Evidence for Late Bronze Age Activity on the Site of the Former Stock Market at Brigg, North Lincolnshire

Nicholas Mitchell and Christopher Bell

In September 1998, at the request of North Lincolnshire Sites and Monuments Record, a small trench was excavated by the Oxford Archaeological Unit (now Oxford Archaeology) in Brigg, North Lincolnshire (SE 998 074; Fig.1). The work was carried out prior to the insertion of a petrol tank for Tesco Stores Ltd on the site of a former stock market, subsequently used as a car park. The fifteen by five metre excavation was defined by iron sheet piling, which retained the sides of the trench, and was dug by machine under close archaeological supervision.

Archaeological background (Fig.1)

The trench was located approximately sixty metres east of the site of the famous Brigг logboat excavated in 1886 on the site of the gas works (Loughlin and Miller 1979, pp.188-89), fragments of which are dated to 1260 - 790 cal BC (95% confidence Q-78; 2784 bp ± 100; McGarai 1981, p.277). Five hundred metres to the north-west is the site of the Brigг ‘raft’ (Dudley 1949, pp.121-25; Loughlin and Miller 1979, p.189). A substantial trackway dating to the late Bronze Age - early Iron Age transition, first reported in 1884, lay 120 metres south of the ‘raft’ and extended across the encroaching estuarine clays of the River Ancholme (Dudley 1949, p.119; Loughlin and Miller 1979, p.188). Other Bronze Age finds from the vicinity are summarised by Van de Noort and Ellis (1998).

Topography and geology

A detailed summary of the geology and topography of the area is presented by Van de Noort and Ellis (1998) and is not repeated here. Brigg is situated on a ridge of higher ground which extends into the Ancholme valley towards the River Ancholme itself, fourteen kilometres south of the River Humber. Geologically the site lies upon the Ancholme Clay Group which is overlain by later Pleistocene and Holocene alluvial deposits of clay, sand and peat.

The clay and alluvium sequence (Fig.3)

A light pinkish natural silty clay was encountered at 0.20m OD which was overlain in the north-eastern part of the site by a silty sand which rises to 0.57m OD. These Pleistocene deposits are overlain by a series of four Holocene alluvial layers which reach a maximum thickness of 1.06m at the southern end of the trench. The first and thinnest of these (108=123), a dark greyish-brown silty clay, is overlain by a series of light brown silty clays (104, 103, and 102). This sequence of darker alluvium overlain by lighter brown layers probably corresponds to the sequence of darker bluish-grey alluvial clay overlain by brown clays recorded in previous excavations and summarised by Dimin (1995, p.31). The alluvium was overlain by a thick layer of topsoil of recent origin upon which lay up to 0.5m of rubble made-up ground.

Archaeological description (Figs 2 and 3)

The upper part of the first alluvial deposit (108=123), in which a palaeosol appears to have formed, was the focus for the majority of the late Bronze Age activity. Eight stakes (117-20, 124-26 and 128) of five different species (including Pomeroidae, Prunus, ash and alder) appear to have been driven through this layer but with no obvious alignment (Fig.2). These slender stakes, between 35mm and 55mm in diameter, have been driven to depths varying from 0.27m to 0.91m. Two of these stakes (119 and 125) have been radiocarbon dated to 1130 - 790 cal BC and 1130 - 880 cal BC respectively (95% confidence Wk-6975; 2750±80 BP; Wk-6977; 2790±70 BP).

The central eastern area of 108-123 is overlain in patches by a light, but evenly sorted sand of heavily abraded flint gravel. An unstructured scatter of thin, straight hazel rods (116), most with chipped ends, lay on this gravel within an area two metres across. The rods have a consistent average diameter of 13mm, but vary in length from 140mm to 1.56m. They have been dated to 1000 - 340 cal BC (95% confidence Wk-6974; 2650±70 BP). Among the rods were four small woodworking chips of hazel, a sheep/goat mandible and a bovine rib. One broken flint blade and three flakes also come from this layer.

Immediately to the south of the hazel rods was a roughly linear scatter of large oak woodworking chips (122) running north-west to south-east. These chips have been dated to 1440 - 1110 cal BC (95% confidence Wk-6976; 3040±60 BP). Both the hazel rods and the oak chips were sealed by a thin layer of silty sand (121).

The alluvium (104) which covers these deposits contained seven horizontal pieces of wood. There are four very long and straight rods of hazel (105, 110-12), each with a worked end, ranging from two to three metres long, with diameters between 45mm and 60mm. One of these rods (112) has been dated to 800 - 410 cal BC (95% confidence Wk-6973; 2520±50 BP). There were also two twisted and branched pieces (106-07), one of which is axe-chopped, and a poorly preserved piece of oak.

Discussion

Layers 123 and 108 are parts of the same palaeosol which was the focus of most of the activity seen in this trench. The layer becomes thicker and more silty as the underlying ‘natural’ drops away to the south-west while it is on the rising ground towards the north that the scatters of worked wood, the flints and two bones were found.

The hazel rods (116) are consistently thin and straight but have been cut to very different lengths. They have not only been removed from the tree but have been further trimmed to remove branches. They are probably the byproduct of the manufacture of a hurdle or basketry.

The oak chips are all from the heartwood of an exceptionally large tree. This is likely to explain their radiocarbon date of 1440 - 1110 cal BC (Wk-6976) despite their occurrence on ground surface 108 which the combined determinations for the hazel rods and stakes suggest dates
Fig 1. Site location.
from 980 - 800 cal BC (95% confidence Wk-6974, Wk-6975, Wk-6977, determinations combined before calibration). The plane and style of their cut suggest the chips were adzed and it is conceivable that they are the product of hollowing a logboat, a process which would generate vast quantities of waste. It is certain in any case, that the chips are from very large scale woodworking.

The small size of the trench means it is impossible to determine whether the stakes represent one or more structures or phases. The radiocarbon determinations for the two sampled stakes (119 and 125) are so similar as to be practically identical. The stakes could be part of a light-weight fence or fences. Although some of them, such as 120, are driven almost a metre into the soft natural clays, they are all slender and could not have supported a substantial superstructure. It is most likely that they formed a boundary preventing livestock from wandering into the soft clays of the encroaching estuary. The stakes are, however, absent from the central western area which is occupied, in part, by the scatter of gravel, chopped hazel rods and oak chips. Although the gravel here could have been deposited naturally, the presence of these scatters indicates an area of activity which may have been delimited by the stakes.

The seven pieces of wood in the overlying alluvium (104) are clearly not in situ and appear to be a mixture of casually discarded lopped branches (106 and 107) and long straight hazel rods (105, 110, 111 and 112). These would have been too useful to merely chop and discard, and could be part of a collapsed fence or some other light structure.

The Environment

In contrast to previous palaeoenvironmental studies of Brigg, this small excavation provides information relating specifically to the active use of a ground surface, dated by radiocarbon to the late Bronze Age, c.980 - 800 cal BC (full reports on the environmental evidence may be found in the site archive). Analysis of the insect remains carried out by Mark Robinson demonstrates that the local area in this period was damp pasture, and that the woodland indicated by the pollen analysis lay at some distance. The alder wood suggested by Smith as extending along the margins of the valley (Smith et al. 1981, p.144), is not, therefore, present in this location at this date. Pollen analyses carried out by James Gregg show that the woodland of the area was dominated by oak and hazel, corresponding well with the wood utilised on site. Hazel and oak are species commonly managed in combination within the same wood, although there is little conclusive evidence for deliberate woodland management from the wood debris itself.

Previous studies have suggested that Brigg was subject to flooding due to rising sea levels and marine incursion during the Bronze Age - Iron Age transition 800-700BC (Smith et al. 1981, p.143). However, the chronology of the consequent transgression of the river from the established channel has yet to be firmly established. The thin layer of alluvium (108=123) seen in the excavation immediately beneath the late Bronze Age activity demonstrates that the transgression had already begun before the activity evidenced on the site commenced. The radiocarbon dates provide a terminus ante quem of 980 - 800 cal BC for the start of the alluviation at this location.

On the higher ground on which the site lies grassland could be maintained, however, and there is some limited evidence for active grazing in close proximity to the flooding River Ancholme in the late Bronze Age. It is this higher ground extending into the Ancholme valley that has made a natural crossing-point. The late Bronze Age activity revealed in this trench reflects both the use of this land as pasture and the strategic and logistical importance of its location.

In summary the excavations at the former stock market site, Brigg uncovered an alluvial sequence dating from the Pleistocene. Within the upper part of the first alluvial deposit evidence for Bronze Age activity was identified. This activity consisted of a series of wooden stakes and wood-working debris, which was thought to be hurdle or basketry manufacturing waste together with large-scale woodworking.
debris. Amongst this debris a small amount of animal bone and some undiagnostic flint debitage was recovered. Environmental evidence from waterlogged insect remains and pollen has enabled the contemporary environment to be reconstructed.

Acknowledgements

We are very grateful to Tesco Stores Ltd for funding the excavation, post-exavcation analysis and publication of this site. Alison Williams (Sites and Monuments Record Officer, North Lincolnshire SMR) and Mark Bennett (Editor Lincolnshire History and Archaeology) provided helpful comments on an earlier draft of this paper. Mark Bennett also provided additional background information for which we are very grateful. Mark Robinson and James Greg undertook the environmental analyses. Nicholas Mitchell identified and reported on the wood. Philippa Bradley identified the worked flint and Bethan Charles identified the animal bone. Christopher Hayden and Philippa Bradley edited this report for publication. The radiocarbon determinations were undertaken at the University of Waikato, New Zealand. This report is a summary of an unpublished client report (Mitchell and Bell 2000) and full reports and further details of the post-exavcation analysis may be found in the site archive, which will be deposited with North Lincolnshire Museum, Scunthorpe under the site code BR1098.

Bibliography


