The lake-dwellings in Holderness, East Yorkshire, revisited: a journey into antiquarian and contemporary wetland archaeology

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INTRODUCTION

The story presented in this paper began in the 1880s with the discovery of five unusual wet sites in the lowlying region of Holderness, East Yorkshire, during drainage works: West Furze, Round Hill, Barmston Drain, Gransmoor and Kelk (fig 1). The changing interpretation of the significance of these wet sites, from contemporary local accounts to their 'expert' publication early in the twentieth century (Smith 1911), contributed to the tale of the Holderness lake-dwellings, echoing the then already famous lake-dwellings of the Alpine region and elsewhere in Europe (Keller 1878). The tale of the Holderness lake-dwellings survived more recent work intact, as excavators approached the sites without challenging the preconception of these being genuine lake settlements (eg Varley 1968).

Given the sites' high wet potential, their rarity value and the prominence of these sites in the regional archaeological record, further excavations were prioritized by the English Heritage funded Humber Wetlands Project (1992-2000). Each of the five sites discovered in the 1880s was subjected to a reexamination, which included applying the range of modern techniques. An assessment of the original finds from within the stores of the British Museum has also taken place. From this work has emerged a re-affirmation of the importance of these sites but, surprisingly perhaps, the conclusion that none (or at least four of the five) of these can be considered to have been lake-dwellings or crannogs. Specifically, the site at West Furze appears to have been a trackway, with multi-period evidence spanning the Neolithic and Bronze Age (Van de Noort 1995); the Round Hill site appears to have been a Mesolithic lakeside platform, with an intriguing find assemblage; Barmston Drain was a Bronze Age settlement situated on the sediments of a Late-glacial mere or lake; Kelk was an Iron Age enclosure alongside a sinuous lake, and is one of the few sites in the region, and in the country as a whole, to have produced evidence of bronze working from that period (Chapman *et al* 2000); and Gransmoor could not be recovered (Van de Noort 2004, 62–6).

This paper revisits the original excavations and publications, and presents their re-interpretations on the basis of recent work.

THE RESEARCH HISTORY

The original discoveries took place between 1880 and 1884, during maintenance work on the Skipsea Branch Drain and elsewhere in the low-lying region of Holderness. The geomorphology of this region was shaped by the action of ice and meltwater during the

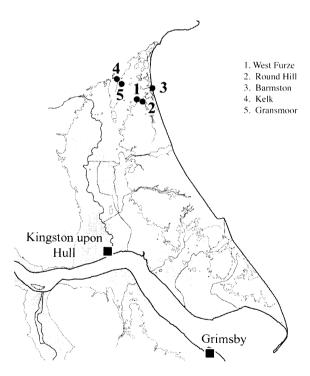


FIGURE 1 Map of Holderness, East Yorkshire, showing five sites (after Van de Noort 2004).

Glacial and Late-glacial periods (Catt 1990), leaving an undulating till landscape. Prior to the introduction of artificial drainage in the early modern period, the landscape included many wetlands. These are known locally as 'meres' and whilst today only a single open waterbody survives in Hornsea Mere, medieval maps show over 70 such wetlands (Dinnin 1995, 27).

The archaeological discoveries were initially reported in newsprint between 1883 and 1885 by the finder, Thomas Boynton, the drainage engineer and landowner from Bridlington who oversaw the maintenance works. His article in *The Yorkshire Post* (26 July, 1883) was followed by one from T M Evans, a local journalist, in *The Standard* (20 October, 1883)

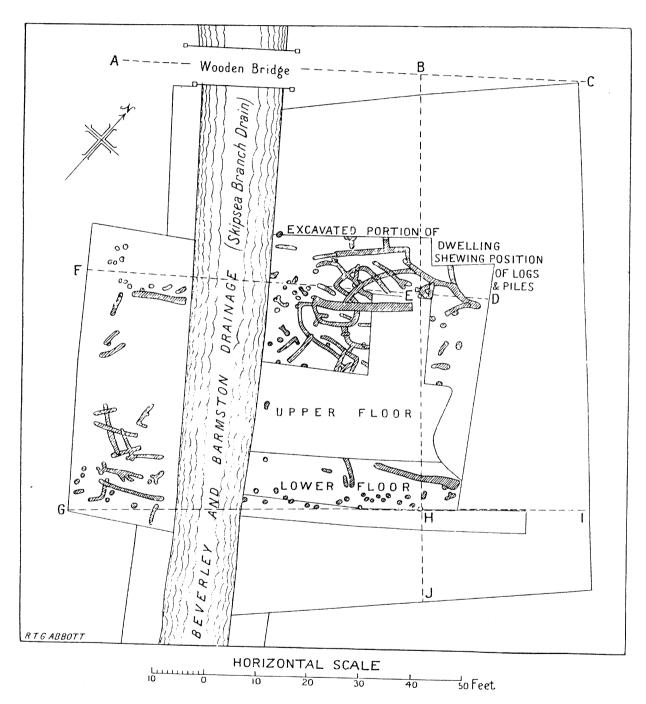


FIGURE 2 Plan of West Furze (after Smith 1911).

and another in *The Hull Quarterly and East Riding Portfolio* (1885). Reginald Smith, Keeper of Prehistoric Archaeology at the British Museum, visited Thomas Boynton and the sites of West Furze and Round Hill, probably in 1884 (the sections drawn by the British Museum draughtsman R T G Abbott are dated to 21 April 1884), but it was not until 30 years after the first find had been made that a full paper was published, under the title 'Lake-dwellings in Holderness, East Yorkshire' in *Archaeologia* (1911).

Another 50 years passed before any of the sites were investigated again, with archaeologist William Varley (1968) looking at the Barmston Drain site in more detail. A systematic analysis of the sites in a landscape context was not undertaken until 1992, with the start of the Humber Wetlands Project. The sites, although geographically close to each other, fell into two of the project's regions, and West Furze, Round Hill and Barmston Drain were investigated in 1994–5, with the results published in the Holderness monograph of the Wetland Heritage series (Van de Noort 1995), whilst Kelk and Gransmoor were researched in 1999, appearing in the Hull Valley report of the same series (Chapman *et al* 2000). This

work was brought together in a full chronological and regional framework, along with the Humber Wetlands Project archive in the synthesis (Van de Noort 2004). More recently, the British Museum has kindly facilitated access to the original finds, and this re-assessment, along with new interpretations of the sites, is presented here. This research now forms part of an ongoing collaborative project with the museum to reconsider the role of the finds from the sites and to define the chronological framework of the bone objects.

Although published in 1911, it is Reginald Smith's paper that has always been seen as the authoritative and last word on the five sites. It is here, for example, that the excavation plans and sections from West Furze and Round Hill were published for the first time (see fig 2). However, this publication was only ever a compilation of material collected over a period of about five years from the five sites. Furthermore, it was published some 30 years after the primary discovery. What characterized these five sites, in Smith's mind, was recovery of preserved archaeological wood from (former) lakes. He interpreted the worked timbers as the piles on which the lake settlements



FIGURE 3
Boynton at West Furze (after Smith 1911).

were established, undoubtedly influenced by the then already famous lake-dwellings of the Alpine region, the crannogs of Scotland and Ireland, and the Glastonbury and Meare Lake settlements in the Somerset levels (Keller 1878; Monroe 1882; Wood-Martin 1886; Bulleid 1894). Reginald Smith's interpretation of the five sites as lake-dwellings, although not challenged since the publication in 1911, was, in fact, not entirely in agreement with local opinion. Thus, T M Evans described the lower layer at West Furze as a 'causeway' (1885, 60), not a lake-dwelling, and our own assessment confirmed the accuracy of this reading of this site.

According to Evans (1885, 59), West Furze was on land belonging to Boynton himself, and the site had been more extensively uncovered by Thomas Boynton than any of the other sites. It remained open to visitors from its discovery in 1880 until (at least) sometime in 1885, and it acquired something of a celebrity status. It is also West Furze where the evocative pictures from the 1880s of the excavator Boynton standing in the trench (fig 3) were taken.

The re-assessments of the five lake-dwellings, as part of the Humber Wetlands Project, commenced with West Furze. A summary of the original interpretations of each of the sites, and our revisited interpretations, is provided in table 1.

WEST FURZE

West Furze is the best documented of the sites, including photographs, plans and sections, and the finds are currently held at the British Museum. It is located on the eastern margin of a series of elongated and sinuous meres, and depressions that characterize the local landscape in the Middle Ages, recorded as Bail Mere and Low Mere. It was, by the standards of the day, skilfully excavated by Thomas Boynton and competently recorded by R T G Abbott of the British Museum. Credit should be given to the recognition of the stratigraphy and the identification of the two 'floors' or layers, the lower layers being without pottery (and late Neolithic/Early Bronze Age in date) and the upper layers without bone tools (of Late Bronze Age date). The wooden stakes and the double alignment were also identified and recorded (including pictures of the tool marks and woodworking techniques), leading Boynton and then Evans to their conclusion that the site was likely to be a causeway or trackway, 'which appears to have reached the land at either end, thus connecting it with both shores of the narrow waters' (Evans 1885, 59-60) (fig 4).

In spite of this plausible and evidence-based interpretation, Reginald Smith concluded that the site was a lake-dwelling, as discussed above. In the recent re-assessment of the site, it became clear that very little of this site survived (Head et al 1995). The 1880s excavation had left the archaeological wood exposed for several years and the drainage system alongside had been efficient in its effort to drain the low-lying grounds. The Humber Wetlands Project's discovery of two barrows east of the mere-complex (from aerial photographs), and Neolithic and Early Bronze Age evidence to the west of the mere-complex (from field walking), added a different focus to the site, providing the basis for the reconstruction of the landscape context, and the re-interpretation of the site as a late Neolithic trackway and a Bronze Age log-dam or beaver lodge (Van de Noort 1995; 2004). Intriguingly, the eastern terminal of the trackway had a 'wicket' (in Smith's description) or a doorway, and the original excavations found at least three human skulls here. In the reconstruction, it has been implied that the elongated mere complex may have divided the landscape into zones. One for the living (to the west of the mere) and one for the dead (to the east), with liminal separation being provided by the wetland (see Parker Pearson 1993 for a similar explanation for prehistoric landscapes in Denmark).

Whilst the site itself may have largely desiccated, the finds provide a lasting interest. In particular, the survival of an unparalleled assemblage of bone tools or, more precisely, multiples of the same bone tools, is significant. Upwards of 15 of these tools were recovered by Thomas Boynton from the lower floor or trackway phase of the site, described as bone adzes by Reginald Smith (1911), but, in fact, resembling picks or mattocks. Nearly all are made from the distal end of Bos Longifrons tibia, with single hafting holes drilled into the thickest part of the joint (fig 5). They had all been used, with use-wear apparent in the breaks and cracks visible at the cutting or digging edge of the tool. These artefacts appear to have been brought together, collected and deliberately interred or cached at the site.

Does this provide an unusual example of the curation and deposition of a particular or specialized object? It is certainly the largest single collection of this type of tool from the British Isles, and to date only a few similar tools are known, including several from Skara Brae (Gordon Childe 1931), although these had been made from similar but slightly different parts of *Bos Longifrons* (Foxton 1991). The apparent care taken to curate and cache these objects at this location has drawn a parallel with Late Neolithic and Bronze

 $\label{thm:table 1} \mbox{Original descriptions and re-interpretation of the 'lake-dwellings' of Holderness.}$

Site summary then and now		
Site	Original description and presented evidence	New information and new interpretation
West Furze (Ulrome)	Two phases were identified, separated by a layer of alluvial clay. The layers were described as 'floors' and identified as being without pottery and without bone tools. The published plan and sections from the 1880s (Smith 1911) show the lower floor as a brushwood layer with a series of upright posts, the upper floor seen as being within an alluvial matrix. Multiple finds included many <i>Bos Longifrons</i> leg bone pick axes from the lower floor and a spearhead from the upper floor. Flints, pottery and many other objects were found at the same time. Boynton/Evans in early newspaper article (c 1883–5) suggested it was a trackway, but Smith's later paper published the platform as a lake-dwelling. Activity at the site continued into the Roman period.	Site is situated at narrowest point where two mere systems combine, and interpretation as a trackway seems most likely, formed by the parallel posts. The brushwood layer may have been naturally occurring or associated with beaver activity (beaver bone was recorded) but still in use as a crossing (see Head et al 1995 and Van de Noort 1995). The bone pickaxes appear to come from a curated assemblage deposited at the site; other Late Neolithic and Early Bronze Age material has also been confirmed, among the many phases of deposition confirmed from the finds assemblage. During the Humber Wetlands Project the wider site context was investigated with the discovery of two barrows of Late Neolithic-Early Bronze Age date situated on the wetland edge.
Round Hill (Skipsea)	A section published in Smith's (1911) paper appears to be speculative and interpretative rather than real. Wooden piles were noted but the assemblage contains many multi-period finds including a human skull, pottery as well as fine objects including an amber bead and section of jet bracelet. Largely of Neolithic and Bronze Age date although some later material present.	Re-excavated in 1992; however, timber samples recovered were dated to the Mesolithic and are therefore much earlier than much of the finds assemblage (Head <i>et al</i> 1995). The evidence from topography and landscape suggest a lake-edge platform. Bulk of the assemblage may be more suited to a later period of deposition than a house/lake-dwelling site.
Barmston Drain	Wooden piles seen in drain section and recorded by Smith (1911) as evidence of lake-dwelling.	Varley (1968) identified hearths, flooring and timbers, dated to Bronze Age. He suggested that the peat developed later and covered the site. The Humber Wetlands Project re-excavated and dated the earlier peat to the Mesolithic. This showed the settlement had developed on the mere during a drier phase in the Bronze Age, and was only partially inundated by later peat growth (Head <i>et al</i> 1995). Not specifically lake settlement but settlement established on a former peat bog/lake.
Kelk	Wooden piles seen in drain section, with only a two-line description in Smith's (1911) paper.	Geophysics, field walking and excavation during Humber Wetlands Project revealed Iron Age enclosure on slope above former stream (Chapman <i>et al</i> 2000). Iron Age material had been dumped in wetland next to site and revealed in the drain cutting by Boynton.
Gransmoor	Wooden piles seen in drain section, with only a two-line description in Smith (1911).	Unpublished excavations from the 1950s revealed an extensive Iron Age settlement on adjacent low hill subsequently quarried away (see Chapman <i>et al</i> 2000). No evidence of material could be found in the Humber Wetlands Project trenches but adjacent settlement site appears to be similar to Kelk site, providing a similar interaction with the wetland.

Age depositional practices elsewhere in the Humber Wetlands (Van de Noort 2004). The value placed on these objects adds a layer of complexity to this site.

Comparisons could be drawn with the depositions of unfinished and unused antler barbed points at Star Carr in the nearby Vale of Pickering, interpreted as a practice that was intended to bridge

animal-derived tools were deposited in another striking wetland location (at the narrowest point of the elongated mere-complex) at the end of their 'lives'. Intriguingly, an example of a similar type of pick or mattock, albeit made of antler rather than bone, is included in the assemblage from Star Carr (Clark 1972).



FIGURE 4
A reconstruction of the West Furze landscape in the Late Neolithic (Les Turner).

the nature-culture divide (Conneller & Schadla-Hall 2003). Whereas at Early Mesolithic Star Carr unfinished tools were returned at a striking wetland location (at the natural outflow of Lake Pickering and the source of the Hertford River), at West Furze

ROUND HILL

Round Hill, located some 700m south-east of West Furze, is known from Thomas Boynton's work by a single section drawing, and a summary description of finds (Smith 1911, 605). The section appears to contradict the description somewhat, and it may be little more than a fanciful reconstruction of Boynton's description of the site. In fact, the site comprises 'logs [that] were not made to overlap, but thrown in promiscuously, and though some were of small dimensions there was no attempt to render the structure solid by means of piles' (ibid.). The finds from the site, however, form a substantial and varied assemblage, including a large flint assemblage, pottery and a circular mace-head, alongside a number of 'exotic' objects such as an amber bead and a section of jet armband or bracelet. Round Hill is, in parallel to the other sites in Holderness, described by Reginald Smith as a lakedwelling and settlement.

The Humber Wetlands Project reassessed the landscape context of this site (Dinnin & Lillie 1995, 74–5). Round Hill is a prominent feature in the local landscape, situated alongside Skipsea Bail Mere. This mere originated in the Lateglacial and formed part of the chain of meres that probably stretched northwards to West Furze. In prehistory, Bail Mere was probably connected to the River Hull but in the Middle Ages it only flooded seasonally.

A single timber was recovered from a small trench excavated in 1994, interpreted as a crudely hewn, somewhat desiccated stake lacking distinctive axe marks or other evidence of working. It was radiocarbon dated to 8350–7940 cal BC (9080±100 BP; GU-5451), or the early Mesolithic. This poses something of a conundrum,

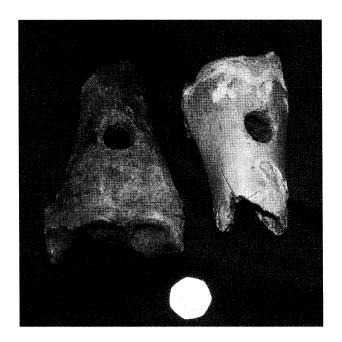


FIGURE 5
Picks or mattocks from the distal end of *Bos Longifrons* tibia,
West Furze (William Fletcher).

as the date of this single stake predates the finds by several millennia. It is not impossible that this prominent feature had been used and re-used on a number of separate occasions, and that during the Early Mesolithic a wooden platform had been constructed on the water's edge. At some point in the Neolithic and, again, in the Bronze Age, renewed activity took place here, the former possibly representing a hunting camp overlooking the mere, providing a lookout for hunters awaiting the arrival of larger mammals to come to the water to drink (see Van de Noort 2004), and the latter probably representing the ritual deposition of selected exotica in wet places (Bradley 1990).

BARMSTON

The Barmston Drain site is, again, a different type of site. Smith (1911) mentions little more than the discovery of wooden piles seen in the drain section as evidence of a lake-dwelling. William Varley, guided by Smith's publication, excavated two trenches here with students of Hull College of Education in 1960 and 1961, and published his work in 1968. The excavations proved beyond doubt the existence of a settlement, including hearths, a cobbled floor, post-holes and cooking pits *in situ*, and radiocarbon

dates from two structural timbers (with date ranges of 1530–810 cal BC and 1510–800 cal BC) places this settlement in the Middle or Late Bronze Age. The peat surrounding the posts was understood as post-dating the settlement. Varley recognized that Barmston was not a lake settlement, but described the site as a 'settlement of sorts within a marshy hollow' (Varley 1968, 20).

The work undertaken by the Humber Wetlands Project closely mirrored that of Varley, down to re-excavating his trenches and even uncovering his labels from the sections, but by dating different material a better picture of this site emerged. Radiocarbon dates of the peat from where the structural timbers had been retrieved returned results of 10720 ± 110 BP (GU-5449), 10190 ± 110 BP (GU-5448) and 9300 ± 70 BP (GU-5450, date range 8590-8090 cal BC). In other words, the peats at Barmston are of Lateglacial date and represent the infill of a mere in a glacially formed depression. The settlement was located on the dried-out surface of the mere. Reginald Smith was thus nearly right, but rather than a lake-dwelling Barmston is a dwelling on a former lake.

KELK

The existence of a lake-dwelling at Kelk was referred to by Smith in a few lines, mentioning wooden piles and some pottery. We also investigated Kelk during fieldwork for the Hull Valley region in 1999–2000 (Chapman *et al* 2000). Situated on a slight hill, above a thin and sinuous peat-filled channel, field walking, geophysics and then excavation revealed a partially double-ditched Iron Age enclosure. Internal features revealed both occupation and specialized industrial activity in the form of mould fragments, slag and crucibles from bronze casting.

This type of activity is rarely found, with only a few well-known sites such as Gussage All Saints in Dorset (Wainwright 1979) and Wheelsby Avenue in Lincolnshire (Fenwick *et al* 2001). Furthermore, no production sites had ever been located so close to the Iron Age settlements and burials on the Yorkshire Wolds. The way the wetland was integrated into the site was clearly significant, but analysis of the channel sequence suggested the wetland was not active open water at this time. When Boynton began to canalize the drainage some elements such as settlement debris or a possible crossing point may have been disturbed, leading to the report in Smith's 1911 paper. Our own trenches into the wetland adjacent to the drain

continued to produce Iron Age material in this fashion.

GRANSMOOR

Smith had teasingly suggested that the Gransmoor lake-dwelling comprised a 'settlement extending 200-300 yards ... in the drain' (Smith 1911), which included the find of a whole 'Roman' pot. For much of the twentieth century, Gransmoor was the site of an extensive sand and gravel quarrying immediately adjacent to the stream. A small sandy hill, which survived until the 1950s, had been entirely extracted and replaced with a deep quarry pit. Prior to this destruction, the Continuing Education Department of Leeds University had undertaken several rescue excavations which hinted at the wealth of archaeology that had once existed (Copley 1953). An extensive Iron Age settlement was revealed, with up to seven hut circles, and a wealth of finds including pots, bones and a fragment of human skull. Later work on the fringes of the site revealed wet deposits (close to the Gransmoor drain) and some timbers that were thought to be providing access through the wet area (Chapman et al 2000). By 1999, the landscape had been comprehensively altered. Small portions of the wetland survived and trenches were excavated by the Humber Wetlands Project team, but only natural sequences were recorded.

CONCLUSION

This short paper has offered alternative explanations for the five lake-dwellings in Holderness, East Yorkshire, as originally described by Reginald Smith (1911). We have come to the conclusion that none of the sites in question resembled Alpine lake settlements, Scottish or Irish crannogs or Somerset lake settlements. In fact, West Furze was a trackway, Round Hill a platform, Barmston a settlement on the surface of a terrestrialized mere, Kelk a riverside enclosure and Gransmoor a settlement on a sandy hill.

This paper has also sought to draw attention to the importance of recognizing perceptions, paradigms or *Zeitgeiste* in our understanding of wetland archaeology. Reginald Smith believed that all wetland sites were lake-dwellings, as at the turn of that century, lake settlements were much in vogue, and alternatives were not at hand. Today, we have to recognize similar problems, and terms such as 'crannog', 'trackway' and 'votive depositions' are likely to encompass a range of sites representing

activities which were perceived in diverse ways by people in the past.

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REFERENCES

Bradley, R 1990 The Passage of Arms. Cambridge.

Bulleid, A 1892 'The Lake Village near Glastonbury', Proceedings of the Somerset Archaeological and Natural History Society 40, 141–51.

Catt, J A 1990 'Geology and relief', in Ellis, S & Crowther, D R (eds) *Humber Perspectives: A Region Through the Ages.* Hull.

Chapman, H, Fletcher, W, Fenwick, H, Lillie, M & Thomas, G 2000 'The archaeological survey of the Hull valley', in Van de Noort, R & Ellis, S (eds) Wetland Heritage of the Hull Valley, an Archaeological Survey. Hull.

Clark, J G D 1972 Star Carr: A Case Study in Bioarchaeology. Addison-Wesley Modular Publication, 10, Massachusetts.

Conneller, C & Schadla-Hall, T 2003 'Beyond Star Carr: The Vale of Pickering in the 10th Millennium BP', Proceedings of the Prehistoric Society 69, 85–106.

Copley, I B 1953 Early Iron Age remains at Gransmoor, East Yorkshire. Leeds.

Dinnin, MH 1995 'Introduction to the palaeoenvironmental survey', Van de Noort, R & Ellis, S (eds) Wetland Heritage of Holderness, an Archaeological Survey. Hull.

Fenwick, H, Van de Noort, R, Fletcher W, & Thomas, G 2001 'Introduction to the Archaeological Survey', in Van de Noort, R & Ellis, S (eds) Wetland Heritage of the Lincolnshire Marsh, an Archaeological Survey. Hull.

Foxton, A D 1991 Bone, Antler, Tooth and Horn Technology and Utilisation in Prehistoric Scotland. Unpubl PhD thesis, vol 1, University of Glasgow.

Gordon Childe, V 1931 Skara Brae: A Pictish Village in Orkney. London.

Keller, F 1878 The Lake-dwellings of Switzerland and Other Parts of Europe. London.

Kelly, T C 1967 'A series of Late-Middle Bronze Age sites, Wilde Street, Mildenhall', *Proceedings of the Suffolk Institute of Archaeology* 31, 46–59.

Head, R, Fenwick, H, Van de Noort, R, Dinnin, M & Lillie, M 1995 'The meres and coastal survey', *in* Van de Noort,

- R and Ellis, S (eds) Wetland Heritage of Holderness, an Archaeological Survey. Hull.
- Monroe, R 1882 Ancient Scottish Lake-dwellings or Crannogs. Edinburgh.
- Parker Pearson, M 1993 'The powerful dead: archaeological relationships between the living and the dead', *Cambridge Archaeological Journal* 3, 203–9.
- Smith, R A 1911 'Lake-dwellings in Holderness', *Yorkshire Archaeologia* 62, 593–610.
- Van de Noort, R (1995) 'West Furze: the reconstruction of a monumental wetland landscape', *in* Van de Noort,

- R & Ellis, S (eds) Wetland Heritage of Holderness, an Archaeological Survey. Hull.
- Van de Noort, R 2004 The Humber Wetlands: The Archaeology of a Dynamic Landscape. Bollington.
- Varley, W J 1968 'Barmston and the Holderness Crannogs', East Riding Archaeologist 1, 11–26.
- Wainwright, G J 1979 Gussage All Saints: An Iron Age Settlement in Dorset. Department of Environment Archaeological Report, 10, London.
- Wood-Martin, W G 1886 The Lake-Dwellings of Ireland. Dublin.