Late Bronze Age and Iron Age activity on the Littleport Fen Edge

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with a contribution from Martin Tingle and Rob Scaife. Illustrations by Charlotte Davies.

Between June 2005 and February 2008, Archaeological Solutions carried out two stages of archaeological investigation on land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732), in advance of residential development. The site encompassed part of the former Fen edge on the north side of Littleport ‘island’.

The investigations revealed three phases of activity, focused on the higher, drier southern part of the site. Scattered struck flint indicated sporadic activity during the early Neolithic (Phase 1), when this area was probably dry. In the late Bronze Age/ early Iron Age (Phase 2), numerous shallow pits, some containing pottery and occasional daub fragments, suggest the site lay within paddocks on the periphery of a settlement further to the south. Peat growth in the north of the site was well-developed by this time, having begun around the middle Bronze Age. Remains of two ditches, the larger of which ran down into the fen, suggest that similar agricultural land use continued into the late Iron Age (Phase 3). Part of a ?curated Mesolithic/Neolithic quartzite pebble hammer was found in the upper fill of the larger ditch, close to its terminus. This might represent a deliberately-placed ‘votive’ deposit. Its deposition may have been associated with the rising water table, which was causing flooding on the site around this time and probably led to its abandonment soon after. Column samples contained well-preserved pollen evidence for later prehistoric environmental change and agriculture in this part of Littleport. A shift away from the predominantly dry conditions of the early prehistoric was evidenced by grasses, sedges and other reed swamp taxa. Bar a brief period of increased salinity and alluvial sedimentation during the middle Iron Age, thought to be associated with rising sea levels, these prolonged fresh water fen conditions provided a backdrop for a predominantly pastoral agricultural regime.

Introduction and background

In June 2005, Archaeological Solutions Ltd. carried out a trial trench evaluation at land adjoining Wisbech Road, Littleport, Cambridgeshire (Grassam et al. 2005). This was followed in December 2007 and February 2008 by an open-area excavation with test-pitting (Greene 2008). The work was commissioned by Cheffins/ Matthew Homes (respectively) prior to redevelopment of the site and construction of residential housing (Figs. 1 and 2). The investigations revealed late Bronze Age to early Iron Age pits and late Iron Age ditches and small gullies (Fig. 3).

Littleport is located c. 5.6km north-east of Ely and c. 20km east of Chatteris. The site is situated on the west side of Littleport, on the north side of Wisbech Road. The site lies at c. 0.00m–2.00m AOD, on the northern edge of what was once a dry ‘island’ surrounded by fenland and slopes down towards the former fen, to the north. The ‘island’ is comprised of solid Kimmeridge Clay deposits, overlain by a tongue of boulder clay till and capped with glacial sand and gravel.

Targeted fieldwalking along the route of the Ely Bypass to the north and west of Littleport recovered struck flint implements of Neolithic and Bronze Age date (e.g. Cambridgeshire Historic Environment Record (CHER) 07191, 07192, 07193B and 07239), suggesting prehistoric occupation of the gravel terraces of the Old Croft River. Archaeological investigations at Highfield Farm (Dymond 1999; Holt 2008) on the higher ground of Littleport ‘island’, to the south of the site, revealed pits dating to the Neolithic and Bronze Age (as well as the early Iron Age and Romano-British periods). These have been interpreted as possible evidence for ceremonial activity (Gdaniec, pers. comm.).

The principal aim of the investigation was to identify and characterise any prehistoric remains on the site and to contextualise them against other prehistoric sites/ finds in Littleport. Another key aim was to use the full spectrum of appropriate scientific techniques to shed light on the origins/ date of the fen deposits at the site and to facilitate reconstruction of the past environment.

For full discussion of all features and finds and for specialist reports, see the site’s ‘grey literature’ report, which can be found at the Cambridgeshire Historic Environment Record (CHER No. ECB 2820; Woolhouse and Greene 2009).

Figure 1. Location of excavation area.
Results of the excavations

Phase 1: early Neolithic (c. 4300 to 3300 BC)

Residual struck flint was found in several features and deposits across the excavation area. Although limited in number, and generally undiagnostic, a few blades and other pieces are enough to suggest a low level of early Neolithic activity on or near the site, possibly including blade production and retouching. The only piece which might have been found in its original context is a denticulate or scraper from Pit F2084, in the north-west corner of the excavation area. However, this feature had clearly been subject to more recent disturbance and the original provenance of the piece is therefore not certain. Other residual blades were found in late Iron Age (Phase 3) Ditch F2011 and late Iron Age/early Roman Silt Layer L2003=L1012. The evidence for sporadic early Neolithic activity on the site might also help to explain the presence of a Mesolithic/Neolithic pebble hammer in the terminus of late Iron Age (Phase 3) Ditch F2011 (see below).

Phase 2: Late Bronze Age to early Iron Age Activity (c. 1000 to 600 BC) (Figs. 2 & 3)

A dense cluster of postholes and small pits was located in Trench 6, on the higher ground in the south of the site. They were all extremely shallow and had been subject to past truncation. Pits F1020, F1022, F1024 and F1050 all contained prehistoric pottery, all of which was undiagnostic except for one body sherd in Pit F1020. Pit F1032 contained two Bronze Age button end scrapers. All these features were cut into L1009=L2004, a mixed boulder clay and glacial sand/gravel. A few late Bronze Age/early Iron Age potsherds were recovered from this deposit and a thumbnail scraper was found lying on its surface.

Undiagnostic struck flint flakes and chips were near-ubiquitous in undated hollows, pits, postholes and stakeholes in the vicinity, many of which may also have been Bronze Age in date. A high incidence of charcoal/burnt material in the fills of many of these features might indicate the disposal of hearth waste from domestic areas (of the 27 such features sampled, 11 yielded charcoal <2mm in size), while the presence of very small quantities of daub (just a few
grams each) in Pit F1032 and undated Pit F1036 hints at there being structures or wattle and daub hurdles/fences somewhere in the vicinity.

Overall, although the sparseness of cultural material in these features might be a result of subsequent truncation, it is likely that this was not a ‘core’ settlement area. The pits and postholes are more likely to represent traces of agricultural land use on the periphery of a settlement further to the south, with some of the postholes/stakeholes perhaps being related to fenced stock enclosures or paddocks.

One of the peat layers in the north of the site (Trench 5) yielded a large assemblage of un-abraded late Bronze Age pottery, probably all from the same
vessel. As this layer overlay an earlier peat horizon (L1004), it appears that the north of the site had already been waterlogged for a considerable period of time before the late Bronze Age. A loomweight fragment from Peat L1004, which appears to be middle to late Iron Age on typological grounds, is hard to reconcile with the late Bronze Age date of the pottery from the overlying peat layer. Either the fragment is too small to conclusively identify and may actually belong to an earlier period, or it was intrusive within the lower peat horizon, perhaps as a result of some localised truncation not visible within the confines of the evaluation trench.

**Phase 3: Late Iron Age activity (100 BC to AD 43)**

(Figs. 2 & 3)

Phase 3 activity comprised two large ditches (F2011 and F2015) and one gully (F2082). Ditch F2011 ran northwards from beyond the southern boundary of the excavation area, leading down towards the fen. As well as a late Iron Age rim fragment and five fragments of cattle bone, Ditch F2011 contained a residual/curated Mesolithic/Neolithic quartzite pebble hammer (SFI, Fig. 4) found fairly high up in the ditch fill close to the northern terminus.

Ditch F2015 was sinuous and aligned roughly east to west, running across the southern edge of the excavation area. It seems likely, given its position and slightly meandering alignment, that Ditch F2015 would have followed the contemporary fen edge. It was dated by a single fragment of late Iron Age pottery. Ditch F2015 appeared to be cut by the perpendicular north to south aligned ditch (F2011), but as it was generally shallower than F2011, might simply have become silted up earlier than the deeper ditch, giving the impression that it was cut by it. The ditches could therefore have been contemporary parts of the same system, forming the corner of a ditched enclosure. Two metres to the north of Ditch F2015, and following the same alignment, was a narrow, shallow, c. 10m long gully (F2013). It did not contain any finds, but appeared to be part of the same late Iron Age boundary system.

Another gully, F2082, was noted during the trial trench evaluation as F1026 and was tentatively dated to the late Iron Age based on the presence of a possible late Iron Age pottery sherd. Scattered undated pits and postholes including F2007, F2024, F2026, F2042, F2038, F2036, F2034, F2060, F2052, F2072 and F2074 appeared to be aligned with respect for the late Iron Age ditches, suggesting, albeit tentatively, that these features were truncated postholes forming fence-lines contemporary and associated with the boundary ditches, or that they were rubbish pits located with respect for the spaces defined by the ditches. The layout of the ditches and the small quantity of associated finds suggests that they were probably field or paddock boundaries. Based on the few fragments of associated animal bone, it can be suggested that the enclosed spaces were used for grazing cattle. The topographical position of the site would have been well-suited to such land use.

All the archaeological features of Phases 2 and 3 were sealed by a shallow silt layer, which is thought to represent an ephemeral episode of flooding to the higher ground in the south of the site. It contained struck flint, four late Iron Age potsherds and a single small Roman sherd in an oxidised sandy fabric. The fills of Ditches F2011 and F2015 were very similar in composition and appearance to this silt layer, suggesting that the ditches were naturally in-filled during this phase of rising water levels in the fen.

The **quartzite pebble hammer** (Fig. 4, Plate 1)

Martin Tingle

This artefact is a pebble hammer, a prehistoric shaft hole implement formerly known as a pebble macehead. The fragmentary example from Littleport exhibits the characteristics of a pebble hammer, being made from a quartzite-type rock, possessing an hour glass perforation and showing marks of battering on its surviving end. While they are often made from discoid pebbles with the perforation at the centre, this example would appear to have utilised an ovoid pebble and consequently, when complete, it might have resembled an ovoid macehead.

![Figure 4. Quartzite pebble hammer.](image-url)
although there are numerous examples of these distinct artefacts appearing, apparently as curated objects, in much later periods, including the Iron Age (Crummy 2004, 12; Roe 1979, 36).

The hammer is made from a pale white translucent quartzite which has pinkish veins that are clearly visible in the broken sections. Only one pebble hammer from Cambridgeshire (a greywacke example from Fen Ditton) has been ascribed to a specific petrological group, thought to derive from Cornwall (Crummy, 2004, 12). Most, like the Littleport example, are quartzite and probably derive from local drift deposits (Rankine 1951, 53). In general pebble hammers are distributed in the south and east of England, although the concentrations in East Anglia are more numerous (Roe and Radley 1968, 169; cf. Rankine 1951, 55 and Roe 1979 fig. 15). A recent example from Gamlingay has been linked to a general cluster of pebble hammers centred on Cambridge, to which the Littleport example could also be ascribed (Crummy, 2004, 12).

Discussion

Development of the fen environment
Rob Scaife and Tom Woolhouse

One of the primary aims of this investigation was to use the full spectrum of appropriate scientific techniques to shed light on the origins/ date of the fen deposits at the site and to facilitate reconstruction of the past environment. In light of this a peat sample was sent for radiocarbon dating, and soil monoliths were taken for the purpose of pollen analysis. The full results of these investigations can be seen in the Research Archive Report (Woolhouse and Greene 2009 – CHER No. 2820), and are summarised and discussed below:

Radiocarbon dating of the basal peat at the site failed to return an accurate date, presumably due to groundwater contamination or unseen soil disturbance just outside the test pit. It is therefore not possible to determine an absolute date for the beginning of peat growth on this part of the Littleport fen edge. However, based on the overall characteristics of the pollen spectra from the column samples, it is thought that the site’s sediments are of late prehistoric or early historic age (Scaife 2009, 39). This characterisation is based particularly on the presence of cereal pollen and associated weeds to the base of the profile, and also on the absence of elm/ lime in any substantial numbers, except for the latter in the lowest pollen zone. The presence of large, un-abraded fragments of late Bronze Age pottery in the upper peat horizon indicates that peat growth was well-underway by this time. The ceramic evidence lends weight to the early to middle Bronze Age date for the onset of fen conditions suggested on the basis of the pollen evidence.

The site was probably dry land in the early Neolithic, when it was sporadically visited by hunter-gatherer groups and saw occasional flint-working. The pollen indicate that around the late Neolithic/ early Bronze Age, the area was river floodplain with grasses, sedges and other fen taxa, and possibly some alder growth along the fen edge. Clay layers directly overlying the Kimmeridge Clay in the lowest-lying parts of the site also suggest the presence of localised freshwater mires. A conjunctural map of the later prehistoric landscape in Littleport (Hall 1996, 23 fig. 11) shows the site as lying close to a meander in the course of the Old Croft River, with one of its tributaries running directly along the northern site boundary (this former watercourse was identified in Trenches 1 and 2). The pollen evidence fits well with this suggested topographical context. The higher, drier land to the south of the site originally supported lime woodland, but this declined markedly prior to the onset of peat growth, probably mainly due to deliberate woodland clearance for agriculture.

This river floodplain stage was followed, in the Bronze Age, by a long and stable period of reed swamp in which willow-dominated fen carr woodland became increasingly important, and peat formed, eventually reaching nearly 0m OD. The late Bronze Age pottery found in the upper peat in Trench 5 shows that the late Bronze Age/ early Iron Age activity in the far south of the site was taking place immediately adjacent to the contemporary fen, on what must have been marginal land.

The period of stable peat growth was terminated by renewed alluvial sedimentation, with strong signs of saline conditions reaching as far as the fen edge. This may have been a result of the last (probable) late prehistoric increase in regional sea level causing water to pond-back up the Old Croft River and its tributaries. It might equate to a known phase of flooding and silt deposition along the course of the Old Croft River, which has been dated to 405–180 cal. BC at Welney (Hall 1996, 19). It might also provide a context for the apparent ‘gap’ in activity on the site during the middle Iron Age. This marine phase was brief and was followed by a return to freshwater fen conditions, dominated by grasses, sedges and other reed swamp taxa. Late Iron Age (Phase 3) land use on the site would have taken place against this backdrop of renewed freshwater peat fen. At least during prehistory, peat never formed at the far southern edge of the site, which was probably always just above the fen edge. However, a shallow silt deposit sealing all the late Iron Age (and earlier) archaeological features shows that even this high ground (above 1.00m OD) was becoming increasingly prone to flooding by the late pre-Roman Iron Age and was probably eventually abandoned for this reason.

Subsequent developments during the historic period were not evident in the pollen record. Hall notes that peat would have continued to form uninterruptedly in Littleport during the Anglo-Saxon and medieval periods, reaching the 3.5m contour (Hall 1996, 19). Peat wastage and modern agriculture had probably removed deposits of later than prehistoric origin.
**Later prehistoric agriculture on the Littleport fen edge**

Late Bronze Age/ early Iron Age activity on the site was represented by a cluster of shallow pits, hollows and possible postholes/ stakeholes, all located on the higher ground in the south of the site, and most of which could not be securely dated. While all had clearly been severely truncated, the general paucity of pottery, daub fragments and other cultural material suggests that this was not a ‘core’ settlement area. It is more likely that contemporary occupation was focused on the higher, drier land further to the south, with the fen edge being used for agriculture and perhaps small-scale rubbish dumping from nearby occupation areas. Some of the possible postholes might relate to fenced enclosures for livestock.

Similar land use appears to have continued in the late Iron Age, albeit possibly with a break in occupation during the middle Iron Age. The late Iron Age ditches show that land along the northern Littleport fen edge was divided into enclosed plots, probably used as pasture/ paddocks given the low-lying topography and fairly wet ground conditions. It is unclear whether the two principal Iron Age ditches represent successive phases of boundary demarcation, or were contemporary, forming the corner of a rectilinear enclosure extending beyond the site boundaries.

By the late pre-Roman Iron Age/ early Romano-British period, the site became increasingly prone to flooding, as evidenced by a silt layer overlying (and in some case in-filling) all the late Iron Age (and earlier) archaeological features. The fill of the largest late Iron Age ditch, which ran down into the fen, was near-identical to this flood-borne silt layer and it seems likely that the ditch also in-filled as a result of flooding.

The pollen record indicates that after the clearance of lime woodland, the pattern of agricultural activity remained much the same for the duration of the sediment record i.e. from around the middle Bronze Age onwards. Grassland, probably rough pasture, was important in areas adjacent to the fen edge (almost certainly including the site itself), while there is a consistent record of cereal, including wheat and barley, being cultivated on the better-drained soils of the nearby high ground.

Excavations at Highfield Farm, near the high point of the ‘fen island’ just over 1km south of Wisbech Road, have identified features spanning the early Neolithic to Romano-British period and beyond (Dymond 1999; Holt 2008). By the late Bronze Age/ early Iron Age, the surviving features suggest that the hilltop was occupied by a ditched rectilinear enclosure. Contemporary postholes could have formed structures and several pits and ditches contained animal bone, large ‘fresh’ potsherds and other domestic ‘waste’ (Holt 2008, 15–16). The presence of only a single middle Iron Age pit suggests that activity shifted away during the middle Iron Age, but by the late Iron Age/ early Romano-British period, the site was occupied by an extensive rural settlement with possible posthole structures, substantial ditched enclosures, droveways, a covered working area and watering holes. The lower slopes to the west and north of the hilltop were occupied by field systems, identified during a previous archaeological evaluation (Cutler 1996). The site is thought to have been used for stock rearing and animal butchery/ processing on a fairly substantial scale, perhaps providing food for the inhabitants of the Romano-British saltern sites along the Old Croft River. It was occupied until the 4th century AD (Holt 2008, 17 & 107).

The Phase 2 and Phase 3 remains on the fen edge at Wisbech Road might be directly related to these phases of activity on the hilltop to the south. The inhabitants of the late Bronze Age – early Iron Age and late Iron Age – early Roman settlements at Highfield Farm may have driven their livestock down to the fen edge to graze and drink. A need for water, as well as pasture, for livestock, is suggested by the presence of a large wattle-lined pit during the late Bronze Age/ early Iron Age phase at Highfield Farm, and by possible watering holes within the late Iron Age/ Romano-British settlement (Holt 2008, 15–17). At just over 1km away, the fen edge on the north side of the ‘island’ is close to the one mile maximum distance recommended by the Ministry of Agriculture for driving cows in milk (Martin 1999, 40). By the late Iron Age, the boundary/ drainage ditches on the present site suggest that this area of the Littleport landscape was well-ordered and managed, and that the local population were concerned with demarcating areas of different use or ownership, even in what must have been a fairly marginal topographical location. Given the evidence for stock raising and processing on something more than subsistence level at Highfield Farm, the importance of the fen edge for pasturing animals is readily understandable. The Highfield Farm settlement was connected to the surrounding fields by droveways, one of which ran westwards, another of which ran downhill towards the fen edge to the north-west. The latter, dated to the late Iron Age phase of the complex, ran almost directly towards the present site (Holt 2008, fig. 10).

**The quartzite pebble hammer: a ‘votive’ deposit?**

The quartzite pebble hammer fragment found close to the terminus of the larger late Iron Age (Phase 3) ditch (F2011) is an unusual object. Given their rarity, it is perhaps significant that another similar object has previously been found in Littleport itself, on the high ground of the island, south of Highfield Farm (HER 07218). In Cambridgeshire, others have been recorded at Chatteris, Kingston, Litlington, Reach and Swaffham Prior (Reynolds 2000, 6), and from Gamlingay (Crummy 2004, 12). Pebble hammers appear to largely date from the Mesolithic, although they may have continued in use through the Neolithic and even into the Bronze Age (Rankine 1951, 53; Roe 1979, 36). It is therefore possible that the object represents residual material left on site during the phase of sporadic early Neolithic activity.
Its presence within the ditch fill may simply be an instance of residual material which was present in the vicinity, either on the ground surface or within an earlier prehistoric feature truncated by the ditch, finding its way into the ditch through natural processes. However, it is equally possible that the pebble hammer had been found by chance by the late Iron Age inhabitants of the area and been deliberately collected and curated as an unusual, aesthetically-pleasing, and valued object. Apparently curated pebbles have been found in later contexts elsewhere, including, for example, in Anglo-Saxon grabenhausser at Gamlingay (Crummy 2004, 12) and West Stow (Pieksma and Gardiner 1989, 47, fig. 36).

The deliberate placement of a valued object in the upper fill of a boundary ditch leading down into the fen may represent a ‘votive’ deposit of some kind. Deliberate deposition of objects in watery contexts is well-attested throughout much of prehistory (and possibly beyond). In the broadest sense, such deposits often seem to have been offerings, perhaps to deities, natural forces or ancestors, but could perhaps also have been used to commemorate important events in the life of a community or its inhabitants. Such practices are seen most spectacularly at sites such as Flag Fen near Peterborough and Fiskerton in Lincolnshire. At Bradley Fen near Whittlesey, the boundary between the late Bronze Age fen and the field/enclosure systems along the dry fen edge was demarcated by seemingly symbolic deposits of bronze metalwork, including spearheads driven point-down into the ground (Pryor 2003, 289–293). The prehistoric inhabitants of the Fenland seem to have been deeply concerned with the transition from ‘wet’ to ‘dry’ land, and with demarcating boundaries. As such, it is tempting to see the pebble hammer in Ditch F2011 as a propitiatory offering in response to the increasingly flood-prone conditions on the site in the late pre-Roman Iron Age.

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Bibliography

Plate 1. Quartzite pebble hammer found at Littleport.