isolated figurine from Lorch shows a bear with a raised right paw, which could also have formed part of an Artio group, but at present the interpretation is uncertain (Bollacher 2015). In Cologne, a figurine of a bear sitting on its hind legs was found in a grave in Luxemburger Strasse in the early 1900s (RITTER 1994), and a bear figurine with a human figure in its mouth was found by a metal detectorist at Longstanton in Cambridgeshire, England (Fig. 6; EVANS/MACKAY 2004). The human figure has been interpreted as a child (although it could also represent a doll), and it was tentatively suggested to be a "funerary beast" (EVANS/MACKAY 2004). The base of the figurine is unfinished and, like the Lorch item, it may have originally been attached to furniture or another object. Although there is an association between a human and a bear in both the Artio and Longstanton figures, the specific pose of the British example is very unusual. The positioning of a human figure in the mouth of a seated carnivore is also seen in the "wolf-god" figure from Woodeaton in Oxfordshire (Durham 2014), but in this case only the legs and feet of the figure protrude from the animal's mouth. Dur-HAM (2014, 209) states that such androphagous figurines are most often found in Gaul, and "apart from wolves or dogs can be lions, Cerberus, sphinxes, griffins or wild boars". The purpose of such juxtapositions is not known, but could be as different as the human being devoured or protected by the larger figure.

Viking Age hogbacks are the only items to link bears and graves in the later early medieval period in Britain. They are large carved recumbent stones, usually 1.5 m long and mainly found in northern England and southern Scotland (WILLIAMS 2016). They are thought to have been grave covers or markers, but none have been found in situ to confirm this (WILLIAMS 2016). There are a great variety of types (CRAMP 1991), including those with "end-beasts" that are apparently grasping the main body of the stone. Some of these end-beasts appear to be bears, and three excellent examples are found in Brompton in Yorkshire, one of which is shown in Figure 7. The presence of bears on the hogbacks does not necessarily indicate that bears were present in the region, rather they are likely to have had some protective purpose, with WILLIAMS (2016, 505) suggesting that the dead were "protected by the static gazes and enwrapping bodies of attendant ursine or dragonesque beasts". The positioning of the bears is also intriguing, as some appear to be hugging or holding on to the stone, in a manner that is very reminiscent of a bear cub suckling its mother. This could evoke ideas of protection, or perhaps of fertility. An additional feature of these hogbacks is that many of the bears appear to be muzzled, and this contrasts with the bears from the Roman period which are often shown in their wild form, unencumbered by harnesses (e.g. Fig. 5). Such a change in iconography may indicate a change in attitudes to bears, from creatures of the wild to those that were harnessed for human purposes, as is increasingly seen in the medieval and later periods (see below). A relationship between bears and the dead is widely seen in Scandinavian practices (GRIMM 2013; LINDHOLM/LJUNGVIST 2016; KIRKINEN 2017), and in the cremation cemeteries of eastern England (see above for discussion). Therefore, it is tempting to speculate that the placement of a carved bear with teeth and paws around the burial stone of a high-status dead person or family may (amongst other things) have been rendering in stone a practice that occurred "in the flesh" in places where bear skins were more readily available.

BEARS IN ENTERTAINMENT

Roman period

In the Roman period, there is clear evidence of exploitation of bears for entertainment on the continent, but relatively little information for Britain. Both historical records and mosaics attest to bears and other large carnivores in the Roman arenas in Europe and North Africa (Toynbee 1973; Mackinnon 2006). These "entertainments" included the *Damnatio ad bestias* (death by beasts), when people were executed in the arena by large predators, and also bears fighting against specially trained gladiators or large animals such as bulls or lions (Auguet 1972). Intriguingly, there is one mosaic from Rades in Tunisia that gives the names of the bears (Coleman 2012), which might suggest that they had some longevity, at least in this arena.

Evidence for bears, or indeed any exotic animals, being used in entertainment in Roman Britain is limited. The only direct evidence comes from the amphitheatre in London, and although the bear bone was missing when the final publication was completed (BATEMAN et al. 2008), Dr Jane Sidell has confirmed that she identified it as a bear humerus, with a knifemark (possibly from skinning) and stated it was found at the edge of the arena (J. Sidell, pers. comm. Jan. 11, 2022). To my knowledge, this is the only evidence of an exotic animal from a Roman arena in Britain. At least five other Roman sites from the 3rd-4th centuries AD also have bear limb bones (e.g. femora, tibiae), which have been interpreted as indicating the presence of complete (and therefore live) animals (see O'REGAN 2018, appendix 2, for full details). These sites are Courage Brewery and Tabard Square in London (Reilly 2008), Binchester (JESSOP 2012), Fullerton Roman Villa (HAMMON 2010), and Catterick Bridge (MEDDENS 1990). Live bears may also have been represented at Balkerne Lane and Butt Road in Colchester, but body part data is not given in the publication (LUFF 1993). An obvious interpretation for the presence of these live animals in human settlements is entertainment, which might be supported by the "Colchester Vase" found with a human cremation, pottery jug, and a Samian dish at West Lodge, Colchester (Thompson Watkin 1877). This vase, dating to the late 2nd century AD, shows a bear in gladiatorial combat with a man wielding a whip (Fig. 8). Unlike imported Samian bowls that depict bears, this vase was made in the Colchester area (TOYNBEE 1963), and may therefore represent a scene that the potters and customers were familiar with. It was also inscribed after manufacture with the names of the gladiators, but the bear is not named (THOMPSON WATKIN 1877).

Medieval and early modern periods

The early medieval (incl. Anglo-Saxon and Viking) records of bears in Britain are discussed above and appear to relate to skins and a probable trade in bear products rather than live animals. However, there is a distinct change in the record of bears from the start of the medieval period (AD 1066-1485). Out of ten sites with bear remains from medieval England (O'REGAN 2018, appendix 2) three have yielded body parts of bears that are not likely to have been kept as souvenirs; a humerus from Barnard Castle (Austin 2007) and another from Gaol Street, Hereford (Hamilton Dyer 2007), and a scapula from Seal House, London (Museum of London Archaeology [MOLA], database). This again suggests live bears were present, which is supported by iconographic and documentary evidence, such as the Bayeux Tapestry (as noted by OEHRL, this volume), which shows a bear tethered to a tree and a man with a sword looking as if he is about to strike it. FitzStephen in 1174 said that in London "in the winter holidays [...] bears of a large bulk are baited with dogs" (Pegge 1772). This statement clearly describes bear-baiting, a very popular entertainment of the time, where dogs were set on tethered bears, and it is likely that there was betting on the outcomes. Further medieval evidence comes from John of Gaunt's Record Book, where he is recorded as arranging for payments for baiting in Newcastle-under-Lyme in Staffordshire, in 1372 (The National Archives: DL 42/13, cited in SOMERSET 2017). Relatively little is known about medieval baiting, other than occasional mentions

in manuscripts and illustrations or carvings. The latter examples include a famous image from the Luttrell Psalter (AD 1325-1340). The bear is shown with a chain and muzzle, but also rather oddly with a stripey wrap or blanket around its hindlegs (LUTTRELL PSALTER, bear baiting image f.161r.). This is unquestionably an image of baiting, as the dogs are being set on the bear, while the audience and the bearward (i.e. bear keeper) look on. A much less well-known medieval image of baiting was brought to my attention by Dr Mark Hall. This undated misericord (a ledge for perching on during church services) in the Burrell Collection in Glasgow, Scotland, shows a muzzled bear fighting a dog (Fig. 9). STOWELL PHILLIPS (2008, 159) found that in a sample of 696 misericords showing terrestrial animals, only 2 % depicted bears (n = 14), 9 % showed monkeys, and 18 % showed lions. This study also found a muzzled bear on the misericords at Durham Castle, and a bear included in a stained glass window in York Minster. The presence of bear iconography in churches is particularly intriguing, as PASTOUREAU (2011) suggested that the Christian church deliberately tried to suppress the role of bears as they had formed part of earlier, pagan religions. Whether or not this is the case, it is clear that bears are rarely present in medieval iconography and material culture (although they are included in heraldry, such as the famous "bear and ragged staff" emblem of the Earl of Leicester [Fig. 10]). However, archival and archaeological evidence demonstrates that live bears were present in medieval towns and cities.

It was not until the early modern period that bear-baiting reached its peak, with the building of specialised arenas, mainly in London at Bankside (Bowsher 2012), but also in rural areas, such as Little Budworth, Cheshire (HINDLE 1995). The post of "Master, Guyder and Ruler of all our Bears" was established by Richard III in 1484 and continued as a royal appointment (with various name changes) until at least the 1620s (CERASANO 1991). By the late Tudor period this was a highly sought-after post, with courtiers and entrepreneurs vying for it. Evidence for this comes from the archives at Dulwich College, London, which contains several letters from the theatre impresario Philip Henslowe, attempting to use his influence to gain the job when the previous incumbent was sick (GREG 1907; CERASANO 1991). The Master of the Bears licenced bearwards in England after the Vagabond Act of Elizabeth I in 1572. This Act meant that like players (i.e. actors), bearwards now had to have a patron, such as a member of the aristocracy, or else they could be prosecuted for vagrancy. Several lords had both playing troupes and bearwards, for example in 1565/66 Lord Strange's players were performing in Lincoln and Cambridge, while Lord Strange's bearward was in Newcastle (Records of Early English Drama: REED 2020a-c). Such widespread patronage, and the determination people showed to gain the role of "Master" suggests that there was prestige, money, or both, involved in bear-baiting in England at this time. Multiple monarchs enjoyed baiting, and were able to command a performance by the Masters of the Bears at whichever palace or castle they happened to be occupying. King James I (reigned 1603–1625) went so far as to remodel the Lion Tower at the Tower of London to allow a better view of the animals being baited below (O'REGAN et al. 2006).

There is also evidence for polar bears (*Ursus maritimus*) in London in both the medieval and early modern periods. For example, in 1251 a polar bear was gifted to the English monarch by the King of Norway (Grigson 2016), and in 1609 two polar bear cubs were captured on Cherry Island (reported as south of Greenland, but "Greenland" probably means Svalbard in this case, cf. Grigson 2016) and presented to James I (Ravelhofer 2002). The two cubs were sent to Bankside to be kept by the Master of the Bears (Ravelhofer 2002). There is a possibility that one of these polar bears could be the same "white bear" that was baited during the visit of the Spanish Ambassador in 1623, as John Chamberlain reported that they "then turned a white beare into the Thames where the dogs baited him swimming, which was the best sport of all" (Chamberlain Letters, cited in Ravelhofer 2002). While baiting was most formalised in London, bears and baitings were to be seen all over England, with some towns becoming particularly well known for their bear-related activities. Congleton, in Cheshire, for example, is remembered in a rhyme "Congleton rare, Congleton rare, sold the Bible to

pay for the bear" which alleges that the town spent the money intended for a new bible on a bear as theirs had died just before a major public event (Baldwin 1995). An archival record from 1613/14, again from Congleton, shows that overnight couriers were sent out to find a bear for the "Wakes" (town carnivals or holidays) after the intended animal failed to show up (Baldwin 1995, 264). Bearwards may have travelled with single animals or groups, as records in both Cheshire and Somerset refer to multiple "beares" (Baldwin 1995; Stokes 1996). In fact documents relating to a great fire in the town of Nantwich, Cheshire, in 1583, report that "John Seckerson who having in his stable iiijor [four] great beyres of his dyd lose theyme out in the beginning to the stretes wheroff the women were soe affrayed. They durst not carrye water". That they were "great" bears rather than cubs indicates that he owned at least four adult animals, and Baldwin (1998, 99) suggests that he was involved in bear-baiting.

By the mid-18th century many public activities such as bear dancing and bear baiting were popular enough to be made into stoneware ornaments and jugs at potteries in Nottinghamshire and Staffordshire (Bedde 2015, 214–215; Halfpenny/Bedde 1990; cf. Fig. 11). These items were sold to the growing middle classes, and were taking off in popularity (c. 1750s) as bear baiting is thought to have been in decline (however, I know of no study of abolition that has actually attempted to chart this). Parliamentary activity attempted to get baiting banned for a number of years in the early 1800s, finally being successful in the Cruelty to Animals Act of 1835 (Tünaydin 2013). Despite this, it appears the British introduced bear-baiting into parts of the British Empire, particularly Pakistan, as a method of disrupting local hierarchies (Fakhar-I-Abbas 2015; Kavesh 2018; 2019).

In addition to baiting, bear-dancing was also popular. These animals must have been imported to Britain, but who travelled with them is currently unknown. TÜNAYDIN (2013) provides a fascinating insight into bear dancing, demonstrating that bear training and performing was associated with gypsies throughout Europe in the late medieval through to modern periods. A second source of dancing bear trainers (orsanti) was northern Italy, as detailed by SERRA (2013). The orsanti would leave Italy with their performing animals (which could also include other taxa such as horses, camels, monkeys or dogs) and travel across Europe during the summer months, often returning to Italy for the winter (SERRA 2013). Bears were taught multiple tricks such as pushing prams and saluting, as well as dancing, sometimes in pairs (TÜNAYDIN 2013). One intriguing early modern record of bear dancing in England comes from 1528/29 when 20 pence was paid to the servant of the Duke of Suffolk with "the dancing bear and the dancing wife" (STOKES 1996). Sadly it is not clear from the record whether they danced together or separately. A children's book from the late 19th century gives an overview of the life of a bear from its birth in the mountains, through a career as a dancing bear, to its eventual exhibition and death at the Zoo in the Jardin des Plantes in Paris (Anon. 1901). While clearly fiction, the text and illustrations give some impression of the life of the animal, and the sort of tricks dancing bears might have performed (Fig. 12).

Bear dancing continued in England into the early 20th century, with specialist bear-leaders travelling over from Italy during the summer months (Serra 2013), finally being outlawed in 1911 (TÜNAYDIN 2013). Bears were also very popular in menageries and later in Zoological Gardens, which exhibited multiple species including brown, black and polar bears (O'REGAN 2020). The presence of bears in zoos and in the streets may have helped lead to the widespread take-up of bears as children's toys (Fig. 13), with teddy bears remaining very popular to this day.

Conclusions

Brown bears have had a varied history in England, from native mammal to source of entertainment. This paper has focussed on the presence of bears and bear iconography in archaeological sites from

the Bronze Age onwards, and for many periods bears are strongly associated with burials, and particularly cremations. In the Bronze Age and Iron Age these were wealthy graves with multiple traded items within them. However, given that they are so rare, it does not appear that bears had a role to play in the mortuary rituals, rather it was the status associated with an "exotic" skin or the ability to trade widely that was important. In contrast, bears do appear to have had a role in the early medieval (Anglo-Saxon) cremation funerary rite in a defined portion of eastern England (Yorkshire to Norfolk). Bear bones are not common in these cremations, but they are found in four different cemeteries in the 5th–7th centuries AD. The source of the bear phalanges or skins used in these early medieval cremations is unknown. There are some parallels between the English practices and earlier Germanic rites on the continent as discussed by SQUIRES (2016).

In the Roman period bear figurines made of jet may have been used as protective amulets in infant graves and cremations, but there are no records of bear bones from Roman burials. However, there are bear bones from a number of Roman settlements, which suggests that the animals themselves were being used for entertainment, such as combat and dancing. Evidence for this includes a bear and a gladiator in combat together depicted on the "Colchester Vase", and a bear humerus found in the Roman amphitheatre in London. In the medieval period we find the first direct archival records of bear baiting, dating back to at least 1174. Baiting became formalised through the laws of Queen Elizabeth I, which required bearwards to have licenses for baiting and dancing. While baiting was outlawed in 1835, bear dancing continued into the early 20th century. Pottery figurines of bears were sold from the 1750s onwards, and live animals continued to be exhibited in zoos and menageries, but by the mid-20th century the majority of the British population would only interact with bears in the form of stuffed toys. Overall then, live bears do not seem to have occupied a significant cultural role in Britain until the rise of bear-baiting in the medieval period, although they had a role in early medieval cremations practices, and are seen in a few earlier burial situations. This is considerably different to many of Britain's closest European neighbours (see different contributions, this volume), and suggests that bears were very rare or absent in the wild in the time periods considered in this paper.

Acknowledgements

I would like to thank Oliver Grimm for inviting me to participate in the "Bear and Human" conference that gave rise to this chapter. I would also like to thank the many colleagues and museum curators who have helped me by providing access to collections and helped me gain permission for images. These include Heather Perry (Wiltshire Council), Martha Jasko-Lawrence (Museums Sheffield), Kirsty Squires (Staffordshire University), Miranda Goodby (Potteries Museum and Art Gallery, Stoke-on-Trent), Christopher Evans and Alex Bovaird (Cambridge Archaeological Unit), Derek Craig (Anglo-Saxon Corpus/Durham University), Mark Hall, Clara Morgan (Museums Sheffield), Glasgow Museums, The Trustees of the British Museum, and The Metropolitan Museum, New York. Thank you also to the referees whose helpful comments have improved the text, and Gundula Lidke for excellent copy-editing.

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Fig. 1. A post-conservation photograph of the Early Bronze Age brown bear pelt from Whitehorse Hill, Dartmoor. The grave contained the cremation of a young adult, with a number of high status artefacts, and is radiocarbon dated to 1740–1560 cal. BC. The bear pelt had been folded in half to wrap the cremation, and the two layers can clearly be seen here with packing between. Note there is no skin present, only the hair was preserved within the peat (photo courtesy of the Conservation and Museums Advisory Service, Wiltshire Council).





Fig. 2. Reconstruction of a high status Iron Age human cremation grave from the Panshanger Estate, Welwyn Garden City, England, reported in Stead 1967, and on display in the British Museum. The amphorae and a silver cup were imported from Italy, and other items are from Gaul. Part of a unique set of glass gaming pieces can be seen above the human bones in Fig. 2b. Six bear terminal phalanges were found intermingled with the cremated human remains (bear remains not shown here). The grave has been dated between 25–15 BC (after SEALY 2009, © The British Museum).

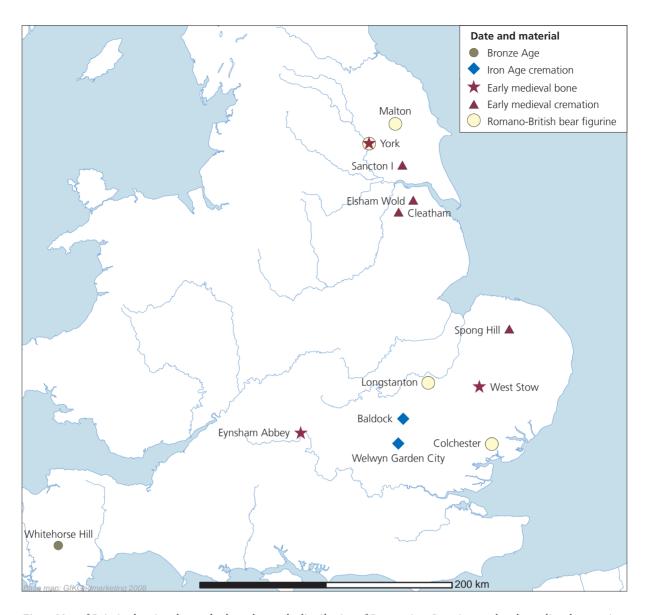


Fig. 3. Map of Britain showing the southerly and easterly distribution of Bronze Age, Iron Age, and early medieval cremations with bear remains, sites with Romano-British bear figurines, and sites with early medieval bear bones. See text for details and references (map GIS department, ZBSA).



Fig. 4. Cremated intermediate bear phalanges from burial MT89BLG (urn 983) from the Anglo-Saxon cremation cemetery at Cleatham, Lincolnshire. It was not possible to sex the human remains, but they were from an older mature adult (31–40 years). There were no pyre goods associated with this individual (after SQUIRES 2011, appendix 2; photo courtesy of Dr K. Squires).



Fig. 5. Romano-British jet bear figurine from Bootham, York. It was found in AD 1845 with a jet bead, a coin of Constantine I (AD 312–315) and a Castor ware beaker, and it is thought to have formed part of a burial group, but no bones were identified or noted at the time (CRUMMY 2010, 43). Note the incised marks on the shoulder and rump of the bear which PARKER (2018) suggested could represent stars. The figurine is in the Bateman collection, Weston Park Museum, Sheffield (© Museums Sheffield).



Fig. 6. Romano-British copper alloy bear figurine found by a metal-detectorist at Longstanton in Cambridgeshire. Note the human figure held within the mouth of the bear (after EVANS/MACKAY 2004).



Fig. 7. Hogback number 17a, from the village of Brompton, Yorkshire. The end-beasts are clearly muzzled, and possibly shown in a suckling position (photo T. Middlemass, image reproduced by permission and copyright of the Corpus of Anglo-Saxon Stone Sculpture).



Fig. 8. The "Colchester Vase", a locally made cup showing two gladiatorial scenes (one of which shows combat between a human with a whip and a bear), and a hunt scene of dogs chasing hares. It was found at West Lodge, Colchester, in 1853 with a human cremation, a small pottery jug or ewer and a Samian dish (cf. Thompson Watkin 1877; © Ancient Art and Architecture Collection Ltd. / Bridgeman Images).



Fig. 9. Bear baiting scene on an undated medieval misericord from the Burrell Collection, Glasgow (cat. no. 50/2044, photo M. A. Hall, Perth, Scotland; image reproduced courtesy of Glasgow Museums).



Fig. 10. The bear and ragged staff was the emblem for the Earl of Leicester's family in the medieval and early modern periods, and is now the badge of the County of Warwickshire. This medieval lead alloy livery badge in the collections of the British Museum (item no. 1853,0502.8) would have been sewn onto the clothing of a servant. The staff has been lost, but the bear is still very clear, as is its muzzle – a very common feature of medieval and early modern bear images (© The Trustees of the British Museum).



Fig. 11. In the mid-18th century lidded jugs or mugs in brown or white-glazed stoneware depicting bear-baiting were made in Nottinghamshire and Staffordshire. The lid of the mug is formed by the head of the bear and can be removed. This is a typical example, showing a collared, chained, and muzzled bear holding a dog between its fore-paws. It is also clearly meant to represent a male bear (© The Metropolitan Museum of Art, New York, Gift of Carleton Macy, 1934. Accession number: 34.165.4a,b; public domain).

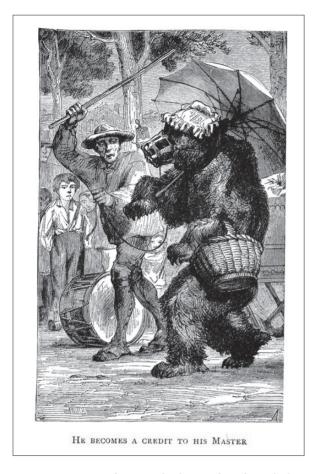


Fig. 12. Engraving of Martin the dancing bear from the late 19th century children's book "The life of a bear" (Anon. 1901). The illustrator has also shown the key accountrements of a travelling bearward – pole, muzzle, and drum (see Serra 2013 for more details). Also note the caption – the book has a strong moral undertone to instruct the young readers in obeying their elders.



Fig. 13. Bears as childrens' toys became increasingly popular in the 20th century. This example, made in Germany between 1910–1920, shows a dancing bear with muzzle. While grotesque to modern eyes, this toy represents a common sight in towns and villages in the 1800–1900s, as bears travelled with their owners to dance for money (Social History collection, Weston Park Museum, Sheffield, accession no. 1989.522; © Museums Sheffield).

Table 1. Names and dates of British archaeological time periods referred to in the text. Dating based on Hunter/Ralston 2009, except *Lateglacial which is in years BP (before present) and based on Rasmussen et al. 2014.

Period	Dates
Lateglacial*	14,692–11,400 BP
Mesolithic	9600–4000 BC
Neolithic	4000–2400 BC
Bronze Age	2400-800 BC
Iron Age	800 BC – AD 43
Roman	AD 43-410
Early medieval (includes Anglo-Saxon and Viking)	AD 410–1066
Medieval	AD 1066–1485
Post medieval (includes early modern and Victorian)	AD 1485-present