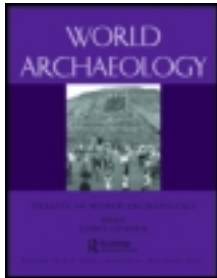


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Avian aurality in Anglo-Saxon England

Kristopher Poole^a & Eric Lacey^b

^a Department of Archaeology, University of Nottingham

^b University College London

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Avian aurality in Anglo-Saxon England

Kristopher Poole and Eric Lacey

Abstract

Reconstructions of past human experience have generally focused on the visual and the tactile. When sound has been considered, it is usually in terms of anthropogenic noises, created within human-built environments. While these studies are valuable, they frequently overlook a ubiquitous aspect of soundscapes in previous cultures: birdsong. As with other animals, birds were far more than just sources of food in past societies; they were key aspects of people's daily lives and the ways they experienced their worlds. Using an integrated approach that combines archaeology, onomastics and textual evidence, this paper explores the roles of bird sounds in Anglo-Saxon England. Through the use of the middle-late Saxon site of Bishopstone as a case study, the importance of birds and their noises for defining place and time is highlighted.

Keywords

Anglo-Saxon; birdsong; sound; landscape; sense of place.

Introduction

Archaeological reconstructions of past human experience have to date tended to focus on visual and material attributes, with other phenomena, such as smells and sounds, typically less studied (for example, see papers in Scarre and Lawson 2006). Such a situation is not surprising given that archaeology is a discipline focused on the study of the material traces of past cultures, which by their nature have greater propensity to endure. By contrast, sound is seen as ephemeral, and any traces of it are often believed to have dissipated soon after noises have occurred (Witmore 2006). This is unfortunate, as sounds are central parts of the daily experiences of people (Mills 2005), changing at different times of the day or year and varying with location (Woolgar 2006, 68). Recognizing this, archaeologists are continually developing methodologies to reconstruct the soundscapes of past environments, and this field, often called archaeoacoustics, is growing (Scarre and Lawson 2006).



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However, the focus of these studies appears to be overwhelmingly centred on reconstructing ancient music or instruments or testing the effects of human-generated sounds at particular sites (e.g. Blake and Cross 2008; King and Sánchez Santiago 2011; Scarre and Lawson 2006). Despite being fundamental to people's lives and landscapes, some of the most significant features of human existence, namely animals, are generally overlooked.

In part, the exclusion of animals from reconstructions of past aural environments is due to the emphasis in much archaeological writing, particularly zooarchaeological reports, on animals as purely economic resources. This emphasis on the 'end product' of human-animal relations (i.e. food and raw materials) means that other aspects of human-animal interactions are missed (Knight 2005; Poole 2013). It is arguable that encounters between humans and living animals are of far greater significance in terms of how people experience the world and understand their place within it than human use and consumption of dead animals (Poole 2014; Sykes 2012). When living, animals may be experienced in a number of different ways, including being seen, smelled, touched or heard (Sykes 2010, 2012), or a combination of these.

This article will focus on the contribution made to soundscapes by birds, a group of animals more frequently heard than seen. Zooarchaeological data can provide information about the birds living in an area and thus the bird sounds that are likely to have been heard, but understanding the perception of, and reaction to, such sounds requires an integrated approach. For this reason, this article also draws upon textual and onomastic (including place-names) evidence to elucidate human perceptions of birdsong in Anglo-Saxon England. It begins by considering the importance of avian aurality in the period generally, before discussing how this may have helped to create a sense of place at one particular settlement, the middle-late Saxon site of Bishopstone, East Sussex.

Avian species and aurality

Textual sources and material culture indicate that in Europe, at least from antiquity to the medieval period, people recognized five senses (sight, hearing, smell, taste and touch), with sight being classed as the most important (Jütte 2005, 64). One particularly well-known example of this is the ninth-century Fuller Brooch, which depicts each of the senses in a central roundel, but with sight placed in the centre, and the other senses arranged around it (Woolgar 2006, 24–5). However, the other senses would still have been key means by which people experienced and understood their worlds (Hamilakis, Pluciennik and Tarlow 2002). Those living in Anglo-Saxon England would have encountered a wide range of anthropogenic sounds. Nonetheless, among people's quotidian activities, animals would have been central, especially given that the vast majority of the population lived in the countryside and were involved in farming (Poole 2013). Animals under human care would have been those which people formed the closest bonds with and possessed the greatest awareness of, in terms of both their appearances and their behaviours. However, through their sheer presence, animals (whether wild or domestic) would have been integral parts of the places within which people lived and worked (Ingold 2000, ch. 11; Philo and Wilbert 2000). One major way in which animals would have been experienced is through the sounds that they made. This would have been especially the case for birds, which are known to vary their physical positioning and pitch in order to improve transmission of their vocalizations (Catchpole and Slater 1992, 71–91; Nemeth and Brumm 2009).

Table 1 Proportions of domestic and wild mammals and birds, by period and site type (*n* = number of identified fragments)

Period/site type	Domestic mammal %	Wild mammal %	Domestic bird %	Wild bird %
Middle Saxon				
Rural (<i>n</i> = 8625)	96.6	0.3	3.4	0.06
Urban (<i>n</i> = 136,080)	96.3	0.3	3.4	0.06
Ecclesiastical (<i>n</i> = 11,475)	93.5	0.5	5.7	0.3
Elite (<i>n</i> = 107,531)	88.8	0.5	9.4	1.3
Average (<i>n</i> = 266,915)	93.1	0.4	5.9	0.6
Late Saxon				
Rural (<i>n</i> = 5821)	96.2	0.4	3.2	0.2
Urban (<i>n</i> = 106,492)	93.9	0.4	5.4	0.3
Ecclesiastical (<i>n</i> = 18,218)	79.0	0.9	19.1	1.0
Elite (<i>n</i> = 41,259)	86.7	2.6	9.1	1.6
Average (<i>n</i> = 171,792)	90.6	1.0	7.7	0.7

Birds are consistently identified in Anglo-Saxon period assemblages, albeit in low frequencies by comparison to the remains of domestic mammals (Table 1). In conventional zooarchaeological analyses, the relatively low representation of birds, especially wild taxa, in Anglo-Saxon England would be taken as a sign that they were ‘unimportant’ to contemporary society because they were rarely captured and eaten. However, researchers are increasingly recognizing that there is seldom a direct correlation between archaeological abundance and social significance: the least well-represented animals, or those that are absent altogether, may have carried more social meaning than the zooarchaeological record suggests (Hamilakis 2003; Russell 2012, 396–7). For instance, no specimens of nightingale have been identified from Anglo-Saxon sites but the inclusion of this species in textual sources of this period shows people’s interest in it. This includes Riddle 8 of the Exeter Book, usually solved as ‘nightingale’, the riddle focusing on the bird’s skilful song and ability to captivate its audience (Krapp and Dobbie 1936, 192–3). It is possible that the absence of nightingales from archaeological sites is an artifice of recovery and identification, their small bones potentially being missed if sieving is not conducted or if confused with the remains of other closely related species. These explanations cannot account for the evidence relating to the bittern, whose bones are large and identifiable yet have been recovered from only three sites of Anglo-Saxon date: at early/mid-Saxon Portchester Castle in Hampshire (Eastham 1976), mid-Saxon Wicken Bonhunt and Brandon, both in Suffolk (Crabtree 2012). Their scarcity in zooarchaeological assemblages most likely reflects the difficulties of capturing them due to their tendency to secrete themselves in reed beds and other thick vegetation, where they are very well camouflaged. However, while the Anglo-Saxon population seldom ate bitterns, they were clearly aware of them because of their sound: the booming noise that male bitterns make during the breeding season, which can be heard up to 5km away (Cramp et al. 1977, 250), is reflected in the bird’s Old English name, *rāredumle*, meaning ‘reed-boomer’ (Kitson 1998, 1). These examples demonstrate that birds were often more appreciated for the sounds they made while alive than the products they provided in death. Indeed, we could even go as far as to say that, in some cases, the only ways in which birds existed for people were in the form of their sounds (Ingold 2000; Schafer 1994, 33).

That people in Anglo-Saxon England took interest in bird calls is suggested by the categorical distinguishing evident in the Old English terms *sang* and *winsum*: the former refers to bird calls

in neutral tones, but the latter singles out calls that were seen as delightful (Meaney 1996, 189). The link between birds and sounds is further indicated by coinage, namely Series K *sceattas*, dating to the early to middle eighth century AD. The obverse sides of five different types of these coins have images which Gannon (2003, 187–8) suggests represent the five senses. In this context, hearing appears to be represented by a bird perched on a person's shoulder. Bird sounds had even further importance through their use in divination, despite the Christian conversion, as indicated by the description of such practices in a letter by Alcuin and in the Whitby *Life of Gregory* (Meaney 1992; North 1991, 119–20). The significance attached to sound is perhaps easier to understand, given that, as in other pre-industrial societies, certain modern competing noises, such as car engines, aeroplanes, trains, amplified music and so on would have been absent. For example, Rosen et al.'s (1962) study of sound levels in a Sudanese tribal village found that typical noise levels were below 40 decibels (around the level of a humming refrigerator), ranging up to 100 decibels in communal celebrations. Accordingly, this would have made birdsong even more noticeable than it is today. As bird sounds could be heard more clearly in the past, they may have been more familiar and thus would have attracted more attention than they currently receive (Whitehouse 2013; Woolgar 2006). Certainly, literary evidence from the Anglo-Saxon period suggests that the sound of birds was often more important than their appearance, with physical descriptions of avifauna being brief by comparison to the attention given to their aurality. A good illustration of this point is provided by the crow family, in particular the similar-looking ravens, rooks and crows which are found on over a quarter of Anglo-Saxon sites (Poole 2011; Fig. 1).

Ravens are the most commonly mentioned birds in Old English literature and often appear in bone assemblages (Poole 2011). In texts ravens are described usually only as 'dark' (e.g. *Judith* l.206, *Beowulf* l.3021) (Fulk, Bjork, and Niles 2008; Griffith 1997) or with variants of phrases such as 'dewy-feathered' (e.g. in *Genesis* l.1984, *Exodus* l.164) (Krapp 1931), which are often used for other birds. Similarly, although there are possible descriptions of the raven's thick bill, these are problematic: for instance in the poem *Judith* (Griffith 1997, l.212) it is unclear whether the term *hyrnednebb*, means 'horn-shaped beak' or 'pointy beak', or even whether it refers to ravens or eagles. Rooks are mentioned only once outside place-name and glossary evidence, and crows not at all. The single reference to rooks in prose names them alongside ravens (Skeat 1881, 493), though the aesthetics of Old English apposition, in which synonyms and near-synonyms are listed together for rhetorical effect (Robinson 1985), means we are not justified in interpreting this as indicative of a distinction between the two birds. Close examination of the linguistic evidence, both in Old English and in later developments, however, alongside considerations of the formation of taxonomies (*pace* Anderson 2003) reveals that these three birds were not distinguished on visual grounds and were prone to being confused with one another (Lacey, forthcoming). Indeed, the most significant criteria for differentiating the three birds are those sounds embedded in their onomatopoeic names: *hroc* ('rook'), *hrefn* ('raven') and *crawe* ('crow').

As with other cultures (Feld 1982; Verheijen 1963), the preponderance of onomatopoeic names in Old English suggests the primary importance of birds' calls, rather than appearance, for identification purposes (Lockwood 1984). The most illustrative examples are those cases in which vastly different-looking birds have etymologically related names because they make similar sounds, e.g. *hraga*, 'heron' and *higer*, 'jay', where both birds were named after their characteristic jarring screeches (Cramp et al. 1977, 1994, 22–3; Suolahti 1909). The attribution



Figure 1 Distribution map showing the location of Anglo-Saxon sites from which bones of crows, rooks and ravens have been identified. Black circle = site produced crow and/or rook bones; Grey circle = site produced raven bones; White circle = site produced raven and crow and/or rook bones.

of different names to similar-looking species, such as corvids and owls (for which see below), also underlines this point. The aurality of birds is similarly emphasized in the Old English riddles, such as in Exeter Riddle 24, usually solved as ‘jay’, the riddle describing the mystery subject’s ability to make the noises of several other creatures – an allusion to the jay’s mimicry abilities (Cramp et al. 1994; Krapp and Dobbie 1936, 192–3). Other instances of onomatopoeic names include *maw*, ‘gull’, *scric*, ‘thrush’, *finc*, ‘finch’, and *ceo*, ‘chough’, all of which imitate the sounds made by the birds they refer to. Even where Old English bird names are not onomatopoeic, they often stress the aural experience of the birds nonetheless, such as *nihtegale*, ‘nightingale’, which literally means ‘night-singer’ (Kitson 1998, 4).

Even domestic birds were mostly named after the sounds that they made. The earliest Old English general term for duck, *ened*, has Indo-European cognates but an unclear original meaning beyond ‘waterbird’ (Suolahti 1909, 420), and its later replacement, *dūce*, referred to its habit of diving rather than its sound (Kitson 1998; Lockwood 1984, 55). However, the word

for goose, *gōs*, is of imitative origin (Lockwood 1984; Watkins 2011, 29). Chickens were known as *cycen*, a formation composed of a diminutive ending *-en* and an imitative root closely related to the Old English term for cock, *cocc* (Lockwood 1984, 41). The latter is clearly an onomatopoeic term (Orel 2003, 223). Another expression used for male chickens was *hana*, from which derives the term for female chickens, *henn*, which is of Indo-European antiquity and originally meant ‘singer’ (Orel 2003, 161), though there is little to suggest it still held this meaning in Old English.

Whether sounds were created by wild or domestic birds, they were, of course, not heard in a vacuum, but were experienced within particular locations, and this connection between certain birds, their noises and locales is indicated by their inclusion within place-names. Ascribing names to the landscape was an activity influenced by resident populations, therefore demonstrating local knowledge of the landscape, as well as its flora and fauna (Howe 2008, ch. 1). Domestic birds are commonly included in place-names, which is to be expected, given their number and people’s familiarity with them, but wild species also frequently appear (Yalden 2002). When wild birds are extant in place-names, this is typically in conjunction with topographical terms that make ecological sense, such as ravens with cliffs and dales (e.g. Ravenscliffe, Derbyshire, and Ravendale, Lincolnshire), or cranes with watery features such as springs and marshes (e.g. Cornwell, Oxfordshire, and Cranwich, Norfolk) (Yalden and Albarella 2009, 120–1). This in itself shows the close links between particular birds, bird sounds and landscape types. Yet, rather than singular species being heard in a landscape, the sounds of different types of bird, some louder and/or perhaps more distinct than others, would often have been apparent within the same time frame. Combined with the different acoustic possibilities created by certain environments, this would have generated an avian aural assemblage, or ‘bird symphony’, that was characteristic of specific areas or particular habitats (Mills 2005; Schafer 1994; Whitehouse 2013). As Howe’s (2008) analysis of charter boundaries has demonstrated, people in Anglo-Saxon England had a keen sense of place, developed through lived experience. Visual perspectives of the landscape represented a type of cultural knowledge, with familiarity formed through working within it. Since bird noises were clearly prominent in people’s everyday experience, we could equally say that the sound of the landscape should be seen in this way, as will now be demonstrated by looking at the site level.

Birds at Bishopstone

Bishopstone is a village located in East Sussex, England, on an expanse of coastal downland in the lower parts of the River Ouse valley (Fig. 1). Excavations at the site between 2002 and 2005 revealed a settlement occupied between the eighth and early eleventh centuries AD (placing it within the middle-late Anglo-Saxon periods), apparently owned by higher-ranking members of society. It appears to have functioned as an ‘estate centre’ over the duration of occupation, acting as a focus for the collection of food rents and agricultural produce from its estates (Thomas 2010). Although documentary evidence indicates that it was under ecclesiastical control over the period of occupation revealed by excavations, it is unclear whether there was actually an ecclesiastical presence at the site itself (Thomas 2010, ch. 3). This is because many high-ranking clergy were drawn from royal families, leading to some similarities in lifestyle and especially in the material culture used by these two groups (Loveluck 2007, 164). A large animal bone assemblage was retrieved from the site,

Table 2 Domestic and wild birds recovered at Bishopstone

<i>Species</i>	<i>Total identified specimens</i>
Chicken	810
Goose species – domestic/wild	35
Domestic goose	27
Wild goose	4
Mallard-size duck	36
Teal/garganey	2
Rock/stock dove	7
Wood pigeon	1
Sparrowhawk	2
Grey heron	3
Crane	1
Curlew	8
Golden plover	1
Oystercatcher	1
Dunlin	2
Cormorant	3
Herring gull	1
Common gull	3
Kittiwake	1
Raven	1
Crow	1
Crow/rook	2
Jackdaw/magpie	1
Tawny owl	1
Turdus sp.	6
Small passerine	13
Total	973

including 6,528 identified mammal and bird bones (Poole 2010) and 2,448 identified fish bones (Reynolds 2010). While this was dominated by the remains of the three main food domesticates (cattle, sheep/goat and pig), it also had a considerable proportion of bird bones (Table 2). Bishopstone's bird assemblage was enhanced due to good preservation and the sampling strategy, including sieving, meaning that the bones submitted for analysis were broadly representative of those extant at the time of excavation. Bird bones incorporated within archaeological features on the site will, to a large extent, have been determined by human preference for 'edible' birds, or those of interest for other reasons, such as pests or hawking birds (Serjeantson 2006; Yalden and Albarella 2009, 151). Even so, the bones provide some idea of what sorts of birds *were* living in the vicinity of the settlement, even if they cannot tell us which *were not* present at the time (Serjeantson 2009, 366).

Of those birds that we can classify as wild, some were mostly, or only, heard at certain points of the year. Many of the bird species in the Bishopstone assemblage would have tended to be winter visitors to its coastal setting, such as the curlew and dunlin, while other wading birds such as oystercatcher and golden plover may have lived in the area all year, but would have formed large flocks in winter. In contrast, other birds, such as crane and kittiwake, were probably present only in summer. The link between birds and seasons is evident from an Old English calendar from Sherborne, *c.* AD 1061, which records saints' days and other religious markers of time, but also notes the day on which birds begin to sing – 11 February (Wormald 1934, 185). Thus, while the local environs of Bishopstone would have changed over the course

of the year, such as in the vegetation and activities people were conducting, there would also have been temporal variations in how they sounded, due to the presence, absence or differing combinations of certain species.

These wild birds would have been drawn to Bishopstone's environment by the availability of habitat and food resources. Some would have been attracted to the settlement itself, by the feeding and sheltering opportunities created by human presence, including notable scavenger species, such as crow, rook and raven (O'Connor 2013). Others would have shown strong preferences for particular habitats and/or food types (Fuller 1982). Linking birds in the past with specific habitats relies on the assumption that the behaviour of individual species has not changed between a certain time period and the modern day (Eastham 1997, 422–3). One group of birds that seem to have altered their natural distribution are gull species, which today are drawn to modern towns to exploit feeding opportunities, greater warmth and a lack of predators (Rock 2005). Yet, if we look at their archaeological distribution in the Anglo-Saxon period, we can see that their remains tend to be focused on estuarine and coastal settlements (Fig. 2). Some of these birds did venture inland, including as far as Oxford, but in this period they seem to be mostly associated with the sea. Certainly, it seems that this is where the gulls in



Figure 2 Distribution map showing the location of Anglo-Saxon sites from which bones of gull species have been recovered.

the Bishopstone assemblage derived from. The ‘mewing’ sounds of gulls (Cramp et al. 1983, hence their Old English name, *mæw*) were therefore typically part of the sounds of the coast, which influenced the poet of *The Seafarer* (found in the tenth century Exeter Book but probably earlier) in his use of these bird calls to create a sense of place. Two other species mentioned in *The Seafarer* are also known for their association with littoral areas and are present among the faunal remains, though we must contend with the degree of uncertainty around the meaning of the Old English bird-names in the poem (Goldsmith 1954; Gordon 1979). One of these is a kittiwake, which Goldsmith (1954, 230–4) has argued is the primary meaning of *stearn* in the poem. The other is a curlew, which is possibly represented by the word *huilpe* in the poem. It is an onomatopoeic term (Suolahti 1909; Kitson 1998, 2) and the poet states that the bird’s call must suffice ‘for the laughter of men’ during his lonely sea journeys. The call is described as *huilpan sweg* (literally ‘the *huilpe*’s noise’), which plays on the formulaic poetic phrase *hearpan sweg*, ‘the sound of the harp’ (e.g. *Beowulf* [Fulk, Bjork and Niles 2008, ll.89, 2458, 3023]). Together, these descriptions imply that the *huilpe*’s note is musical and is comparable to the laughter of men. As well as the curlew, the whimbrel also fulfils these criteria and may be meant instead.

That there was an Anglo-Saxon mental connection between wading birds and the coast, including other species identified from Bishopstone, is also indicated by coinage. One type issued (Series Q *sceattas*), dating to the early to middle eighth century AD, depicts long-legged waders, usually associated with crosses; such coins were predominantly circulated along coastal regions of England (Gannon 2003, 113–14). Combined with the fish bones, which are dominated by marine species (Reynolds 2010), presence of whale bones, probably from carcasses washed ashore (Poole 2010) and pottery evidence indicating coastal trade (Jervis 2010), this shows how central the coast was to people’s experiences at the settlement. The mixture of birds and their sounds would have created a different aural arena than that encountered at settlements further inland, including those occupying a similar social position to Bishopstone. This is also indicated by the poet of *The Seafarer*, who uses bird sounds to evoke images of the hostility and isolation of the coast and sea in winter, in contrast with the pleasures of life on land and the company of others. Moreover, it fits well with contemporary ideas regarding socio-political control, which focused on land and the resources originating from it, with coastal communities viewed as somewhat marginal (Loveluck and Tys 2006, 162).

Nonetheless, there were aspects of the avian aurality of the settlement that would have been familiar to those living at higher-status settlements inland, namely the noises generated by domestic birds. These bird species are likely to have been most audible and made the greatest contribution to the aural environment in the immediate vicinity. Some of the goose and duck bones could conceivably come from wild species, but distinguishing between domestic and wild ducks and geese is notoriously difficult (Dobney et al. 2007, 177–80). Nonetheless, presence of juvenile goose bones, along with juvenile and neonatal ducks indicates onsite husbandry of domestic species (Poole 2010). The same was true of chickens, with almost 30 per cent of chicken bones being unfused, including neonatal remains, and the sexing data suggest a ratio of 4:1 hens to cockerels, typical of a barnyard flock (Serjeantson 2006, 137). In terms of how chickens were husbanded, isotope data obtained from a single chicken skeleton have an elevated nitrogen value, probably reflecting an omnivorous diet comprising human food waste (Marshall et al. 2010). It would thus seem likely that chickens were allowed to roam freely around the settlement, eating whatever they found. The number of birds wandering around the site could have been considerable, given that the bone data

suggest the presence of a minimum of forty-seven individual chickens. These birds could thus have made a significant contribution to human diet in terms of meat and eggs, but we need to think in terms of what their existence as living animals at the site meant. The presence of chickens must have been apparent across the entire settlement and the noises they produced would have formed a substantial component of the soundscape of this location. The typical sounds made as chickens wandered around the settlement searching for food would also have been accompanied by the crowing of the cockerels. After all, as noted above, chickens were not named after what they were used for, but rather the sounds that they made. With its high proportion of domestic birds (13.1 per cent of the total assemblage), Bishopstone stands out from many contemporary sites, especially those of lower rural status, which typically have lower numbers of these birds (Table 1). The greater quantities of domestic birds, and their aurality, on elite and ecclesiastical sites thus would make the experiences of living and working there very different, compared to other settlement types. Whereas eating chickens was a very short-term relationship, the long-term nature of humans and chickens co-inhabiting the same settlement was much more significant in terms of experience (Sykes 2012). Interestingly, when we look at the proportions of the different types of domestic birds at Bishopstone, the percentage of chickens (89.2) as opposed to geese (6.8) and ducks (4) is also far above that for other sites (Table 3). We could therefore argue that, as well as being distinct from urban and lower-status rural sites, the Bishopstone soundscape could have even been differentiated from settlements owned by other higher-status persons, whether secular elite or ecclesiastical.

Regarding the identities of the high-status persons at Bishopstone, the temporality of birds represented in the faunal assemblage hints at an ecclesiastical presence. Whereas most of the species found at the site would have been heard during daylight, the tawny owl, as a nocturnal hunter, would have been heard only at night. The fact that most other birds will have fallen silent at this point would have made their calls even more audible. Despite being birds that were rarely seen and which are scarce in zooarchaeological assemblages, owls were recognized – and indeed distinguished – on the basis of their calls alone. The tawny owl was known as *ule*, in contrast to other owls, known onomatopoeically as *uuf* (Kitson 1998, 6). Owl bones have been recovered from only three sites of Anglo-Saxon date: at the time of writing the only known

Table 3 Relative frequencies of domestic birds, by period and site type (*n* = number of assemblages)

Period/site type	Domestic birds		
	Chicken %	Goose %	Duck %
Middle Saxon			
Rural (<i>n</i> = 22)	65.0	29.2	5.8
Urban (<i>n</i> = 17)	67.3	31.5	1.2
Ecclesiastical (<i>n</i> = 4)	51.5	47.6	0.9
Elite (<i>n</i> = 8)	62.9	27.6	9.5
Average (<i>n</i> = 51)	63.8	29.6	6.6
Late Saxon			
Rural (<i>n</i> = 13)	73.7	22.0	4.3
Urban (<i>n</i> = 43)	79.3	17.3	3.4
Ecclesiastical (<i>n</i> = 4)	57.8	37.8	4.4
Elite (<i>n</i> = 11)	64.9	30.8	4.3
Average (<i>n</i> = 71)	69.2	26.8	4.0

examples are of tawny owl at Bishopstone (Poole 2010), bones of tawny and barn owl at Flixborough (Lincolnshire) (Dobney et al. 2007) and barn owl at Jarrow (Tyne and Wear) (Noddle and Stallibrass 2006). Given the possibility of a monastic presence at Bishopstone, it is interesting that the two other sites with remains of owls, Jarrow and Flixborough, were either monastic sites (in the case of the former) or have been suggested to have had a phase of monastic occupation (the latter). While there was some variety in the running of monastic houses for much of the Anglo-Saxon period, many held night-time services, with the community roused by anthropogenic sounds, possibly including bells (Foot 2006, 200). Were the inhabitants of these settlements thus more likely to have heard the calls of owls than other members of society? If so, were owls killed for this reason, especially given the view of owls as birds of ill omens (Kitson 1998, 7; Rowland 1978)? The tawny owl in the Bishopstone assemblage consists of a partial skeleton (paired tibiotarsi and tarometatarsi – leg bones), from a pit, indicating the presence of a complete individual bird on site – perhaps purposely captured and slaughtered before being dumped. Presumably, when the cockerels on site crowed around the start of the new day (although they may have crowed at any time), this was seen more positively, given their role as symbols of resurrection (Rowland 1978, 20–8). With this in mind, it is intriguing that, in his *Carmen rhythmicum*, written in the seventh century, Aldhelm describes monks at a minster in Devon being roused around daybreak by the ‘fourth cockcrow’, for the first service of the day (Foot 2006, 199). The cockerel would have been joined by the dawn chorus, created by a wide number of different bird species, including some of the smaller songbirds (small passerines) found in the assemblage. The intensity of this noise would have died down as the birds started to go about the search for food. However, bird sounds would still have been near-ubiquitous, forming integral parts of human experiences and understanding of place and time.

Conclusion

Animals are currently absent from reconstructions of past soundscapes. Yet, as this paper has shown, the noises that they made were central to how people perceived them and the locations in which they were heard. In earlier societies, noises such as birdsong would have been magnified due to the lesser volume of competing sounds. This frequently led, as it did in Anglo-Saxon England, to their calls defining species, especially if they were never, or only rarely, seen. As shown by the Bishopstone evidence, collections of bird species attracted to certain locales created distinctive soundscapes, marking out some areas, such as the coast, as different from many inland habitats. Their noises also defined settlement types, with the large numbers of domestic bird species kept on site making Bishopstone’s soundscape markedly different from urban and lower-status rural settlements. Moreover, the very high proportions of chickens compared to ducks and geese suggest that its avian aural assemblage was perhaps even distinct from settlements of a similar social level. Even so, the tawny owl remains recovered hint that, along with sites such as Jarrow and Flixborough, it may have had people present whose quotidian activities required them to be up at night, namely ecclesiasts. What the evidence from Bishopstone and Anglo-Saxon England in general demonstrates is that birds (as with all animals) are able to act in ways that affect human behaviour and how people think about their worlds (Poole 2014). Reconstructing these aspects means moving beyond seeing animals

as mere passive resources to be exploited or measuring their importance by how common they are in a bone assemblage. Rather, it requires us to understand the behaviour of animals and the nature of their relationships with humans. An integrated approach, utilizing faunal remains, place-name, textual and species naming evidence have enabled such aspects to be elucidated in this paper. For other periods, it may be the case that different, or less rich, sources are available. Nonetheless, given that animals were central to past societies, attempts need to be made to integrate them into interpretations of past human experience.

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Kristopher Poole
Department of Archaeology, University of Nottingham
kristopher.poole@nottingham.ac.uk

Eric Lacey
University College London
m.lacey@ucl.ac.uk

References

- Anderson, E. R. 2003. *Folk-Taxonomies in Early English*. Madison, WI: Farleigh Dickinson University Press.
- Blake, E. M., and I. Cross. 2008. "Flint Tools as Portable Sound-Producing Objects in the Upper Palaeolithic Context: An Experimental Study." In *Experiencing Archaeology by Experiment*, edited by P. Cunningham, J. Heeb, and R. Paardekooper, 1–19. Oxford: Oxbow.
- Catchpole, C. K., and P. J. B. Slater. 1992. *Bird song. Biological themes and Variations*. Cambridge: Cambridge University Press.
- Crabtree, P. 2012. *Middle Saxon Animal Husbandry in East Anglia*. Bury St Edmunds: East Anglian Archaeology 143.
- Cramp, S., C. M. Perrins, D. J. Brooks, E. Dunn, R. Gillmor, J. Hall-Craggs, B. Hillcoat, et al. 1994. *Handbook of the Birds of Europe, the Middle East, and North Africa: The Birds of the Western Palearctic. Volume VIII: Crows to Finches*. Oxford: Oxford University Press.

- Cramp, S., K. E. L. Simmons, D. Brooks, N. Collar, E. Dunn, R. Gillmor, P. A. D. Hollom, et al. 1983. *Handbook of the Birds of Europe, the Middle East and North Africa: The Birds of the western palearctic. Volume III: Waders to Gulls*. Oxford: Oxford University Press.
- Cramp, S., K. E. L. Simmons, I. J. Ferguson-Lees, R. Gillmor, P. A. D. Hollom, R. Hudson, E. M. Nicholson, et al. 1977. *Handbook of the Birds of Europe, the Middle East, and North Africa: The Birds of the western palearctic. Volume I: Ostriches to Ducks*. Oxford: Oxford University Press.
- Dobney, K., D. Jacques, J. Barrett, and C. Johnstone. 2007. *Farmers, Monks and Aristocrats: The Environmental Archaeology of Anglo-Saxon Flixborough (Excavations at Flixborough Volume 3)*. Oxford: Oxbow Books.
- Eastham, A. 1976. "The Bird Bones." In *Excavations at portchester castle. Volume II: Saxon*, edited by B. Cunliffe, 287–96. London: Society of Antiquaries.
- Eastham, A. 1997. "The Potential of Bird Remains for Environmental Reconstruction." *International Journal of Osteoarchaeology* 7: 422–29. doi:10.1002/(SICI)1099-1212(199707/08)7:4<422::AID-OA389>3.0.CO;2-V.
- Feld, S. 1982. *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Poetic Expression*. Philadelphia: University of Pennsylvania Press.
- Foot, S. 2006. *Monastic Life in Anglo-Saxon England, c. 600–900*. Cambridge: Cambridge University Press.
- Fulk, R. D., R. E. Bjork and J. D. Niles. 2008. *Klaeber's Beowulf*. 4th ed. Toronto, ON: University of Toronto Press.
- Fuller, R. J. 1982. *Bird Habitats in Britain*. Calton, Staffordshire: T & A.D. Poyser.
- Gannon, A. 2003. *The Iconography of Early Anglo-Saxon Coinage: Sixth to Eighth Centuries*. Oxford: Oxford University Press.
- Goldsmith, M. E. 1954. "The Seafarer and the Birds." *The Review of English Studies* V (19): 225–35. doi:10.1093/res/V.19.225.
- Gordon, I. L. 1979. *The Seafarer*. Old and Middle English Texts Series. Manchester: Manchester University Press.
- Griffith, M. 1997. *Judith*. Exeter Medieval Texts and Studies. Exeter: Exeter University Press.
- Hamilakis, Y. 2003. "The Sacred Geography of Hunting: Wild Animals, Social Power and Gender in Early Farming Societies." In *Zooarchaeology in Greece: Recent Advances*, edited by E. Kotjabopoulou, Y. Hamilakis, P. Halstead, C. Gamble, and V. Elafanti, 239–47. London: British School at Athens.
- Hamilakis, Y., M. Pluciennik, and S. Tarlow. 2002. "Introduction. Thinking through the Body." In *Thinking through the Body: Archaeologies of Corporeality*, edited by Y. Hamilakis, M. Pluciennik, and S. Tarlow, 1–21. London: Kluwer Academic.
- Howe, N. 2008. *Writing the Map of Anglo-Saxon England. Essays in Cultural Geography*. London: Yale University Press.
- Ingold, T. 2000. *Perception of the environment. Essays in Livelihood, Dwelling and Skill*. London: Routledge.
- Jervis, B. 2010. "Pottery." In *The Later Anglo-Saxon Settlement at Bishopstone: A Downland Manor in the Making*, edited by G. Thomas, 90–105. York: Council for British Archaeology Research Report 163.
- Jütte, R. 2005. *A History of the Senses: From Antiquity to Cyberspace*. Translated by J. Lynn. Cambridge: Polity.
- King, S. M., and G. Sánchez Santiago. 2011. "Soundscapes of the Everyday in Ancient Oaxaca, Mexico." *Archaeologies: Journal of the World Archaeological Congress* 7: 387–422. doi:10.1007/s11759-011-9171-y.

- Kitson, P. 1998. "Old English Bird-Names (ii)." *English Studies* 79 (1): 2–22. doi:10.1080/00138389808599110.
- Knight, J. 2005. "Introduction." In *Animals in person. Cultural perspectives on Human-Animal Intimacies*, edited by J. Knight, 1–13. Oxford: Berg.
- Krapp, G. P. 1931. *The Junius Manuscript. The Anglo-Saxon Poetic Records I*. New York: Routledge.
- Krapp, G. P. and E. Dobbie. 1936. *The Exeter Book. The Anglo-Saxon Poetic Records III*. New York: Columbia University Press.
- Lacey, E. Forthcoming. "Transitory Taxonomy: When is a Hroc Not a Hroc? When It Is a Craue or Hrefn!" In *The Order of Things: Rethinking Transitions and Taxonomies in the Middle Ages*, edited by M. Boulton, J. Hawkes, and M. Herman, Dublin: Four Courts Press.
- Lockwood, W. B. 1984. *The Oxford Book of British Bird Names*. Oxford: Oxford University Press.
- Loveluck, C., and D. Tys. 2006. "Coastal Societies, Exchange and Identity along the Channel and Southern North Sea Shores of Europe, AD 600–1000." *Journal of Maritime Archaeology* 1: 140–69. doi:10.1007/s11457-006-9007-x.
- Loveluck, C. P. 2007. "Cædmon's World: Secular and Monastic Lifestyles and Estate Organization in Northern England, A.D. 650–900." In *Cædmon's Hymn and Material Culture in the World of Bede*, edited by A. J. Frantzen and J. Hines, 150–90. Morgantown: West Virginia University Press.
- Marshall, P., J. van der Plicht, G. T. Cook, P. M. Grootes, N. Beavan Athfield, and M. Buzinny. 2010. "Scientific Dating Evidence." In *The Later Anglo-Saxon Settlement at Bishopstone: A Downland Manor in the Making*, edited by G. Thomas, 196–200. York: Council for British Archaeology Research Report 163.
- Meaney, A. L. 1992. "Anglo-Saxon Idolators and Ecclesiasts from Theodore to Alcuin; A Source Study." In *Anglo-Saxon Studies in Archaeology and History 5*, edited by W. Filmer-Sankey, 103–25. Oxford: Oxbow.
- Meaney, A. L. 1996. "Exeter Book Riddle 57 (55) – A Double Solution?" *Anglo-Saxon England* 39: 187–200.
- Mills, S. 2005. "Sensing the Place: Sounds and Landscape Perception." In *(Un)settling the Neolithic*, edited by D. W. Bailey, A. Whittle and V. Cummings, 79–89. Oxford: Oxbow Books.
- Nemeth, E., and H. Brumm. 2009. "Blackbirds Sing Higher-Pitched Songs in Cities: Adaptation to Habitat Acoustics or Side-Effect of Urbanization?" *Animal Behaviour* 78 (3): 637–41. doi:10.1016/j.anbehav.2009.06.016.
- Noddle, B., and S. Stallibrass. 2006. "The Animal Bones and Marine Shells from Jarrow." In *Wearmouth and Jarrow Monastic Sites, Volume 2*, edited by R. Cramp, 552–67. Swindon: English Heritage.
- North, R. 1991. *Pagan Words and Christian Meanings*. Costerus New Series 81. Amsterdam: Rodopi.
- O'Connor, T. P. 2013. *Animals as Neighbours: The Past and Present of Commensal Animals*. East Lansing: Michigan State University Press.
- Orel, V. 2003. *A Handbook of Germanic Etymology*. Leiden: Brill.
- Philo, C. and C. Wilbert. 2000. *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations*. London: Routledge.
- Poole, K. 2010. "Mammal and Bird Remains." In *The Later Anglo-Saxon Settlement at Bishopstone: A Downland Manor in the Making*, edited by G. Thomas, 146–57. York: Council for British Archaeology Research Report 163.
- Poole, K. 2011. "The Nature of Society in England, c. AD 410–1066." PhD diss., University of Nottingham.
- Poole, K. 2013. "More than Just Meat: Animals in Viking-Age Towns." In *Everyday Life in Viking Towns: Social Approaches to Towns in England and Ireland, c. 800–1100*, edited by D. Hadley and L. Ten Harkel, 144–56. Oxford: Oxbow Books.

- Poole, K. 2014. "The Contextual Cat: Human-Animal Relations and Social Meaning in Anglo-Saxon England." *Journal of Archaeological Method and Theory*.
- Reynolds, R. 2010. *The Later Anglo-Saxon Settlement at Bishopstone: A Downland Manor in the Making*, edited by G. Thomas, 157–62. York: Council for British Archaeology Research Report 163.
- Robinson, F. C. 1985. *"Beowulf" and the Appositive Style*. The Hodges Lectures. Knoxville: University of Tennessee Press.
- Rock, P. 2005. "Urban Gulls: Problems and Solutions." *British Birds* 98: 338–355.
- Rosen, S., N. Bergman, D. Plester, A. El-Mofty, and M. H. Satti. 1962. "Presbycusis Study of a Relatively Noise-Free Population in the Sudan." *Transactions, American Otological Society* 50: 135–152.
- Rowland, B. 1978. *Birds with Human Souls. A Guide to Bird Symbolism*. Knoxville: University of Tennessee.
- Russell, N. 2012. *Social Zooarchaeology. Humans and Animals in Prehistory*. New York: Cambridge University Press.
- Scarre, C., and G. Lawson. 2006. *Archaeoacoustics*. Cambridge: McDonald Institute for Archaeological Research.
- Schafer, R. M. 1994. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, VT: Destiny.
- Serjeantson, D. 2006. "Birds: Food and a Mark of Status". In *Food in Medieval England. History and Archaeology*, edited by C. Woolgar, D. Serjeantson, and T. Waldron, 131–47. Oxford: Oxford University Press.
- Serjeantson, D. 2009. *Birds*. Cambridge: Cambridge University Press.
- Skeat, W. W. 1881. *Aelfric's Lives of Saints Part One*. Early English Texts Society 76. London: Trübner.
- Suolahti, H. 1909. *Die Deutschen Vogelnamen* [The Names of Birds in German]. Strasburg: Trübner.
- Sykes, N. 2010. "Worldviews in Transition: The Impact of Exotic Plants and Animals on Iron Age/Romano-British Landscapes." *Landscapes* 10 (2): 19–36. doi:10.1179/lan.2010.10.2.19.
- Sykes, N. 2012. "A Social Perspective on the Introduction of Exotic Animals: The Case of the Chicken." *World Archaeology* 44 (1): 158–69. doi:10.1080/00438243.2012.646104.
- Thomas, G. 2010. *The Later Anglo-Saxon Settlement at Bishopstone: A Downland Manor in the Making*. York: Council for British Archaeology Research Report 163.
- Verheijen, J. A. J. 1963. "Bird-Names in Manggarai, Flores, Indonesia." *Anthropos* 58 (5/6): 677–718.
- Watkins, C. 2011. *The American Heritage Dictionary of Indo-European Roots*. 3rd ed. Boston, MA: Houghton Mifflin Harcourt.
- Whitehouse, A. 2013. "Listening to Birds in the Anthropocene: Silence, Noise and the Search for Resonance." Paper presented to the British Animal Studies Network, Winged Creatures Conference at the University of Strathclyde, October 12.
- Witmore, C. L. 2006. "Vision, Media, Noise and the Percolation of Time: Symmetrical Approaches to the Mediation of the Material World." *Journal of Material Culture* 11 (3): 267–92. doi:10.1177/1359183506068806.
- Woolgar, C. M. 2006. *The Senses in Late Medieval England*. London: Yale University Press.
- Wormald, F. 1934. *English Kalendars before 1000 AD*. Henry Bradshaw Society 42. London: Harrison & Sons.
- Yalden, D. W. 2002. "Place-Name and Archaeological Evidence on the Recent History of Birds in Britain." *Acta Zoologica Cracoviensia (Special Issue)* 45: 415–29.
- Yalden, D. W., and U. Albarella. 2009. *The History of British Birds*. Oxford: Oxford University Press.

Kristopher Poole is a Research Fellow at the University of Nottingham, where he is working on the *Changing Cultural and Scientific Perspectives of Human-Chicken Interactions* project. His research explores human-animal interactions and the ways in which they relate to cultural identities and worldviews in past societies.

Eric Lacey completed his PhD at University College London and is part-time lecturer in English language and history at the University of Winchester. His research interests lie in recovering the interrelated scientific, religious and cultural perceptions of birds in the early medieval period as well as in vernacular cultural contact, religious transition and comparative linguistics more generally.