

Places in watery worlds: thinking about wetland landscapes

Introduction

Over the last two decades, archaeologists have changed the way past landscapes have been studied. The literature on landscape is far too extensive to be even summarised here, but in essence this new way of looking at the landscape includes a major shift from a functionalist to a quite diverse range of social, ideological and symbolic approaches to understanding past landscapes. Landscapes have been studied by anthropologists in various ways, with particularly useful perspectives provided on the role of place-names in landscapes (e.g. Hirsch & O'Hanlon 1995; Basso 1996). Landscapes have been approached by historians exploring the ideologies behind landscape art and representation (e.g. Cosgrove and Daniels 1988), they have been approached as a metaphor and source of inspiration for literature and nation building (e.g. Schama 1996) and as a socially and politically contested space in the modern world (Bender 1993, 1998; Bender & Winer 2000). 'Landscape archaeologists' have explored landscape in terms of both 'natural' and 'monumental' landscapes, sometimes simultaneously (e.g. Bradley 2000), in

terms of prehistoric ancestral geographies and kinship connections (Edmonds 1999) and, influentially, in terms of people's phenomenological experience and understanding of the worlds they move through (e.g. Tilley 1994; 2004).

Paraphrasing the words of the cultural geographer Dennis Cosgrove, we recognise that landscape is an ideological concept that is – or was – intended to represent the ways in which people in the past signified themselves and their world through their imagined relationship with nature (Cosgrove 1994, 15). In other words, past people should be understood as active rather than passive agents within the landscape, and the 'landscape' comprises more than archaeological sites and finds set against an environmental backdrop. We must also start to consider the broader range of elements (or phenomena) that were present in the past landscapes in the eyes of the people we study, such as time, space, daily activities, myths and stories, past and contemporary settlements, burial grounds and monuments and, of course, 'nature', which was not perceived as static but dynamic, and thus had agency. Among the most prominent published examples of this new approach we could mention Barrett (1994), Barrett *et al.* (1991), Bradley (1993; 1998; 2000), Bradley *et al.* (1994), Cooney (2000), Hill (1995), McOmish *et al.* (2002), and Tilley (1994), and edited volumes by Bender (1993) and Brück (2000).

This chapter considers a number of ways of thinking about wetlands in the landscape, adopting the principles employed in recent non-wetland landscape studies. However, one of the most important aspects of our argument is the need to understand the diversity of wetlands, and how people engaged with this diversity. Wetlands encompass an extraordinarily wide range of physical landscapes, including raised bogs, fens, lacustrine and riverine wetlands and coastal and estuarine saltmarshes, and we need to deconstruct the 'meta-narrative' of wetlands, and start seeing these landscapes from the point of view of the people we wish to understand, developing a comprehension for the 'native eye'. For example, wetlands have traditionally been seen as physically and socially marginal landscapes or as sources of economic benefit, but such a view belongs typically to the outsider.

In this chapter we also explore the role of wetlands, or certain wetland types and specific locales within them, as places that were storehouses of cultural and symbolic meaning. The enculturation of nature through inhabitation, whereby the perception of areas changed from wilderness to cultural landscape, may be particularly relevant for wetland studies. Certain wetlands became the foci of votive depositions, and concepts of liminality are frequently invoked when discussing wetlands, and thus the study of wetlands as 'natural places' will be discussed here

(Bradley 2000). At the same time, we also need to recognise that some wetlands were part of the landscape of everyday life – that is, they were ‘tasksapes’ (Ingold 1993) – and this will be the final theme developed in this chapter. Throughout this chapter, we give examples of opportunities that arise to embrace high-resolution dating and detailed palaeoenvironmental data for reconsidering people’s inter-relationship with nature.

The concept of wetlands: deconstructing the meta-narrative

Inventing and inventorying wetlands

It is most doubtful that people in the past ever thought about wetlands in the landscape in the ways we do today. Indeed, ‘wetlands’ as a word did not exist in the English language before the 1960s, nor were there equivalents in Dutch, Old Frisian, German, French or Danish. Ancient place-names that include the generic term wetland as a prefix or suffix are also non-existent, although the Dutch place-name Waterland comes close. Instead, we find plenty of English place-names (often deriving from Anglo-Saxon roots) indicating *specific* kinds of wet landscapes or wet features, with suffices such as -ings, -hay, -moor, -dyke, -fen, -levels, -fleet, -pool, -mere, -beach, -ford, -bridge, or -on-the-water and -on-the-Marsh. Similarly, in Irish, place-

names often incorporate specific words for marshes (*corcach*), water meadows (*cluain*) and bogs (*móin*), but there is no word for wetlands. We have also plenty of other place-names that indicate the kind of wetness of specific locations, such as the evocative Dirtiness and Reedness, both in the Humber Wetlands of England. So, if people in the past did not use the word wetland, when was it invented and what does it mean?

Although writers referred to 'wet land' (i.e. waterlogged ground) in the eighteenth and nineteenth centuries, one of the earliest published uses of the term 'wetland' was in *Scientific American* in 1965, and it was also used in *Nature* in 1969 (referring to wetland flora and fauna). Thence the term 'wetlands' emerged in the 1960s in the United States of America, largely as a growing concern about the habitat of birds and especially ducks, and led to a number of federal laws that used the term wetland as a generic term for such habitats. That the pressure for such laws came principally from the hunting lobby matters not, but it explains the early preoccupation with generic, rather than specific, wetland protection.

During the UNESCO-sponsored International Convention on Wetlands in Ramsar, Iran, in 1970, the 'formal' definition of wetlands was agreed as follows: 'Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas

of marine water the depth of which at low tide does not exceed six metres.' Much debate has since been dedicated to redefining this definition of wetlands, and the Ramsar Bureau itself provides an exhaustive list of the many specific kinds of wetlands that are included under the Convention. Within three major groups, comprising Marine/Coastal Wetlands, Inland Wetlands and Man-made Wetlands, it identifies 41 types of wetlands, such as permanent shallow marine waters, seasonal/intermittent freshwater marshes/pools on inorganic soils, salt exploitation sites and canals and drainage channels. This division is primarily based on the ecological functions and benefits of these types of wetlands.

Bradley (2000) has suggested that people in the past did not think in terms of environmental systems or ecosystems (e.g. wetlands), but developed 'native ecologies' using their own terms to define specific topographical features or places (e.g. that lake, this marsh, etc). We can assume, if this was the case, that people in the past living within and outside the wetlands would have understood these landscapes in terms of particular land-forms, rather than by using the broad, generic term 'wetlands'. Rethought wetland archaeology should similarly deconstruct the concept of wetlands when attempting to understand how people in the past engaged with these landscapes, and develop an empathy for the characteristics of

the many wetlands as seen and understood by the people we study.

Archaeology of diverse wetlands

It is evident that even in environmental terms, different types of wetland offer quite different resources for food gathering, the use of raw materials, potential for accessibility and for reclamation. This diversity of past wetlands and its implications for archaeological study has been explored by several scholars (e.g. Mitsch & Gosselink 1993; Dinnin & Van de Noort 1999). They have argued against the sweeping assertion that all wetlands offer attractive ecological conditions with a natural high bio-productivity and biodiversity. Indeed, in a calculation of the biomass generated in a range of wetland landscapes compared to non-wetland ecosystems, it was found that whilst certain wetlands are indeed amongst the most bio-productive ecosystems in the world, others belong to the poorest in terms of bio-productivity.

So, from a modern ecological perception, biogenic wetlands (that is the wetlands formed through the accumulation of peat, such as blanket bogs and raised mires) are wetlands with levels of biomass production that are among the lowest in the world. This is caused by saturation by rainwater, which deprives plants of nutrients and oxygen. They also have a low biodiversity, as only a

limited number of specialised plants (e.g. *Sphagnum* mosses) can tolerate the high water table, acidity and low nutrient availability. The minerogenic wetlands (that is, wetlands formed primarily through the accumulation of silts and clays such as river floodplains and areas with marine sedimentation containing alder carrs, sedge fens and reedswamps) have access to groundwater and floodwater, and so benefit from the water-borne nutrients brought into the ecosystem. Riverine wetlands that are regularly inundated by floodwaters from streams and rivers have an even higher primary productivity and greater biodiversity, and as nutrient levels in the water increase downstream, river deltas and estuaries are amongst the highest biomass producers in the world, with annelids, molluscs, fish and waterfowl feeding on plants, and thus contributing to a greater biodiversity.

Wetlands archaeological research in the Humber Basin has revealed interesting correlations in the distribution of archaeological sites and different types of wetlands in the past (see Dinnin & Van de Noort 1999; Van de Noort 2004b). From the earliest Mesolithic through to the high Middle Ages, many more sites were found in the Humber estuary and alongside the many rivers that flow into it, than in any of the peatlands of this region. Taking a broader overview of the published literature, it seems reasonable to suggest that features and sites thought to be

related to food production or daily life were predominantly located on what were minerogenic wetlands.

Leendert Louwe Kooijmans' (1993) synthesis of research in the Dutch delta also makes it apparent that the majority of prehistoric sites in its wetlands were not located in what would have been peatlands, but near rivers and within minerogenic wetlands. Similarly, research on England's east coast, in the Fenlands of East Anglia, found many more prehistoric and Roman-period sites on the fen edges and alongside rivers than within the peat, although many sites were subsequently submerged by mires (Hall & J. Coles 1994; Hayes 1988). This accounts, to a considerable extent, for the fact that the overwhelming majority of the sites from these landscapes were frequently buried by subsequent alluvial deposits or peat, but were not themselves waterlogged. On the Severn estuary, most Bronze Age and Iron Age houses, dwellings and trackways were focused on the zone between the mires and the saltmarshes, attracted no doubt by the rich grazing of the minerogenic wetlands (Bell *et al.* 2000). Similarly, on the Shannon estuary, while there is evidence for prehistoric and medieval activity down by the estuarine marshes, there is rather less in the region's peatlands (O'Sullivan 2001). Finally, in the Roman period and the Middle Ages, both small- and large-scale reclamation and transformation of wetlands centred initially on

alluvial wetlands, rather than the mires (e.g. Rippon 2000). The peatlands were, as a rule, the last type of wetlands to be reclaimed.

If we consider this diversity of wetland landscapes, and how this diversity would have been perceived by people in the past living within or outside the wetlands, it becomes apparent that the term wetland in interpretative studies is too broad. It forms an appropriate entity only in the sense that anoxic environments have caused the preservation of organic archaeological and palaeoenvironmental remains that require specialist methods and techniques during recovery and analysis. However, as has been so clearly shown in place-names, past people never thought about wetlands in the landscape generally, but instead considered the values, merits and dangers of specific types of wetlands. This should be taken fully into consideration both in studies focusing on the economical exploitation of specific wetland landscapes, and in those focusing on other aspects of prehistoric and historic societies.

*The Humber Wetlands: different wetlands,
different wetland archaeology*

Recognising the fundamental differences in the many types of wetland landscapes and what people did there is an essential component of rethought wetlands. In the Humber Wetlands, for example, the dichotomy in types of activity in minerogenic

wetlands and peatlands remains striking (Van de Noort 2004b). On the silts and clays in the Humber Wetlands, for example, archaeological survey has found few monumental sites, or types of sites traditionally associated with death and burial. Instead, the survey identified 'hunting camps' and 'flint production sites', field systems, settlements, and sites of industrial activities, including salt winning and metal production or, if one wishes, the archaeology of 'daily life'. The palynological evidence indicates something similar; the opening up of the indigenous forest throughout the Neolithic and Bronze Age, with little remaining woodland by the start of the Iron Age. In contrast, the archaeology of the peatlands of this region offers a dearth of settlements and field systems, and there is also a pronounced lack of finds of flint or pottery. Instead, the antiquarian finds of bog bodies from Thorne and Hatfield Moors in the Humberhead Levels, and a large number of Bronze Age and Iron Age bronze objects 'ritually deposited' in the moors and floodplain mires, testify to a perception that is strikingly different from that attributable to the minerogenic wetlands. The place-names still used in the region reflect this differential perception of the many types of wetlands. The alluvial or minerogenic wetlands are usually called 'sands', 'levels' or 'carrs', whereas the organic peatlands were known as 'moors' and 'wastes', and peatlands were thus understood to have been marginal landscapes.

We must guard, however, against translating cultural- or contextual-specific observations into cross-cultural or non-contextualised generalisations. This is exactly what Rod Giblett set out to do in his *Postmodern Wetlands: Culture, History, Ecology* (1996), where he proposed a 'post-structuralist' distinction of the different types of wetlands, based on English literature. The 'white waters' (i.e. rivers and minerogenic wetlands) represent masculinity, culture, progress and development, the latter often under the direction of distant owners, authority and capital, whereas the 'dark pools' (i.e. peatlands) signify femininity, nature, stagnation, disease and opposition to progress and development.

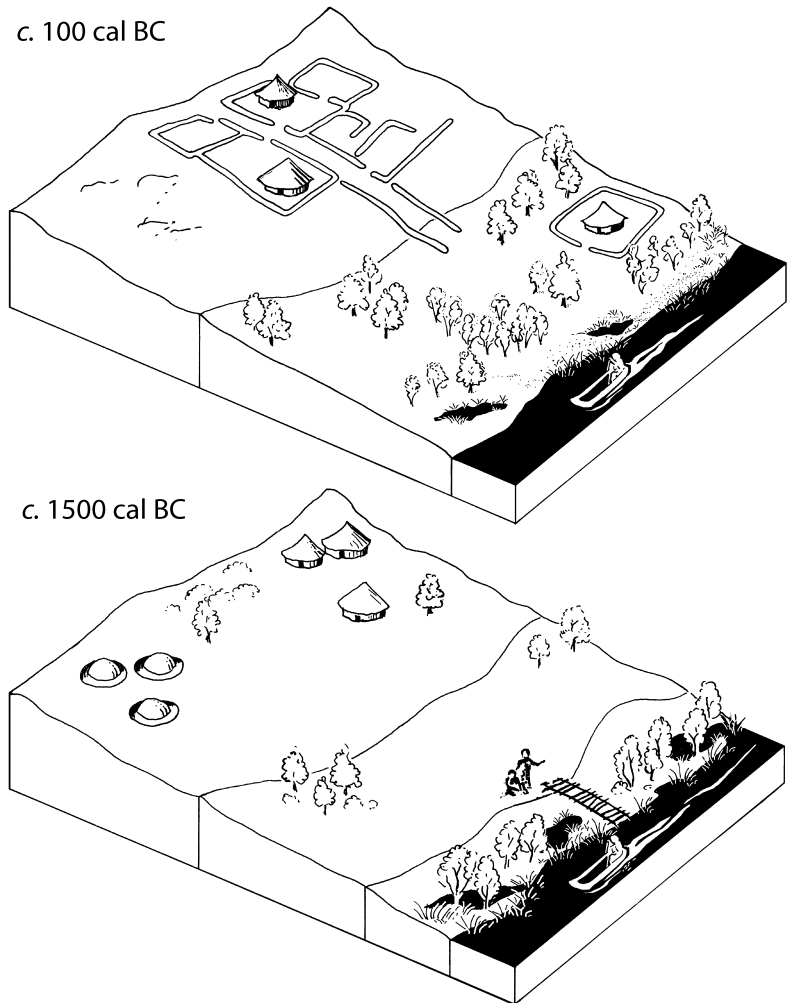


Figure 3: The changing character of a riverside wetland in the Humber basin, England, between 6000 and 100 cal BC, showing how the function and perception of wetlands changes over time. The 'votive deposition' of bronze artefacts around 1500 cal BC reflects such a time-specific perception of this wetland (after Van de Noort 2004: 169)

Whilst the archaeology of the Humber Wetlands in the Bronze Age and Iron Age contains ample characteristics that underwrite aspects of this post-structuralist description, such an opposition is wholly untenable for the same area in the Roman and medieval periods, when the

peatlands were extensively transformed and exploited, and peat itself became a valuable commodity as fuel. The reasons for their exploitation were economically, socially and politically determined, rather than intrinsically linked to the natural properties of the specific wetlands.

North Holland: perception of different wetlands

A study from the Netherlands may be used here to illustrate further the importance of cultural perceptions when considering the way in which people in the past perceived the different types of wetlands. The lowlands in North Holland had been exploited from the Neolithic onwards, but the late Roman and early medieval marine transgression, coupled with the erosion of the ancient dune system, provides an environmental reason for the discontinuation of settlement in this marginal landscape.

From the fifth to the eighth century this landscape remained largely devoid of human interference, as shown by the palynological record for the region and the dearth of archaeological sites and finds. However, from the ninth century AD onwards, archaeological sites including settlements appear within the peatlands. Whereas environmental factors, and especially a period of reduced rainfall, enabled this colonisation of the

peatlands, the socio-political factors of the day are considered of greater importance.

Jan Besteman (1990, 117), in his study of the colonisation of the peatlands of North Holland, considers the early medieval socio-political context of patrons and clients. The king, occupying the top of the feudal pyramid, would have been perceived as the landowner of any wilderness such as the peatlands of North Holland. However, with the declining control of the Carolingian kings over their vassals after the middle of the ninth century, the latter usurped the peat bogs for themselves. Continuing erosion of political structures and increasing geographical distance between the seats of the local elites and the areas of reclamation in the subsequent centuries gave rise to groups of 'free' farmers. These 'free farmers' were no longer bound by oath, obligation or tax to their patrons, and these apparently marginal wetland landscapes had become fundamentally attractive places to live.

The concept of marginality has been invoked for many wetlands, in particular by archaeologists and historians not specialised in their study. As argued above, from an economic point of view it is certainly true that specific types of wetlands have lower bio-productivity than adjacent free-draining landscapes. Marginality, however, can only be understood fully as the interaction of economic and cultural factors. The examples used so far from

North Holland and the Humber Wetlands illustrate this point.

Enculturing nature

Thus far, in the tradition of wetland archaeology over the last few decades, we have focused on the economic aspects of wetlands in the landscape. However, wetland landscapes were perceived in other ways as well, and much has been said and written about their most intriguing archaeological treasures: the bog bodies and wooden trackways. It has long been accepted that it is unlikely that people in our prehistoric past divided life up into segments, and that the economic, social, political and religious aspects of life were all, to varying degrees, interwoven. For this reason, one cannot translate the economic marginality of the peatlands directly into their role in ritualised behaviour, especially when considering those wetland types across different cultures or through time. Nevertheless, it is beyond doubt that different types of wetlands were perceived essentially differently within certain societies at particular points in time. For example, Jan Besteman's (1990, 117) description of the peatlands of North Holland in the early Middle Ages as 'a wilderness', discussed earlier, invokes images of an uninhabited or uninhabitable landscape, even though subsequent events showed that people could live there quite agreeably. In this

section we look at some different perceptions of wetlands, and will consider how people engaged with them in terms of ritual behaviour, and in the process encultured the wetlands.

Star Carr – a Mesolithic ritual site?

The excavations and interpretations of Star Carr, in the Vale of Pickering in Yorkshire, are well documented. The excavations by Grahame Clark between 1949 and 1951 were initially published in 1954, and updated in 1972, with Star Carr described as a hunter-gatherer 'base camp', dated to *c.* 9500 BP. A major reappraisal of the site's function was published by Robin Legge and Peter Rowley-Conwy in 1988, describing the site essentially as a seasonally occupied 'hunting camp', but alternative models and explanations have been proposed. Further research of the environmental context of the site was published in *Star Carr in Context*, edited by Paul Mellars and Petra Dark in 1998. Most recently, Chantal Conneller and Tim Shadla-Hall (2003) have considered twelve other Early Mesolithic sites in the Vale of Pickering, and conclude that Star Carr was an exceptional site, used in a variety of different ways by different people.

Clark's original work produced no less than 191 (unfinished) barbed points, but only one other has been found in the many years of work in the Vale of Pickering since 1975. Furthermore, the

famous antler frontlets with perforated holes remain unique for the British Isles, if not in Europe. Additional finds such as the shale and amber beads, and the perforated teeth of red deer, have few parallels in the region. It could be argued that the antler barbed points and antler frontlets would not survive in anything but waterlogged deposits and that their absence on the other twelve Early Mesolithic sites in the Vale of Pickering is the result of differential survival, rather than differential deposition. However, this argument is rejected by Conneller and Shadla-Hall who consider the whole structure of deposition on the site to be markedly different from the other sites. An important component of their argument is a detailed analysis of the flint finds from the site, which shows that Star Carr, with its relative prevalence of burins which are considered to have been used in the manufacture of bone and antler objects, is in this respect also exceptional within the Vale of Pickering.

Conneller and Shadla-Hall (2003, 102-3) do not wish to redefine Star Carr as a 'ritual site', as this is considered too narrow, but they note that the range of artefacts from Star Carr makes this an atypical site within the contexts of the Vale of Pickering in the tenth millennium BP. The ritual aspects of Star Carr, and not dissimilar assemblages from Early Mesolithic sites such as Friesack in northern Germany, lead them to explain the site as a locale within the landscape that had

been selected 'for the deposition of specific objects, particularly objects manufactured from animal remains' such as the barbed points, and 'a place where human and animal identities were explored and blurred'.

We may ask ourselves how important the wetland context of these finds was, and whether we must try to understand the site as one where an early form of 'votive deposition in wet places' was practised, as has been proposed for some of the Mesolithic wetlands in southern Scandinavia (Larsson 2001; see below for a discussion on this phenomenon in the Bronze Age). This is a tempting proposition. The presence of the half-finished barbed points has a resonance with the never-used bronze weapons and extremely thin bronze shields which find their way into selected wetlands as votive deposits in the Bronze Age across much of Europe (Bradley 1990), and this could represent one way of approaching votive depositions, alongside the practice of depositing used objects. The selection of this specific locale on the edge of Lake Pickering as a place for the deposition of objects makes it certainly one of the earliest sites where a wild wetland is encultured (see Zvelebil 2003).

The Neolithic Sweet Track, Somerset

A reappraisal of existing interpretations of the Sweet Track in the Somerset Levels may provide

another fruitful avenue for considering the cognitive and ideological aspects of past societies. The Sweet Track has been introduced in Chapter 1. To date, excavators and commentators alike (e.g. B. & J. Coles 1986; Edmonds 1999, 24) have argued that the track was built to connect two areas of dryland, the Polden Hills to the north and Westhay island to the south, for reasons of contact, exchange and trade (although a recent paper by Bond 2004 also considers the Sweet Track in the context of spirituality).

Alongside the track, various objects were recovered during the excavations. Amongst these were a polished jadeite axe from central Europe, unhafted and in pristine condition, flint arrowheads and axes, pottery, yew pins, a broken pot filled with hazelnuts, a fragment of a bow, an arrow shaft, a wooden bowl and an object that has been interpreted as a child's toy axe of oak, but which may alternatively be seen as a (votive) token. The pollen record for the region shows the impact of woodland clearance or management, possibly associated with the construction of the Sweet Track, but it also indicates subsequent woodland regeneration or regrowth, rather than the expansion of agriculture.

In a popular reconstruction drawing of the track by Edward Mortelmans, we see a man, a child and a woman walking along the track, presumably a family on its way to visit kin across the wetlands. The track is set within the reed

swamp, but the reeds either side of the track have been cut just above the water. The man carries a hafted polished flint axe, a bag and a bow and arrows; one of the birds overhead could be his next prey. The boy carries a wooden axe, the woman a wooden pot. From a gender archaeology perspective, the reconstruction drawing can be critiqued (Joanna Brück, pers. comm.): the hirsute man actively strides out, forcefully in front, the woman passively walks behind with the child, her breasts modestly covered, as she holds her 'handbag' by her side. In any case, this is a reconstruction of a Neolithic nuclear family going about some relatively prosaic task, on a shopping trip to the bountiful 'wetlands' perhaps. In a sense, the reconstruction drawing is very symptomatic of how we make sense of the past, and condensed everything we know about the track during its ten-year use into a single moment.

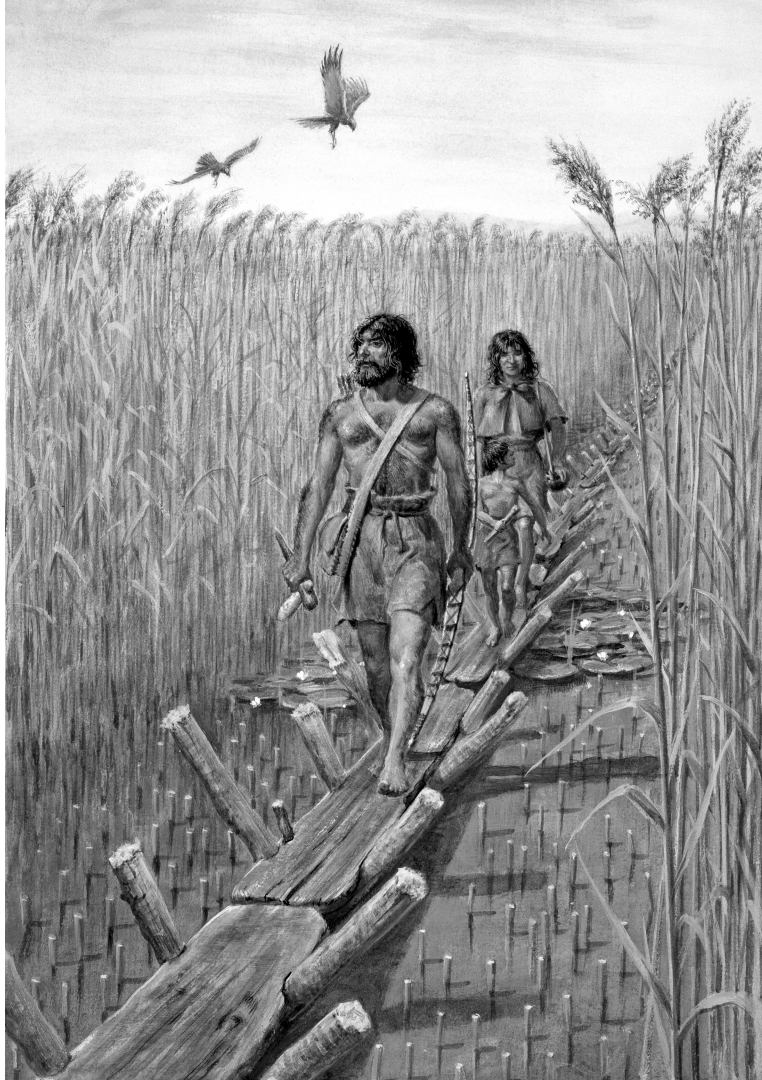


Figure 4: Reconstruction of the Sweet Track, Somerset, England (drawn by Edward Mortlemans; courtesy of the Somerset Levels Project/Somerset County Council)

Explanations to date have not given any thought to Neolithic people's perception and experience of this wetland in the wider landscape, and this results in an exclusively utilitarian outlook on the Sweet Track itself. Let us reconsider the track and its context. Even within a functionalist paradigm, it is worth pointing out that the Westhay 'island' had nothing to offer in terms of exploitable resources

that could not be found on the Polden Hills and *vice versa*, and the wetland-dryland interface could be readily exploited (e.g. for wood, reeds and herbs) from all along the edge of either of these dryland areas. The use of the 'other side' as pasture land is possible, but the track certainly would not have been passable for cattle or sheep. This raised footpath allowed people a dry passage, but it would have been quite difficult to pass oncoming travellers (without becoming rather intimate), and outright impossible whilst carrying any large loads such as reeds or wood. Using the track to exploit the wetlands, for example for fowling, is also doubtful as the hunter would have had to leave the track to recover the kill. A logboat would be more suitable for such activity, and such a craft could also conveniently have been used to maintain contacts between kin groups in the Somerset Levels and for the exchange of goods. The construction of a logboat or curachs (or even several logboats) would have been achieved at a fraction of the labour and timber cost required for the construction of the Sweet Track, and the track itself would have been a barrier to logboats.

The excavators of the Sweet Track, John and Bryony Coles, have always recognised that the artefacts found alongside it may either (or variously) have been dropped accidentally or placed in the reed swamp on (ritual) purpose (e.g. B. Coles 1999). Considering the material culture of the Neolithic in Somerset, and particularly the

presence of the exotic jade axe alongside the Sweet Track, the latter of the two explanations must be favoured. The practice of votive deposition of a range of objects in 'wet places' from the Mesolithic through to the post-medieval period in much of western Europe have been described in outline elsewhere (e.g. Bradley 1990, 2000), and it is probable that the jade axe and the other objects including the bowl with hazelnuts and wooden child's axe form part of this tradition.

If the Sweet Track was not a trackway to the food store or the practical solution to a traveller's inconvenience it has been claimed to be, than we should explore alternative explanations. In our view, both the wooden structure itself and the artefacts alongside the Sweet Track underpin the notion that early Neolithic people saw this wetland as a landscape with clear symbolic meaning, and possibly as a 'wilderness'. Within the context of the early Neolithic of south-west England, the Sweet Track remains unique in its early date, construction and length, and as a functional site it is something of an anomaly. Like their contemporaries in other parts of south-west England, the community that built and used the track was one of predominantly pastoral farmers who continued to hunt and gather foodstuffs, and may have been of no fixed abode. Living in temporary lodges in clearings, rather than in long-term settlements with long houses, much of their collective energy was expended on the

construction of monuments, such as long barrows and causewayed enclosures. Within this interpretative framework, the importance and significance of such monuments have been explained in terms of offering fragmented and dispersed communities opportunities to trade, exchange and reinforce kinship bonds through communal ceremonies linked to shared ancestry. Such monuments also offered kin groups a sense of place and, increasingly over time, a concept of ownership and ties with the land (Bradley 1998; Edmonds 1999).

If such a view of early Neolithic society and settlement is accepted, should the extraordinary amount of energy and timber used for the Sweet Track be seen as a monumental building aimed, as many other cultural markers of this period, at essentially creating a sense of place? Christopher Tilley (1994) has argued that tracks and paths are primary human artefacts. They were one of the first modifications people made to their environment, forming a medium through which the environment could be integrated with the psyche and transformed into a landscape, that is, an environment which reflects and is interpreted by human beings. The environment thus becomes 'encultured' into landscape (Tilley 1994, 206-7). The concepts of paths and roads, and the journeys that they enable, are powerful metaphors (Tilley 1999, 178), recognised by the Romans and even by us in our modern, so-called rational culture. Thus

the path is not just a route from one place to another, but more importantly, it transforms a wilderness full of unknowns into a cultured landscape, a known place. The deposition of artefacts reinforces this symbolic role of the Sweet Track (e.g. B. & J. Coles 1986). We could postulate that the depositions represent occasions, over the ten years in which the track may have been used, when this symbolic function was reinforced.

If early Neolithic society in south-west England was of a more sedentary nature than can currently be demonstrated archaeologically, we could consider alternative explanations for the Sweet Track. For example, the track may have acted as a boundary, between two social groups. Or the island of Westhay may have been perceived as an area with special, ritual meaning, a 'natural' place in Richard Bradley's (2000) definition, with the Sweet Track providing access for pilgrimages.

Trackways from the Bourtanger Moor, Netherlands

Other trackways built elsewhere in Europe have been similarly reinterpreted as functioning at the same time in profane and sacred spheres. Several trackways in the raised mires of Drenthe, in the eastern part of the Netherlands, and adjacent Lower Saxony in Germany, have been dated to the Neolithic period (e.g. Casparie 1987). Probably the best-known of these is the Nieuw-Dordrecht trackway, dated through radiocarbon assay to c.

2900-2450 cal BC. New dating evidence using dendrochronology combined with wiggle-matching of radiocarbon dates has shown that the track was constructed in phases, with at one point a gap of a century in activity. Constructed from roundwood timbers, and in places positioned over longitudinally positioned timbers, it extends for nearly one kilometre into the Bourtanger Moor from a sand ridge known as the Hondsrug, with a width of 2.5 to 3 metres. The abrupt 'end' of the trackway somewhere in the Bourtanger Moor has occasioned much debate. Suggestions that the trackway was constructed to enable the exploitation of the bog ore for iron production have been dismissed on the grounds that iron production did not commence for at least another two millennia. Similarly, it is unlikely that the building project was abandoned because the people involved in its construction were insufficiently familiar with the landscape. Wijnand Van der Sanden (2001, 141-2) argues instead for a ritual function for this trackway. He points to the artefacts that have been deposited beneath or near the trackway as evidence: the wooden disc wheel, the axe handle, the 'hockey stick', and the cache of flint, which included one axe and eleven long blades.

We could speculate that the phased extension of the Nieuw-Dordrecht trackway was intended to access new areas of (unspoilt) wilderness, whilst the repeated building of extensions would also

have played an important role in reinforcing socio-political relations. Existing parts of the track, and any associated votive depositions that had taken place there, had effectively encultured those parts of the Bourtanger Moor. To communicate with the ancestors, ghosts or gods that resided in untainted nature, or to domesticate un-encultured areas of the bog, the track had to be extended periodically. In this manner, wetlands were encultured through ritualised activities such as the deposition of bodies in bog pools and of bronze artefacts at the edge of expanding peatlands – and, one might suggest, through the construction of trackways, beliefs and myths (e.g. Tilley 1994).

Van der Sanden (2001, 143) reinterprets another trackway from the Bourtanger Moor, the Valtherbrug, now dated by wiggle-matching of radiocarbon and dendrochronological dates to the first century AD, as a non-utilitarian road. This 12 km (!) long trackway links an area of known occupation, the Hondsrug, with one that wasn't occupied, the Westerwolde. Palaeoenvironmental analysis shows that the region became increasingly wet, and that the Westerwolde area was not farmed. Finds from near the track included four bog bodies, all more or less contemporary with the track, at least five querns, and wagons or parts of wagons. Van der Sanden suggests that the track was used for ritual processions. Rather than periodically extending the track, as was the case

with the Nieuw-Dordrecht trackway, the function of the Valtherbrug lay in recurrent ceremonies.

*Bronze Age and Iron Age trackways and
causeways*

In the Irish Midlands, the number of trackways linking areas of dry ground across the extensive raised mires are numerous, and range in date from the Neolithic through to the post-medieval era (Raftery 1996). The frequent rebuilding of tracks on the same alignment have to date been explained only functionally, that is that the new trackways were constructed to maintain contact in periods of climatically induced rapid upward growth of the peat. Alternatively or concurrently, it could be suggested that the trackways were built at least in part as a way of enculturating the raised mire. The more dynamic the raised mire, the greater its association with metaphysical phenomena in the eyes of people who lived within it or nearby. Domesticating such dynamic landscapes became a matter of urgency when periods of increased wetness resulted in accelerated peat growth and an advance of the wilderness areas through the burial of whole trackways. Dated to 148 BC by dendrochronology, the spectacular Iron Age Corlea 1 trackway, the largest of the Irish trackways, has already been interpreted as a structure with political, social and ideological functions (Raftery 1996). Its massive design and its apparent

deliberate disassembly towards the middle of the route suggest that the track may have had a similar symbolic function to other major trackways, but the project involved a larger number of people, possibly under the leadership of a local chief, and was executed in a most impressive fashion.

Many trackways from other regions are associated with human remains and gold and bronze artefacts, suggesting a ritual or symbolic role alongside a vernacular one. At Islandmagrath on the Fergus estuary, a Late Bronze Age wooden trackway was located near the findspot of a gold bracelet (O'Sullivan 2001, 125-8). On the Crouch estuary in Essex, a Late Bronze Age wooden causeway was associated with two seemingly deliberately placed human skulls (Wilkinson & Murphy 1995). It is not conceptually hard to link these smaller structures with the larger Bronze Age and Iron Age timber causeways found at Testwood Lakes, Eton Rowing Lakes, the River Thames (Vauxhall), Caldicot and Fiskerton, all of which appear to have been routes out into watery worlds, associated with the deposition of human remains, weapons, ornaments and pottery.

The significance of trackways in enculturing selected wetlands may be summarised as follows. Certain wetland landscapes are not ordinary places. Peatlands such as raised mires can be treacherous to cross. They offer a constantly changing geography with no permanent landmarks. They are associated with unusual

phenomena, such as spontaneous ignition of methane. They can be neither cultivated nor easily used for pasture (but see below). Their fabric is neither stone nor soil, and anyone who has inadvertently stepped onto a quaking bog will know that it is neither land nor water. Bogs are thus dangerous, disorientating, enigmatic and otherworldly places which are resistant to domestication, save by draining. Domestication of the environment is deeply significant to an agrarian society such as existed in Neolithic and Bronze Age Europe (e.g. Bradley 1993). To these people, bogs, in their truculent wildness, would have appeared possessed of a power which opposed domestication, and thus opposed their culture. This power therefore needed to be acknowledged and, perhaps, placated (Adam Wainwright pers. comm.). Of course, such a process of enculturation would have been reinforced by the everyday use of the trackways, and the ritual and everyday aspects would have continually reinforced each other.

In describing how people thought about certain wetland landscapes, such as the Somerset Levels, the peatlands of North Holland, the raised mire of Bourtangier Moor, and the peatlands of the Irish Midlands, the concept of 'wilderness' may be useful. Wilderness is a landscape-construct formed by human perception and imagination (Cosgrove 1984, 11). It has been argued that for many societies world-wide, wilderness is the perceived

place of origin of distant ancestors, or is sensed as that part of the landscape where natural or social rebirth and regeneration takes place (e.g. Oelschlaeger 1991; Cosgrove 1993, 291). The concept of wilderness was also used to define boundaries that could not be crossed. For certain wetland landscapes, a role such as wilderness is archaeologically demonstrated by a number of late prehistoric bog bodies and votive depositions. Wijnand van der Sanden (1996) entitled his book on bog bodies in Europe *Through Nature to Eternity*, expressing his understanding of this phenomenon: the bog pools that received the bodies connected this world with the next and enabled the regeneration of this world. Mires are therefore frequently associated with supernatural powers, a notion that was reinforced by their constantly changing geography.

Boundaries and edges: wetlands as natural places

Marginality and liminality

It would be mistaken to assume that landscapes that were places of work (i.e. of economic exploitation) were by definition non-ritual landscapes or, conversely, to assume that ritual and symbolic landscapes had no economic value at all. We have already argued that the mires that were perceived as otherworldly landscapes could be

encultured, and thus that their economic 'exploitation' could have been enabled. The example of the early medieval inhabitation of the space previously regarded as 'wilderness' in North Holland shows how perceptions of landscapes were transformed with socio-political change, and many peatlands across the world have become resources for peat as fuel, bedding for domestic animals, and for mulch in the horticultural industry. We must, in addition, accept that specific locales within certain types of wetlands seem to have been chosen for ritualised activities. Although the ritual activities themselves effectively encultured such locales (Tilley 2001), their long-term use shows that their importance as places where one could communicate with nature, or with the gods, ancestors or ghosts, was retained over long periods of time. We do accept, however, that the meaning of such places changed with every ritual activity that took place there. Such locales could be termed 'natural places', as argued by Richard Bradley (2000).

Recent research in the Witham valley in Lincolnshire, England, offers an outstanding example of the longevity of the significance of some natural places in wetlands. Stocker and Everson (2002) studied this lowland valley running from the vicinity of the town of Lincoln towards the coastal region of the Wash. In the Middle Ages, the River Witham was the boundary of the independent state of Lindsey. Research found that the medieval

monasteries were located at strategic points along the valley where causeways provided access across the river and its extensive riparian wetlands. In the Middle Ages the causeways were already of great age, and excavations of one of them, at Fiskerton, showed a predecessor of Iron Age and Roman date (Field & Parker Pearson 2003). The causeways were also associated with votive depositions, which occur in this area only at the terminals of the causeways. In turn, these votive depositions were found to be in the vicinity of Bronze Age barrow cemeteries. Stocker and Everson (2003) thus argue that specific locales within the Witham valley were perceived as places where one could cross this boundary for a period in excess of two millennia, despite the evolving nature of this wetland landscape. Bronze Age perceptions endured, in one way or another, into the Middle Ages, with the medieval monasteries effectively Christianising pagan practices and beliefs.

The concept of liminality is frequently invoked where wetlands are traversed. Liminality, a notoriously fluid concept, is linked to 'rites of passage', originally proposed by Van Gennep (1906) to describe the formalised rituals and practices that accompany one's transition from one particular state into another, especially the rites associated with birth, reaching adulthood, marriage and death. As part of these rituals, symbolic or real 'thresholds' needed to be crossed, with the thresholds constituting liminal zones. This

concept seems applicable in the case of the Witham – crossing this boundary was evidently some sort of rite of passage accompanied by specific rituals.

As economic and ritual activities are not, on a landscape level, mutually exclusive, the recurrent equation of liminality with marginality is similarly mistaken. Although some liminal zones were to be found in what were considered marginal landscapes, others (e.g. the threshold passed by newlyweds in the modern world) are located within settlements or within areas in economic use. In other words we must be very specific when identifying places that were liminal.

The manifestation of liminality in wetlands can come in different guises. Francis Pryor (1988) argues that the Neolithic causewayed enclosure at Etton, near Maxey in the East Anglian Fenlands, was used for rites of passage related to transitions after death. The location of the site, on the boundary of wetland and dryland, stresses its liminality. Equally, the deposition of bronze weapons and artefacts alongside the Flag Fen causeway is interpreted as relating to rites of passage and, therefore, the causeway and its setting are interpreted as a liminal space. A reappraisal of the so-called West Furze lake-dwellings, in Yorkshire, showed that the site was in effect a Neolithic trackway across a mire that had developed in the Bail and Low Mere complex (Van de Noort 1995). These elongated mires may have

been seen as a boundary between the world of the living and the world of the dead, with evidence of two burial mounds to the east of the former meres, and somewhat tentatively a settlement on their west bank. The trackway at West Furze that crossed these wetlands included several features that could have symbolised this liminal space, most notably the wicket or doorway at the eastern terminal of the short trackway. The symbolic function of this boundary was further reinforced with a number of human skulls.

Votive depositions in wet places

The most significant phenomenon that could possibly be considered as signifying some aspect of liminality in wetlands, and undoubtedly as a practice associated with natural places, is the 'votive deposition in wet places' described by Richard Bradley in his influential *Passage of Arms* (1990). He provides a long-term overview of this pan-European practice, and describes votive depositions in wet places as 'Gifts to the Gods' (see Gregory 1980), with clear socio-political and economic functions. Currently, the notion of 'votive deposition' requires reconsideration within the broader concept of 'structured deposition', recognising that certain cosmological rules governed the discarding and disposal of artefacts, human remains and rubbish that has been

observed for much of the European Bronze Age and Iron Age (e.g. Hill 1995).

The term 'wet places' calls to mind the problems of using the term 'wetlands' that we discussed earlier in this chapter. Bradley (1990) concentrated his research on areas with particularly high densities of bronze votive depositions, such as the Thames valley, but this reliance on evidence that has been accumulated over several centuries has resulted in the environmental context of many finds not being considered. Others have also argued that water and wetlands were used for votive depositions on the grounds that they were places that were life-giving for all organisms and where contact with the metaphysical world was possible (e.g. Larsson 2001), but the lack of specificity in their arguments as to particular locations masks important aspects of the votive deposition in wet places.

In fact, many votive depositions seem to have been associated with places where waters or wetlands were crossed. To return to an earlier example, Stocker and Everson (2002) argued that the votive deposition in the Witham valley in the prehistoric period was linked geographically to the Iron Age causeways. Similarly, Davey (1973) identified the natural constriction in the Ancholme valley at Brigg, also in Lincolnshire, as a place of high concentration for votive deposition. That this location was used for cross-river and cross-wetland transport is exemplified by three Bronze Age finds

from the same area: the Brigg 'raft', the Brigg logboat and the Brigg trackway. A similar argument can be made for Flag Fen, with the causeway providing a crossing from Fengate to Northey, and possibly the Sweet Track.

More importantly, another feature that many sites have in common is that the votive deposition of objects did not involve their being thrown into the water, but nearly always being carefully placed in shallow water. Where votive deposits have been excavated by archaeologists, this is almost always true. It is the case for Mesolithic flint caches in Sweden (e.g. Larsson 2001), for the Neolithic pots in Denmark (Koch 1999), probably for the jade axe, the bowl with hazelnuts and the child's axe near the Sweet Track (B. & J. Coles 1986), for the wooden wheels beneath the Nieuw-Dordrecht Trackway (Van der Sanden 2001), for the deposition of bronze artefacts and whole pots in the Wissey embayment in the East Anglian Fenlands (Healey 1996), the bronze weapons at Flag Fen (Pryor 2001) and even the Nydam and Hjortspring boats in Denmark (Crumlin-Pedersen & Munch Thye 1995), to name only a selection of well-known but highly diverse finds and sites. The subsequent extension of the wetland, for example under the influence of sea-level rise, enveloped these artefacts in peat, thus creating the impression that these were bog deposits. One can wonder whether the dynamic nature of wetlands reinforced the perception that these landscapes

were in some way alive and thus home to supernatural powers. To achieve this careful deposition, the person doing the offering would have had to stand in the water himself, thus gaining a certain intimacy with the water and the supernatural, which may not have been available to any onlookers standing along the water's edge.

Wetlands as taskscapes

Notwithstanding our discussion of the non-utilitarian functions of trackways, their construction served practical purposes as well: to provide access across areas of otherwise impassable ground. Indeed, the ritual or special significance of trackways for the process of enculturation, as boundaries, or for rites of passages, was greatly enhanced by their use in everyday life. There is ample palaeoenvironmental evidence that the estuarine wetlands of the Thames (Meddens 1996), Humber (Van de Noort & Ellis 1999), Severn (Bell *et al.* 2000) and Shannon (O'Sullivan 2001), as well as many of those on the Somerset Levels (e.g. Tinney's Tracks; B. & J. Coles 1986), had economic or functional uses, for example to provide access for people or to allow cattle to utilise saltmarshes as seasonal feeding grounds, and formed part of the routine activities of daily life. In this section, we return to this theme in the study of wetlands as 'taskscapes'. This phrase was coined by Tim Ingold (1993) to focus

on the concept that the manner in which landscapes are experienced and perceived is closely related to the activities or tasks that are undertaken in particular landscapes at particular times. This theme is further developed in Chapter 3, which considers the social identity of the people who worked and lived in the wetland.

*The Irish Midlands bogs: trackways in wetland
'vernacular' landscapes?*

Some wetlands were used as places for hunting, fowling or other relatively prosaic domestic activities. Until the 1990s, those trackways or toghers (from the Irish word *tóchar* for road) that had been identified in Ireland's Midlands bogs were interpreted as structures that crossed or spanned the entire wetlands. Stanley (2003, 65) has suggested that this led to a perception of bogs as wastelands, as obstacles to travel, and to a view of the large trackways as being on regional communication routeways. In fact, it now seems that the massive trackways such as the Iron Age road at Corlea 1, or the other substantial causeways in that bog that cross it (e.g. the Early Bronze Age track at Corlea 6 and the Late Bronze Age timber trackway at Derryoghill 1) are the abnormal ones (Raftery 1990, 1996). It is now known that large linear causeways that traverse a bog from one edge to another represent a very

small proportion of the total number of known sites (MacDermott 1998, 7; Stanley 2003, 65).

Recent archaeological surveys by the Irish Archaeological Wetland Unit have revealed that most of the three thousand wooden structures recorded in Irish Midland bogs to date are in fact short, narrow pathways or platforms constructed of hurdles, poles or bundles of brushwood (Stanley 2003). These indicate activity on the surface of the bog itself, rather than an attempt to cross it, and encourage 'a richer interpretative outlook in which bogs were part of everyday life for many people in the past and at different times would have represented a resource, a boundary, a barrier/refuge or a sacred place' (Stanley 2003, 65). Although raised bogs are not as resource-rich as minerogenic wetlands, they could have accommodated some hunting and fowling, and the gathering of some plants for medicinal purposes, crafts and building, while also providing turf for fuel. Raised bogs can also be used intermittently for short-term seasonal grazing by burning the top layer of the bog, for the preservation of butter, the seasoning of wood and the curing of leather. We should recognise that these activities, though seemingly economic practices, are things that people do every day, albeit in specific cultural and social conditions.

At Derryville Bog, Co. Tipperary, in southern Ireland, a major multidisciplinary project explored the archaeology and environment of a small raised

mire from the Neolithic to the Middle Ages. It revealed that the bog was used across time, and that it could be regarded as a 'vernacular landscape, a place for everyday life and practice in fens and marginal woodlands, rather than a supernatural boundary for ritual structured deposits' (Cross *et al.* 2000; O'Neill 2000). Naturally, such a perception of Derryville Bog depends on who made it, and the differences of the insider-outsider perspective is further explored in Chapter 3.

In the Middle Bronze Age (1700-1200 BC) a settlement of roundhouses was located on the dry ground at the margins of the bog. There was also a substantial cemetery of 28 cremation burials with pottery, frequently marked by wooden posts. In the wet margins at the edge of the wetlands, *fulachta fiadh* or burnt mounds were built for long-term use, for cooking, bathing, processing skins and undoubtedly many other activities. There were also short, narrow trackways constructed in wet parts of the fens and woodlands, seemingly as the result of casual low-level activities as people sought access out into the wetlands. There were a few larger stone causeways, narrow but relatively monumental, which crossed the entire bog. However, most structures aimed to merely bridge watery pools between drier parts of the bog's surface.

In the Late Bronze Age and Iron Age, wooden causeways, platforms and hurdles were also

constructed in a casual way, often poorly constructed or not secured to the bog's surface with vertical wooden stakes. Many of these may have been used for brief periods of not more than twenty years. There were occasional larger structures, such as the timber causeway at Cooleeny 31, which may indeed have been on a regional network of movement through the raised mires of Templetuohy and Littleton. In the Iron Age, the dominant environment was a raised bog at the centre of the basin, but most human activities were focused on the watery fens and alder carr woodlands around the edges of the mire. By the early Middle Ages (i.e. AD 650-1250), hut sites and trackways may reveal an increasing activity, perhaps even inhabitation, on the surface of the raised bog itself, while waterlogged and unsafe locations within the bog seem to have been demarcated by rows of stakes.

However, in contrast with some of the Dutch, English and Irish bogland landscapes discussed above, this was not a place for power or high-status activities. In the Late Bronze Age and Iron Age, there is no archaeological evidence for high-status settlements in the vicinity (e.g. hillforts, or marsh-forts such as Sutton Common in England; see Chapter 5), nor is there any evidence for the deposition of high status metalwork or human remains in the bog itself. Interestingly, as revealed by the detailed palaeoenvironmental and archaeological studies, the local communities also

showed a sensitivity to, and intimate knowledge of, the local environment, responding to different waterlogged conditions and bog bursts. The Derryville Bog sites can thus be interpreted as the wetland components of a broader 'vernacular landscape'. This landscape was a place for inhabitation, daily travel and movement, perhaps including various activities on the surface of the bog, but nonetheless no doubt incorporating sacred spaces and ritual behaviour.

Conclusion

This chapter has explored opportunities to study wetlands as landscapes from the point of view of the people we study. By 'empathising' with their actions and thoughts, approaching archaeological data from the point of view of past people's perceptions, by developing a feel for the 'native eye', and by being more explicit about our own modern preconceptions, new ways of understanding wetlands come within reach. This includes a more detailed appreciation of the diversity of types of landscapes than is encapsulated in the generic term 'wetland', and a more informed understanding about the range of values of specific types of wetland landscapes to people in the past. These values were always diverse, differing from time to time and from place to place, and everyday and sacred aspects of the

landscape were always intertwined. This intertwining of values has been demonstrated in a number of case studies from Ireland, the UK and the Netherlands, exploring such concepts as wilderness, enculturation, liminality, marginality and taskscapes.