

No. 103 Spring 2023

# PAST

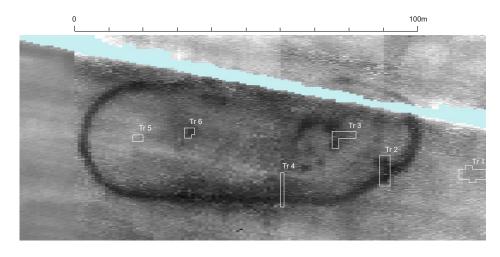
THE NEWSLETTER OF THE PREHISTORIC SOCIETY

#### A multi-barrow enclosure at Forty Acre Lane, Harting, West Sussex

Early in 2021 metal-detectorist Mark Spinney found a bronze dagger of Camerton-Snowshill type on the Chalk crest above the Rother Valley. The great majority of such daggers have come from burials so its discovery close to a known cropmark site begged the question, could a context be established? Geophysical prospection led by one of the authors (DE), using magnetometry and earth resistance, encompassed both the findspot and the cropmark, and it quickly became apparent that an intriguing site was present. The landowners willingly consented to follow-up excavations during September and October 2021 which were conducted by a volunteer team drawn from the *People of the Heath* project and other local groups, supported by Petersfield Museum.

The cropmark was initially thought to represent half of a circular ring-ditch, but re-investigation by the National Mapping Programme covering the *Secrets of the High Woods* project area found aerial photographic evidence that it was instead an oval enclosure aligned east-west. The project had interpreted the site in their unpublished database as a possible plough-levelled Neolithic long barrow (Monarch site 200821) but the plan of the ditch that emerged from our geophysical surveys suggested it was instead a Neolithic *long enclosure*, a monument type within the cursus spectrum. Even so, two slight rises, one inside and one to the west of the enclosure, looked like possible remnants of round barrows and a third possible phase was suggested by a pit-circle, or more strictly a pit-horseshoe, revealed by the geophysics.

Six trenches were opened. In Trench 1, placed around the findspot of the dagger to the east of the enclosure, the only features were recent metal-detector holes. Two trenches (2 and 4) were placed across the ditch at different points because of a hint that the enclosure might have been two-phase. These cuttings showed the ditch to be flat-bottomed, up to 1.7 m deep and 2.8 m across the weathering cone at



Earth resistance plot of the oval enclosure, 99 x 37 m externally; note the 'pit-circle' inside the eastern half. The dagger was found about 20 m east of the east end



Camerton-Snowshill type dagger found early in 2021

the top of the bedrock. As is to be expected, the lowest fills were rich in chalk rubble, but above was a sequence of layers of changing character including stable soil horizons and early ploughsoils.

Trench 3 was laid out on the axial line of the enclosure close to the middle of the internal rise. Here there proved to be a slightly deeper soil profile including some that had escaped plough disturbance and containing a horizon of artefacts, bone fragments, burnt flint and small charcoal pieces. Diagnostic pottery all appears to be from Early Bronze Age urns, most of them decorated. This horizon continued uninterrupted across the excavated parts of two pits belonging to the pit-horseshoe. The pit fills were sparse in finds, both in an upper wodge of pure orange-brown clay and in a lower more varied fill of chalk lumps and soil. The stratigraphic evidence thus supports the provisional view that this pit-horseshoe is later Neolithic. On an aerial photograph of 1976 a clear circular soil mark about 15 m in diameter can be seen in exactly this part of the enclosure. It comprises a patch of more chalk-free soil than is typical

in this ridge-top setting and can be interpreted as the basal part of a turf mound in the course of being levelled.

Trench 6 investigated a feature showing on the axial line a little further west. It yielded a good assemblage of potsherds and flintwork all of earlier Neolithic date and an associated burnt animal bone fragment has been radiocarbon dated to 3370–3100 cal BC (95% probability, SUERC-105468, 4544±24 BP). The feature itself is curious; it clearly has an element of disturbance from a root system, but it is not the familiar crescentic-shaped tree-throw hole.

At the close of the excavation, we were still working under the assumption that the site was a Neolithic long enclosure, albeit with a rather unusual east terminal, perhaps a secondary addition. As finds from the ditch fill were examined, however, it rapidly became clear that neither pottery nor flintwork from low in the fill could be dated before the Bronze Age. Confirmation now comes from radiocarbon dates on four bone samples lying within or immediately above the primary chalk rubble, two each from Trenches 2 and 4. In both trenches one date falls within the range 1620–1500 cal BC (95% probability: SUERC-105465, 3293±24; SUERC-107536, 3303±24) and the other, 1410–1225 cal BC (95% probability: SUERC-107535, 3048±24; SUERC-105467, 3058±21). The later dates indicate that this oval enclosure cannot have been created before the middle of the Middle Bronze Age. So, what is it?

A known but little-discussed occurrence amongst the plethora of Early Bronze Age round barrows is the enclosing of two or more contiguous mounds within a single ditch. Leslie Grinsell tended to call them 'twin', 'triple' or 'quadruple' barrows, but that term could equally apply to contiguous mounds lacking a single enclosing ditch, so we propose the term *multi-barrow enclosures*. Very few appear to be recorded and only one or two have been excavated in modern times, that uniting Barrows 4 and 4A at Radley Barrow Hills, Oxfordshire, and another possible site at King's Newnham, Warwickshire. Such multi-barrow enclosures usually unite between two and four mounds, but there may have been five at one site. An area of elevated bedrock evident at Forty Acre Lane coincides closely with the enclosure, and further support for a row of round mounds comes from the cusping line of a Romano-British



Left: West section through the enclosure ditch in Trench 2. This is one of the sections used for a mollusc column. Right: The site revealed in ploughsoil in an aerial photograph taken on 9 March 1976 (Historic England NMR oblique 909/400; top is north-west)

plough headland cutting into the bedrock and the evidence from early aerial photographs. Meanwhile, the rise outside to the west appears to be a natural eminence, part of which had been quarried away at some point in the past.

The 'logic' of multi-barrow enclosures is that they were dug only when the last of the given set of contiguous mounds was constructed; this would tend to make them later rather than earlier in the Early Bronze Age round barrow phenomenon. In the case of the Forty Acre Lane enclosure, however, the enclosure appears not to have been dug until well after the close of the Early Bronze Age. In the new age of field systems considerable effort was put into augmenting this set of barrows, the chalk from the ditch probably having been heaped onto the pre-existing mounds.

The site promises to give fresh detail on the evolution of vegetation cover and land use on the high Chalk of the South Downs, mollusc samples having been taken from four profiles. Preliminary assessment suggests that Neolithic contexts, including the basal chalky sediments in one of the pits of the pit-horseshoe, have assemblages of shade-loving species indicating woodland. The substantial ditch of the large oval enclosure was sampled in Trench 2; in the lower fills an abundant assemblage is also largely of shade-loving species although some open-country taxa increase in higher fills. There followed a tertiary colluvial fill probably related to cultivation and containing species of open conditions. In an adjacent pit, which may be later, species of open grassland conditions predominate throughout. Whilst caution is appropriate in interpreting mollusc assemblages from feature fills - due to the inclusion of material eroded from earlier contexts and the possibility that the features themselves were more shaded and vegetated than the wider landscape the preliminary analysis points to the existence of woodland on the site during the Neolithic and through to the Middle Bronze Age. This is significant in the context of ongoing debates about the extent to which the Sussex Chalk was wooded during the Holocene climax. Moreover, it contrasts with the general perception of barrows being built in open grasslands, sometimes argued to be ancestral grazing lands. The expansion of the extensive field systems on the South Downs, superbly revealed in this block by the Secrets of the



Conical shale pendant after conservation (Claire Woodhead, Hampshire Cultural Trust)

*High Woods* Lidar project, may well have gone hand in hand, here at least, with primary woodland clearance.

While the excavations did not find a specific context for the dagger, they did establish that round barrows and presumably also Early Bronze Age burials were present on the site. A further indication of former burials came from the find of a small conical shale pendant, a variant of the familiar V-bored buttons, in Trench 6's ploughsoil. That this fragile object survived in one piece could suggest it had not been out of a protected environment for long. The Forty Acre Lane site should provide a valuable regional sequence of environmental and cultural data spanning the Middle Neolithic to the Romano-British period.

#### Acknowledgements

Many thanks go to landowners John and Doreen Wolfe and family. We are also grateful to Roy Loveday and David Field for discussions during the fieldwork and after, George Anelay for the loan of equipment and time, and Sheridan Bowman for research assistance. Especial thanks go to the team of volunteer diggers who responded at very short notice.

> Stuart Needham (stuart\_needham@outlook.com), Dom Escott (dom@barrowscapes.uk) and Martin Bell, University of Reading

#### The Hallstatt Collection at the Ashmolean Museum

In the salt-rich region (*Salzkammergut*) south of Salzburg in Austria lies one of the most iconic archaeological sites in Europe: the Late Bronze Age and Early Iron Age site at Hallstatt. The extensive cemetery of cremations and inhumations, and the related salt mines there, were regarded as being so important that an entire period of later prehistory was named after the site (the 'Hallstatt period', 800–400 BCE).

The town of Hallstatt has long been known as a salt mining centre, with the extensive salt deposits exploited since the

Neolithic period and salt mines being fully developed by the Middle Bronze Age, around 1500 BCE. During the Late Bronze Age and Iron Age the prosperity of the community at Hallstatt seems likely to relate to trade in this important commodity. It is now believed that the Late Bronze Age/Iron Age cemetery there contained around 5–6000 people; the objects found in these burials were diverse and contained both locally made and imported items.

The Hallstatt cemetery was first excavated between 1846 and 1863 by the *Bergmeister* (director of the salt mines),

Johann Georg Ramsauer (1795–1874). Several other phases of excavation followed, and work continues in the area today conducted by the Department of Prehistory at the Natural History Museum in Vienna. Collections in the Ashmolean Museum in Oxford primarily relate to a little-known phase of work from 1866–69 by Ramsauer's successor as *Bergmeister*, Joseph Stapf (1819–86), for the English antiquaries John Evans (1823–1908) and Sir John Lubbock (1834–1913).

Knowing the reputation of the site from Ramsauer's work, Evans and Lubbock, along with Lady Lubbock, visited Hallstatt in 1866. Evans described the trip to his wife, Francis (Fanny), in a letter dated 19 April 1866, 'We found the diggings too pleasant for us to be able to tear ourselves away from them'. During this visit, Evans and Lubbock acquired objects for their collection from Stapf. They also arranged to provide funding for his future work on the cemetery in return for further artefacts. Letters between Evans and Stapf document the delivery of material from the site to the two antiquaries until 1869.

Stapf's excavations were the source of most of the objects from Hallstatt that are part of the Sir John Evans collection at the Ashmolean Museum (donated to the museum by his eldest son, Sir Arthur Evans, a former Keeper of the Ashmolean Museum). They were also the major source of Sir John Lubbock's collection from the site (now in the British Museum).

#### The Ashmolean Hallstatt project (2020–23)

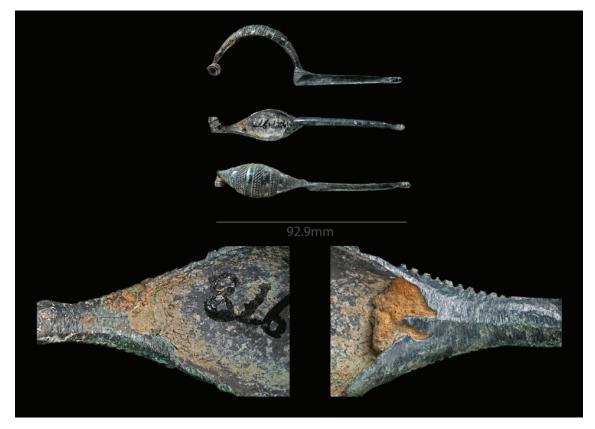
Evans's Hallstatt collection at the Ashmolean was not well known or documented until the authors were granted a Prehistoric Society's Collections Study Award in 2020. This funding enabled them to create a detailed catalogue and conduct research on the material from this collection, drawing on object-based, scientific, and archival research. As the project progressed, it generated considerable interest from other researchers and facilitated additional analytical work not planned in the original project.

The original project had two key research aims. The first was to create a detailed catalogue of the entire collection (188 objects), with each entry accompanied by professional photographs by Ian Cartwright and line drawings by Nick Griffith. These objects are made of a variety of materials (copper alloy, iron, gold, clay, glass, amber, stone, bone, and wood). Object types range from containers to weapons, with personal ornaments making the largest group, especially copper alloy brooches, arm ornaments, and amber bead necklaces. The second aim was to conduct research into the history of the collection through the Sir John Evans archive and other records held by the museum.

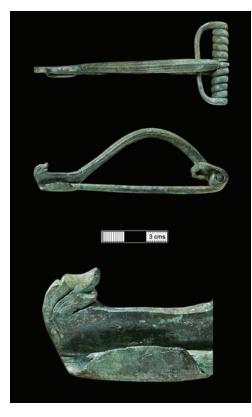
In this short report, we give a first glimpse at some of the highlights of the project, which will be published as part of the School of Archaeology at Oxford's monograph series (Archaeopress).

#### Highlight 1: Two brooches

Of the 16 brooches documented in the catalogue, two stand out as being of special interest. The first is a cast 'open leech fibula' made of copper alloy (AN1927.978). It is intricately ornamented with incised lines arranged in bands across the bow. What makes this brooch particularly interesting,



Brooch with detail of clay mould © Ian R. Cartwright, School of Archaeology, University of Oxford

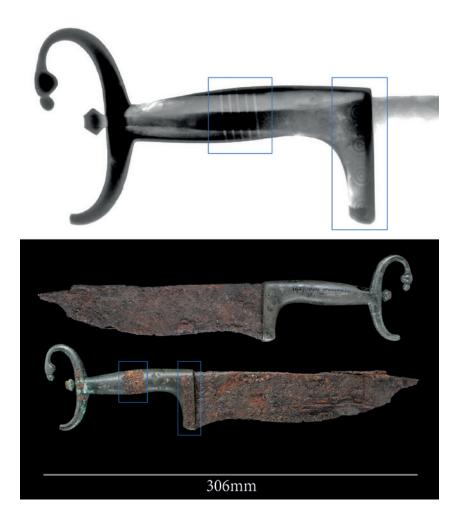


X-ray of antennae-hilted knife showing previously unknown ornamentation © Ashmolean Museum of Art and Archaeology, University of Oxford

however, is not what is on the outside, but rather what survives on the inside – the remains of the clay mould. The second brooch is an unassuming, three-piece brooch also made of copper alloy (AN1927.981). At first glance, it appears to be minimally ornamented with incised lines and a leaf-like moulding at the end of the catch-plate. However, during the process of ultra-high-resolution photography, lan Cartwright noticed that this was not a leaf, but rather an animal head (possibly a boar?) which is denoted by the incision of two small holes marking the nose. Many of these kinds of observations were made during the collaborative process of photographing, drawing, and cataloguing this collection.

#### Highlight 2: New analyses

Such was the level of interest generated by the Hallstatt project that it proved possible to enable two Masters projects undertaken by students at the School of Archaeology from 2021–22. The first student, Timo Geitlinger, conducted a cluster and seriation analysis of the brooches, which allowed these objects to be connected to chronologies of the western Hallstatt zone, northern Italy, and to published absolute dates. The second student, Zexuan Chen (with supervisor Victoria Sainsbury), conducted x-ray fluorescence (XRF) analyses on the same set of brooches, with a view to understanding their metal composition. However, due to the high level of surface corrosion, this project ended up analysing corrosion products. This resulted in an important identification of two composition



Brooch with detail of the animal head © lan R. Cartwright, School of Archaeology, University of Oxford groups that correlate to different time periods. Alongside this work, x-rays of all iron objects from the Hallstatt collection were taken by Kelly Domoney, the Ashmolean's Conservation Manager. The x-rays reveal new details, such as two concentric rings that are covered by iron corrosion on the handle of an antennae-hilted knife (AN1927.1029).

### Highlight 3: The Sir John Evans archive (https://archiveshub.jisc.ac.uk/data/gb1648-je)

The Sir John Evans archive contains previously unpublished letters and notes from Evans and his colleagues about the work at Hallstatt. These include correspondence between Evans and Joseph Stapf, which reveal details of how Evans negotiated the purchase of the artefacts that eventually made their way to the Ashmolean. They also include letters he wrote to his wife, describing his time excavating at the site. In a letter to her on 19 April 1866, he writes: 'I never in my life saw such a lovely place as this. There is something quite wonderful about it ... we saw the Berg-meister who had a very nice small collection of antiquities which curiously enough we brought away with us and have divided between us together with some more things I found in a cottage down here so that we each have a rather characteristic collection...'. The entire suite of illuminating letters and their transcriptions will be published in the monograph.

Courtney Nimura (courtney.nimura@ashmus.ox.ac.uk), Ashmolean Museum of Art and Archaeology, Jennifer Foster (jennifer.foster@conted.ox.ac.uk), Department of Continuing Education, University of Oxford, and Alison Roberts (alison.roberts@ashmus.ox.ac.uk), Ashmolean Museum of Art and Archaeology

#### Wrapped bones in a Bronze Age cist – a cautionary tale

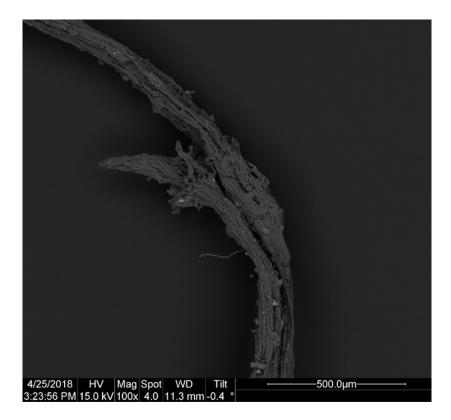
In 2017, an Early Bronze Age short cist burial was discovered by a farmer ploughing a field at Oakslaw near Rock, Northumberland. The voided cist contained a crouched inhumation with a Beaker ceramic vessel. Several of the human bones were covered with reddish, matted fibrous strands. The fibrous material was initially described in news reports as a 'remarkable fungal growth' and 'some form of blanket [...] possibly horse hair'.

Given the rarity of preserved organic fabrics of this period, this unusual material and its position wrapping and covering the bones was potentially an exciting find. The preservation of organic material in short cist inhumations across north England and Scotland show that fabrics, including twined plant materials and hides, wrapped or covered bodies in burials that otherwise have few or no surviving grave goods. To determine if the Rock material was a blanket, in 2018, specialist in archaeological textiles and leather, Susanna Harris, analysed the fibrous material visually and with a portable digital microscope. Short, curly, strands of material wrapped and covered the left femur, right tibia, cranium and left side of the mandible. The strands were coated with a reddish and white substance. The analysis showed there was no evidence the strands were twisted into yarn or interwoven into fabric, such as a textile or basketry. A small sample taken during this visit was analysed with Scanning Electron Microscopy (SEM) at the University of Glasgow and revealed the material was, or at least, contained roots.

A second laboratory visit funded by The Prehistoric Society, took place in 2021. The aim was to take samples to identify the fibrous material and examine the colour coating to



Bones of the left lower limb and leg including femur shaft wrapped in fibrous material with red and white coating (S. Harris)



Scanning electron micrograph of fibrous strand from right tibia, showing epidermis and root tip (S. Harris)

understand if this was evidence of a deliberate bone wrapping or if it was intrusive material, such as crop debris from the field or root growth.

In the laboratory, archaeometrist Richard Jones analysed the fibrous coverings with portable x-ray florescence (pXRF). The results showed the colours were natural. Before sending the samples for destructive analysis, they were inspected by a palaeentomologist, Nicki Whitehouse, who confirmed there were no insect remains, apart from one item that could represent a modern contaminant. Archaeobotanical analysis by Alan Clapham and aDNA analysis using a new polymerase chain reaction (PRC) system by Robin Allaby's team at the University of Warwick identified the strands as desiccated gorse roots (Ulex sp.). A radiocarbon date of a sample of the gorse roots was submitted to the Scottish Universities Environmental Research Centre (SUERC). The material returned a determination of 1660-1878 cal AD (177±24, SUERC-102264, 75.8% probability) or 1915-1950 (19.7% probability). This indicates this material is a modern contaminant or very recent material, most likely gorse roots that had grown into the cist and wrapped themselves in situ around the bones in recent times.

While those working on the analysis were initially disappointed the fibrous material was recent, we agreed the results showed archaeological science working at its best. It is important to know that plant matter wrapping and covering the bones of Rock cist is not of Bronze Age date and it should not be included in future interpretation.

Ideally all organic material in voided cists should be radiocarbon dated, however, the cost may be prohibitive. As a priority:

- Organic fibrous plant or animal material in voided cist burials need to be analysed by a textile specialist, leather specialist or archaebotanist for evidence of human working, such as twisting into yarn, alignment of elements, interlacing into a woven structure or as fur attached to hide.
- Those fibrous materials in voided cists without evidence for human manipulation, such as unaligned or untwisted plant matter and tufts of fur not attached to hide, need to be radiocarbon dated separately, preferably alongside the human remains, to establish their age.
- If a date contemporary with the human remains is established, the material can then go for analysis by other specialists, for example, an archaeobotanist or fibre analyst.

This should prevent intrusive organic material such as plant roots, stems, leaves, and fur from burrowing or grazing animals becoming unwittingly included in archaeological grave inventories.

#### Acknowledgements

Thanks to those who enabled the research through funding, expertise and access to finds and laboratories: The Prehistoric Society, Peter Chung, Chris Fowler, Meriel McClatchie, Stuart Needham, Sanita Nezirovic, Charlotte O'Brien, Ruth Pelling, Ben Roberts, Jessica Turner and Neil Wilkin.

Susanna Harris (susanna.harris@glasgow.ac.uk), Richard Jones, Nicki Whitehouse, all University of Glasgow; Robin Allaby, Alan Clapham, Annabelle De Vries, Teri Hansford, Shuya Zhang, all University of Warwick; and Richard Carlton, Newcastle University This report covers the period of January to December 2022. This was a year where things felt more normal, the Europa returned as a face-to-face meeting and council and executive met in person for the first time since the pandemic. On the other hand, we applied the lessons we learned from the pandemic, particularly surrounding online access facilitating far wider engagement with the Society. This year also saw the departure of Prof Clive Gamble as President of the Society and the arrival of his successor Prof Linda Hurcombe to take over the helm. We also thanked Clare Randall for years of exceptional service as our treasurer.

#### Lectures, meetings and study tours

The Society continues to fulfil its commitment to reach a wide range of regional audiences and to promote its aims and objectives through varied lectures, conferences, and tours. In March 2022, our annual day school celebrated the legacy of John Coles. It was a fabulous event celebrating John's many and varied interests and hosting it online led to a large and diverse audience. Our next day school on 4 March 2023 will be both in person and online and will explore the history of prehistory. We were also thrilled to be able to offer a special behind the scenes tour of the British Museum World of Stonehenge exhibition with curator Dr Neil Wilkin.

The number of collaborative events organised with other archaeological bodies and societies continues to astound, with events being delivered both online and in person. Particular highlights include Prof Annelou van Gijn's lecture on tools and materials at the Society of Antiquaries of Scotland, and Dr Rebecca Wraggs Sykes' lecture to the Leicestershire Fieldworkers on her hit book *Kindred*. In addition, we sponsored part of a rock art conference in Colombia and a prize for the best poster at the Bronze Age Forum. Dr Chris Evans delivered the annual Pitt Rivers lecture and the Sara Champion lecture was delivered by Dr Sophia Adams. A growing number of our lectures are available to view on YouTube.

Our Global Pasts lecture series is completely free and open to everyone. Hosted on Zoom through the winter it is allowing

both members and the public more broadly a glimpse into the archaeology of every continent. This year we have learned about indigenous pasts in the Americas, and prehistoric silk routes in China.

#### Europa Prize

The return of our Europa lecture in 2022 was a real highlight as we gathered in Bournemouth to celebrate the achievements of Prof Eszter Bánffy of the German Archaeological Institute. It was wonderful to host our first in person conference since 2020 and to have the chance to meet old friends once again.

#### **Research Grants**

In February 2022 £6732 of research grants were awarded to: Richard Bradley for his work exploring King Arthur's Round Table henge in Cumbria; Francesca Cortese for her work on agricultural practices in Early and Middle Bronze Age, Italy; and Alison Sheridan for her work on the lithic material form Slewcairn. The Leslie Grinsell prize was awarded to Hamza Benattia Melgarejo for excavations at Bronze Age site of Kach Kouch in north-west Africa. The James Dyer prize went to Kate Waddington for post-excavation analysis of materials from the double ringwork of Meillionydd, Llyn Peninsula and the Bob Smith prize was awarded to Petros Chatzimpaloglou for a study of Neolithic material use in the Morava Valley, Serbia.

The Collections Study Award was given to Gail Boyle and Peter Bray for their work on copper alloy objects from Bristol Museum. The conference fund was awarded to Jessica Bates to attend Association of Archaeology Wear and Residue Analysts, and to Magda Basyiashvilli to attend the European Association of Archaeologists conference in Budapest. The Coles award was given to Rose Moir Freston to allow her to travel to gain experience in the analysis of Neolithic pottery. A SUERC Award was given to Cristian Rodriguez to date chullpas (tower shaped monuments) in the Altiplano Carangas, Bolivia.

#### Notice of AGM and Europe Conference 2023

We will be holding our 2023 AGM at 4pm on Saturday 3rd June, as part of our Europa conference at University of Cambridge. An agenda and papers will be available from the website in advance.

The Europa conference, Peopling the Past: Reflecting on Prehistoric Europe, 2–4th June 2023, celebrates the achievements of Professor Marie Louise Stig Sørensen in the field of European prehistory. The full programme and booking details can be found inserted within this edition of PAST.

Along with two full days of lectures, the conference will also include a half-day field trip to the Museum of Archaeology and Anthropology and Wandlebury hill fort on Sunday 4th June. In addition, the conference will feature exhibitors and a poster display. If you would like to display a poster about your research, please send a 150 word abstract to Jess Bates (jessica.bates@ york.ac.uk) by Sunday 30th April 2023.

We hope to see many of you there!

#### The Annual General Meeting for 2022

The AGM was held as part of the Europa conference in Bournemouth.

The President reported on another successful year, providing details of the Society's core activities, publications, lectures, and conferences. Our continued thanks were extended to Tessa Machling for her exceptional social media work that continues to entertain and inform members and non-members alike.

The President thanked all Council and members who have assisted with events during the year. Warm thanks were offered to retiring officers and Council members: President Prof Clive Gamble, Vice President Prof Jo Brück, Treasurer Dr Clare Randall, Meetings Secretary Dr Matt Knight, and council members Dr Anne Teather, Dr Annabell Zander and Dr Richard Brunning. We were saddened by the passing of Dr Peter Clark who had been serving with passion on our council until his death.

The following officers and members of Council were elected and re-elected:

President	Prof Linda Hurcombe
Vice-Presidents	Dr Rachel Pope, Dr Eileen Wilkes, Dr Jacqui Mulville, Dr Rupert Housley
Treasurer	Dr Lisa-Elen Meyering
Secretary	Dr Rachel Crellin
Managing Editor/Editor of PPS	Dr Julie Gardiner
Editor PAST	Dr Susan Greaney
Editor, Prehistoric Society Research Papers Series	Dr Mike Allen
Book Reviews Editor	Dr Helen Chittock
Meetings Secretary	Dr Felicity MacDowall
Conservation Co-Ordinator	Dr Jane Sidell
Council	Dr Helen Chittock, Dr James Cole, Dr Catherine Frieman,

#### Awards

Two sets of brand-new awards were given in 2022. Prof Shanti Pappu and Dr Rebecca Wragg Sykes were the inaugural winners of the President's Award in recognition of their work engaging new audiences with the deep past. The Peter Clark Award, named in honour of council member Dr Peter Clark, recognises the vital but often overlooked contribution of fieldworkers to prehistory. It was



Dr Susan reaney, Dr Susanna

Roberts, and Dr Rob Wiseman.

Harris, Mr Rob Hedge, Dr Meredith Laing, Dr Ben

Keith Parfitt from Canterbury Archaeological Trust is presented with the inaugural Peter Clark Award by President Prof Linda Hurcombe.



The 2022 winner Katherine Hearne and five recipients of runners-up awards from this year and and previous years are presented with their certificates at the Sara Champion lecture in Octobee

awarded to Keith Parfitt from Canterbury Archaeological Trust.

The Baguley Award (for best paper in *Proceedings of the Prehistoric Society* 86) was awarded to Mark Haughton and colleagues for their paper 'Bronze Age woollen textile production in England: a consideration of evidence and potentials'. Katherine Hearne from UCL was awarded the 2022 undergraduate prize for her dissertation 'A Neolithic epidemic? The first farmers of Europe and disease'.

#### Publications

During 2022, the Society published Volume 88 of the *Proceedings of the Prehistoric Society*, which contained 12 refereed papers covering topics such Beaker burials, Iron Age fingerprints and sarsen stones. As usual, three editions of *PAST*, the Society's newsletter, were published under the editorship of Dr Susan Greaney.

#### Advocacy

The Society continued its active role in advocacy led by Dr Jane Sidell. We have continued to offer support to Kilmartin Museum, Old Oswestry Hillfort, and the Alexander Keiller Museum. We have written in support of Stoke Museum Services and Swindon Museum and Art Gallery and the archaeology departments at Sheffield, Chester and Worcester all of whom were faced with cuts. We continue to foster links with the European Association of Archaeologists in the wake of Brexit.

#### Membership and administration

Membership is healthy and the Society's online and social media presence continues to grow steadily.

As ever, the Society would not be able to function without a large number of individuals giving freely of their time and knowledge to organise events and to deliver the results of their fieldwork and research. The Society offers sincere thanks to all those who have helped throughout the year, and especially to its administrator, Tessa Machling. We are pleased to announce the publication of two new volumes in the Prehistoric Society Research Papers series this spring, both still at £35, the price when we launched the series in 2009.

The Drowning of a Cornish Prehistoric Landscape: Tradition, deposition and social responses to sea level rise (PSRP vol 14: Andy M. Jones & Michael J. Allen)

A Bronze Age barrow excavation north of Penzance undertaken in 2018, and the 2019 coring of Marazion Marsh, a RSPB reserve, are presented in this volume. They provide a platform for discussion as to the implications of loss of land for prehistoric communities. This went beyond the loss of land for settlements, buildings, and pits, but extended to the loss of pasture and farmland, and to the salinisation of freshwater. These necessitated changes in the whole economic base of coastal communities if they were to stay exploiting the same, but changing, landscape.

Nestling above Penzance, the Middle Bronze Age barrow overlooked a locally perched wetland, with moorland beyond. Finds from the barrow included an important almost pure copper Late Bronze Age ingot. In contrast, in the shadow of St Michael's Mount, the reed bed at Marazion Marsh is separated from the coast by a shingle bar and small sand dune system. This is Cornwall's largest reed bed, beneath which is a 9-m-deep peat and sediment sequence recording nearly 10,000 years of landscape and land-use change from the Mesolithic to the medieval period. Both sites lie within an area of coastal hinterland, which has been subject to incursions by rising sea levels. Since the Mesolithic, an area of approximately 1 km in extent between the current shoreline and St Michael's Mount has been lost to gradually rising sea levels. Given their proximity, the opportunity was taken to draw the results from the two projects together, along with all available existing palaeo-environmental data from the Mount's Bay area, presented in one place for the first time. Evidence for coastal change and sea level rise is discussed and a model for the drowning of the landscape presented. In addition to modelling the loss of land and describing the environment over time, social responses including the wider context of the Bronze Age barrow and later Bronze Age metalwork deposition in the Mount's Bay environs are considered. The effects of the gradual loss of land are discussed in terms of how change is perceived, its effects on community resilience, and the construction of social memory and narratives of place. The volume demonstrates the long-term effects of climate change and rising sea levels, and peoples' responses to these over time.

Repeopling La Manche: New perspectives on Neanderthal archaeology and landscapes from La Cotte de St Brelade (PSRP vol 10: Beccy Scott, Andrew Shaw, Katherine Scott & Matt Pope)

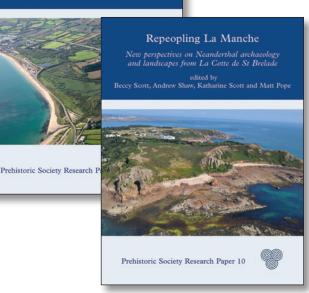
This much delayed fantastic volume on the Neanderthal site at La Cotte de St Brelade, Jersey is well worth the wait.

The volume deals with the important excavated evidence and takes stock of the Middle Palaeolithic archaeological record along the fringes of La Manche in northern France and southern Britain. The record is examined in light of recent advances in quaternary stratigraphy, science-based dating, and palaeoecology, and explores how this interdisciplinary approach has transformed our understanding of Neanderthal behaviour.

Aspects of movement into and through these landscapes, changing technology and raw material procurement strategies, hunting patterns, and site structures are presented as accessible behaviours which have changed at site and landscape scales in response to changing climate, sea level, and ecology over the last 250,000 years. The seaways that separate southern Britain from northern France comprise a flooded landscape open to occupation by hunter-gatherers over the 0.5 million years since the English Channel's formation. While much of this record is now inaccessible to systematic archaeological investigation, this was a landscape critical to past human societies in the region in terms of access to, inhabitation in, and exploitation. This volume provides a starting point for approaching the Middle Palaeolithic record of the English Channel region and considering the ecological opportunities and behavioural constraints this landscape offered to Neanderthal groups in north-west Europe.

Both volumes are hardback and due to be published in spring. They are currently offered at a pre-publication price of only £28 from our publishers Oxbow Books, where further information and the contents can be found (www.oxbowbooks.com).

The Drowning of a Cornish Prehistoric Landscape Tradition, deposition and social responses to sea level rise Andy M. Iones & Michael I. Allen



#### Undergraduate dissertation prize – submissions open!

The Prehistoric Society invites annual submissions for the undergraduate dissertation prize.

The award celebrates the dissertation that has made the greatest contribution to the study of prehistory in any part of the world. This prestigious prize represents an excellent opportunity for outstanding young scholars to have their work publicly recognised.

The prize is open to students from any university in Britain and Ireland, nominated and submitted by their host department. Only one nomination is permitted per university. The judges will assess entries based on the quality of work, the originality of the approach and the degree to which the research advances our understanding of prehistory.

Entries for the current academic year are to be sent as a single PDF document by a staff representative of the host

department to the relevant council officer (contact details will be available on the website by end of June) by Friday 4th August 2023. Please note that we will not accept entries directly from students. It is advised that the file name comprise the student's name and institution. Entries must be accompanied by the email address, postal address and contact phone number both for the candidates and for their supervisor(s).

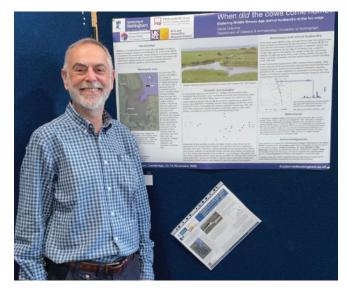
The winner will receive three years' free membership of the Society, the choice of one of the Society's in-print monographs and £100. Three runners-up will be awarded a current copy of the Proceedings of the Prehistoric Society. An abridged version of the successful dissertation will be considered for publication in the Proceedings. The prize will be presented prior to the Sara Champion lecture to be held at Burlington House in London in October 2023.

## When *did* the cows come home? Exploring Bronze Age animal husbandry with isotopes and X-rays

Domesticated animals were an important part of prehistoric communities and analysis of their remains can cast light on their movement as part of their husbandry and offer a proxy for the day-to-day mobility of their human companions. A study of mobility at these smaller scales helps to reanimate our understanding of life in past societies and how they made use of resources in the landscapes in which they lived. This is the essence of my AHRC-funded PhD research, which uses isotope analysis of bones and teeth of cattle, sheep and pigs to explore their diet, from which it is possible to infer their husbandry regime and the use of landscape resources for grazing.

Lincolnshire and the Fens are rich in archaeological sites and my research uses animal bones and teeth excavated by two commercial archaeology units in advance of development. Network Archaeology in Lincoln had uncovered some material at sites along the route of the Lincoln Eastern Bypass road, while Cambridge Archaeological Unit (CAU) holds samples excavated from sites now lost to gravel quarrying to the east of Langtoft, near Peterborough. These two areas represent different types of grazing, with the sites near Lincoln being a more freshwater environment, while that near Langtoft was close to the fen-edge and the area subject to marine incursions in prehistory. The faunal material from both sites is broadly contemporary, dating to the Middle Bronze Age, c.1500 BCE, and offers scope for investigating whether animals at the Langtoft site may have been grazed on the fen-edge saltmarshes in summer, while those from Lincoln were further inland.

NERC's National Environmental Isotope Facility (NEIF) at British Geological Survey, Keyworth, Nottinghamshire, have



The author with his Prehistoric Society prize-winning poster at the Bronze Age Forum in Cambridge, November 2022

funded my isotope analysis of animal bones and teeth from Lincoln and Langtoft through a collaborative project entitled *When did the cows come home?*, including Professor Hannah O'Regan, Dr Angela Lamb and Professor Jane Evans. We are using the laboratory's Thermo Fisher Isolink elemental analyser to simultaneously determine stable isotopes of carbon, nitrogen and sulphur in each sample.

The isotope analyses of faunal bones and teeth will be complemented by the analysis of soil samples collected by CAU at 2 m intervals along eight transects crossing the ditch features of enclosures and a proposed droveway along which animals may have been moved. Lab-based x-ray fluorescence



Cattle grazing saltmarshes, Solway Firth, Cumbria, 2021. The fen-edge may have resembled this view in prehistory (author's photo)

(XRF) spectrometry in the School of Geography at the University of Nottingham is providing data on concentrations of elements from sodium to radium. Once complete, these data should allow creation of an interpolated map showing 'hot spots' of elements associated with the presence of animals, such as phosphorus from the phosphates present in their dung. This should reveal concentrations in areas associated with their penning as well as movement along the droveway to and from the fen-edge saltmarshes.

To start, a selection of bones from both sites have been analysed. These have shown unexpectedly high concentrations of sulphur. High sulphur concentrations are a feature of some marine estuarine environments and to explore this further, we are processing some samples obtained from the banks of the Thames at Bankside, dating from 17–19th centuries, and at Wapping, thought to date from the Tudor period. This will allow us to assess if the sulphur isotope signal is contaminated.

The next stage is to sample the dentine from the cattle and sheep teeth. It is hoped that multiple, incremental samples in teeth from Langtoft will show oscillating sulphur isotope values, with higher values obtained from summer grazing on the fen-edge saltmarshes and lower values from wintering on drier land. The teeth from the more freshwater environment near Lincoln should not exhibit these changes. By combining the different insights offered by the isotope and XRF analyses, a picture should emerge of the small-scale movements that were part of Bronze Age daily and seasonal life and animal husbandry on the fen-edge.

#### Acknowledgements

Thanks go to Diana Fernandes and colleagues at Network Archaeology in Lincoln; Dr Marcus Brittain, Dr Emily Banfield and Vida Rajkovača at Cambridge Archaeological Unit; Lara Maiklem for the Thames bone samples; Dr Angela Lamb at BGS; my supervisors, Prof. Hannah O'Regan (Nottingham) and Dr Oliver Harris (Leicester). Funding from Midlands4Cities Doctoral Training Partnership and NERC National Environmental Isotope Facility is gratefully acknowledged.

> David Osborne (d.osborne@nottingham.ac.uk), University of Nottingham

#### Excavations at Arminghall timber circle and henge

In September 2022, the Centre for Archaeology and Heritage at the Sainsbury Institute for the Study of Japanese Arts and Cultures, University of East Anglia and the Cambridge Archaeological Unit, University of Cambridge, in partnership with the Restoration Trust, and many volunteers, were fortunate to open trenches in a re-examination of Arminghall Henge, Norfolk.

Arminghall Henge was discovered in June 1929 by Wing Commander Gilbert Insall, four years after he discovered Woodhenge. Insall recognised similarities and coined the new site 'Norfolk's Woodhenge'. The site sits close to the confluence of the rivers Tas and Yare just 3 km south of Norwich. The first excavation took place six years later, led by Grahame Clark, who wrote that it was on the edge of the city leaving it vulnerable to the growing infrastructural needs of Norwich. concerning for Clark was the building of electricity pylons, which still mar the setting of the of the monument today. Aerial and ground survey had established that there was a significant number of monuments nearby, principally ring-ditches.

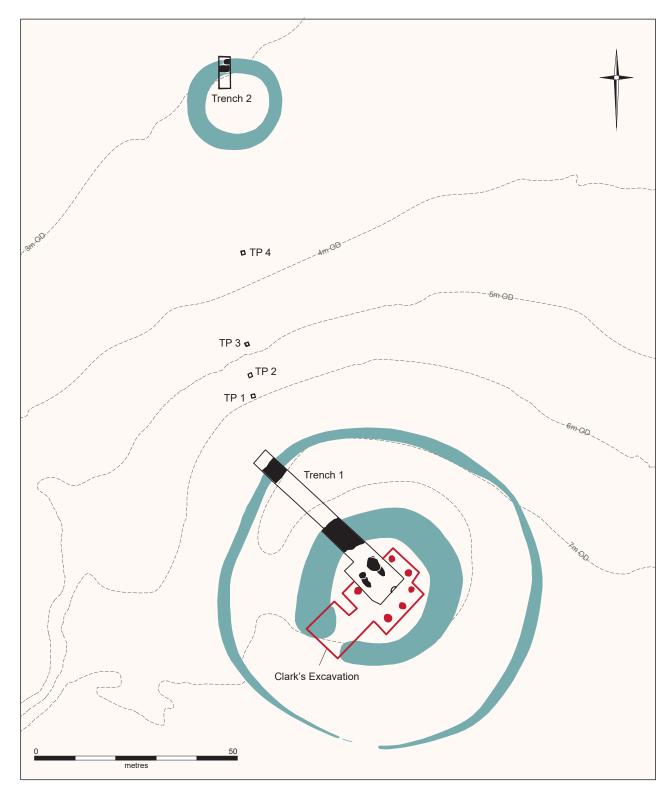
Clark's excavation took five weeks during August and September 1935. A single trench was cut to investigate the

timber circle along with the henge and its inner and outer ditch. The excavation demonstrated the large inner ditch to be penannular in plan and oriented southwest, whilst the interior investigation exposed the footprint of a timber circle

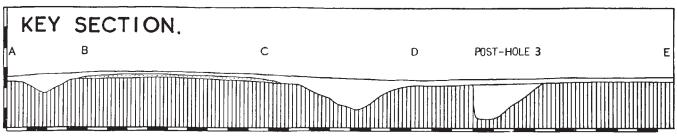
comprising eight c.1 m diameter posts arranged in a horseshoe configuration (c.13 m in diameter). Each posthole had a south facing insertion ramp indicating the timber circle was erected before the henge.

Clark recovered sixteen sherds of rusticated Beaker pottery from a burnt deposit at the very base of the penannular ditch. This find provided him with an Early Bronze Age date for the construction of the henge. In 1960 Clark wrote to Rainbird Clarke, Curator and Keeper of Archaeology at Norwich Castle Museum requesting he make a case to the British Museum Laboratory for a radiocarbon date for charcoal collected from post-hole 7. The following year a date was received, 4440±150 BP (BM-129). Recent reassessment of that date gives a calibrated date range for the sample of 3630–2670 cal BCE providing, at best, a *terminus post quem* for the timber circle.

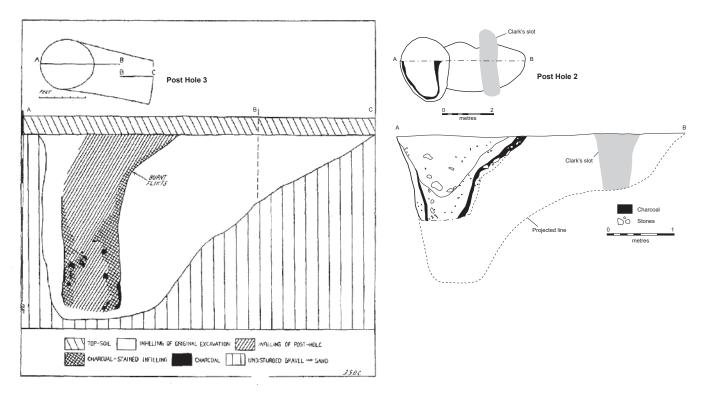
Geophysical survey in August 2022 showed several of the timber circle post-holes, the henge ditches and, to the north-



Plan of the henge and its immediate setting, including a nearby ring ditch



Clark's section through the timber circle, penannular ditch, bank, and outer ditch



Post-holes 2, excavated by Clark, and post-hole 3, excavated in 2022, compared

east, a small ring-ditch. The field that the henge is in consists of river terrace gravels, traversed by electricity lines, and hence was magnetically noisy. The gravel extraction pit associated with the construction of the railway and latterly used as a rubbish dump can been seen less than 50 m west of the henge.

Our excavation strategy was to re-open Clark's intervention and recover further materials with which to re-examine the dating of the monument and try to achieve a chronological sequence for the construction of its components. This work took place with members of the Restoration Trust, a charity helping people suffering from low mental health through creating opportunities to get involved in local heritage projects.

Clark's trench was re-opened and the section that was drawn and published in the 1936 article cleaned and re-examined. We re-excavated post-hole 3 and sample excavated the previously untouched post-hole 2, both of which were found to contain significant quantities of charcoal which was sampled. We were able to test again some of the excavation techniques and assumptions made by the team in 1935 and largely their interpretations were proven to be correct.

Geoarchaeological analysis of the valley, consisting of a transect between the henge and the current course of the river Tas, canalised in the 1840s, showed only Pleistocene gravels, demonstrating that there are no surviving alluvial deposits east of the current course of the river. The henge sits on a terrace that once possessed a sharp scarp to the north and west, so, as seen from the river, it was once more impressive than the relatively gentle slope that it now occupies. This scarp was infilled with hill-wash, possibly resulting from ploughing in later prehistory. Investigation of a ring-ditch to the north of the henge found a relatively shallow ditch containing worked flint, probably a shallow disc barrow.

Re-examination of post-hole 3 and fresh excavation of posthole 2 allowed comparison with the 1935 section drawings, demonstrating they were remarkably similar. Both post-pipes contained charcoal angled in alignment with the post-slot or ramp. The process that led to this is open to interpretation, but it seems likely that the timber circle was burnt *in situ* and then removed. The post-slot provided the least resistance for extraction compared with the surrounding gravels. Potentially, all eight of the posts were set alight, effectively bringing the timber circle to an end.

The 1935 excavation recorded burnt flints, and charcoal, at the base of the inner ditch. Re-exposed in our work, these appear to have gone into the ditch hot, as the gravel underneath was heat discoloured, suggesting perhaps that some of the debris from the burning of the timber circle ended up in the freshly excavated base of the ditch, along with the sixteen sherds of rusticated Beaker, discovered by Clark's team, along with 27 worked flints and eight burnt flints recovered in 2022. Was this the end of the timber circle and its replacement with a new monument, the henge? Analysis of samples taken from both the post-holes and the base of the ditch continues. Early work suggests some material is appropriate for radiocarbon dates to discuss soon.

The henge remained a focal place during later periods, as shown by the continued use of nearby barrows as funerary monuments and an assemblage of Iron Age pottery (30 sherds), found in the middle fills of the inner and outer ditches. Also, a significant amount of Romano-British pottery



(215 sherds) and coinage were deposited further up in the inner ditch, including a coin from the early second century through to material of fourth century date.

The next steps for the project are a programme of radiocarbon dating for Arminghall Henge and a reassessment of the surrounding landscape. Our plans for summer 2023 are to move onto another iconic prehistoric Norfolk monument, Warham Camp, to again explore previous excavations and hopefully add to our understanding of that part of Norfolk's later prehistory.

#### Photo of section across post-hole 2

#### Acknowledgements

The excavations at Arminghall were generously supported by the National Lottery Heritage Fund, the Society of Antiquaries London, and the Norfolk and Norwich Archaeological Society.

Andy Hutcheson (a.hutcheson@uea.ac.uk), Sainsbury Institute for the Study of Japanese Arts and Culture, University of East Anglia, Matt Brudenell and Mark Knight, both Cambridge Archaeological Unit

## Unveiling the herding-farming communities of Mediterranean north-west Africa, *c*.1300–700 BC: the hilltop settlement of Kach Kouch

The Western Mediterranean has been characterized by complex population dynamics, with the movements of Late Bronze Age communities settling the African shores yet to be fully deciphered. The site of Kach Kouch in Morocco, a settlement with no parallels in north-west Africa, offers a unique chance to understand these dynamics and their place within debates about the hyperconnectivity of the Mediterranean in the late 2nd and early 1st millennium BC. It also represents a ground-breaking opportunity to confront and challenge the colonial theories and subsequent bibliographies that have marked research into north-west African population dynamics.

The strategic location of Kach Kouch, controlling the access from the lower basin of Oued Laou to the inland valleys of the Western Rif mountains, makes it ideally placed within a wider exchange network connecting local communities with the rest of the Mediterranean. To date, the archaeology of this region has been written overwhelmingly from a colonial perspective, even though evidence points to early connectivity of this area since the 6th millennium BC.

The May-June 2022 fieldwork season at Kach Kouch focused both on the hilltop settlement and a cave located on the northern slope of the hill. On the hilltop, a total surface of 154 m<sup>2</sup> was excavated, adjoining an area excavated in 2021. Silo type storage structures and other pits directly dug into the bedrock were documented, together with several domestic buildings, including round or elliptical mud-built structures with postholes and a rectangularshaped structure with stone plinth and mud walls. Various artefacts (handmade and wheel-thrown pottery, knapped lithics, ground stones, carved bone and metallic items) and ecofacts (seeds, charcoal, fauna and ostrich eggshell) were recorded during the excavation. The diversity and heterogeneity of the architecture and other cultural practices documented, suggest that the inhabitants of Kach Kouch played an active role in the dynamics of mobility and



contact that characterised the Western Mediterranean in the early first millennium BC.

In the cave, an 18 m<sup>2</sup> excavation area was set up in the deepest zone of the cavity. The cave has been highly disturbed due to several factors both natural and anthropic. Because of its karstic origin, the action of water has been the most important disturbance factor, but also burrows of several animals have altered the stratigraphy and the archaeological materials. Nevertheless, the excavation documented human remains belonging to at least three individuals (two adults and a child), one of which was well preserved. Samples for isotopic, dentine and ancient DNA analysis have been collected. A previously unknown Early Neolithic (c.5400–5000 BC) occupation of the cave was also documented. This occupation is represented by an abundant and varied lithic industry composed of microliths, blades, bladelets and cores, together with some Cardial ware and other pottery decorated with impressions and grooves, with clear parallels in the Early Neolithic pottery of the 'Tingitan cluster'.

Two radiocarbon dates from seeds recovered in the 2021 field season have provided interesting data on the chronology of the hilltop settlement. The first yielded a date of late second millennium BC and the second an early first millennium BC date, in association with the presence of the first imported Phoenician pottery. It is not yet clear whether these represent two distinct phases of occupation or whether there was a single, non-stable occupation between the late second and early first millennia BC. Therefore, in the coming months, further radiocarbon dating will be conducted on the different stratigraphic units excavated in 2022, to help understand

Left: The hilltop of Kach Kouch, looking north. The red star marks the entrance to the cave. Below: View of the excavations in the cave, showing one of the burials



the site's chronology and the materials associated with each phase.

#### Acknowledgements

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Hamza Benattia Melgarejo (hbmelgarejo@gmail.com), University of Barcelona

The deadline for submissions for PAST 104 is 12 May 2022. Contributions to Editor, Susan Greaney, University of Exeter, Laver Building, North Park Road, Exeter, EX4 4QE: past@prehistoricsociety.org. Contributions as e-mail attachments are preferred (either .docx or .rtf files) with illustrations sent as .jpeg, .tif or .pdf files. The book reviews editor is Helen Chittock, MoLA (Museum of London Archaeology), Mortimer Wheeler House, 46 Eagle Wharf Road, London, N17ED. E-mail: reviews@ prehistoricsociety.org. Queries over subscriptions and membership should go to the Society administrator at the London address on the front cover. E-mail: admin@prehistoricsociety.org.