

Fig. 1 (left): site location plan; (right): trench location plan

Prehistoric Southwark: Neolithic, Bronze Age and Iron Age activity on Horselydown Eyot

Jim Leary, Nick Branch and Louise Rayner

Introduction

The excavation in Tanner Street, Bermondsey (Fig. 1 left), comprised Trench 1 measuring 16.4×3.8 m and Trench 2 measuring 22×3.8 m (Fig. 1 right). Findings revealed prehistoric activity, with pottery and residual Mesolithic flintwork, and struck flint from a tree throw of Neolithic date. Fragments of burnt daub suggest structures or hearths nearby. Early to Mid-Bronze Age evidence includes north-south orientated fence/s, sealed by a soil horizon containing Late Bronze Age/Early Iron Age material, as well as quantities of burnt flint. Agricultural activity was suggested by ard-marks. There was a large Late Bronze Age/Early or Iron Age east-west ditch with a bank, forming a river wall, as well as two parallel Iron Age fences, possibly used as an animal pen. The area subsequently became marshy and largely uninhabitable, eventually to be inundated during the Roman period.

Horselydown Eyot

From the prehistoric into the Roman periods the landscape of north Southwark would have been one of sand and gravel eyots interspersed with braided channels and areas of marshes and mudflats. It appears that the shape of the eyots remained broadly the same from their late glacial/early post-glacial emergence to the Roman conquest,¹ although changes in water level of the Thames resulted in changes in the area of land exposed.

The underlying geology comprises Palaeocene London Clay, overlain by Pleistocene floodplain sand and gravel. Since the last glaciation c. 10,000 years ago, mean sea level has varied, affecting the low-lying areas along the Thames. During the Holocene, the Lower Thames was subjected to widespread alluvial accretion, resulting from the submerging of the original Late Devensian landscape under a wedge of sands, gravels, silts and peats, varying

in thickness from less than 5 m in Southwark to over 35 m at Canvey Island in the Thames estuary.² No detailed lithostratigraphy has been formulated,³ and Devoy's work,⁴ based on broad-ranging marine transgressions and regressions, is usually taken as the model for the sedimentary development of the valley. The application of this model has been questioned⁵ and alternatives, dependent on considerations of a more localised development involving the original (Late Devensian) topography and the movement of 'sedimentary and ecotonal fronts' along the valley, have been suggested.⁶ These can have major archaeological implications concerning the nature, extent and chronology of the exploitation of particular locales within the floodplain. Following the period of sea-level regression, the area in the vicinity of the site appears to have become uninhabitable due to flooding from the prehistoric period up to at least

the 15th century. The top of the alluvium at the neighbouring site was at 2.8 m OD.⁷ Present ground level at the site itself is approximately 2.8 m OD.

The last twenty years have shown that a rich archaeological resource is preserved beneath the alluvium, showing exploitation of the islands from the Mesolithic to the Iron Age and later. The nature of the exploitation varied through time and local conditions, from sporadic visits to more settled occupation and farming. Flintwork characteristic of the Mesolithic industries came from the base of a channel at 283 Tooley Street.⁸

Mesolithic flint was also recovered at 1–2 Three Oak Lane⁹ and from Butlers Wharf.¹⁰ Bone and flint tools found along the Thames demonstrate that this area formed part of the subsistence economy and that the eyots were locations for temporary camps.¹¹

Evidence for later prehistoric activity was noted at 22–28 Whites' Grounds. At Vinegar Yard, 33 Tanner Street, truncated natural sand was encountered containing lithics and pottery of possible Bronze Age date. Peat layers dating to the Bronze Age were located at 159–161 Tower Bridge Road; flints were recovered from the top of the gravels at Brunswick Court. Recent excavations to the south-west, at 167 Tower Bridge Road, found natural sand sloping from –0.33m OD in the north to –0.88m OD to the south, which may be part of the southern edge of Horselydown. At 151 Tower Bridge Road thick deposits of alluvium were encountered.¹² At Phoenix Wharf, approximately 250 m east, a burnt mound was identified, radiocarbon dated to 1575–1525 BC.¹³ North-east of the site, ard marks were recorded at Wolseley Street, overlain by a plough soil from which flint, waste flakes, blades along with a scraper, and Neolithic pottery were recovered. This was sealed by silty clay. A further group of ard marks was identified at Lafone Street to the north.¹⁴ At Three Oak Lane features dating from the Late Neolithic to Early Bronze Age were located.¹⁵ Wood and timber stake tips survived *in situ*. The tip of an oak ard share was also found. The peat which overlay this prehistoric activity was radiocarbon dated to the Late Bronze Age. Excavations at Queen Elizabeth Street

revealed worked flints and pot sherds, and a large concentration of burnt flint came from a prehistoric context at Butlers Wharf. Excavations at 49–51 Tanner Street (TAT99) revealed Bronze Age cultural material from a deposit cut by a large east-west Bronze Age ditch.

The rising sea level following the Bronze Age would have significantly reduced the size of Horselydown, and Iron Age occupation was thought to be limited to the higher areas of the eyot to the north. Activity has been recorded at 285–291 Tooley Street,¹⁶ 283 Tooley Street¹⁷ and 271 Tooley Street.¹⁸

Archaeological sequence

The earliest deposits at the site comprised loose sandy gravel with organic inclusions to the south of both Trenches 1 and 2. The topography of this deposit was recorded in eight hand-augured probes, which show it as sloping down from –0.54m OD in the north to –0.74m OD in the south of Trench 1 and –0.56m OD in the north to –0.67m OD in the south of Trench 2. These sands and gravels originated in the last (Devensian) cold episode, when the Thames comprised a relatively fast-flowing series of braided stream channels, with upstanding bars between them. OSL dates from similar deposits at Butlers Wharf suggest this deposition happened *c.* 18,510 BP ± 3,660.¹⁹ Overlying the gravels were fine-grained silty sands. The surface had been considerably disturbed by root action. The top was at 0.5m OD on the north side of Trench 1 sloping to 0.36m OD on the south side and 0.44m OD on the north side of Trench 2 and 0.24m OD on the south.

These deposits were laid down during the early Holocene in relatively low-energy conditions and overlay earlier gravel bars; they formed islands separated by channels or low-lying areas of marshland. On the site these deposits followed the underlying topography and sloped to the south forming the southern shore of Horselydown Eyot. A channel may have existed to the south of the site, probably in a similar position to the Neckinger River; along the line of present day Tanner Street.

Mid-Late Neolithic activity

The earliest features were a pit, a ditch

and a tree throw, as well as a layer with cultural material, all in Trench 2. Pit [177] was oval in plan and measured 1.36 m by 1.34 m and 0.44 m deep (Fig. 2). It contained two fills comprising a mid-brown clay sand with frequent charcoal flecks and a light brown clay sand. Two pieces of struck flint were recovered from the upper fill.

Ditch [174], orientated north-west to south-east, measured 2.6m in length (continuing beyond the limits of the excavation), by 1.25m wide with a depth of 0.44m (Fig. 2). The sides were concave and the base was rounded. The fill was loose mid-brownish-grey silty sand with occasional charcoal flecks. It contained a single sherd of Neolithic pottery and some struck flint. Plant macrofossils indicate the area was damp waste ground with sedges, elder trees/shrubs, buttercups and species of the carrot family.

Disturbing the north-western part of the ditch was an irregular hollow (Fig. 2), representing a tree throw (cut [169]), measuring 3.4 m × 3.46 m × 0.31 m in depth. It was filled with silty clay sand with very frequent charcoal (context [9]), indicating localised burning. Relatively large quantities of pottery and struck flint suggest that the tree hollow was used as a shelter or possibly for structured deposition. The assemblage included fragments from at least seven Neolithic vessels, including rims of round-based open bowls and sherds with an incised geometric pattern, likely to be in the Early Neolithic 'decorated' plain bowl tradition or a later Peterborough-type bowl (3500–2500 BC). A radiocarbon date, from charcoal from this context, indicates deposition between 2910 and 2470 BC, suggesting a derivation from a Peterborough-type bowl, and therefore a Mid-Late Neolithic date. This activity was contemporary with that at Addington Street in the Waterloo area.²⁰ The flint assemblage was consistent with a Neolithic date, comprising blades, blade-like flakes as well as cores and flakes indicative of the preparation and maintenance of tools, and 105 g of burnt flint. This context also produced three small fragments of rounded and abraded daub, and a fragment of cattle tooth.

These features in Trench 2 were overlain by a layer of light grey silty

sand at a level between 0.52 and 0.73 m OD. A continued Neolithic presence was indicated by pottery, and struck flint encompassed 78 pieces including a hammerstone as well as 1020 g of burnt flint. Also recovered were sixteen small to medium-sized fragments of abraded daub, indicative of building activity. This layer was only seen on the north side of the trench; the southern parts may well have been scoured away by river action in the Late Bronze Age/Early Iron Age. At the very northern end of the trench it was cut into by a pit, [157] (Fig. 2).

An early to mid-Bronze Age fence line

The next phase of activity, recorded in Trench 1, was represented by an approximately north-south alignment of stakes (Fig. 2), most of which had clear axe marks. The stakes were of two different types: one used sections of radially cleft oak (an unusual feature for London prehistoric sites); whilst the other used round-wood stakes, comprising a mixture of alder, hazel and cherry. While the round-wood

stakes could have been used for a wattle work fence of moderate durability, the cleft oak stakes would have been for a more solid fence or a revetment, possibly indicating two separate structures. In both cases the axe marks were more typical of the Early to Middle Bronze Age or Late Iron Age. The presence of an overlying Late Bronze Age/Early Iron Age soil horizon indicates an Early to Middle Bronze Age date rather than an Iron Age one (dendrochronology proved unsuccessful). Numerous stake-holes were recorded immediately to the east (Fig. 2), and broadly along the same alignment, suggesting that the fence/s were regularly moved. The fence/s may have been used for the management of cattle although this was not reflected in a phosphate assessment.

Late Bronze Age/Early Iron Age cultivation and soil horizon

The Phase 4 stakes were sealed by a grey silty sand soil horizon, to the south, and to the north of Trench 1 as well as from the north and south of Trench 2, which forms a homogeneous

horizon across the site. It included Late Bronze Age/Early Iron Age pottery (as well as some residual Neolithic pottery) and lithics. There was a high preponderance of scraper tools, suggesting animal processing. A chopped goat horn core implies associated craft activities, such as horn-working. Much burnt flint came from these deposits, possibly from a disturbed burnt mound. There were numerous fragments of burnt and fired

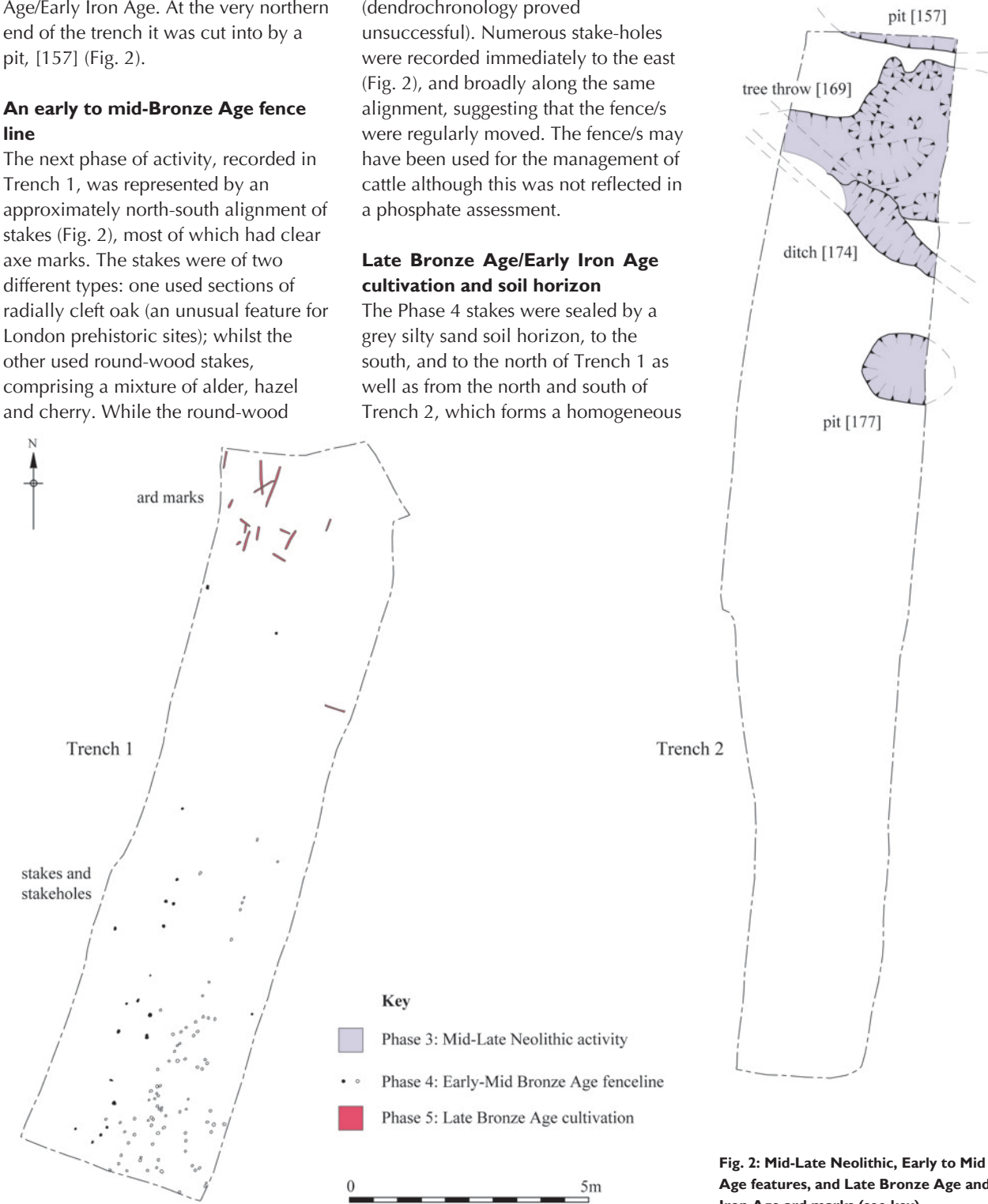


Fig. 2: Mid-Late Neolithic, Early to Mid Bronze Age features, and Late Bronze Age and Early Iron Age ard marks (see key)

daub, suggesting buildings or a nearby hearth. There was also a fragment of red haematite, possibly used for ritual purposes, as well as (intrusive?) Late Iron Age 'brick', and fragments of cattle and horse bones. A similar layer was recorded at 49–51 Tanner Street, at between 0.61 m and 0.49 m OD.

This horizon may have formed as the result of animal poaching or frequent flooding, indicating a change in local conditions. At the north end of Trench 1 the deposit sealed 16 fragmented ard marks, indicating it may in part derive from agricultural activities (Fig. 2). They were aligned broadly north-east to south-west and south-east to north-west, and may have related to agriculture or ritual activity. If the latter then the area could be seen as a liminal zone between the river channel and the higher, more habitable area.

Late Bronze Age/Early Iron Age ditch

Cutting the Phase 5 soil horizon was a large east-west ditch in Trenches 1 and 2 (Fig. 3). It was 1.7 m wide and 0.65 m deep, and ran across the entire length of the site, as well as the neighbouring site of 49–51 Tanner Street. Its base sloped from –0.05 m OD to the east to –0.14 m OD on the west, and at –0.21 m OD, at 49–51 Tanner Street, suggesting it drained to the west. A bank, [151], formed of the up-cast, was piled to its south side in Trench 2 (Fig. 3), indicating that it was protecting the area to the north from the river. This bank was not seen in Trench 1, or at 49–51 Tanner Street, suggesting that either it had been thrown up in an isolated area only or that it had been truncated elsewhere (possibly by a post-medieval well in Trench 1). Two fills were in the ditch from which burnt and struck flint, residual Neolithic pottery, a small quantity of abraded fired daub and fragments of animal bone were recovered as well as plant macrofossils which have low species diversity and represent carrot and dead-nettle families. The primary fill had a richer assemblage, including elder and bramble seeds, characteristic of general wasteland. The bank and ditch may represent a form of river defence.

Iron Age fence-line

To the north of the ditch in Trench 2 and aligned east-west with it was a

double row of stakes forming two parallel fence lines (Fig. 3). A line of charcoal between some of the stakes suggests that they may have supported wattle. These stakes were made from sections of round-wood of willow or poplar. Some had wide and flat axe marks, similar to those produced in the Early Bronze Age or Iron Age. Given that they were driven through a Late Bronze Age/Early Iron Age soil horizon, an Iron Age date is likely. These fence-lines were not seen in Trench 1 and therefore imply that an isolated area had been fenced off.

A layer of mid-grey-brown silty sand in Trenches 1 and 2, found on the north side of the ditch, may represent colluvium washed down from further up the island. It overlay the backfilled ditch in Trench 1, suggesting that the ditch had gone out of use, whilst it seems to have built up against the fence in Trench 2, suggesting that the fence remained standing. A small assemblage of Late Bronze Age/Early Iron Age (and residual Neolithic) pottery was recovered as well as a few fragments of abraded fired daub.

Middle Iron Age land stabilisation

Overlying the area to the south of the ditch in both trenches was a layer of dark reddish/grey brown organic, peaty silt and clay. This indicated that the lower, southern end of the site had become marshy and that water levels had risen further. Cultural material included residual Neolithic and Late Bronze Age/Early Iron Age pottery, a few fragments of burnt daub, nine pieces of struck flint, a large quantity of burnt flint and a few bones identified as horse. The pollen indicates that during the formation of the peat, the local vegetation cover was open alder woodland, with hazel and bracken occupying the dry land. The plant macrofossils include bramble, elder and sedge; insect remains were also recovered. A radiocarbon date indicates peat formation between 410 and 360 BC (Middle Iron Age). This is in contrast to a single radiocarbon determination from peat from the neighbouring site at 49–51 Tanner Street which suggests that peat formation here began considerably earlier, between 1890 and 1435 BC.²¹

Roman flooding/inundation

Following the formation of the peat, the site was inundated, indicating sea levels continued to rise, leaving estuarine silts and clays with a top level of 1.33 m OD. A rim sherd from a Roman ceramic vessel was recovered from the lower layer, as was a Roman tile (fabric 3060, dated from the mid-1st to 2nd centuries). The pollen suggests a local vegetation cover of alder and reed-mace-dominated wetland. On the dry land, there is evidence for mixed deciduous woodland, which was open in character.

Conclusions

The excavations revealed evidence for the prehistoric to the post-medieval periods, which included some of the earliest clear evidence for human presence on Horselydown Eyot, in the form of the Neolithic pit, ditch and tree throw. The relatively large quantities of pottery and struck flint suggest it had been used as a shelter or for structured deposition. A north-south fence was erected during the Early/Middle Bronze Age, possibly to control the movement of animals. The entire site was then sealed by a soil horizon, containing Late Bronze Age/Early Iron Age cultural material, as well as considerable quantities of burnt flint, possibly from a disturbed burnt mound. To the north-west were ard-marks, indicating either arable activity or the ritual breaking of the soil. Cutting this was a Late Bronze Age/Early Iron Age east-west ditch and bank, which formed a river wall, indicating rising water levels. This represents one of the earliest river walls known in the United Kingdom. A double row of Iron Age stakes respected the backfilled ditch, whilst Middle Iron Age peat deposits indicate that the southern area had become marshy and uninhabitable. Subsequent to the formation of the peat, the site was inundated. No further activity was present until 17th-century tanning remains.

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Jim Leary BA FSA MifA was formerly a Supervisor and site director for Pre-

Construct Archaeology and is currently an Archaeologist (Prehistory) with English Heritage.

Dr Nick Branch BSc MSc PhD is Senior Lecturer in Palaeoecology at the School of Human and Environmental Sciences at the University of Reading, and Director of Quaternary Scientific (QUEST).

Louise Rayner BA MSc is Assistant Director, Centre for Applied Archaeology, and Assistant Director and Head of Specialist Services, Archaeology South-East.

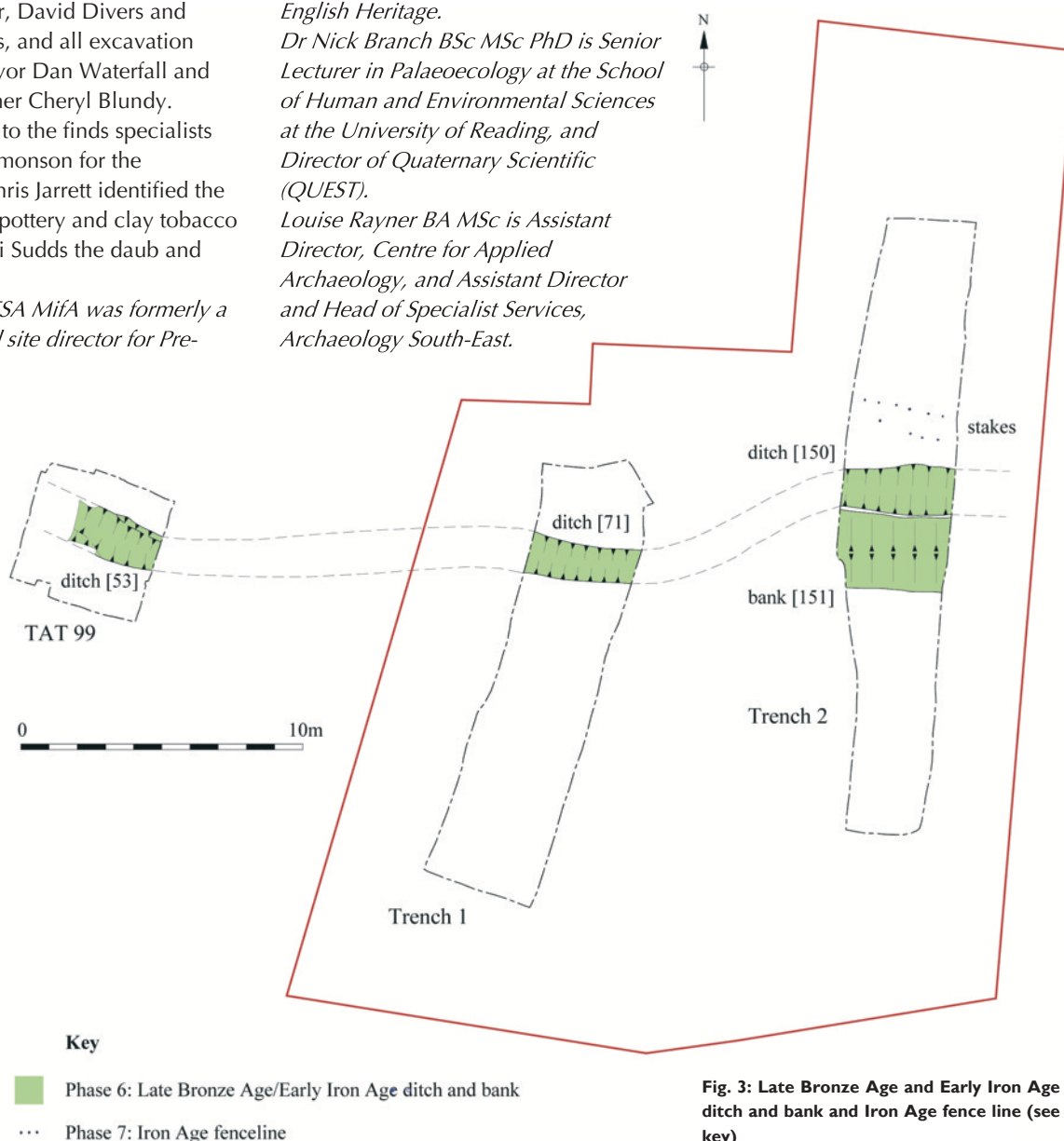


Fig. 3: Late Bronze Age and Early Iron Age ditch and bank and Iron Age fence line (see key)

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