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ANTHROPOLOGICAL APPROACHES
TO ZOOARCHAEOLOGY

COMPLEXITY, COLONIALISM, AND ANIMAL TRANSFORMATIONS

edited by

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Animals and Complexity: How Zooarchaeologists Contribute to the Study of Complex Society in the New and Old Worlds

Justin Lev-Tov and Susan D. deFrance

Animals in complex human societies are often both meal and symbol, related to everyday practice and ritual. People in such societies may be characterized as having unequal access to such resources, or else the meaning of animals may differ for component groups. Here, in this book, 28 peer-reviewed papers that span 4 continents and the Caribbean islands explore in different ways in which animals were incorporated into the diets and religions of many unique societies. The temporal range is from the Neolithic to the Spanish colonization of the New World as well as to modern tourist trade in indigenous animal art. The first section is the most general, containing a variety of studies on the interaction of foodways with complex societies via themes such as status, stratification, feasting, and economics. The second section springs from the first, and in it authors all address one theme in particular, the interaction between diet and colonialism. Our final section explores the complex role that animals, and parts of animals, play in all human societies as religious, identity markers, or other types of symbols. Animals are not only passive actors but, as creatures living intimately with their human counterparts, are actively used by people to express beliefs about human interactions and beliefs.

This volume is organized according to these themes rather than according to geographic location or time period. We believe that – clearly – these issues crosscut both such divisions. In so doing, we hope that this book will present an opportunity for scholars divided by geography especially, but also by temporal period, to read about each other’s research and perhaps to bring these ideas into their own research, even if it is regionally and temporally divergent from the examples offered here. In other words, different archaeological settings can perhaps address the same problems cross-culturally.

Because the volume is arranged not along the lines of time and space demarcation, but rather as a series of case studies of revelations of diet for the study of social complexities, what follows are some general remarks about themes the essays address. Just as the papers presented here cover many of the subjects traditionally focused on

within the study of complex societies (cf. Crabtree 1990), it is also interesting that they address their subject matters in distinct ways.

Research themes that emerged prominently in this realm of zooarchaeology include the origin of state societies and the development of centralized control over agriculture and specifically meat distribution to urban, presumably non-food producing, residents. Other subjects treated quite a bit in the literature concern the internally divided populations that typify and even define complex civilizations. Populations in such societies are divided by group origin or identification, that is to say ethnicity, by access to power and wealth, in other words status and class, as well as gender roles. Arguably, an offshoot from the study of status and wealth relations through diet has been the employment of zooarchaeology in the study of colonialism. Colonialism, since it is ultimately about relations of power and the negotiation of identity between intrusive and indigenous groups, or even two intrusive groups, lends itself well to the study of animal use and diet. Food is a locus of culture at once public and private, shared at the community level and held private within the family. As well, food has often been a means by which dominating groups have tried to complete their cultural conquests, consciously or not. Building on the theoretical chapter by Campana, the case studies by De Nigris et al. examine the role of hunger in a Spanish colonial setting in Tierra del Fuego. Elsewhere in the Spanish Empire, studies by Tarcan and Driver and Pavao-Zuckerman address the indigenous response to Spanish colonization of the American Southwest and northern Mexico. The paper by Gifford-Gonzalez provides an interesting critique of the questions being addressed by zooarchaeologists researching the American Southwest.

At times, the processes that shape diet in complex societies are woven closely together. Within the archaeology of colonialism, Dietler (2007) has argued that “goods, and especially foods, have not only been appropriated and indigenized, but they have also been used by both parties in colonial situations to attempt to control the other.” Several

authors in this volume examine ancient Roman colonialism in Europe and North Africa, seeking to separate indigenous from native carnivory. Crabtree as well as Lyublyanovics set out to study the effects of Roman colonialism on diet in different parts of Europe, but along the way wind up considering questions of identity, what is native and what is Roman, rather than purely economic and political questions. MacKinnon demonstrates the remarkable dietary changes which took place in ancient Carthage at the time of the Roman conquest, and how those trends waned as the Roman hold on the city weakened. In these colonial situations, subordinate groups may resist such actions by retaining pre-existing foodways or even cooking up a creole of traditions.

Other papers in this volume examine the intersection of diet and empires from alternative perspectives. Lev-Tov's paper examines the effects the Neo-Assyrian Empire's conquest of the Levant had on the diet of Philistines there, wherein the local people's diet was changed to accommodate the commercial interests of the colonizers. A similar issue of the role of empire expansion on the local use of animals is addressed in the paper by Capriles *et al.* in their examination faunal remains in pre and post-Inka contexts from the site of Yoroma in Bolivia. Despite evidence from surrounding sites to the contrary, the latter authors demonstrate that Inka political dominance at this site did not lead to dietary changes. DeNigris *et al.* present the sole study of a failed colonial adventure, this one in southern Argentina, where a Spanish settlement failed after only a few years, despite – or because – the colonists out of necessity had taken to hunting some of the wild animals that native hunter-gatherers had also pursued.

The animal link between many societies that were colonized, and the colonizers, has been, more than the dietary staples brought with them on the hoof and consciously, the commensal fauna that sometimes preceded but always accompanied such efforts. O'Connor discusses commensal animals, their importance and their categorization. These fauna occupy a gray zone between the wild and domestic, and therefore, escape our attention despite the key role such animals have played. Vretemark and Sten address another sort of companion to humans, dogs. They study how that animal played multiple societal roles, as pets, actual and symbolic guardians, and ritual food in their study of Neolithic canid remains from a Hungarian Bronze age fortified site.

While our conceptions of some animals are almost nonexistent, with others we entertain nearly uniformly negative views. In this volume Gonzalez demonstrates how sharks in Brazil formerly held special status, as seen in the frequency of different species' skeletal elements as they occur in settlements vs. burial mounds. The implication, of course, is that rather than feared and loathed, certain shark and other elasmobranch species were instead sacred. If human societies of all kinds have complex and non-economic relationships with various species, certain animal body parts also have special status outside of food considerations. Similarly, Cooke and Jiménez address the

cultural attitudes that ancient Panamanians had toward varied tropical animals and how animals and their products were used to establish hierarchy and status.

Clearly, one such arena of belief would be animal sacrifice, whether the custom involved is the selection of species to ritually slaughter and how to preserve the magic of the act, or which portions of the body might have more power than others. Two papers in this volume touch on these subjects, as Daróczy-Szabó examines a pagan Hungarian practice, continued into the Christian era, of burying sacrificed animals in upside down pots, while MacKinnon's examination of side preference in ancient sacrificial portions focuses on ancient Greece. In the latter paper, the author draws an interesting parallel to human handedness that may have influenced sacrificial preferences. Morris addresses the ways people used Associated Bone Groups (ABGs) in distinct contexts in Neolithic to medieval period sites in southern Great Britain to create meaning including changes in animal use following "Romanization" of the region.

Gumerman (1997, 106, 114, 116) pointed out that food is intrinsically social, in that people choose to eat or avoid certain foods and base their decisions on concerns such as the status or identity values it connotes. Part of the reasons for this has to do with the fact that consumers are not always, the producers in such societies. Here, contributing scholars use different case studies from Europe to assess the extent to which studies of animal bones may help us understand the identity of the Celts in Europe. Stallibrass draws on evidence of articulated and burned bones deposited within pits at a Hellenistic period site in Bulgaria, to argue that the Celts were at least one component of the city's population. In another study of identity and animal bones, Bartosiewicz and Gál draw on both unworked and worked bone data from multiple sites in a border area of Hungary to attempt to sort out which ethnic groups inhabited certain sites. The relative abundance of steppe animals within an earlier sample suggests that so-called Scythian peoples occupied the area at least in part, while the later collection, with higher amounts of pig bones, has more of a settled, Celtic character to them. The authors nonetheless argue that the assemblages do not provide profiles completely compatible with either group showing that the frontier area was typified by interaction rather than rigid cultural borders.

Other papers in the volume tread more familiar, but no less intriguing, ground, covering the important themes of provisioning, how urban residents obtained their food, whether through independent means or via governing officials, often elites, who distributed animals or meat to non-food producing classes of workers. The development of these types of distributive hierarchies is one of the general defining characteristics of the state, and it is therefore interesting that the two papers that explore that theme, both using datasets from the Near East, come to opposing conclusions regarding their sites. Redding examines the diet of the workers who built one of the pyramids of Egypt, and argues that the status of different workers is

visible in the types of meats they were provided. Status is not only visible in the (zoo)archaeological record, the state identified certain peoples' statuses by prescribing a diet for them. Allentuck and Greenfield, however, found no visible link between status and diet based on their study of faunal remains from a similarly early state-level site, this in Turkey. While these two papers come to different conclusions, they both take a bottom-up approach to the study of diet.

The archaeological delineation of status has long occupied archaeologists and zooarchaeologists studying the sites of complex societies, deFrance's recent (2009) review of zooarchaeological approaches to status highlights the challenges of the subject, perhaps the most critical being that class-based dietary choices vary highly from one time and place to another. In Mid-Continental North America Kelly examines how birds, or parts of them, were transformed from beasts to powerful symbols as a part of communal feasts that involved many segments of society at Cahokia. In the present volume, deFrance illustrates the difficulty in discerning high status food and animals that might have been used in feasts by an emerging Puerto Rican chiefly society. Although it is widely recognized that a stratified society existed in that study area, social differentiation evidently was not symbolized via access to different animals incorporated into the population's diet.

State religion(s) and elaborate rituals are of course a hallmark of societies throughout time, so it is only natural that such worldviews would extend also to the realm of animals in culture. Not only what people ate, and sacrificed, but certain animals or even skeletal elements can themselves become ritual objects derived from cultural beliefs about the biological animals in which they originated.

Taking up these themes, a number of papers in this volume address the transformation of animals, and bones, into objects of special interest and/or devotion for past peoples. Choyke presents an overview of the topic, demonstrating how societies past and present have imbued various animals with magical properties. In addition, Choyke discusses bone amulets found in Hungarian early medieval graves as examples of the transformative process, from living animal, to bone, to carved object with prophylactic powers. Other examples presented here include the significance of the quetzal bird to the former state societies of central

Mexico (Aguilermo) and the transformation of bird feathers and skeletal elements into powerful material symbols for Mississippian elites (Kelly). Using artwork from Bronze Age Armenian sites as a basis for discussion, Manaseryan demonstrates that the depiction of animals using metal and other materials was done in such a way as to emphasize certain species' behavioural or physical characteristics esteemed by ancient societies there.

The material and symbolic transformations through time of tupilaks, that is, items carved from whale ivory by the native population of Greenland (Sims and Yates) has relevance both to understanding the indigenous Inuit but also modern economics of trade in endangered animals. Thus, during the Neolithic period of southeastern Europe, as Trantalidou's paper details, it was the skulls of cattle, both real and imitated in clay that held some kind of special, symbolic significance for those peoples.

The chapters that follow take up the above and other diverse themes, all in the pursuit of the ways in which past societies manipulated animals, meat, and the products derived from animals as raw materials, to give expression to a number of social processes. Zooarchaeology, however, is not an end in itself, but rather a subfield that contributes to the overall picture of past lives and societies unravelled through archaeological study. These essays demonstrate the utility of animal bone studies in aiding the understanding of past hierarchical and multiethnic social systems.

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27. The Composition and Interpretation of Associated Bone Groups from Wessex

James Morris

This paper derives from work investigating the nature and interpretation of associated bone groups (ABGs), which have also been referred to in the literature as “special animal deposits.” The project has involved the collection of all available published data regarding these deposits from the Wessex region, southern England. The information presented here comprises the initial results. The past and current interpretations for such deposits are discussed with differences between periods, and the influence of archaeological paradigms highlighted. The species proportion and composition of ABGs are investigated for sites dating from the Neolithic to the Medieval period. The results indicate that a number of changes occur in the ABG assemblages between time periods, possibly due to social change. The transition between the late Iron Age and Romano-British period is investigated in depth. Results show that the composition of ABGs from rural settlements changed very little until the middle Romano-British period. However, urban sites display a “Romanised” pattern from the beginning of the Romano-British period. Finally, the current trends of ritual interpretations for ABGs are discussed.

Keywords: Associated Bone Group (ABG), Special animal deposits, Wessex, Romanisation, Ritual

Introduction

The majority of archaeologists are now aware that the study of faunal remains can offer much more beyond economic and ecological interpretations. During the last decade zooarchaeologists and archaeologists have shown an increased interest in the non-economic aspects of zooarchaeology (e.g., Anderson and Boyle 1996; Gilhus 2006; Grant 2000; Grigson 1999; Hamerow 2006; Hill 1995; Lauwerier 2002; Marciniak 2005; Méniel 1992; Ryan and Crabtree 1995; Wilson 1992; Woodward and Woodward 2004). This “social zooarchaeology” has mainly concentrated on the “ritual” interpretation of Associated Bone Groups (ABGs). These consist of deposits of faunal material from the same animal which are often articulated.

This deposit type has long been recognised in the archaeological record, under a number of different names; “animal burials” (Wheeler 1943, 115), “butchery waste” (Maltby 1985), “culled deposit” (Maltby and Coy 1981), “fall victim” (Maltby 1993), “feasting waste” (Armour-Chelu 1991), “sacrificial offerings” (Ross 1968) and “special animal deposit” (Grant 1984, 533; Wait 1985, 122). The uses of the above descriptions fail to separate the deposit type from its interpretation. To combat this problem Hill (1995) utilised the term Associated Bone Group (ABG)

as it has no interpretive connotations. Because of this advantage the term will also be used here.

The definition of an ABG is variable. A number of previous studies such as Grant (1984) and Hill (1995) have included deposits of single bones in their examination of ABGs. Deposits of complete and fragmented skulls are often included, even if there was no sign of them having been deposited in articulation with other elements. Complete mandibles, particularly of horses, again deposited as a single unarticulated element have also been classified as “special animal deposits.” This paper is concerned with deposits of elements from the same individual. Therefore single bone deposits defined as “special deposits” have not been included in the analysis.

This paper is derived from part of a Ph.D. project in which two main aspects of ABGs were investigated, firstly the composition and secondly the interpretation of these deposits. Data were collected from Wessex and Yorkshire. The provisional results from Wessex will be presented in this paper, which includes data from the counties of Dorset, Hampshire and Wiltshire. Although not constituting an archaeologically distinctive region, due to restrictions placed on data collection, the current county boundaries formed a useful sample. The results are derived from a systematic search of monographs, journals and Ancient

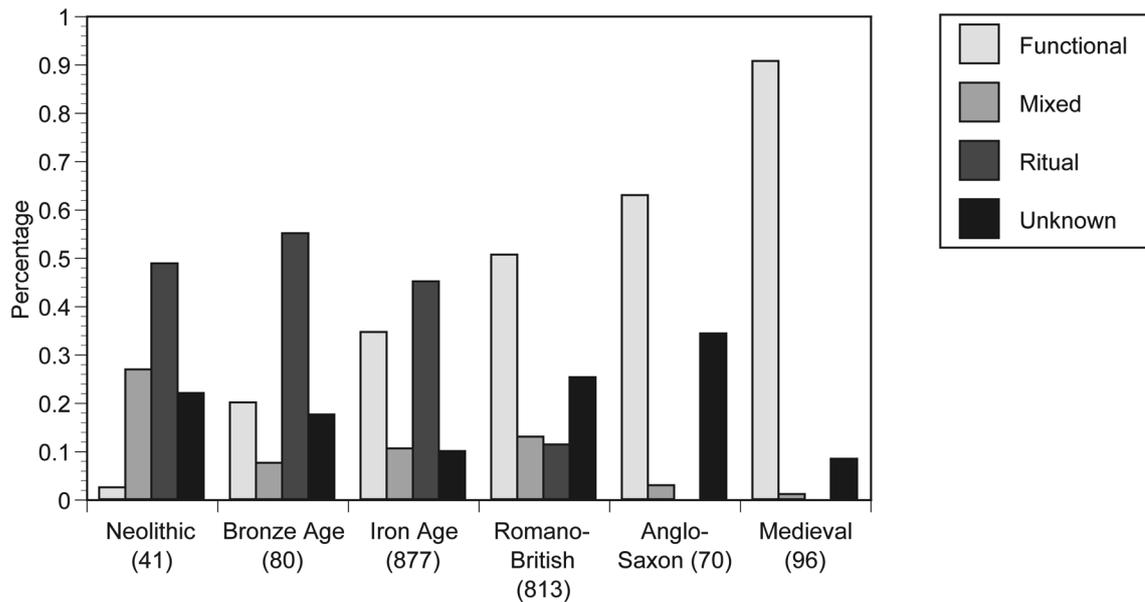


Figure 27.1. Graph showing the interpretation given to ABGs by archaeologists from each time period covered by this study.

Monument Laboratory (AML) reports dating from 1945 onwards (a full list appears in Morris 2008a).

Past and Current Interpretations

As discussed above, this project has used the term ABG because it removes interpretive connotations. The purpose and possible meaning of ABG deposits has been the subject of much discussion in the archaeological literature, resulting in a number of different interpretations. To investigate this aspect, the interpretation of each individual ABG has been recorded. These can be subdivided into four main categories: *ritual* (including feasting, grave goods, sacrificial offering), *functional* (including butchery waste, victims of disease, falls, natural deaths), a *mixed* explanation, stating ritual and functional interpretations but not drawing a conclusion, and *unknown*, where no interpretation is offered.

The most common interpretation given for these deposits differs according to the period to which the ABG dates. If the ABG dates to the Neolithic or Bronze Age then a ritual interpretation is more likely (Fig. 27.1). There is an increase in the number of functional explanations given for ABGs dating to the Bronze Age. This appears to be due to more ABGs being discovered on settlement sites. The number of ritual interpretations offered for ABGs in the Iron Age decreases compared to the Bronze Age, and there is a relative increase in the number of functional explanations. The Romano-British period appears to be the transition point where ABGs have commonly been regarded as the by-products of functional activities, rather than ritual ones. So far, no ritual explanations have been offered for ABGs from the study area dating to the Anglo-Saxon and Medieval periods. However, Hamerow (2006) has recently reinterpreted some Anglo-Saxon ABGs as resulting from ritual activity.

There therefore appears to be a general trend that ABGs dating to a prehistoric period are considered more likely to be formed by ritual activity, whereas those dating to an historic period are given a functional explanation. This is taking into account ABGs discovered from the 1940's onwards. The interpretation of these deposits has developed through the last century. The data collected for this project indicate that the interpretations offered have changed as archaeological theory developed. Neolithic and Bronze Age ABGs were the first to be investigated regarding their possible ritual nature, with studies concentrating on deposits from central Europe (Behrens 1964; Gabalówna 1958; Piggott 1962). This work influenced the interpretation of some finds within Britain, for example complete Neolithic or Bronze Age dogs found in association with human remains started being interpreted as ritual deposits (Bailey 1967; Bunting *et al.* 1968; Grinsell 1959). However, such interpretations were the exception. Before the 1980s, the majority of ABGs were not commented upon. By the 1980s, 42% of Bronze Age ABGs were being interpreted as ritual deposits. Unfortunately, the sample size for Neolithic ABGs is too small for comparison. By the 1990s, 58% (11) of Neolithic and 64% (16) of Bronze Age ABGs were given a ritual explanation. During the current decade, all ABGs for both periods have been given either a ritual or a mixed interpretation.

No ritual interpretations were offered for the remainder of the archaeological periods until the 1980s when ABGs were either given functional explanations or not given one at all. Also, before the 1980s, few site reports mention the presence of ABGs (see below). This would seem to correspond with the general trend that archaeologists of the 1960s and 1970s were reluctant to investigate the role of ritual and religion (Renfrew 1994). The "palaeoeconomic" school at Cambridge took a hard line in stating that "the soul leaves no skeleton" (Higgs and Jarman 1975, 1).

Ritual was viewed as unimportant and not worth studying on archaeological sites.

As discussed in Morris (2008b) for Iron Age ABGs, this changed in the 1980s with 40% (233) given a ritual explanation. However the majority of these came from Danebury. In the 1990s, there was a drop to 15% (12) of ABGs being given a ritual explanation. This could be due to a smaller sample size or a large number of faunal reports which were written in the 1980s and in some cases the 1970s but only published in the early 1990s. It could also be an indication, as Grant (1991, 482) states in her second Danebury report, that not all zooarchaeologists were accepting of a ritual interpretation for ABGs:

There is also, it must be added, an undercurrent of scepticism about these animal deposits, and some have argued, privately and publicly, though not necessarily in the press, that they represent nothing more than natural deaths of animals that died in circumstances that render them unfit for human consumption (Grant 1991, 482).

However, ritual explanations of ABGs dominate reports from the late 1990s. This is also reflected in results from the current decade, where 95% (144) of ABGs have been interpreted as being ritual in nature.

The Romano-British period ABGs display a different pattern to those from the Iron Age. Ritual interpretations were not often offered until the 1990s. For example, of the 452 individual ABGs reported upon from Romano-British contexts in the 1980s, only three (0.6%) were given ritual interpretations. However, 90 ABGs were given a mixed interpretation, perhaps showing an unwillingness at the time to put forward ritual interpretations of Romano-British deposits. There was an increase in the number of ritual interpretations from this period in the 1990s (12% (28)). However, ritual interpretations have increased dramatically in the current decade with 81% (36) of ABGs given a ritual explanation.

The interpretation of Anglo-Saxon and Medieval ABG deposits shows a very different pattern. No ritual explanations have been recorded so far. Until the late 1990s all explanations were functional in nature. However, a small number of mixed interpretations have been offered in recent publications such as the complete Anglo-Saxon dog ABG from the Matthew Estate, Wiltshire (Gooden *et al.* 2002).

It therefore appears that the interpretation of these deposits is influenced by a number of variables, including the period the deposits date to, preconceptions regarding that period, and current archaeological trends towards the study and recognition of ritual (Bradley 2005, 31–2). Until recently, it appears ritual interpretations were limited to ABGs from prehistoric periods. However, this is no longer the case, Romano-British (Fulford 2001; Woodward and Woodward 2004) and Anglo-Saxon (Hamerow 2006) ABG deposits has also been interpreted as the result of ritual activity.

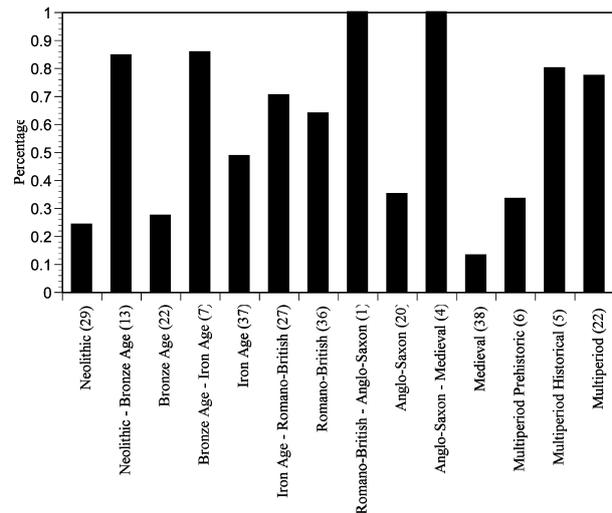


Figure 27.2. Graph showing the percentage of sites with ABGs present for each period. The total number of sites for each period is shown in brackets. Multi-period Prehistoric covers sites that were utilised from the Neolithic to Iron Age, Multi-period Historical refers to sites that were utilised from the Romano-British to Medieval periods. Multi-period covers sites that span a number of prehistoric and historic periods.

The Current Data Set

Data have been collected from 267 sites with faunal remains present. Not all sites had recorded ABGs as being present. Currently, ABGs have been reported from 130 sites, whereas the remaining 137 sites do not report the presence of ABGs. However, the presence of ABGs may not have been noted by some excavators or been deemed unworthy of reporting. Currently only 9 of 25 sites reported upon before the 1970s state that ABGs were present. In comparison 71 of 127 (56%) sites published after 1990 report ABGs as being present. Therefore, ABGs were more likely to be noted from 1990 onwards. This may be due to the work of Grant (1984) and Hill (1995) who raised awareness of this deposit type. Thus, sites excavated earlier in the last century may have had ABGs present but were not noted. This does not, however, mean that older data cannot be used, just that it is necessary to be cautious when comparing relative abundance.

There are also differences between time periods in the proportion of sites with ABGs present (Fig. 27.2). The majority of sites in the region dating to the Neolithic (4000–2500 BC) or the Bronze Age (2500–700 BC) appear not to have ABGs present. This, however, does not appear to be the case for some sites utilised in both periods. Roughly half the sites with ABGs dating to these periods were round barrows, such as Bishops Cannings barrow 81 (Grigson 1980), Winterbourne Stoke barrow 44 (Green and Rollo-Smith 1984) and Down Farm pond barrow (Legge 1991). However, the majority of sites from the Neolithic and Bronze Age that do not contain ABGs are also funerary monuments. It may therefore be the case that there is an increase in the deposition of ABGs at funerary sites in the

Species	Neolithic (41)	Bronze Age (80)	Iron Age (877)	Romano-British (813)	Anglo-Saxon (70)	Medieval (96)
Cattle	46.3%	46.3%	16.2%	10.7%	27.1%	6.3%
Sheep/Goat	7.3%	30.0%	33.9%	12.7%	8.6%	15.6%
Pig	19.5%	2.5%	11.6%	8.0%	8.6%	12.5%
Horse	-	6.3%	16.6%	3.2%	4.3%	7.3%
Dog	12.2%	13.8%	16.4%	42.9%	37.1%	10.4%
Cat	-	-	0.8%	4.6%	5.7%	5.2%
Wild Mammal	14.6%	-	2.6%	4.1%	-	7.3%
Domestic Fowl	-	-	0.7%	5.3%	2.9%	27.1%
Other Domestic Bird	-	-	-	-	-	4.2%
Wild Bird	-	1.3%	1.1%	8.6%	5.7%	4.2%

Table 27.1. Table showing the percentage of species for ABGs in each period. The number in brackets is the total ABG sample size for the time period.

late Neolithic/early Bronze Age, but then a decrease in the middle Bronze Age.

The majority of the current data comes from sites dating to the Iron Age (700 BC–AD 43) and Romano-British (AD 43–450) periods with currently 50% of the sites with ABGs present dating to one or both of these periods. These periods also contain the highest number of individual ABGs with 85% of those recorded coming from these two periods (Table 27.1). Although the majority of work involving ABGs has concentrated on the Iron Age (e.g., Cunliffe 1992; Fitzpatrick 1997; Grant 1984; Green 1992; Hill 1996; Knight 2001; Méniel 1992; Ross 1967; Wait 1985; Wilson 1999), Romano-British sites appear to be more likely to have ABGs present. Surprisingly, 52% of the sites examined dating to just the Iron Age have no ABGs present, whereas 36% of sites dating to just the Romano-British period have no ABGs present. However, although fewer Iron Age sites produce ABGs they do so in slightly greater numbers than in the Romano-British period, which may relate to overall faunal sample sizes.

The number of sites with ABGs present drops in the sample from the Anglo-Saxon (AD 450–1050) and again in the Medieval (AD 1050–1550) periods, with 35% of Anglo-Saxon sites and only 13% of Medieval sites having ABGs present. However, the Medieval period has produced more individual ABGs than the Anglo-Saxon period (Table 27.1).

As this brief description has indicated, there are large numbers of ABG data available from the Wessex region (Fig. 27.3). The remainder of this paper will concentrate on the species proportions and compositions of ABGs and how these proportions change between different time periods. Due to the large sample from the Iron Age and Romano-British periods, results from these periods dominate the discussion.

Species Proportion and composition

Domestic animals dominate the ABG assemblages from all time periods covered in this study. However, the relative proportions of individual species differ between them. Cattle (*Bos taurus*) remains form the highest proportion of ABGs in the Neolithic and Bronze Age. Caprines (sheep

[*Ovis aries*] and goat [*Capra hircus*]) do not comprise a substantial proportion of the ABG assemblage until the Bronze Age. Also, wild mammals are the third most common ABG in the Neolithic, due to deposits of roe deer (*Capreolus capreolus*) and red deer (*Cervus elaphus*) at sites such as the Coneybury ‘Anomaly’, Wiltshire (Maltby 1990) and Thomas Hardye School, Dorchester, Dorset (Smith 2000), respectively. The proportion of caprines present in the assemblage remains relatively consistent from the Bronze Age to the Iron Age periods. However, the proportion of cattle ABGs falls dramatically, with the relative number of horse (*Equus caballus*) and dog (*Canis familiaris*) rising.

Dog, horse, and wild birds have received much attention in the literature for their “ritual” deposition as ABGs in the Iron Age (Grant 1984; 1989a; Green 1992; 2001; Hill 1995, 104–105; Ross 1967). Dogs, horses, and wild birds such as the raven (*Corvus corax*), have been seen as animals closely connected with spirits/deities and therefore worthy of “special” deposition. Hill (1995, 107) and Méniel (1992, 142) see the horse and dog as important animals for deposition, closer to humans than other species. However, the data collected for this study indicate that sheep/goat were the most commonly deposited ABG, although this does not necessary equate to their being the most important animal for deposition, if the ritual nature of such acts is accepted.

There is a shift in the species proportions in the Romano-British period, with dog ABGs becoming most common, followed by caprines and cattle. Also, the Romano-British period produced the highest number of wild bird ABGs of all periods. Roughly one third of the wild bird ABGs consist of corvids, the remainder including buzzards (*Buteo buteo*), ducks (Anatidae), pigeons (*Columbia livia*), and red kites (*Milvus milvus*) and an assemblage of 30 swallows (*Hirundo rustica*) from the Oakridge well (Maltby 1993) making up the other two-thirds. Dogs remain the dominant ABG in the Anglo-Saxon period although the relative number of cattle ABGs also increased. The assemblage from Medieval sites is the most distinctive as it is dominated by domestic fowl (*Gallus gallus*), with caprines the second most numerous ABG species.

An interesting aspect of the ABG assemblage, which was

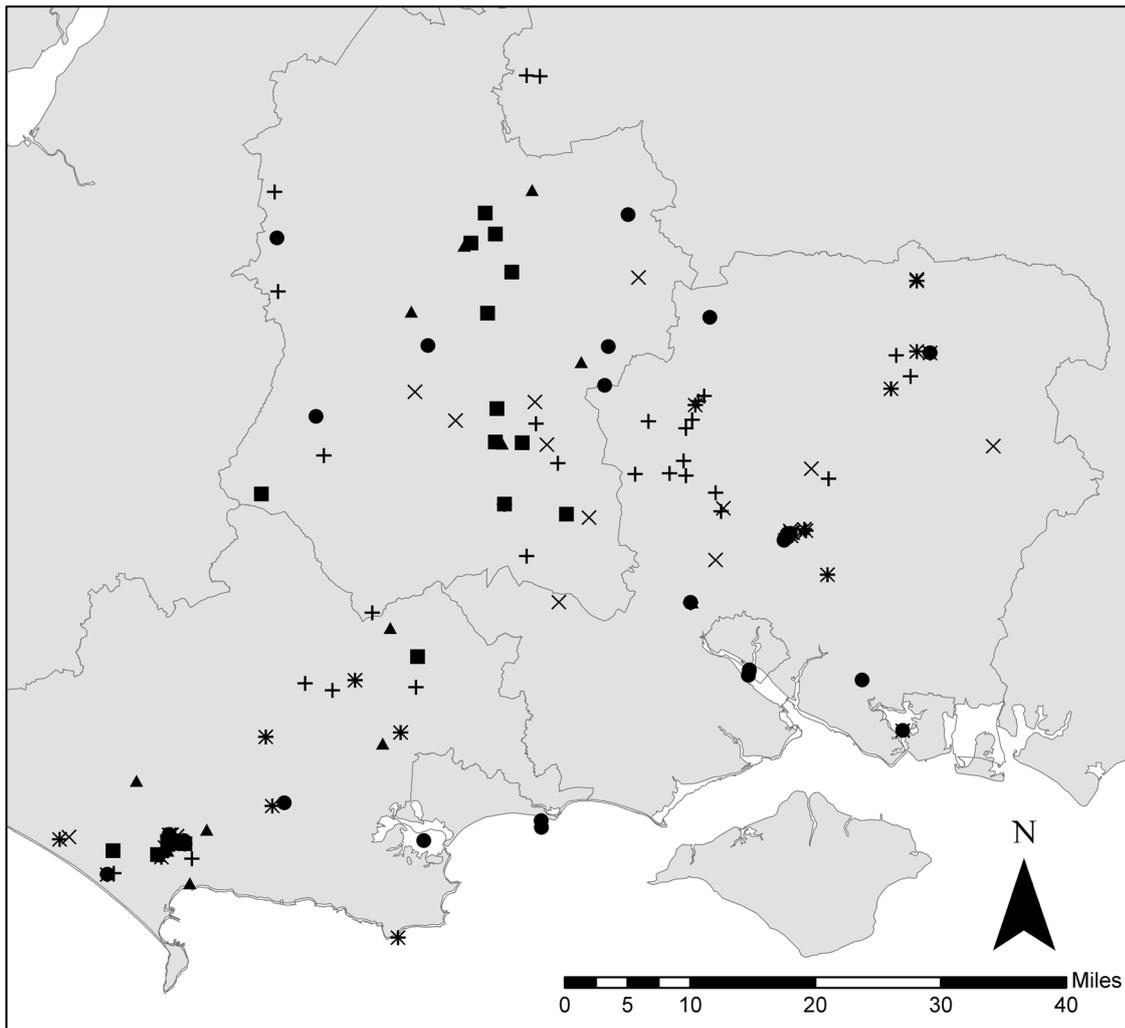


Figure 27.3. Map showing the location of sites with ABGs. From left to right the counties present are Dorset, Wiltshire and Hampshire. The symbols indicate the date of the sites. Square=Neolithic, triangle=Bronze Age, cross=Iron Age, X=Romano-British and circle =Medieval

also noted by Grant (1984), is that the species proportions are not the same as in the “normal” disarticulated faunal assemblage. For example, caprines also dominate the “normal” faunal assemblage from Iron Age Wessex, but generally to a greater extent (Hambleton 1999, 87). Dog and horse bones are not normally as common amongst the faunal assemblage as a whole. For example, combined, these species constitute 6% of the total disarticulated faunal assemblage from Danebury (Grant 1991, 449). Therefore, if the ABG assemblage were a representation of what could be considered the “normal” economic faunal assemblage, a higher proportion of the ABGs would be expected to consist of caprines with a much smaller percentage of dog and horse remains.

The composition of the ABGs also differs with each time period. For this study, the composition of each ABG was recorded, whether it was “complete” or “partial”. Complete means that all body areas were represented, the body areas consist of the head, the axial skeleton (vertebrae, ribs, pelvis), upper legs (scapula, humerus, radius, ulna/femur, tibia, fibula) and lower legs (carpals/tarsals, metapodials,

phalanges). A complete ABG does not necessarily have every skeletal element present, as elements may be missed during excavation or become disarticulated due to post-depositional movement, but has the majority of each body area represented.

A number of patterns are consistent across the periods (Table 27.2). Large animals such as cattle and horse commonly form partial ABGs. The only exception is a number of complete horse ABGs from the Medieval period. These are from three main sites: Facombe Netherton, Hampshire, a manorial site (Sadler 1990), St Georges Road, Dorchester (Bullock and Allen 1997) and West Mead, Dorset (Hamilton-Dyer 1999). Caprines and pig show a slightly different pattern. Complete caprine and pig ABGs seem to be more likely to be found in sites of the Iron Age and Romano-British periods. The results show that 33% of caprine ABGs from the Neolithic period are complete. However, this is due to a very small sample size, and the only complete caprine ABG is represented by a individual deposit from Whitesheet Hill, Wiltshire (Maltby 2004).

Dog appears to be the only species which is consistently

Species	Neolithic	Bronze Age	Iron Age	Romano-British	Anglo-Saxon	Medieval
Cattle	100% (19)	83.8% (37)	90.1% (142)	86.2% (87)	100% (19)	83.3% (6)
Sheep/Goat	66.7% (3)	70.8% (24)	80.8% (297)	79.6% (103)	100% (6)	40% (15)
Pig	100% (8)	100% (2)	60.8% (102)	70.7% (65)	100% (6)	41.7% (12)
Horse	-	100% (5)	97.3% (146)	84.6% (26)	100% (3)	57.7% (7)
Dog	80% (5)	54.5% (11)	53.5% (144)	29.7% (349)	30.8% (26)	70% (10)
Cat	-	-	14.3% (7)	51.3% (37)	75% (4)	100% (5)
Wild Mammal	100% (6)	-	26.1% (23)	30.3% (33)	-	28.6% (7)
Domestic Fowl	-	-	33.3% (6)	72.1% (43)	100% (2)	19.2% (26)
Other Domestic Bird	-	-	-	-	-	100% (4)
Wild Bird	-	100% (1)	90% (10)	48.5% (70)	50% (4)	50% (4)

Table 27.2. Table showing the percentage of ABGs which consist of partial ABGs for each species per period. The number in brackets indicates the sample size.

represented by a large proportion of complete ABGs. The main exception is for the Neolithic period where a number of partial dog ABGs are present from Windmill Hill, Wiltshire (Grigson 1999). There are also a high proportion of partial dog ABGs from the Medieval period, especially from Winchester, Hampshire (Coy 1984). Fewer than half the dog ABGs from the Bronze Age and Iron Age are complete. However, a high proportion of the partial dog ABGs from these periods consist of mixed deposits, with some areas of the head, axial skeleton and legs represented. They therefore may have been deposited as complete but due to secondary deposition and other post-depositional taphonomic effects they may have become disarticulated.

A high percentage of wild mammal ABGs from the Iron Age, Romano-British and Medieval period are complete. However, the results are skewed by deposits from a small number of sites. The Iron Age sample is dominated by the deposit of twelve fox (*Vulpes vulpes*) ABGs found in the same pit and associated with a complete red deer ABG at Winklebury Camp, Hampshire (Jones 1976; 1977). The Romano-British wild mammal ABG assemblage is dominated by the deposits found at Oakridge, Hampshire, where thirteen complete polecats (*Mustela putorius*) as well as complete red and roe deer are present (Maltby 1988; 1993). Almost all the complete wild mammal ABGs from the Medieval period come from the manorial site of Faccombe Netherton, Hampshire, again fox and polecat are represented (Sadler 1990).

Iron Age – Romano-British transition

Due to the large sample size and distinct changes, the transition from the Iron Age to Romano-British periods has been examined in depth. As discussed in Morris (2008b), species proportions also differ between site types. Pig ABGs are much more common on hillfort sites in the early to middle Iron Age periods. However, this changes in the late Iron Age, with pig ABGs becoming more common on non-hillfort sites. Cattle ABGs are also common on hillforts until the late Iron Age.

A number of differences are also present between urban

and rural settlements from the Romano-British period. The ABG species proportions for urban sites remains consistent through the Roman period, with dog ABGs often consisting of 50% of the assemblage or more. Caprines and pig are the second and third most common ABGs respectively. However, species proportions from rural settlements display a different pattern.

Overall, the rural settlements show a similar pattern to the towns with dogs dominating, except that cattle are the second most common ABG. When investigated in depth, the pattern from early Romano-British (AD 43–150) rural settlements differs from the ABG assemblages of later sites. The most common ABGs are from caprines followed by dogs. When compared to late Iron Age rural settlements (non-hillfort sites), the patterns are very similar (Fig. 27.4). There appears to be a change in the deposition of ABGs around the middle of the Romano-British period, with a drop in the number of caprine ABGs and an increase in the number of dogs deposited. The rural settlements' pattern from the middle Romano-British period onwards is very similar to that found on town sites. However, the pattern is found on town sites from the beginning of the Romano-British period.

A number of other changes occur in the ABG record around this period. The majority of partial cattle, caprine and horse ABGs found on late Iron Age rural settlements consist of elements from the axial skeleton, mainly the vertebral column, ribs and skull. This remains the case in the early Romano-British period. However, this changes by the middle Romano-British period, especially in the composition of partial cattle ABGs. The vertebral column is still one of the most common body areas present, but not to the same extent. Also, skulls and ribs are hardly present (Morris 2008b).

As stated in Morris (2008b) there is a change in butchery style and equipment between the late Iron Age and middle Romano-British period. This is linked with a shift in the level of exploitation for meat (Seetah 2005). During the Iron Age the knife is the most common tool used for butchery (Maltby 1989). This tends to leave specific cut marks across the bone, some of which are present on ABGs. However, a skilled butcher could process a whole animal and leave

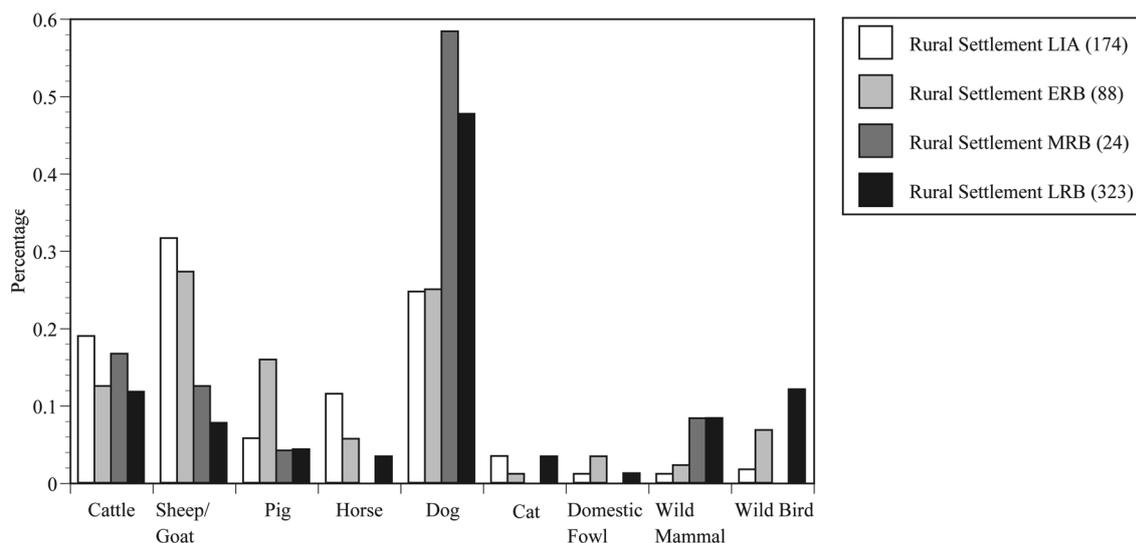


Figure 27.4. Graph showing the percentage composition of ABGs from rural settlements from the late Iron Age to the late Romano-British periods. The number in brackets indicates the sample size.

no trace of a cut mark. The Romano-British period sees a change in butchery methods and technology. During the Iron Age, large animals were probably not hung (Wilson 1996, 32) and butchery was carried out on the ground with a knife. In the Romano-British period, specialist butchers would have been present in towns (Rixson 2000, 69), carcasses would be hung and butchery took place with a cleaver (Seetah 2006). This new style of butchery produced a clearly visible pattern of dismemberment, where specific joints such as the femur and pelvis were dismembered by cleaving the femoral head. Other traits included an intensification in the breakage of cattle limb bones for marrow (Maltby 2007).

The overall reduction in the number and change in composition of cattle ABGs may be a result of the change in butchery practices. The Romanised style of butchery is more likely to result in disarticulation, as it was based around fast processing. However, specialist butchers would have been more common in towns. Iron Age methods did, however, continue on some rural sites (Maltby 1994) which may be the reason cattle and horse ABGs are more common on Romano-British rural sites compared to towns.

The changes described above can be seen as part of Romanisation. This was originally considered to represent the process of cultural change whereby native Britain became “Roman” through the dominant force of the Roman Empire. A number of authors have suggested that is a one-sided simple abstract view, and that Romanisation has never been adequately defined, and has meant different things to different scholars (Fitzpatrick 1989; Forcey 1997; Hingley 1996; Wells 2001). Recent studies have shown that communities adopted different aspects of Roman society at differing rates (*e.g.*, Goodman 1999; Wells 2001): that the term “Romanisation” is of limited use. In this way, changes in the archaeological record should be viewed as a continuous dialogue between a number of regional “native” and “Roman” agencies. Within this paradigm,

ABGs have been viewed as a continuation of local native expression.

Anne Ross (Ross and Feachem 1976), expanding upon her earlier work (Ross 1968), investigated the Romano-British Newstead pits in the aptly named “Ritual Rubbish – The Newstead Pits.” Ross and Feachem (1976) argue that it is the nature of the deposits within the Romano-British pits that classify the features as having a ritual nature. Such deposits often included cattle, dog, and horse skulls, animal skeletons, human remains, complete pots, ornaments, metalwork, and stonework. Clarke (1997) revisited the interpretation of the pits and concluded that they represent a continuation and development of prehistoric activities. In the same volume, Richardson (1997) argues that at La Pâatural in central France there is a continued use of “special” ABG deposits into the Roman period, although interestingly at this site there is a move away from dog ABGs.

We could view the similarity of ABGs deposited on rural settlements in the late Iron Age and early Romano-British periods as a continuation of native practices, possibly in conflict with the Roman ABG depositional practices taking place within the towns. The change by the middle Romano-British period in both species and composition of ABGs may be seen as a gradual integration of Roman practices. Patterns in the rest of the faunal assemblage also indicate that changes had occurred in diet and stock size by the middle Romano-British period (Grant 1989b; King 1999; Maltby 1994).

Current theory regarding the deposition of ABGs now regards them as a continuation of Iron Age ritual activity (Fulford 2001). Clarke (1999) argues that the deposition on Romano-British sites as well as Iron Age ones, was controlled in large part by behavioural patterns that to us appear as illogical responses to superstitious or religious beliefs. It would certainly appear that there is a continuation of the deposition of partial and complete

animals as discussed above, but should we be so accepting of a ritual explanation for these deposits? It appears that the interpretation of these deposits has swung between two dichotomous interpretations: functional and ritual. The changes in species proportion and composition between the Iron Age and Romano-British periods could be seen as being due to alterations in ritual deposition, or alternatively changes in butchery practices. As discussed above, a major change in the type of butchery methods used occurs in the Romano-British period, especially in towns. Therefore, the patterning seen in the ABGs record may not only be reflective of an increase in the number of dogs being deposited as ABGs, but also a decrease in the number of cattle, caprines, pig and horse. This decrease may be due to these animals being subject to a more intensive form of butchery compared to the Iron Age, therefore resulting in fewer ABGs being produced. The butchery methods utilised in the Iron Age are more likely to leave connective tissue present on the bone resulting in articulation (Wilson 1996, 32). In comparison, the Romanised style of butchery is more likely to result in complete disarticulation, as it was based around fast processing.

Perhaps the main problem is in how the interpretation of these deposits has been dominated by dichotomous thinking. They are either ritual or functional. This need not be the case. The same butchery processes are used for “functional” and “ritual” carcass processing (Hill 1996; Wilson 1992; 1999). Just as the same domestic animals make up the “ritual” and “functional” faunal assemblages, ethnographic studies would suggest that most pre-industrial societies did not distinguish animals in such a way (Serjeantson 2000). The study of ABGs has an inherent problem, common to all of archaeology, which concerns our use of language. The problem with the terms “ritual” and “functional” is that as abstract ideas they have proved to be very difficult to define, although many have tried, mainly regarding ritual (Levy 1982; Renfrew 1985, 20; Richards and Thomas 1984). Brück (1999) has suggested that we move away from the term “ritual” altogether and that by trying to examine “ritual” we are ignoring rationality, which to investigate we must reject the sacred and profane dichotomy which dominates our thinking. Bradley (2003, 2005) suggests placing less emphasis on ritual and more on the practice of ritualisation, where certain actions associated with a dominant concern of the society acquire an added emphasis through particular kinds of performance.

If we accept such arguments, then perhaps asking if these deposits represent ritual acts is the wrong question to be posing. Perhaps we should view these deposits as polythematic instead of monothematic. A number of interpretations can be given for these deposits, and it is highly probable that different agencies were involved with the creation of each ABG. Therefore there may have been a variety of rationales behind the deposition of each ABG, in other words, a combination of what could traditionally be viewed as functional and ritual reasons.

Conclusions

Many data have been presented here regarding ABGs from Wessex. Certainly this deposit type has been largely overlooked by zooarchaeologists until recently. The data collected indicate that this deposit type can be found from the Neolithic to the Medieval period. However, the species used and the composition of the ABGs changes between periods. This paper has tried to show that ABGs can help us to investigate changes in society, in particular the continuation of a late Iron Age pattern of deposition on rural settlements in the early Romano-British period.

The investigation has also shown that ABGs have been interpreted in a number of different ways in the archaeological literature. However, the current trend is for them to be seen as the result of ritual activity. This may be the case for some deposits, but the trend of interpreting the majority of ABGs as the result of ritual activity may be a step too far. This article has discussed ABGs being the result of either “ritual” or “functional” practices of past societies, because these are the interpretations given by the zooarchaeologists and archaeologists reporting on the deposits. However, the use of such dichotomous language can cause problems, as the terms become laden with preconceived ideas. Perhaps we should view these deposits as resulting from a number of different acts. Undoubtedly, some of the ABGs may have been the product of ritual activity, some functional, and others a combination to varying degrees. The problem now facing zooarchaeologists and archaeologists is how we move beyond our current monothematic interpretations.

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