The ancient landscape around the Market Weighton Canal

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Geology and Early prehistory

The landscape around the Market Weighton canal has gone through many changes through time. Around 245,000-186,000 years ago the climate was very different and much warmer and extinct animals roamed. Bones of the now extinct straight tusked elephant have been discovered at North Cliffe and Bielsbeck.

Tooth of a straight tusked elephant from South Cliffe Common.

These large animals related to an earlier and much wider version of the river Foulness which ran between the ridge at the foot of the Yorkshire Wolds near the villages of North and South Cliffe and Church Hill, Holme-on-Spalding Moor. The clay deposits laid down by the river were around 9m deep and preserved the remains of insects and snail shells, which along with the remains of larger animals, showed that this large river ran through marsh, woods, and some open grassland.

A map showing the route of the ancient river Foulness. Bones of straight tusked elephant and mammoths from Bielsbeck and Elloughton show dramatic changes in climate.

The earliest evidence for humans in this landscape was a Palaeolithic (Old Stone Age) handaxe found near Hotham, at the top of Austin's Dale, overlooking the Foulness valley. It may have been dropped during a hunting expedition by an early human ancestor, around 250,000 years ago.

The hand axe from Hotham (Photo: M. Park courtesy Hull Museums)

The Ice Ages

Much of the landscape we see today was created during the Ice Ages. There have been many changes in climate over the last half a million years, with warm and very cold phases. The flat land of the Vale of York was mainly created by a huge glacial lake known a Lake Humber. The clay soils to the east and south of Holme-on-Spalding Moor were laid down by this.

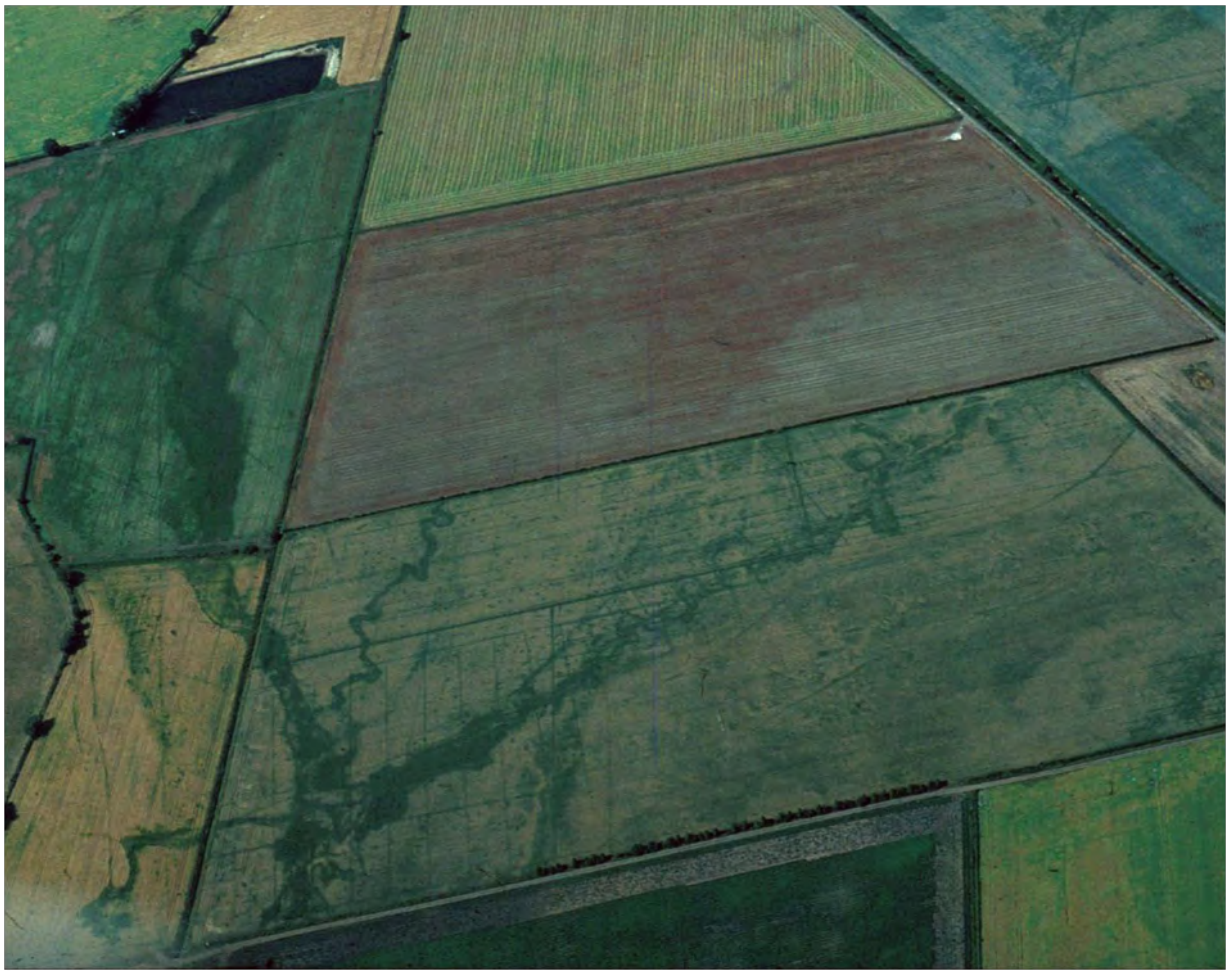
Sea levels were low, and Britain was connected to the European continent and much of the landscape resembled the Russian steppes and Alaska today. Animals evolved to cope with these changes and the remains of mammoths have been found at North Cliffe and Holme-on-Spalding Moor.

Part of a mammoth leg bone from North Cliffe (Photo: P. Halkon)

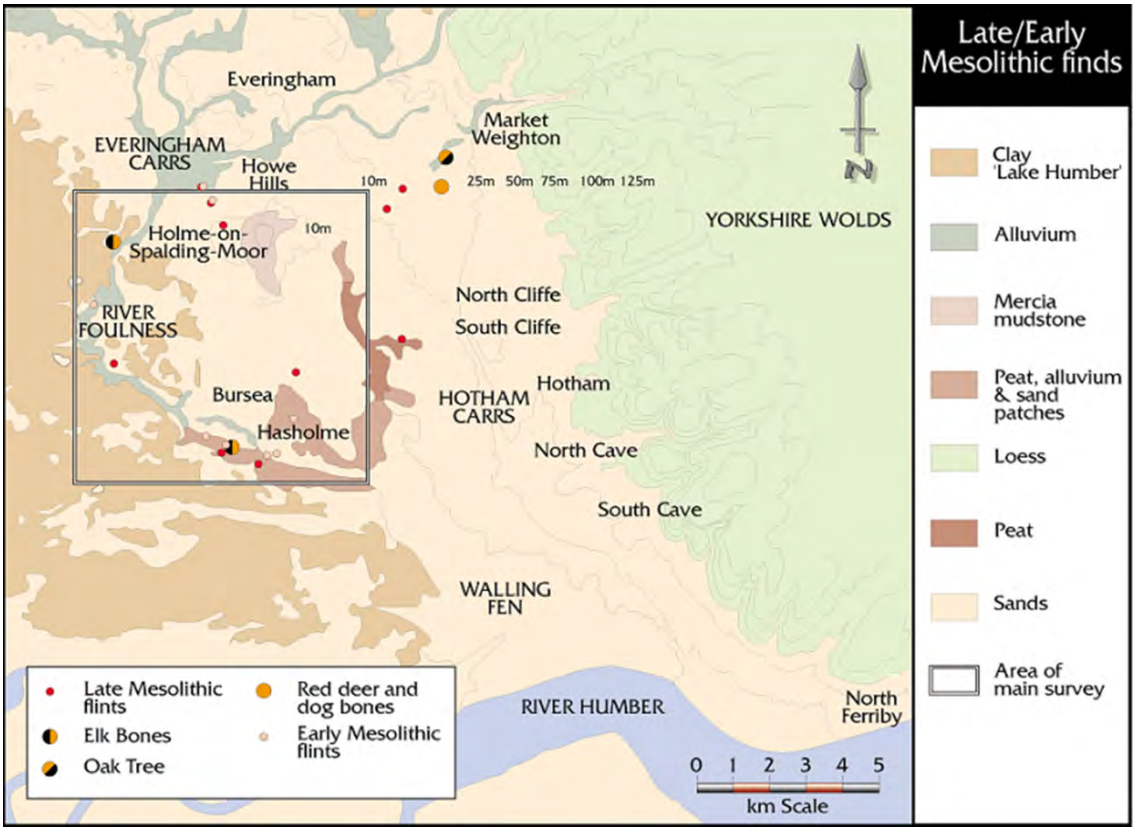
As Lake Humber began to dry up and the land began to thaw, low ridges of gravel and sand were left behind. As the landscape was largely open, winds blew the sands round the lake edges into low rises and many of the farms in the southern part of Holme-on-Spalding Moor are sited on these. In some places along the Foulness Valley, small lakes were formed. Wholsea, Bursea and Seaton Ross, have *-sea* in their place name, which is derived from the Old English word *s*[illegible] meaning a pool.

Mesolithic (Middle Stone Age) **-** Around 10,000 to 4000 BC

Former lakes and the routes of ancient streams can be traced in growing crops and can be seen in aerial photographs. It was around this time that the river Foulness took more or less its present course.



The former courses of streams around Stray Farm showing as marks on growing crops. (Photo: P. Halkon).



Map showing Mesolithic sites in the Foulness Valley

Study of the ancient landscape by coring through the soils along the southern stretch of the Foulness Valley between Welham Bridge and Sandholme, and study of animal and plant remains, shows that there were reed swamps rich in vegetation, with trees on the marsh edges which provided a suitable habitat for the elk and red deer whose bones and antlers have been found.

The sand ridges close to the river and marsh lands or carrs as they are known, made excellent places for the people to settle. At Bursea and Hasholme and the now largely destroyed Howe Hills on the edges of Everingham Carrs, flint tools have been found, including axes and small flint blades known as microliths, which would have been set into wooden and bone handles to make spears, arrows and other tools used in hunting and foraging. In the early Mesolithic, people exploited the land close to the river. Towards the end of this period, they spread out into the wider landscape. There was a rise in sea levels and water levels in general with the reed-swamp environments being replaced by large stretches of open water. During the construction of the Market Weighton By-pass, where the road line crossed Market Weighton Beck, the remains of an oak tree about 6500 years old was found. The bones of dog and red deer were also discovered close by in the same deposits.

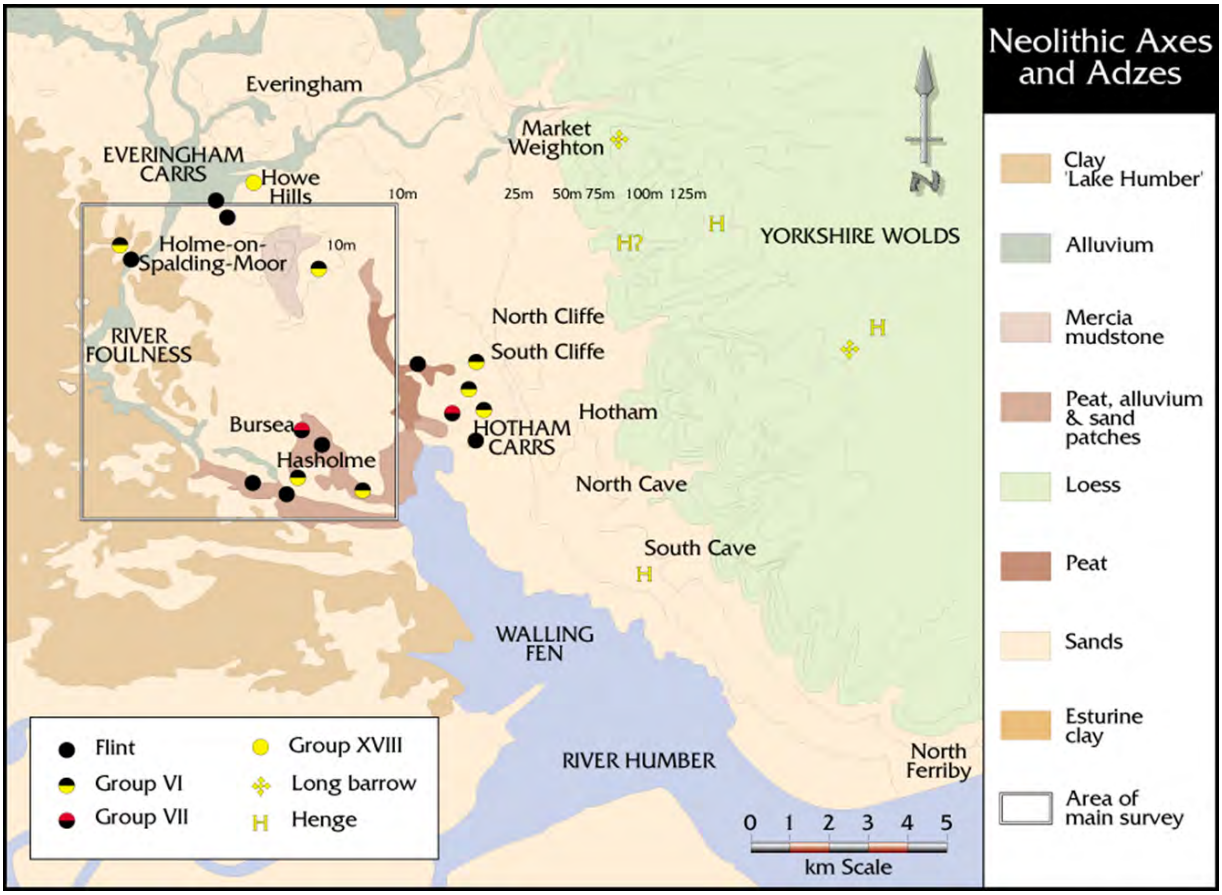
Microliths from Howe Hills Everingham (Photo: Mike Park)

Further coring at Sandholme shows that around the same time wetland conditions were altered by a sudden rise in sea levels and sea flooding up the Humber valley which together with increased rainfall which caused flooding along the Foulness Valley, created a tidal inlet in what is now Walling Fen, with estuarine conditions extending as far north as Hasholme.

The Neolithic (New Stone Age) **-** Around 4000 to 2500 BC

Study of the ancient environment from Sandholme and Hasholme Grange shows that the Foulness valley in this period was a mixture of vegetation. Further away from the estuarine inlet were freshwater reedswamp and fen areas, with woodland along the valley. New people came into Britain from continental Europe. These were the first farmers. They also brought with them new styles of flint and stone tools and pottery. Leaf shaped flint arrowheads found close to what is now Market Weighton Beck and various places along the Foulness Valley, show that people also continued to hunt. At Howe Hill, Everingham, where there was early and later Mesolithic

activity, a Neolithic leaf shaped arrowhead was found in association with an early type of pottery known to archaeologists as Grimston ware showing that certain places in the wetlands of the Foulness Valley continued to be used for a long time.



A map showing the distribution of Neolithic sites and finds from the Foulness Valley. Group VI heads were from Cumbria, Group VII North Wales, and Group XVIII Northumbria.

Elsewhere along the valley, environmental evidence in the form of pollen and beetle remains shows some evidence of human activity within the woodland bordering the wetlands. Woodland management may have been in operation at this time, as seventeen stone and flint axe heads and adze heads have been found within a 6x9km area, with a total of 30 such finds within the larger area of the Foulness valley. Most of these tools were found on the light, better-drained soils close to the river. Some of the finest polished tools from the Foulness valley may have been deliberately placed near watercourses as part of a ritual. A flint adze head of from Hasholme Carr Farm is in mint condition and the high quality of this object make it unlikely that it was ever used in woodworking.

Flint adze blade from Hasholme Carr Farm, Holme-on-Spalding Moor. L. 18.2 cm, 4 cm across the cutting edge. (Photo A. Arnott).

Perhaps the timber used in the construction of the Long Barrow at Market Weighton Wold, may have originated in these lowlands. Long barrows were a type of tomb in which the bones of the dead were placed in chambers within a timber or stone structure. In East Yorkshire these were built out of wood. At some stage the wooden structure was deliberately burnt and the whole thing mounded up with earth. The Market Weighton Wold long barrow may have been deliberately placed near the head of a prominent dry valley to mark a route-way linking the chalk uplands of the Yorkshire Wolds with the lowlands of the Foulness Valley. It is possible that this idea continued in the Bronze Age.The large round barrow cemetery at Market Weighton Wold and the famous square barrow cemetery at Arras may relate to this line of movement through the landscape.

Within the Foulness Valley later Neolithic flint tools show increasing activity, especially at South Cliffe Common, Bursea and Hasholme Once again all these sites are located on the drier sandy ridges on the wetland margins. At South Cliffe Common 19 scrapers were found, as well as a flint sickle fragment and a saddle quern for grinding cereals may provide evidence for settlement and farming.

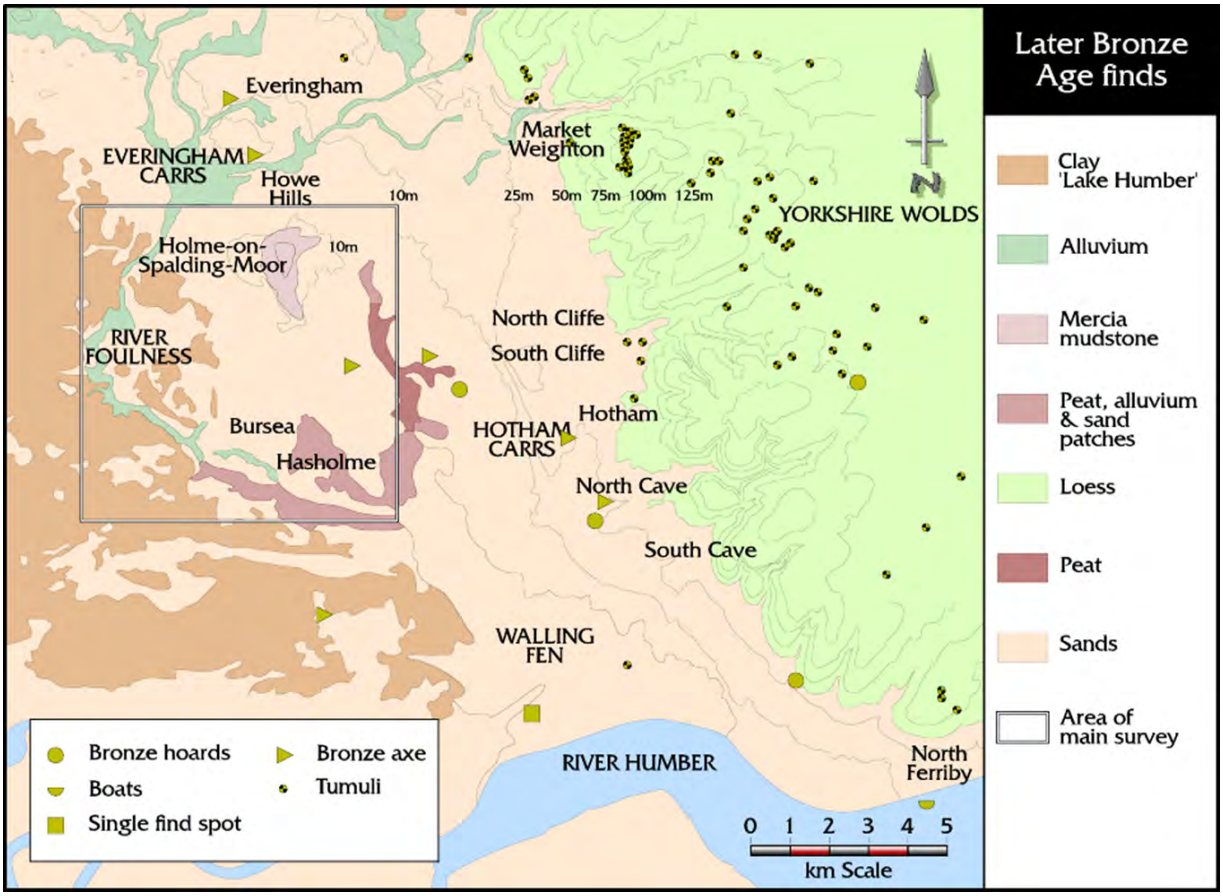
Saddle quern from South Cliffe Common (top stone diameter: 24 x 20cm, height: 6cm. The arrow indicates a groove, almost certainly created by polishing stone axes. (Photo: M. Park).

The Bronze Age - Around 2500 to 800BC

Recent DNA analysis shows that new peoples came into Britain from the European continent, bringing with them the use of metals and new styles of pottery. These tall, sometimes highly decorated pots are known as beakers and often accompanied the dead in round burial mounds known as round barrows or tumuli.

An early Bronze Age beaker from South Cave decorated by impressing a cord into the clay before firing.

New styles of arrowhead were also developed. By *c.* 2880-2667 BC, deposits cored at Sandholme show changes in the Foulness Valley landscape. The tidal inlet dried up and was replaced by extensive woodland. Red deer bones from Hasholme suggest that hunting may have continued to be important within this environment. As well as pollen, a large quantity of timber survives, particularly in wetland deposits within the lower Foulness valley. Bog oaks, such as those observed in the excavation of drains and an irrigation pond at Hasholme Grange demonstrate the presence of much woodland, a valuable raw material for making various wooden structures recorded on the Humber foreshore itself. The most spectacular of all of these finds are the Bronze Age Boats from North Ferriby.



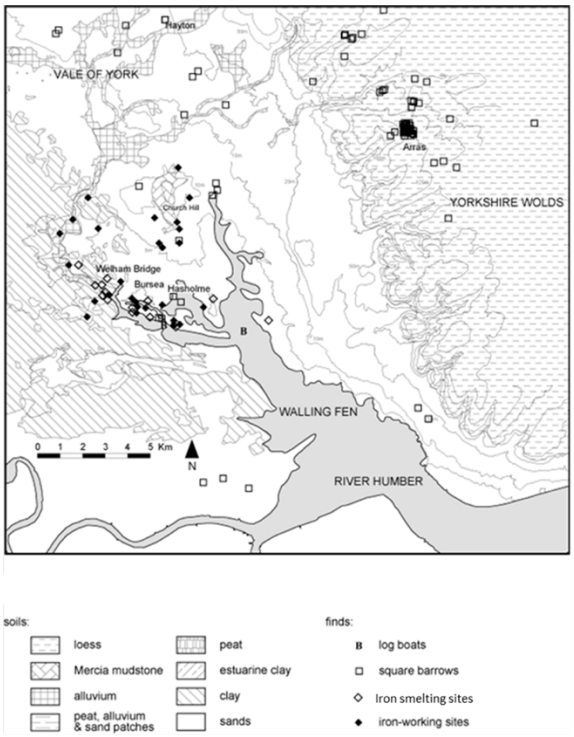
Hoards of bronze axe heads such as those found at Hotham Carrs and Everthorpe and single finds at Newport and Everingham, may also relate to woodland management or exploitation, though their find-spots close to streams within the Foulness Valley, also means that some may have been ritually deposited.

The Everthorpe Hoard of later Bronze Age socketed axe heads. In the centre is a gouge and block

of bronze

The Iron Age - Around 800 BC to AD 43

The beginning of the Iron Age in the Foulness Valley was marked by another environmental change around 815- 405 BC when marine flooding up the Humber estuary and further flooding down the Foulness Valley changed a Bronze Age forested freshwater into an estuarine inlet and its tributary stream valleys into tidal creeks.



The Middle Iron Age landscape of the Foulness Valley

The Foulness valley became more closely connected with the Humber estuary, which had an important impact on the development of the wider region. Woodland management continued on the wetland margins, as large quantities of charcoal were needed to fuel a nationally significant ancient iron industry. The wetland edges also provided considerable deposits of bog iron ore. During field survey 19 smelting sites presumed to be of Iron Age date were located, with almost all of these being situated on the sand ridges close to the river Foulness. A slag heap at Moors Farm, Welham Bridge was fully excavated and found to contain *c.* 5 tonnes of slag. It was dated to around 450-250 BC.

Excavating the Moors Farm slag heap in 1985.

This was the time of the East Yorkshire Arras culture, with its chariot burials and square barrows some of which contained iron swords, mirrors, and chariot-fittings. Iron production was complex and time consuming and it is estimated that it would have taken around 288 person days to produce enough iron for the tyres and other fittings for a chariot. The Arras cemetery itself lies at the head of the dry valley of Sancton Dale, which may have formed a natural route way between wetlands and wolds.

The low-lying carr land close to the River Foulness provided summer grazing for cattle. The enclosures and droveways which show up as crop marks on the sand ridges may have been used for livestock. Cattle bones were found in the 12m logboat from Hasholme, hewn from an 800-year-old oak cut down around 322-277 BC and is therefore contemporary with the iron industry and the Arras culture burials. The tree was massive and had been part of a dense woodland. A further now destroyed logboat was found during drainage at South Carr Farm, near Newport, a few kilometres to the east of Hasholme. It was found in the same estuarine clay deposit as the

Hasholme boat. This boat was longer and had decorated internal ribs but was similar in shape to the Hasholme vessel. within a kilometre of an Iron Age settlement and iron smelting site at North Cave. There is, therefore, as in the Bronze Age, ample evidence for waterborne transport within the Humber wetlands.

The Hasholme logboat under excavation in 1984

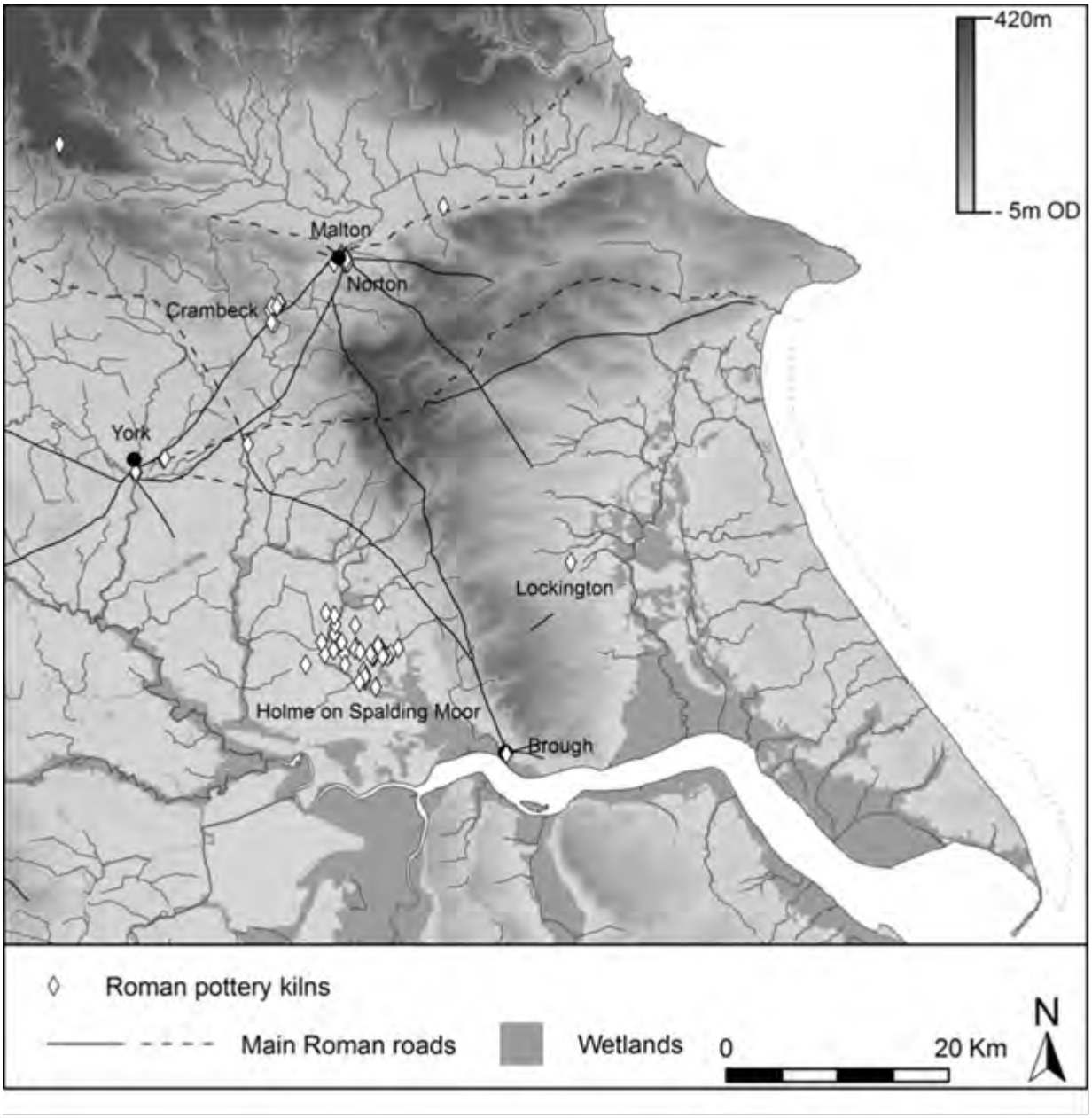
In the later Iron Age, it is clear that water borne trading contact continued, with evidence for cross-Humber contacts. At Bursea House, Holme-on-Spalding Moor wheel thrown pottery from south of the Humber very similar to pottery from the Iron Age site of Dragonby was found,

A similar pot was also excavated at Brantingham which overlooks the eastern side of the Foulness tidal inlet, along with coins of the Corieltauvi, the tribe which occupied what are now Lincolnshire and Leicestershire. Similar coins were found at North Cliffe and Holme-on-Spalding Moor.

The Roman Period - AD 43 – around 400

The Roman armies crossed into the East Yorkshire region around AD71, founding a legionary fortress at Eboracum (York). Landscape factors that determined settlement and industry in the prehistoric continued to be important during the Roman period. The Walling Fen inlet remained important.

There was a Roman fort at Brough on Humber positioned at the interface the inlet and the Humber, which developed into a town named Petuaria, the probable tribal capital of the Parisi. The route of main Roman road, which took the higher, drier ground close to the Yorkshire Wolds was also determined by this feature and roadside settlements developed at Hayton and Shiptonthorpe, where the road crossed tributary streams of the Foulness system. These sites were to become the main markets for the pottery industry around Holme on Spalding Moor. During investigation of 8x8km around Holme, sixteen certain and eighteen possible pottery kiln sites were found. The main centres were at Throlam and Tollingham, Hasholme and Bursea, as well as around 70 other sites indicated by sherds of Roman pottery and other material.



Roman pottery kilns in East Yorkshire

Inside one of the pottery kilns at Hasholme Hall excavated in 1972 (Photo: J. Wilson).

Most of these sites were placed on the sand ridges close to the River Foulness as water transport was the best way of moving pottery. A pottery production centre also developed at North Cave. At Faxfleet, close to Market Weighton Lock, which would have been on the opposite side of the tidal inlet, there was a small settlement. Salt making took place here and also a 'pig' of lead from Derbyshire was found. Lead pigs from Elloughton and South Cave suggest that this region became an outlet for trade with the rest of the Roman world.

Lead pigs from Faxfleet and Elloughton. (Mike Park: Courtesy Hull Museums)

Coppiced woodland continued to provide a source of fuel, as it had done for the iron industry before. Charred botanical remains and the plant impressions on kiln fabric from Bursea House, has shown that the wetlands provided other resources such as clay and sedges as species associated with wet habitats, such as *Litorella uniflora* have been identified.

There does seem to have been special deposition of artefacts and animals close to the Foulness streams and within wells and ponds in both the prehistoric and Roman periods. If the face and smith tool pots are, as has been suggested, linked to Vulcan or his Celtic equivalent, what better deity could the people of this area of furnace-based industries have chosen to venerate?

Further Information:

Interactive website: https://ironmasters.hull.ac.uk/

Reading

Books

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