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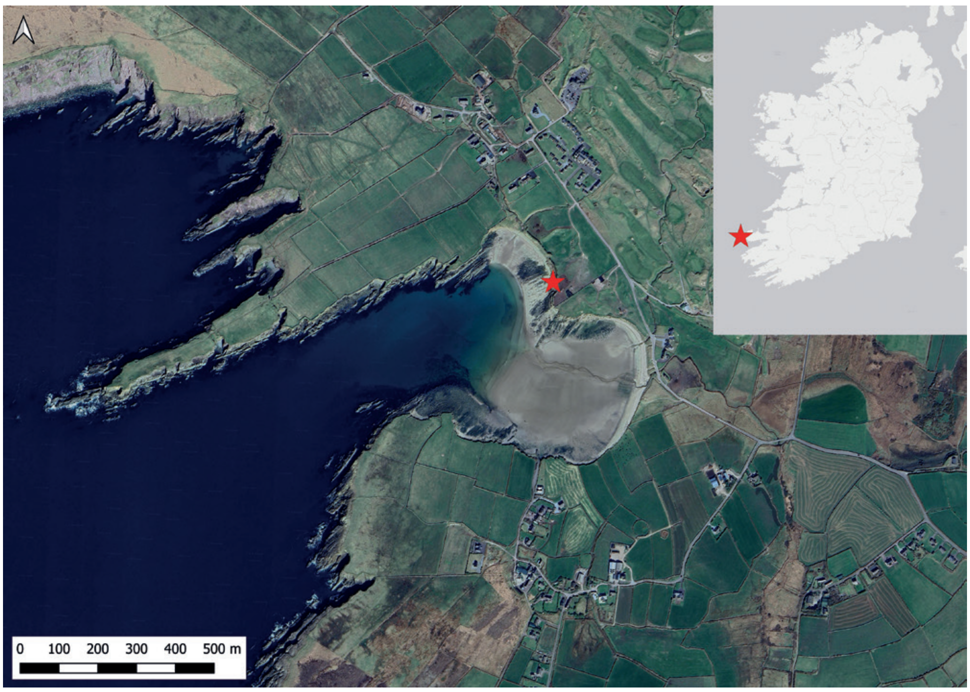
PAST

THE NEWSLETTER OF THE PREHISTORIC SOCIETY

No sacred cows: ZooMS identification of the Late Mesolithic bone assemblage at Ferriter's Cove, Co. Kerry, Ireland

Excavated from 1983–1995 by Prof. Peter Woodman (University College Cork; UCC) and team, the Mesolithic site of Ferriter's Cove, Co. Kerry occupies a significant place in narratives of the Mesolithic–Neolithic 'transition' in Ireland, Britain and Western Europe. Bone fragments radiocarbon dated to the second half of the fifth millennium BC were anatomically identified as human, and others as domestic cattle. The presence of domestic cattle bones in a Late Mesolithic context contradicted existing models of the Mesolithic–Neolithic 'transition' in Ireland and, ever since, the 'Kerry Cow' has been used to demonstrate contact between Mesolithic hunter-gatherers and Neolithic farming communities. The precise mechanisms and origins of the cattle bone have been at the centre of many – at times heated – discussions, and variably used to demonstrate failed attempts at colonisation by farming groups, or hunter-gatherer-led contact with overseas neighbours.

Ferriter's Cove forms part of a postdoctoral project (2025–2027) at University College Dublin (UCD) – led by Martin Moucheron under the mentorship of Graeme Warren – which combines existing and new archaeological and geoarchaeological datasets in the reassessment of legacy Mesolithic sites. In collaboration with Benjamin Gearey,



Location of the site (red star) overlooking the sea at Ferriter's Cove, Corca Dhuibhne/Dingle Peninsula, Co. Ciarraí/Kerry. © Bing satellite image

Coastal erosion of the archaeology-bearing soil profile at Ferriter's Cove © M. Moucheron

Margaret McCarthy and Barra Ó Donnabháin (UCC), and Kate Kanne (UCD), the original archaeological material from Ferriter's Cove (now stored at UCC) was reviewed.

Following an assessment of the assemblage, it became clear that the original species identifications were ambiguous and tentative – a caveat lost in many subsequent publications on the site. To address this, we took samples for Zooarchaeology by Mass Spectrometry (ZooMS) analysis, which can identify species using the proteins preserved in bone collagen.

Eight samples from the osseous assemblage – identified in the excavation report – were sent to the Mass Spectrometry Unit of the Michel Eugène Chevreuil Institute, Lille, France, directed by Fabrice Bray (CNRS), in June 2026. Bray and Lisa Garbé (CNRS-INSERM, Lille) processed and analysed the samples using a MALDI-FTICR and PAMPA software. Although two samples failed to produce reliable peptide sequences, it was possible to provide a positive species identification for the remaining six samples. The assessment of the anatomical analysis for one fragment identified as mammal was refined, with ZooMS results identifying *Sus scrofa* (wild pig) marker peptides. The zooarchaeological identifications were also upheld for the two long bone fragments identified as human, which were confirmed as *Homo sapiens* by ZooMS. However, results of ZooMS analysis overturned the original assignment of three samples previously identified as domesticated cattle, with marker peptides indicating bear (two samples) and wild boar (one sample).

These results have a significant impact on our understanding of the Mesolithic–Neolithic 'transition' both in Ireland and in Western Europe more broadly since, as things stand, there is now no evidence of contact between Ireland and its Neolithic neighbours before 4000 BC. They also offer exciting possibilities for future research. Isotope and ancient DNA (aDNA) analyses of the human remains, which are rare in the Mesolithic period, will contribute significantly to the current corpus. In parallel, Liquid Chromatography-tandem Mass Spectrometry (LC-MS/MS) analysis currently being undertaken on the bear samples is refining species identification to either brown bear (*Ursus arctos*) or polar bear (*Ursus maritimus*) by providing fragmentation spectra for each peptide. This, together with extracting an aDNA profile, will contribute to recent debates about bear extinction and hybridity in Ireland.

Although archaeology is a cumulative discipline that builds on the work of others, it is essential to return to the primary data with a new perspective, and to verify older interpretations empirically. While ZooMS analysis of Late Mesolithic bone fragments from Ferriter's Cove have confirmed or refined some of the original anatomical identification for humans and wild boar, the new results (reassigning those bones thought to represent domesticated cattle to bear) disrupt previously established narratives on the Mesolithic–Neolithic transition. These findings set the groundwork for significant avenues of future research that will be pivotal in broader discussions of the arrival of agriculture in the British and Irish Isles, and plans are already in place to supplement the archival work with small-scale fieldwork in summer 2026.

Acknowledgements
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Martin Moucheron (martin.moucheron@ucd.ie), Graeme Warren, Kate Kanne (University College Dublin), Benjamin Gearey, Margaret McCarthy, Barra Ó Donnabháin (University College Cork), Fabrice Bray (CNRS – Institut Chevreul) and Lisa Garbé (CNRS – INSERM)

A newly discovered solstitial post alignment in the Stonehenge landscape at Bulford

Stonehenge is known the world over for its links with the mid-summer and mid-winter solstices, attracting thousands of people to the circle each year. It is a testament to the monument and the powerful attraction of the solar cycle that the astronomical skills of the Neolithic engineers and surveyors from 2500 cal BC can still be appreciated in modern times. Their achievements at Stonehenge, Durrington Walls and Woodhenge can now be supplemented by recent discoveries at Bulford, which pre-date the extant sarsen monument at Stonehenge by approximately 500 years.

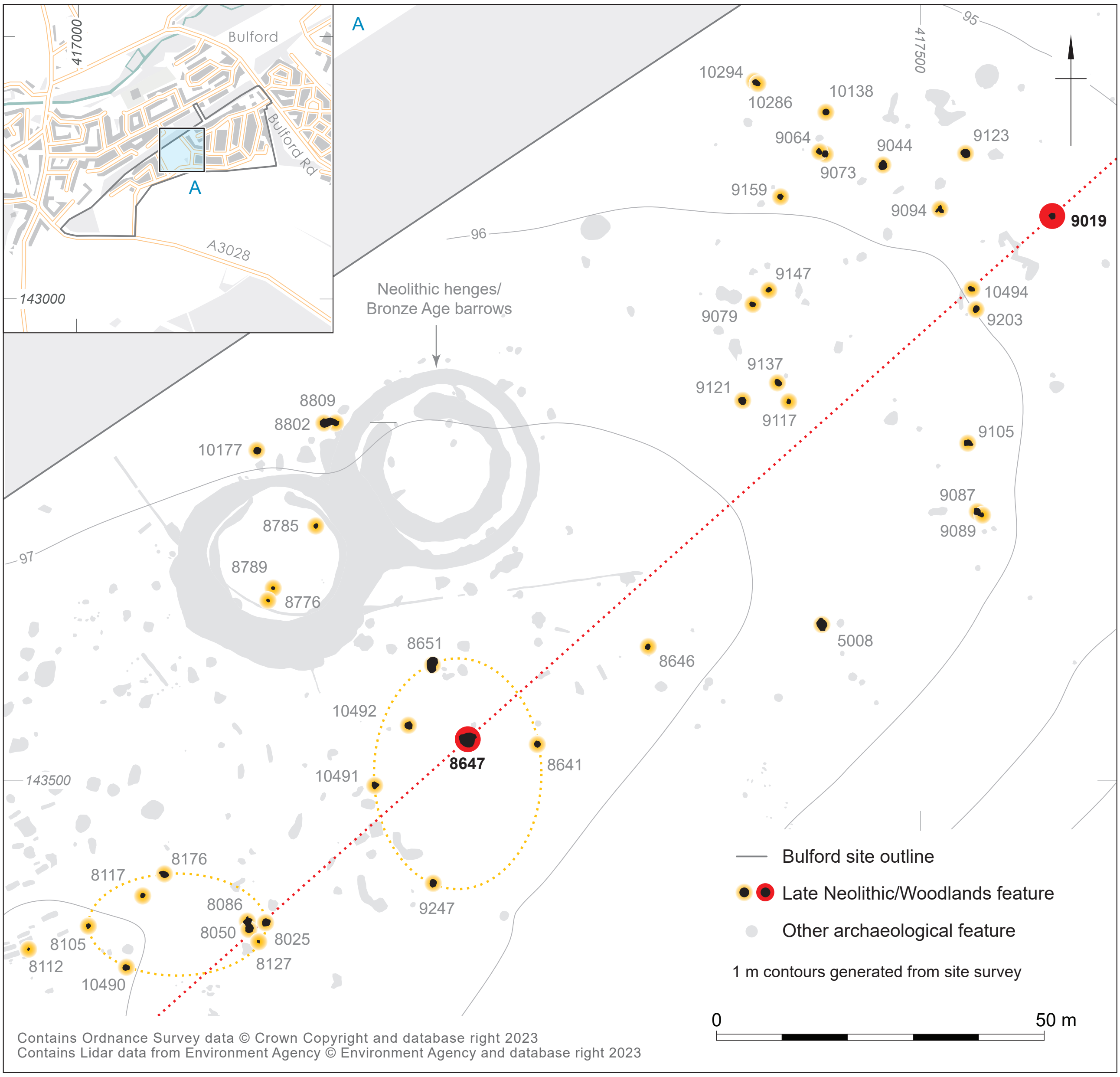
Between 2015 and 2017, Wessex Archaeology undertook a major programme of archaeological fieldwork, under the Army Basing Programme, around the southern rim of the

Salisbury Plain Training Area, in advance of development to provide accommodation for service personnel. Fieldwork, which included excavation at Bulford, was completed in 2017, with focus since concentrated on post-excavation analysis and publication.

The site at Bulford occupies a ridge of land covering 13 ha, bordering the southern edge of the Nine Mile River near its confluence with the River Avon. The site lies adjacent to major Late Neolithic monuments at Durrington Walls and Woodhenge, and 5 km north-east of Stonehenge.

The excavation produced evidence of four phases of Neolithic and Bronze Age activity, including two episodes related to the Late Neolithic. The earlier phase was represented by a pit cluster containing Grooved Ware pottery of the Woodlands sub-style. Radiocarbon dates from over 40 samples produced consistent results centred on 2950 cal BC, which show that they were broadly contemporary and used over a relatively short time frame. The pits were approximately 1 m in diameter and 0.5–0.6 m deep, with steep sides and flat bases. They were typically filled with primary deposits containing pottery, animal bone, worked flints and charcoal, sealed by chalk rubble and capped by an upper tertiary soil.

However, two features (9019 and 8647), approximately 120 m apart, were distinctly different in form, depth and fill. These two pits averaged 1.2 m in diameter and 0.8 m deep, with sides that tapered to narrow bases approximately 0.5 m across. Both features were primarily filled with chalk rubble and included artefacts that were steeply-inclined within the fill. This suggested that the pits may formerly have held posts that had been removed, and that they had originally been post-pits. Initial calculations established that they were aligned approximately 50° from north and may have related to a solstitial alignment. The excavation produced a



Site plan of Bulford showing location and alignment of post-pits 9019 and 8647 with associated Late Neolithic pits, including pit 8050 © Wessex Archaeology

Post-pit 9019 © Wessex Archaeology

Post-pit 8647 © Wessex Archaeology

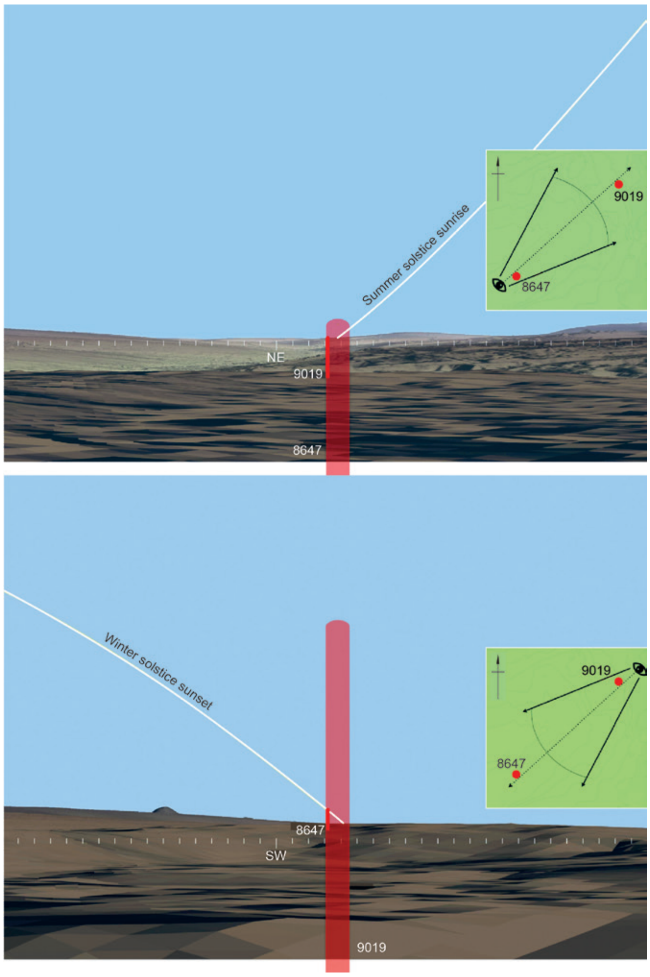
number of other pits adjacent to the post-pits, including five satellite pits that formed an oval arrangement approximately 33 m north–south and 25 m east–west around post-pit 8647. A small cluster of pits, which included pit 8050 (see below), was located approximately 37 m along a projected line south-west of post-pit 8647. This additional pit contained a polished discoidal knife that was found in a vertical position in the upper part of the primary fill.

Radiocarbon samples, including a fragment of ash charcoal which may have derived from the post, dated post-pit 9019 to 3090–2910 cal BC (95% probability; SUERC-123835) and post-pit 8647 to 3090–2920 cal BC (95% probability; SUERC-109576). These dates were sufficiently contemporary to warrant more detailed analysis to resolve the possible solstitial connection, using established computer programs to calculate spatial, astronomical, landscape and horizon reconstructions around *c.* 3000 BC.

The results of these calculations refined the orientation of the line created by the two post-pits to 48.1°/228.1°. The Stonehenge solstitial axis at approximately 3000 BC has, by comparison, been established as 49.1°/229.1°. The Bulford post-pits can therefore be considered to deviate from this solstitial axis by exactly 1°. This relatively small margin equates to the two widths of the sun disc, indicating that, at the solstices, the sun would noticeably rise/set to the left of the line of posts.

Subsequent analysis considered three methods by which the two posts could be incorporated in a sightline to minimise the impact of this misalignment and provide the most accurate solstitial observation. This process included variables in the viewing distance (20 m or closer) from the nearest post, using a maximum post diameter of 0.5 m calculated from the post-pit bases. The study concluded that the best results were achieved by using a tangent line to look along the left side of each post, where the sun would appear to rise from the nearest post on summer solstice, and set into the post on winter solstice. Use of this method showed that precision is improved – producing a more accurate and reasonably precise alignment in both directions – as distance increases from the nearest post up to *c.* 35 m. The pit cluster containing pit 8050, 37 m behind post-pit 8647, may therefore have formed an integral part of the solstitial monument as a 'base-station' from which the mid-summer solstice was observed. The discoidal knife was probably added to the pit as a placed deposit, and the choice of this object type (which is exceedingly rare) may represent deliberate symbolic reference to a sun disc.

The presence of the post-pits at Bulford – aligned on the mid-summer sunrise/mid-winter sunset axis – has provided a model by which to account for the extensive associated pit



Alignment along the left tangent of the two posts from a position 20 m away from the nearest post, shown semi-transparent for ease of visualisation. Both posts are modelled at 0.5 m diameter, with posts 9019 and 8647 measuring 4 m and 2 m high respectively © Fabio Silva cluster, and implies a location that may have been occupied by a large gathering of people over a relatively short period of time to celebrate the solar cycle. It remains uncertain whether the monument was intended to celebrate the mid-summer or mid-winter solstice, although the former option offers a relatively uninhibited view northwards along the Nine Mile River.

This discovery represents a significant addition to the chronological sequence that celebrates the solar cycle in the Stonehenge landscape, and one that inevitably cannot exclude Stonehenge itself. Earlier communities were aware of the solar cycle and constructed monuments, including causewayed enclosures, to face the rising sun. The post alignment at Bulford arguably marks the first attempt to capture the solstitial axis in the Stonehenge landscape, using only two timber posts. This simple method enabled the solar event to be celebrated before more permanent complex henge monuments were constructed subsequently at Stonehenge, Durrington Walls and Woodhenge.

The lower level of accuracy at Bulford may relate to limitations in survey techniques that had improved by the time the Phase 2 sarsen monument was constructed at Stonehenge, or indicates that high precision was not valued for a monument designed for short-term use. The general orientation of the entrance at Stonehenge acknowledges the mid-summer cycle in the design of the Phase 1 monument. This phase was broadly contemporary with events at Bulford and may have incorporated a similar post-built alignment, although any associated traces will have been erased by subsequent phases of work. The findings at Bulford thus make a major contribution to our understanding of archaeoastronomy in the Stonehenge landscape, filling a gap of almost 500 years before the Phase 2 sarsen ring at this renowned monument took centre stage.

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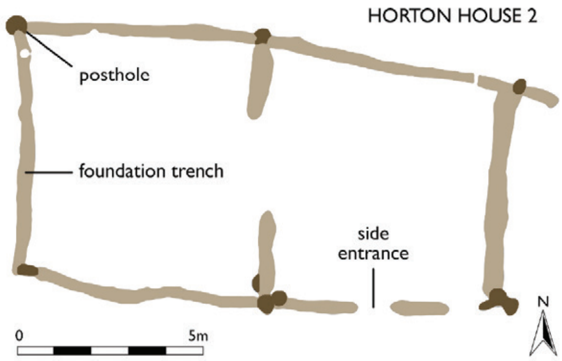
The Butser Ancient Farm Horton 2 building: an 'experimental house' or something else?

In 2019–20, site staff, volunteers, and staff from Wessex Archaeology constructed an experimental Neolithic building (Horton House 2) at Butser Ancient Farm in Hampshire, England. The building's archaeology was excavated in 2012 by Wessex Archaeology as part of a pre-extraction programme of investigation at the Kingsmead Quarry, Horton, Berkshire. The excavation revealed trenched foundations of a large structure (dated to *c.* 3750 BC) filled with dark organic material. The sub-rectangular foundations measured *c.* 15 m in length, varied from 6.1–7.7 m wide and were up to 1 m deep. Paired discontinuities near the south-eastern corner, *c.* 1 m wide and separated by a *c.* 0.9 m trenched dividing feature, were interpreted as entrances. Trenches *c.* 2.3 m long extended laterally towards the centre of the structure from the mid-points of each long side, dividing it into two approximately equal sized cells. These were separated by a central gap of *c.* 2.3 m and interpreted as foundations for a discontinuous wall. Postholes were identified at each corner of the foundations and at the junctions between the long sides and central dividing trenches. Postholes may have been present at the inner terminals of the internal dividing trenches but the evidence was ambiguous. The excavators interpreted the building's walls as having been constructed of earth-fast upright posts or planks set onto sill beams.

This archaeology was chosen as the basis for an experimental building because of its excellent preservation and significance as among the earliest and largest Neolithic structures in Britain. The foundation features were replicated in plan, size and orientation and informed the engineering

The Horton 2 Neolithic house at Butser Ancient Farm. © Rachel Billingham, Butser Ancient Farm 2021



Photograph (top) and excavated plan (bottom) of 'House 2' at Kingsmead Quarry, Horton, Berkshire. © Wessex Archaeology 2012

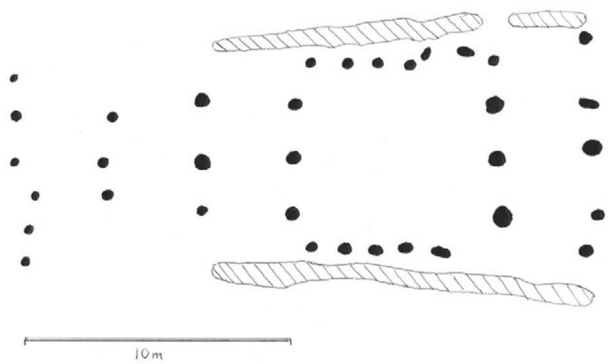
*of the structure. Assumptions about building materials were derived from environmental and archaeological evidence from the excavated site at Horton and other Neolithic sites. The building was constructed using very simple jointing, and rope and twine lashings. Carpentry techniques were based on reasoned assumptions and evidence recovered from well-preserved Early Neolithic well-linings in eastern Germany. It was assumed that the original roof would have been pitched to ensure water shedding. However, engineering a stable roof across an almost entirely unsupported *c.* 7 m span and limiting wall-spread on a plank-walled building using only simple joints and lashings proved challenging. By contrast, the widespread Neolithic aisled buildings of continental Europe, such as those of the *Linearbandkeramic* (LBK) Culture, feature numerous, well-aligned internal postholes. This evidence almost certainly indicates that the problem was solved by supporting the roof with internal structural posts, an option not available to us, since they were absent from the excavated evidence at Horton.

The solution adopted was to eliminate load-bearing walls and construct an A-frame building using Scots Pine (Pinus sylvestris). Five 45° earth-fast principal rafters carry the roof load, while horizontal purlins support paired common rafters carrying longitudinal hazel battens lashed to water reed thatch. A pair of internal posts located at the mid-point of the building provide additional support for the roof. Their positions reflect those of the possible postholes identified during excavation. Additional posts support the roof at the gable ends. These are not indicated in the archaeology but were considered necessary for stability.

Interior of Horton House 2 with A-frame construction at Butser Ancient Farm. © Trevor Creighton 2019

Hafted flint axes, wooden mallets and bone awls were used to create one pair of tied rafters to confirm that the structure could be built with Neolithic tools. The remainder of the structure was created with modern tools but it was erected without mechanical aids. All joints and thatch were lashed with twine and rope, and the most heavily-loaded joints were also secured with wooden pegs.

In order to explore different types of wall construction, low, non-load-bearing walls of earth-fast horizontal planking were used on the long sides, while a non-load-bearing vertical plank wall was built at the building's eastern end, and a sill beam carrying a wattle and daub wall at the western end. Paired entrances reflect the positions and orientation of the trench discontinuities identified in the excavated archaeology. Although differing from the load-bearing wall design proposed by the excavators, the building nevertheless incorporates the characteristics of the excavated plan. However, the foundations of the Butser reconstruction are relatively shallow compared to those excavated, which also showed no specific evidence of the raking posts used for the earth-fast rafters. As with all experimental buildings,



The single phase plan of a mid-sixth century BC structure from Schwanfeld, Germany, is typical of a smaller Linearbandkeramic (LBK) building. The hatched linear features represent trenches; probably foundations for plank walls. The internal structural posts, rather than the walls, can bear most or all of the roof load. At c. 20 m long, it is only slightly larger than Horton House 2, with a similar average width. © Trevor Creighton 2019 there is considerable scope for alternative interpretations; hence Peter Reynolds advocating for the term 'constructs' in preference to 'reconstructions' in his vision for the experimental work at Buster.

It is undoubtedly possible that now-invisible engineering features in the original structure, including advanced joinery, overcame the structural issues described. Alternatively, the trenches may have carried robust palisade walls as revetments for embanked earth, which would significantly enhance structural stability and eliminate wall spread. It is worth noting that no substantive evidence of domestic use was identified during excavation, so it is possible that the building was not a dwelling. As such, it is plausible that the foundations were those of an unroofed enclosure. Two broadly contemporary earth-fast post-built structures were also excavated at Horton. The contrast between the foundations of these, more easily interpreted, structures and the idiosyncratic nature of Horton 2 may be suggestive of some, at least partial, special function of the latter.

Two other structures of near-identical plan to Horton 2 have been identified in Britain, including a second at Horton and another at Stansted, Essex, although the form is more numerous in Ireland, with examples at Mullaghbuoy, Dunsinane, Ballygally, Ballyharry, Russellstown and Kishoge, among others. They vary in size but are remarkably similar in plan, and their dates cluster on the so-called 'house horizon', between the early 39th and late 37th centuries BC, with architecture so distinctive that they must be considered as a distinct type from their post-built counterparts.

It is possible that this tradition of construction arose spontaneously, either locally or among a newly arrived group. However, their appearance is so sudden and their form so distinctive that it is perhaps more likely the tradition originated elsewhere. If so, identifying the regional origins of these structures would be of significant value to existing (e.g. palaeogenetic) studies of the origins of the British and Irish Neolithic. The archaeology shares some characteristics with excavated structures at Mairie in the French Ardennes (*c.* 4000–3600 BC), while those excavated at Flögeln and Pennigbüttel in Germany also bear comparison. While the German sites are somewhat later (*c.* 3200–3100 BC) and not identical in form, some similarities are striking and may indicate a shared lineage.

By *c.* 3600 BC, free-standing structures of the Horton type no longer appear in the archaeological record. It has been suggested, however, that, rather than disappearing, the function of large Neolithic structures changed, and the fate of an early–mid 38th century BC timber structure excavated at Cat's Brain, Vale of Pewsey (comparable in form to Horton 2), may offer insights into a more widespread practice. Having been in use for some decades, the Cat's Brain structure was covered by a chalk barrow in the first half of the 37th century BC, perhaps reflecting a point of transition from an organic 'house' to an inorganic monument. Although there was no clear indication that the Horton structure was treated in a similar way, the chronological and structural parallels surely provide a platform on which further research into this enigmatic structural type can be built.

Acknowledgments
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Project Archaeologist, Butser Ancient Farm

We welcome research proposals from institutions or individual researchers. Please feel free to contact us about any aspect of our research.

Brusselstown Ring: the largest nucleated settlement in prehistoric Ireland

Over recent decades, the idea that Irish prehistory lacked nucleated settlements – unlike parts of Britain and continental Europe – has been increasingly challenged. While the coastal site of Corrstown was an early example, most nucleated sites first identified in Ireland were unenclosed hilltop settlements in the west, such as Turlough Hill, Co. Clare, and Knocknashee and Mulnafarnagh, Co. Sligo. More recently, some Irish hillforts, including several in the Baltinglass cluster in Co. Wicklow, have produced evidence of nucleated interior occupation.

The Baltinglass hillfort cluster stands out as one of Ireland's most significant prehistoric landscapes. Often dubbed 'Ireland's Hillfort Capital' due to its density and diversity of ancient monuments, the area contains up to 13 large hilltop enclosures on five prominent hills, including at least seven major hillforts and several other enclosures. This landscape reflects a long tradition of settlement and large-scale monument construction, from the Early Neolithic to the Bronze Age.

Within the Baltinglass landscape, the enclosed sites of Hughstown, Co. Kildare, as well as Rathcoran, Knockeen, and Brusselstown Ring, all in Co. Wicklow, have yielded evidence of nucleated settlement. Rathcoran's enclosure dates to the Early Neolithic, and Knockeen's layout, centred on a large cairn, also suggests a Neolithic date. However, prior to the current project, no dating evidence existed for the roundhouse occupation at these sites. For the bivallate hillfort of Brusselstown Ring – whose footprint of 41.19 ha

View of Brusselstown Ring hillfort with location of test trenches

makes it one of the largest hillforts in Ireland – the situation is further complicated by the fact that its outer enclosure intersects with a much larger contour fort (Spinans Hill 2). At 131 ha, Spinans Hill 2 encompasses both Brusselstown Ring and Spinans Hill 1, the latter enclosure home to a number of large cairns and also dated to the Early Neolithic.

It is highly unusual for an outer enclosure like Spinans Hill 2 to stretch over more than one hilltop; this is rare in both Irish and British hillfort traditions. While multi-summit enclosures are seen in Late Iron Age *oppida* on the Continent, they are not typical of earlier hillforts. This unusual configuration underscores the importance of securing firm dating evidence for the roundhouse occupation and the enclosing elements at Brusselstown Ring, where UAV and Lidar surveys have identified more than 600 micro-topographical anomalies consistent with an interpretation of house platforms; this would make it the most extensively nucleated settlement so far in prehistoric Ireland and Britain. To address questions about the date, development and function of the site's occupation and enclosures, a programme of test excavations was initiated in the summer of 2024.

Initial excavations focused on the interior occupation, targeting some of the anomalies identified by UAV. The identified anomalies range from 3–12 m in diameter, with most measuring 5–10 m; dimensions that align well with those of prehistoric roundhouses. Given the evidence for multi-period activity in the Baltinglass area, four 1.5 x 1.5 m test trenches were opened at different anomaly locations. Originally, three trenches were planned for excavation in August 2024, but weather and terrain limited work to two. The team returned for two more weeks in April 2025 to complete the third, and add a fourth, trench. The goal was to determine if the anomalies were prehistoric structures and to recover dating material and construction details. To investigate if roundhouse size reflected function or status, anomalies of different diameters were chosen. The limited size of the trenches meant that wall construction details were not exposed, but all four anomalies showed signs of prehistoric activity. Trench 1 revealed a

Test Trench 3 with hearth feature and stake holes in north-east corner

Test Trench 4 under excavation

cobbled surface, potentially a floor, along with evidence for a significant burning episode. Trench 3 exposed part of a hearth and several stake holes, while Trenches 2 and 4 contained pit features and more possible stake holes. Finds were minimal, and limited mainly to a few stone tools and fragments of burnt clay.

Radiocarbon dating places most of the occupation in the Late Bronze Age (1210–780 cal BC), with some Early Iron Age use suggested by features in Trenches 2 and 4 (750–400 cal BC). This aligns with the available dating evidence from other Irish hillforts, which places them mainly in the Late Bronze Age, in contrast to British hillforts, which are mostly Iron Age.

Prehistoric settlement agglomerations of a similar scale exist in Britain, but none of them quite surpass Brusselstown Ring. The 18.84 ha hillfort of Eildon Hill North in the Scottish Borders encloses over 500 house platforms, with excavations by Christison (1894) and Owen (1992) yielding Late Bronze Age artefacts and radiocarbon dates indicating occupation in 1200–800 BC. Similarly, the smaller 8.41 ha hillfort of Mam Tor in Derbyshire shows multi-phase construction beginning in the Late Bronze Age and contains nearly 300 house platforms, some of which were shown through excavation to be broadly contemporary with this early phase of activity. Thus, in both its overall footprint and the number of house platforms identified, Brusselstown Ring represents potentially the largest nucleated settlement not only in prehistoric Ireland, but across the Atlantic archipelago.

Future work at Brusselstown Ring will need to focus on uncovering the structural features of both the houses and the enclosures, and on obtaining dating evidence for the latter. Establishing the relationship between the roundhouse occupation and the enclosing elements will be crucial for understanding whether the site developed as a single planned entity or through successive phases of construction and reuse. Such work has the potential not only to clarify the internal dynamics of the Baltinglass cluster but also to redefine our broader understanding of social organization and settlement nucleation in later prehistoric Ireland. In doing so, Brusselstown Ring may ultimately emerge as key to bridging the long-assumed gap between Irish and British patterns of hillfort and settlement development during the Late Bronze and Early Iron Ages.

Acknowledgements
We sincerely thank the local landowners and our dedicated volunteers, Paul and Kathleen Carberry. We also acknowledge funding from the Natural Environment Research Council (NERC) and UK Research and Innovation (UKRI) (QUADRAT DTP). The excavation of Test trench 4 was made possible by a generous grant from *The Prehistoric Society*, the project receiving the James Dyer Prize for 2025.

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PAST AND FORTHCOMING MEETINGS PROGRAMME 2026–2027

TIME/DATE	VENUE/FORMAT	DETAILS
2026		
Monday 11th May 17.00 (BST)	In person Cripps Court, Magdalene College, Cambridge	*Found architecture: places becoming monuments in northern Britain* Prof. Richard Bradley (University of Reading) *Joint lecture with Cambridge Antiquarian Society*
Saturday 6th June 12:00–19:00 (BST)	In person and online Alcuin Lecture Theatre, University of York	*What can we learn from Neanderthals?* *Annual Europa conference*
Saturday 5th September 14.00 (BST)	In person Leeds City Museum	*Life after the Ice Age: Uncovering secrets of hunter-gatherers at Star Carr and Flixton Island, in the Vale of Pickering* Dr Jess Bates (University of York) *Joint lecture with the Prehistory Research Section of the Yorkshire Archaeological and Historical Society*
Thursday 17th September (Time TBC)	In person Ken Edwards Lecture Theatre 1, University of Leicester	*Melsonby Hoard (Title TBC)* Dr Sophia Adams (British Museum) *Annual Joint Lecture with the Leicestershire Fieldworkers*
Monday 5th October 18:00 (BST)	In person, TBC	*Norfolk Hoard (with boar's head standard and carnyx)* Mark Hinman (Pre-construct Archaeology) *Joint lecture with Cambridge Antiquarian Society*

An exceptional anthropomorphic figurine from Mediterranean France

Known for one of the most significant iconographic corpora (engravings, paintings, stelae) of the European Neolithic, southern France nevertheless appears, during this period, to be notably lacking in figurines and, more generally, in portable art. Indeed, the inventory includes barely 20 items, predominantly made of terracotta and attributed to the Middle Neolithic.

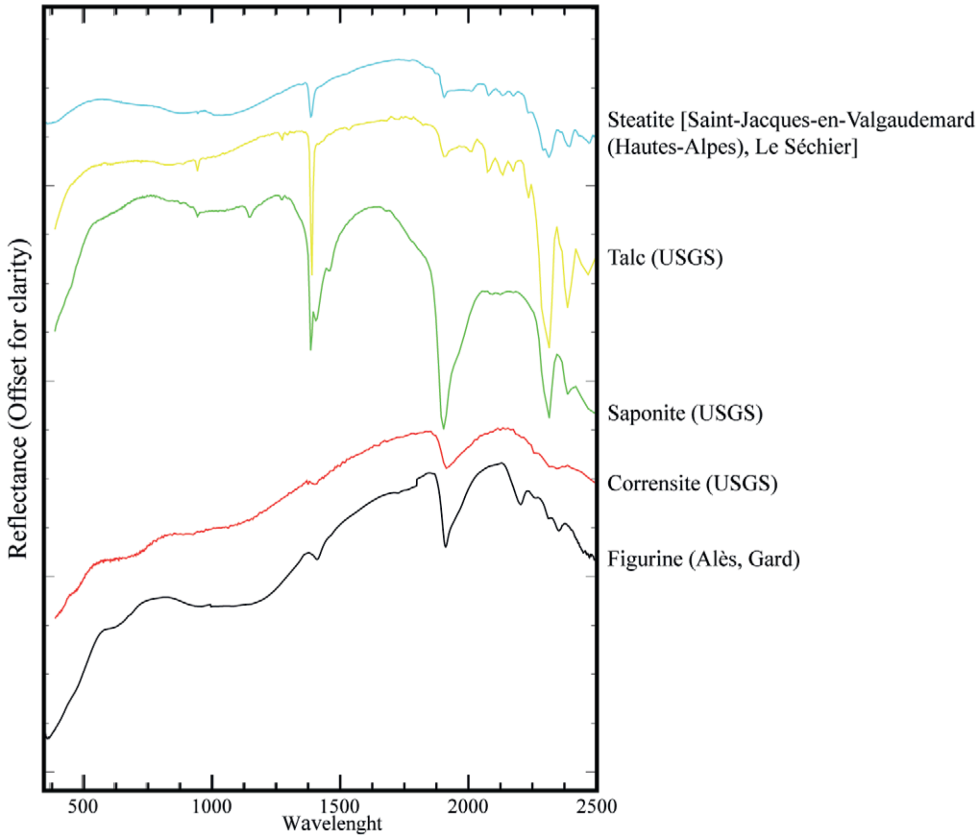
Here we introduce a new, small anthropomorphic piece, made of stone and displayed at the Colombier Museum in Alès, in the Cévennes region of Gard. This artefact had gone unnoticed until now, and stands out from the traditions usually documented in the Neolithic of southern France. Given that there is no mention of it either in the archives of P.-J. Roux (1904–1962), who supposedly discovered it in 1936, or M. Bordreuil (the museum's first curator; 1968–1999), its origin is open to doubt.

The museum presents the figurine as linked with artefacts from the Grotte de l'Olivier, located west of Alès, approximately 60 km from the Mediterranean coast, and indicates that it might have been found in the scree of mixed layers in front of the cave. Excavations conducted in the early 20th century yielded lithic material, ceramics, and human remains. Largely unpublished research by P.-J. Roux during the inter-war period, followed by the investigations of J. Salles and G. Jouanen in 1950, reportedly documented four stratigraphic layers: from the Mesolithic (*c*. 7th millennium BC) and Late Neolithic Ferrières phase (*c*. 3400–2900 BC), together with some deposits from the Early and Middle Bronze Age (*c*. 2200–1300 BC).

The figurine, which measures 55 x 30 x 13 mm, has been sculpted, then polished, and, owing to the potential plasicity of the material, perhaps even modelled. The general outline is quite naturalistic: the head is ovoid and a multitude of cuts define the anatomical details. The left eye is represented by two convex incisions but the right eye is less distinct due to damage in this area of the face. The nose is sub-rectangular but the mouth is absent. A transverse perforation through the nape of the neck suggests that it might have been worn as a pendant.

The shoulders slope downwards on either side of the thick neck and the forearms converge on the abdomen, folded upwards. The outline of the supra-clavicular fossae, arms, and hands is delineated, and along the edges, the lower boundary of the forearms is indicated by the bending of the elbows. On the back, the distinction between the torso and the right arm is clearly marked, but the boundary of the left arm is less distinct. The hands appear to be marked by two sub-vertical lines and, on the left, two sub-horizontal lines

Photographic projections of the Alès figurine (label '5' corresponds to an inventory number) © Jules Masson Mourey



Spectrum obtained by spectroradiometric analysis of the Alès figurine (black) in comparison with various other reference spectra, including that of corrensite (red). Wavelength is given in nm © Michel Errera

isolate three fingers. At the level of the hips, the figurine narrows to emphasise the lower limbs. The legs are very short and close together, separated on front and back by a continuous groove that passes through the base. Two other convex lines isolate the feet.

A spectroradiometric analysis was conducted to determine the material used, previously identified as steatite. It is, in fact, a mineral belonging to the chlorite group: corrensite. Corrensite is characterised by a waxy lustre, green colour, and has a hardness of 1–2 on the Mohs scale. Here, its specific gravity (relative density) is 2.84 ± 0.02. In France, corrensite occurs naturally in Allier (Le Mayet-de-Montagne), Creuse (Montebras) and Haute-Loire (Villeneuve-d'Allier) but, unlike steatite, it has never before been recorded in the material assemblages of the southern French Neolithic. It could, therefore, be either a Neolithic import from central France or elsewhere, an authentic object originating from a distant region and deliberately 'planted' in front of the Grotte de l'Olivier with the intention to mislead P. Roux, poorly catalogued at the museum, or a forgery.

Nevertheless, certain stylistic affinities should be highlighted. In Corsica, the figurine from Campo Fiorello, possibly from the early 5th millennium BC, shares several common features, while 'a braccia conserte' figurines from the San Ciriaco facies in Sardinia, dating to 4500–4000 BC, also show certain similarities. Meanwhile, other parallels include the Keros-Syros 'idols' from the Early Cycladic II (2800–2200 BC) of the southern Aegean, and numerous figurines from the Erimi culture (4000–2500 BC) in Cyprus, which possess similar suspension holes.

Acknowledgements
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Exploring Late Iron Age identity at Westhampnett, West Sussex

Lacking formal visible burial rites for much of the period, the dead of Iron Age Britain have often been described as 'elusive'. Despite this, the ERC-funded *COMMIOS Project (Communities and Connectivities: Iron Age Britons and their Continental Neighbours;* https://commiosarchaeology.wordpress.com/) has spent the last six years compiling disparate datasets in an interdisciplinary study which draws on osteology, biomolecular techniques (e.g. aDNA and isotope analysis) and funerary archaeology to explore the demography, mobility and diversity of funerary practice

Cremation burial at Westhampnett under excavation © Elaine Wakefield, Wessex Archaeology

across later prehistoric Britain.

One distinctive regional exception to the 'invisible' funerary rites which characterise much of Iron Age Britain is the Aylesford-Swarling tradition of south-eastern England (named after type-sites in Kent and more simply referred to as Aylesford burials). This funerary rite, once termed 'Belgic' and thought to represent immigrants from the near Continent, is characterised by the presence of (usually) small cemeteries varying in wealth, with the most lavish burials comprising chamber graves furnished with the trappings of elite lifestyles, including bronze mirrors, gaming pieces, iron firedogs, Gaulish tableware and amphorae which reflect the culinary traditions of the Roman world. The bodily treatment associated with Aylesford burials is, however, cremation, so while we can say much about the material worlds of these individuals, study of the individuals themselves has been more difficult. Cremated bone, due to its high fragmentation, limits the potential of detailed osteological analysis and, since most of the organic component is destroyed during the cremation process, the application of biomolecular techniques is also challenging. While Aylesford burials present clear cultural affinities with funerary traditions in north-east France, the Low Countries and central-western Germany, suggesting strong cross-Channel contact, the nature of that contact has remained elusive.

Ancient DNA analysis, which has been successfully applied to a great many Iron Age individuals from inhumations, pit burials and miscellaneous domestic contexts, cannot be used on cremated bone. Some aspects of mobility and migration can, however, now be approached, thanks to pioneering work applying strontium isotope analysis to cremated bone. Strontium incorporated into our bones through the food and water we ingest varies depending on geographical region. Comparison of the strontium isotope signal in individuals' bones with that of the landscape in which they are buried can therefore help elucidate whether those individuals are local to the area or travelled there during their lifetime.

'New rites, local lives: strontium isotope analysis of cremated human remains from the Late Iron Age cemetery at Westhampnett, West Sussex', published by the COMMIOS team, working with colleagues at the Vrije Universiteit Brussel in Belgium, in the *Journal of Archaeological Science*, represents the first strontium isotope analysis of Iron Age cremated remains in Britain. The paper focuses on the cemetery of Westhampnett in West Sussex, which is currently the earliest known of its kind, having been established in the second century BC. Westhampnett is also the second largest (161 graves) known cemetery of this type, at the western end of the Aylesford burial distribution. The team analysed 31 individuals from a cross-section of the graves, including three 'focal' burials, three older adults from an 'inner circle' of graves in the north of the cemetery, and a more isolated adult female buried inside a small ditched enclosure reminiscent of 4th–3rd century BC funerary monuments in northern France. Samples comprised cortical bone from long bones where possible (together with a single cranial fragment), whose strontium isotope signal represents the last few decades of an individual's life.

Westhampnett lies on the West Sussex Coastal Plain, which is bounded to the north by the chalk escarpment of the South Downs. According to the *British Geological Survey* biosphere map, the local estimated strontium ($^{87}Sr/^{86}Sr$) range for the cemetery is 0.7087–0.7097, while that of the neighbouring chalk is 0.7079–0.7087. Of the 31 individuals analysed, 25 fell within this local range, and the range of values for all analysed individuals was quite narrow (0.7090–0.7099). The slightly higher strontium values of the other six individuals can likewise be found in areas not too distant from Westhampnett, including *c.* 10 km southwards towards

Typical size of sample needed for strontium isotope analysis the coast or north into the western Weald. Although similar geology can be found in northern France – and thus possibly obscuring evidence for mobility between the two regions – the results of strontium isotope analysis of these individuals suggest a local population, despite the 'continental' burial rite and grave goods accompanying them.

In a world in which ancient DNA is reigniting old debates regarding mechanisms of change in the archaeological record, providing evidence for the kinds of large-scale migration that dominated interpretations of the earlier 20th century, the Westhampnett study stands out. Here we see what appears to be a local population with close cultural ties to the near Continent, perhaps as part of a vibrant network of trade and exchange, choosing to set themselves apart (in life and in death) through the conscious uptake of 'exotic' culinary customs, fashion accessories, and funerary practices, reminding us of the complex interplay of factors involved in the creation and maintenance of social identities.

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'A Drawing on the Deposits at Drummond's': an early prehistoric cartoon from *Punch*

An 1882 issue of the UK weekly satirical magazine, *Punch*, shows one of the first cartoons to portray prehistory. It was drawn by Harry Furniss (1854–1925), an Irish artist, who worked for *Punch* from 1880 to 1894.

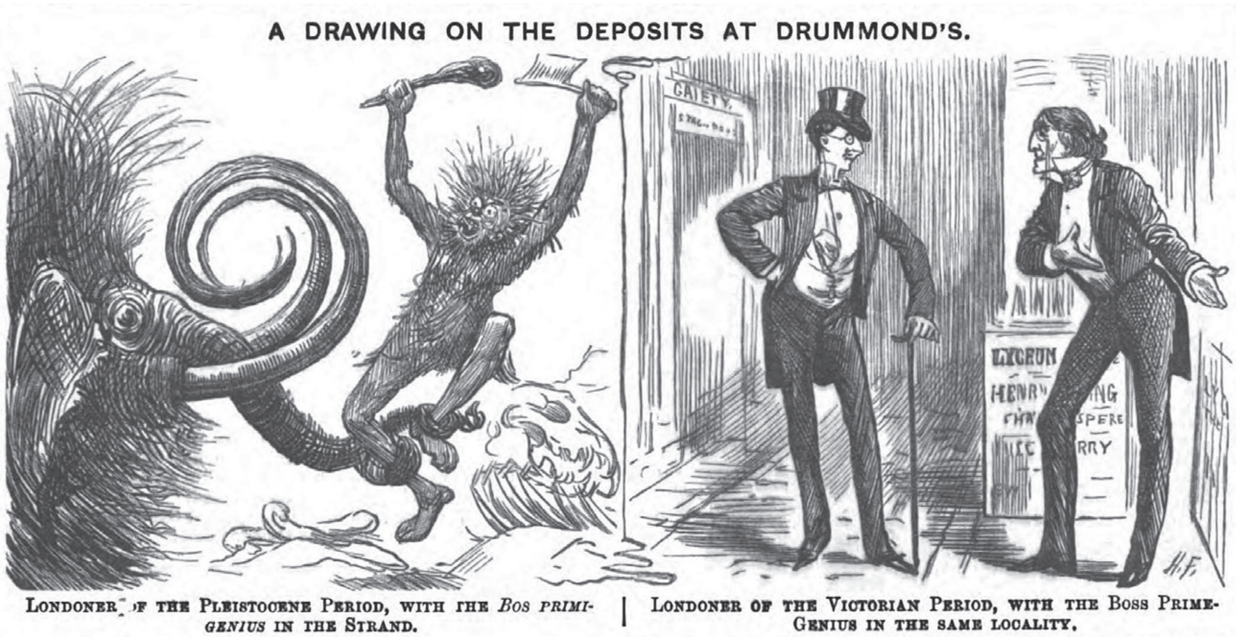
The cartoon has two contrasted segments. On the left, captioned *'Londoner of the Pleistocene Period, with the Bos Primigenius in the Strand'*, a frantic hominin, armed with a cleaver and club, has been caught by the legs by a mammoth. On the right, captioned *'Londoner of the Victorian Period, with the Boss Prime-Genius in the same locality'*, the proprietor of some theatre-land establishment invites a swell, with top hat and monocle, to grace his premises.

The inspiration for the cartoon is the 1879 construction of Drummond's Bank in central London, next to the Admiralty Arch in Charing Cross. During preparatory excavations, fossil remains were found of lion, elephant, Irish and red deer, rhinoceros, and giant ox (aurochs, or Bos primigenius). These finds were reported in local newspapers, and subsequently in *The Times*. The cartoon accompanied an anonymous poem called *The Pets of the Pleistocene*, which lists the mammals, and recounts:

> *While the Bos Primigenius would come down to the Strand,*
> *Arm-in-arm with the mammoth, to dine at "The Grand".*

The Grand Hotel was on The Strand, overlooking Trafalgar Square and a short walk from Drummond's Bank.

Furniss's cartoon is a prime example of *Punch*'s predilection for convoluted gags. On the left, he puns on 'primigenius', in the Latin names of the woolly mammoth (Mammuthus primigenius) and the aurochs (Bos primigenius), mentioned in the poem. Perhaps a mammoth was thought to have

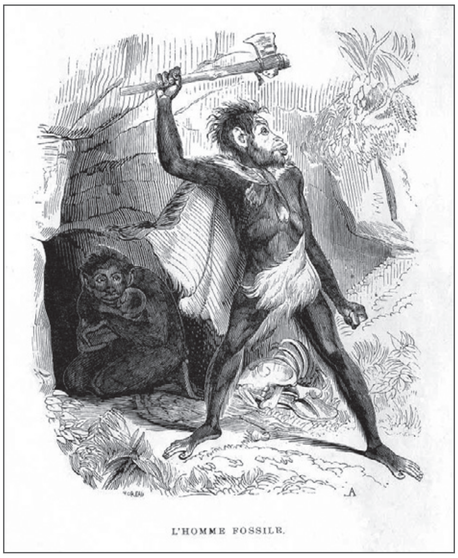


A Drawing on the Deposits at Drummond's. Left: Londoner of the Pleistocene Period, with the Bos Primigenius in the Strand. Right: Londoner of the Victorian Period, with the Boss Prime-Genius in the same locality (Furniss 1882; Punch 83, p. 181) more potential for humour than an aurochs. On the right of the cartoon, the swell may well have just been to the bank. Thus, in the cartoon's title, '*A Drawing on the Deposits at Drummond's*', Furniss puns both on artistic and financial 'drawing', and on palaeontological and financial 'deposits'. Further, the pun on 'Bos' and 'boss' across both segments associates the mammoth and the proprietor, so the swell is associated with the unfortunate hominin, and is the *real* target of the cartoon.

I think that the difference between the two segments is striking. The swell and the proprietor are very much of their time. Like most contemporary *Punch* characters, they are naturalistic, and are placed in a busy, but flat, scene. In contrast, the mammoth and the hominin feel modern. The hominin looks as if it has had an electric shock, and leaps out of the page. And the looming mammoth has a preposterously prehensile trunk and curly tusks.

The hominin is reminiscent of Pierre Boitard's *Le Homme Fossile (The Fossil Man)* from 1861. Here, in what became a widely replicated prehistoric trope, the hominin, modestly attired and wielding a hafted axe, guards a cowering female and child, amongst skeletal remains, at the mouth of cave. Boitard (1789–1859) was a French botanist and geologist, and this image is the frontispiece of his posthumous *Paris Avant Les Hommes (Paris Before Men)*; a book that has been heralded as the first prehistoric novel. Perhaps Furniss was offering what might be called *'London Before Man'* as an homage.

London based *Punch* was aimed at educated, middle-class men, and ran from 1841 to 2002. Although it had a circulation in the high tens of thousands, each issue was seen by many more people. To make any sense of this cartoon, readers must have had a working knowledge of the taxonomic names of Pleistocene fauna, and been aware that hominins and extinct mammals had coexisted. They might have gained this from the rather more serious *Illustrated London News*, which ran



L'homme Fossile (Boitard 1861; Paris Avant Les Hommes in Moser 1996, Ancestral Images, p. 135)

alongside *Punch*, from 1842 to 2003, and featured sustained coverage of palaeontology and archaeology.

The cartoon is also an indirect celebration of burgeoning British Imperialism, whose steady expansion in West and southern Africa enabled the funding of modern buildings like Drummond's Bank and The Grand. The anonymous poet was, however, not so sure as to whether the resulting pollution, traffic congestion, and lawlessness at 'home' really did represent 'progress':

> *So the Mammoth would think, and the Lion would vow,*
> *That the days when they flourished were better than now*
> *And that Man prehistoric was festive and fat,*
> *Though his shin-bones they say were uncommonly flat:*
> *Then the earth was far freer from trouble and crimes.*
> *Oh, why can't we go back to Pleistocene times?*

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Pottery from the Bronze Age tell site of Százhalombatta-Földvár, Hungary

Százhalombatta-Földvár is a Middle Bronze Age tell settlement located on the River Danube some 30 km south of Budapest, Hungary. Excavations since 2000, using systematic recording and an advanced single context approach, has now has retrieved all Middle Bronze Age levels, with the associated assemblages stored at the Matrica Museum. The site has produced a rich and complex ceramic data set, which is the focus of the current study. Although ceramic studies have been used to analyse settlements, there has been nothing on the scale of this tell excavation, in terms of the quantity of pottery and level of detail of on-site recording. As such, the current study not only characterises the ceramics in terms of fabric types, craft skills, etc, but also examines how, and in what context, the vessels were used, through analysis of wear patterns, spatial distribution and the morphologies of different assemblages.

The complex ceramic data set allows us to interrogate tradition and behaviour on a microscale, not just in relation to individual households but also across time. The houses at the site comprise both floor and debris layers resulting from collapsed walls and roofs, allowing for analysis of the ceramics in relation to both the house when it was in use and after it had been abandoned. This provides a unique opportunity to characterise 'household' assemblages in terms of craft production. Starting from the procurement of the raw material to final discard, variables such as vessel type, range, and volume, as well as technological features, like

A Middle Bronze Age Vatya cup

surface treatments, decoration, and overall execution, enable a comprehensive analysis of the vessels as material objects resulting from a complex manufacture process. The pottery also provides central insights into the socio-economic characteristics of the household, as well as daily life. This is brought out by variables such as the estimated minimum number of vessels per assemblage, and by characterisation of the use of the ceramics within the household. The latter is examined through use-wear analysis, sooting patterns and carbonised residues, post-depositional characteristics, and spatial distribution. These are all factors that help us to evaluate the role of ceramics during the life-span of the house, as well as during its destruction, abandonment and resurrection.

Preliminary results are very promising in that the 'central' houses, which overlay one another and therefore provide a record of the ceramic assemblages through time, showed distinct differences in terms of both the range of vessels and the presence/absence of specific vessel types. Such differences between houses do not appear to correlate with crafting ability, although this is a theme that will be pursued in further studies. However, simply in terms of volume, there is a visible difference between the houses over time, with one structure yielding almost twice as much pottery as the one below it. This is not a reflection of house size, but may relate to longevity, use or abandonment practices. These findings highlight interesting patterns in the relationship between ceramics and households, which need to be explored further.

I was able to characterise what I have called a 'repertoire of household pottery', which showed a recurring pattern between individual households as well as through time. The repertoire consists of: cups, varying sizes of bowls (small, medium and large, deep bowls), cooking pots, domestic bowls, storage vessels, and sometimes sieve fragments. This repertoire forms a baseline for household biographies, in which we can distinguish what is shared between households and what represents individual choices and practices.

This work enables us to look not only at the pottery as a singularity but as part of a household, a collection of households, as part of a living space, and as part of a space that changed and adapted through time. Further work will be conducted to enhance our understanding of changes through time but also differences between neighbouring households at this rich and long-lived site.

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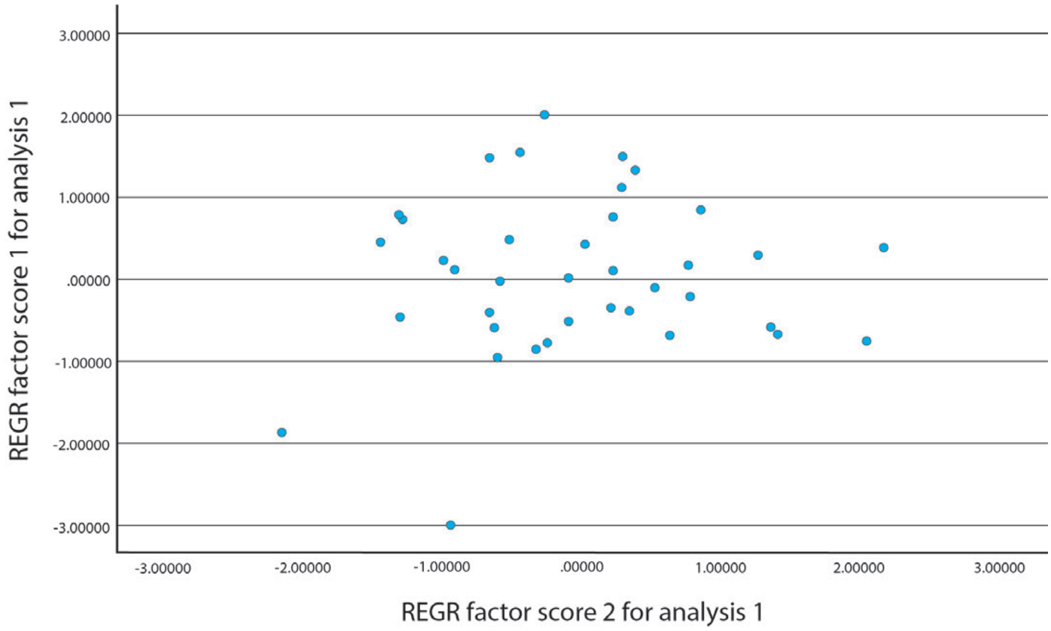
The archaeology of Knossian Linear B tablets

Linear B tablets are iconic objects. These clay tablets were found in the Mycenaean palaces of Greece, where they recorded the import and export of raw materials and manufactured items. The assumption is that they form just one part of a large array of accounting documents that provide information about the kinds of objects that the palaces desired, and many studies have been undertaken on the Linear B script (the earliest known Greek writing) incised into them. The focus of these investigations has almost exclusively been on the texts inscribed and the seal imagery impressed into these objects, with only limited work on shaping techniques, scribal hands and archival storage arrangements (predominantly on the Linear B tablets from Pylos). Somewhat surprisingly, no project has yet investigated these artefacts as archaeological objects in their own right; that is, considering the entire manufacturing sequence from the collection of raw materials, processing of the clay, and shaping techniques, to use and deposition. This 'proof of concept' research enables an intimate study of this category of objects for the first time.

Thirty-nine Linear B tablets (35 from the Ashmolean Museum, Oxford and 4 from the British Museum, London) were studied macroscopically and their geochemistry analysed using portable X-ray Fluorescence (pXRF). The geochemical data have been analysed by principal components analysis (PCA) and indicate that all Linear B tablets from both museums come from a single source; based on the data available: Knossos. Meanwhile, X-radiography of the Ashmolean Museum tablets revealed the existence of cords that had been inserted lengthwise into several Linear B tablets. While such cords were known, the high frequency of their incorporation was a new finding.

The first results of the research were presented at the UISPP Archaeometry Conference in Chania, Crete (6–8th November



Principal components analysis scatterplot

Tablet 14 experiment: record shot before text was obliterated with liquid clay and then X-rayed to reveal hidden inscription

2025). Initial conversations with Dr Eleni Papadopoulou (Director of the Archaeological Museum at Chania) and Dr Georgia Flouda (Curator at the Herakleion Museum) about expanding the approach to material in Crete were well-received.

X-radiography of the Linear B tablets (and CT-scanning of one tablet) from the British Museum has been requested and is tentatively timetabled for spring/summer 2026. Also still to take place is the pXRF and X-radiography analysis of sealings, roundels and other clay administrative objects, as well a wide range of Knossian pottery fragments from the Ashmolean Museum. This will allow for a better understanding of to what extent (if any) these objects utilised similar clay sources and clay preparation techniques as the tablets.

Further experiments will also be undertaken to test different hypotheses about the purpose of the internal string arrangement found in several of the tablets under study. The original experimental and X-radiography work of Minoan Pylian tablet replicas has been published in the journal *EXARC* (Berg 2025). However, a new sequence of experiments is required, since the manufacturing technique of the Knossian tablets has been found to be entirely different from Pylian tablets (which formed the basis of the original experiments), creating a more solid, thicker and more compact object. Experimental work has also shown the potential of detecting inscribed, but later deleted, text, and work is currently underway to scrutinise the X-rays from the Ashmolean Museum for hidden remnants of ancient text.

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