

PAST

THE NEWSLETTER OF THE PREHISTORIC SOCIETY



Introducing our new President, Professor Linda Hurcombe



My key interests are in prehistoric material culture, experimental archaeology, and the methods we use to study and present the past. I set up and direct the MSc Experimental Archaeology programme at University of Exeter because I like the mixture of practical and theoretical knowledge. This photograph was taken during the recent Colombian rock art conference (supported by the Prehistoric Society) which was live streamed in four languages including the indigenous Tukano language. It was a joy to be able to travel and meet again, especially at such a stunning site.

Combining the best

During the pandemic the Society tried to turn constraints into opportunities with initiatives such as the Global Pasts online lecture series. Now that face-to-face activities are possible, we can return to some of those events which have been most missed, but also plan to keep some of the benefits of doing things differently and connecting with our members and interest groups wherever they may be in the world. This year is going to be busy with online and in-person events.

A busy agenda

We are looking for ways to raise income – we do a lot but would love to do more! We also want to streamline some of our operational processes. To simplify legal obligations the executive and council have agreed to pursue changing the structure of the society from that of a company to a charitable incorporated organisation. We wanted to let the membership know of these plans and invite members who have any comments on this or have experience of this organisational change, to please contact our administrator Tessa Machling (admin@prehistoricsociety.org).

It is an exciting time to be President and I look forward to meeting more members in person.

Not the garage midden – a cautionary tale

More than 25 years ago Needham and Spence, in their discussion of the Runnymede ‘middens’, stressed that they had taken ‘pains to resist employing the term midden in order simply to denote the existence of refuse-rich deposits’. Such use was to them ‘of no value in promoting the understanding

of settlement debris’. They pressed rather for the use of ‘occupation deposit’ as a ‘suitable generic term to cover all contexts interpreted as relating to settlement activity’ and further to differentiate the internal variations within these deposits to facilitate the ‘reconstruction of site organisation



Views of the deposits from the garden gate (left) and beside the garage frontage (right)

and maintenance routines'. These recommendations were reiterated by John Barber in his 2003 work on Bronze and Iron Age farm mounds in the Outer Hebrides, and further in his 2011 discussion of aeolian site formation where he wrote: 'The abuse of the term 'midden' has devalued it and caused some confusion'. Quoting Schiffer's 1987 work, he stressed the importance of the interplay of natural and anthropic processes in deposit formation, describing a 'spectrum of proportions of natural to anthropic' within the sediments.

In 2016, I addressed the misuse of the term 'midden' in relation to Skara Brae where its indiscriminate application, traced back to an inherited 'kitchen midden' designation from the mid-19th century, has resulted in the misrepresentation of the site as a 'midden mound' covering a warren of (semi-) subterranean houses – a characterisation that has regrettably allowed its inhabitants to be described as 'hobbits in burrows'. In attempting to redress this misapprehension, I demonstrated the range of material at the site previously subsumed within this single overarching 'midden' term: *inter alia* sand with varying levels of organic and artefactual admixture; clay with refuse trample; deposits of domestic waste; varied habitation floors; areas of sub-soil beneath established turf surfaces; and agglomerations of actual organic midden itself. Repeating Needham and Spence's advice, I pressed again for a more nuanced and accurate categorisation of such deposits and hence their identity and meaning.

These appeals have so far been to no avail. The midden label continues to be employed as a blanket term for any accumulated deposit around a settlement site, regardless of content, location or extent. More troubling still, the categorisation of these deposits as an undifferentiated single substance, indicative of deliberate placement, has led to automatic assumption of their identity as part of structured or ritual deposition and, further still, their presence frequently interpreted as representing acts of 'closure'.

So, in a further attempt to promote a more accurate, measured, application of the term, I am here presenting a serendipitous piece of experimental archaeology, observed process rather

than formal project. Some time ago, exiting my garden on my daily dog walk, I found myself observing – for the first time with the eye of the archaeologist – the partially weed-covered build-up around the base of my somewhat decrepit garage. Here was an area of deposits representing a microcosm of site-formation, usefully demonstrating the incremental accumulation of a range of substances and materials.

This build-up of deposits, approaching 30 cm deep, sloping up between garage frontage and rough lane surface, comprises: an underlying basal sand amalgamated with, and overlain by, silts and some gravels which have migrated from the loose surfaces further up the lane, plus the soil-mat from grass, dandelions, nettles etc that have colonised the area between garden gate and garage frontage. More pertinent to the current discussion is that, over recent years, I have retrieved from this area one silver earring, one Pilot drawing pen, the odd hairpin, one Renault car key and one surveying arrow. Concurrently I have also observed various [?]chicken bones (discards perhaps from the odd passing student's KFC or from the meal of a fox/cat/gull) and random shells (likewise possible gull sheddings) and – naturally – incidental sticks, leaves and other debris.

It should be noted that these are only those objects that are prominent in my memory, observed or retrieved when fleetingly visible before rain, wind, flood and other factors resulted in them becoming fully buried. There exist in all likelihood other eco- and artefacts which formal excavation might reveal - additional earrings, canine coprolite deposits, scatters of unused cat litter (a useful anti-skid device).

It should go without saying that the overwhelming bulk of this material represents natural accumulation, random losses or accidental droppings. With the exception of some of the gravel, and the putative cat litter, it represents no deliberate anthropic deposits, no curated or structured deposition. Scenarios explaining the incorporation of the artefacts listed are simple: spare keys, pens etc dropped from pockets as gloves pulled out; earrings or hairclips dislodged while bending to attach dog-lead to lively pup. Crucially there was no *intentionality* about the location of these objects within these sediments:

the earring was not sacrificed to propitiate the garage gods; the pen not placed to mark any liminal space between garden and lane; the bones and shells not the debris of a ritual feast.

Hence if I was to label this area in anything other than just 'The Garage Midden' it would be to give it a totally false characterisation. It would be misleading in terms of its identity but most crucially in affording it an implied *purpose*. By using the term 'midden', deliberate and dedicated placement is indicated – a proscribed area, its existence deriving from human action. It has hopefully been demonstrated above, however, that the garage door deposits do not have a single anthropic origin or function – simply an existence, and that existence a random, haphazard, accidental one, Needham and Spence's 'undirected refuse aggregation'.

The implication of this cautionary tale should thus be obvious and, it is hoped, give pause. It might prevent excavators from automatically assuming intention when assessing accumulations of settlement debris and, further, might dissuade them from designating multivariuous deposits – as disparate as a single heaped accumulation against

an external wall or a 50 m-wide layer spread across the landscape—all simply as 'middens'. Instead, the term should be reserved for those deposits that warrant it: accumulated deposits of anthropic origin, whose existence is calculated and, more specifically, whose product can be shown to have been utilised, whether as fertiliser, as infill, or, in the case of ash middens, for hardening and resurfacing of floors and paths. Labelling should distinguish the dung heap with little or no artefactual content from the midden-enriched ploughsoil or the mud-clogged passageway beneath thatch overhang. Each should be represented as separate parts of that panoply of accumulations – some managed and intentional, some haphazard and incidental – which, like those beside this modest Aberdeen garage, amass in and around any inhabited settlement.

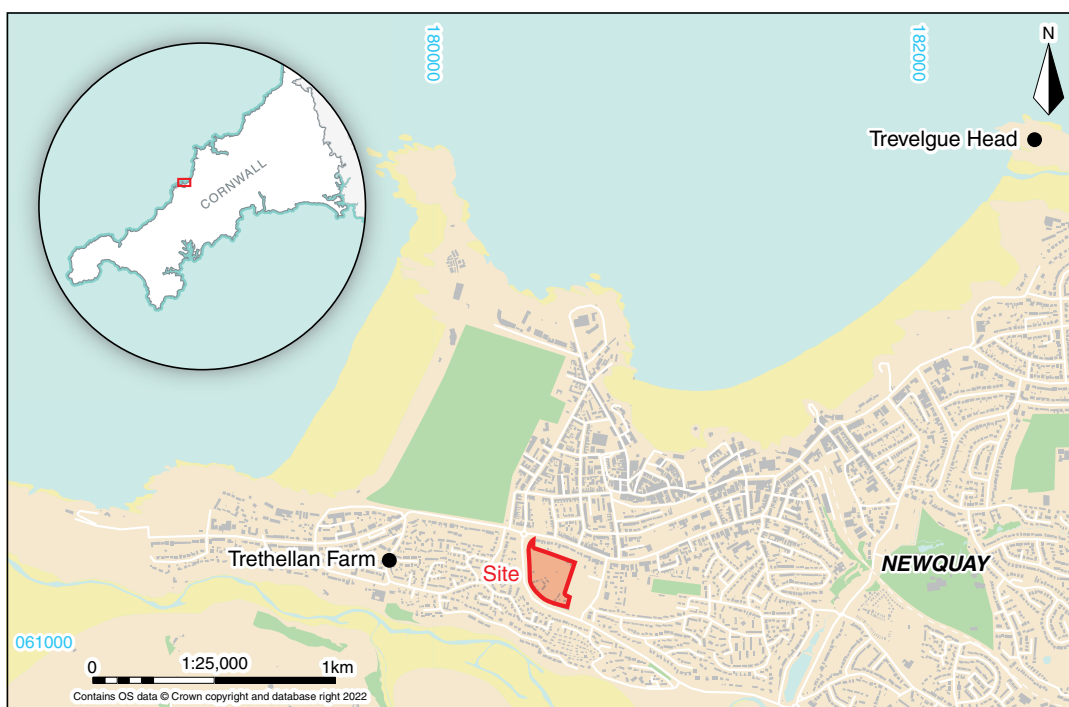
*Alexandra (Lekky) Shepherd (lekkwork2@aol.com),
Independent Researcher*

This article is presented in fond memory of Caroline Wickham-Jones – together we had lively discussions about the M-word.

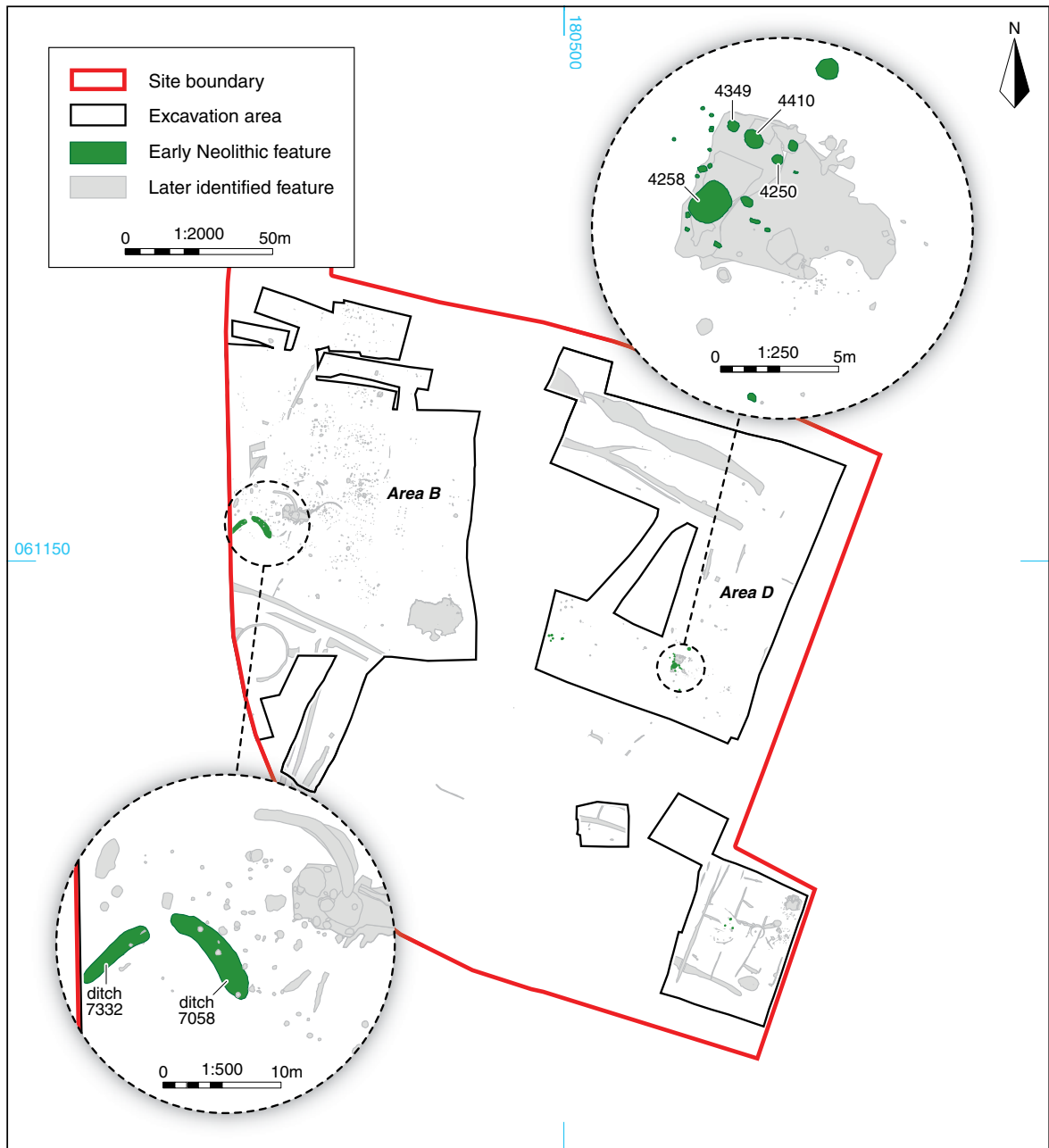
An early date for the introduction of a Neolithic lifestyle in south-west Britain – new evidence from Tregunnel Hill, Newquay, Cornwall

Excavations at Tregunnel Hill, Newquay, undertaken by Cotswold Archaeology in 2012, revealed parts of an extensive and densely occupied prehistoric and later landscape, preserved under deep layers of wind-blown sand and coluvium. Aside from Late Neolithic, Bronze Age and Iron Age

boundaries, burials and settlement, the site included Early Neolithic pits and structures. An important assemblage of Early Neolithic pottery was recovered and the radiocarbon dates are amongst the earliest associated with the introduction of a Neolithic lifestyle in Cornwall and the south-west of Britain.



*The location of
Tregunnel Hill*



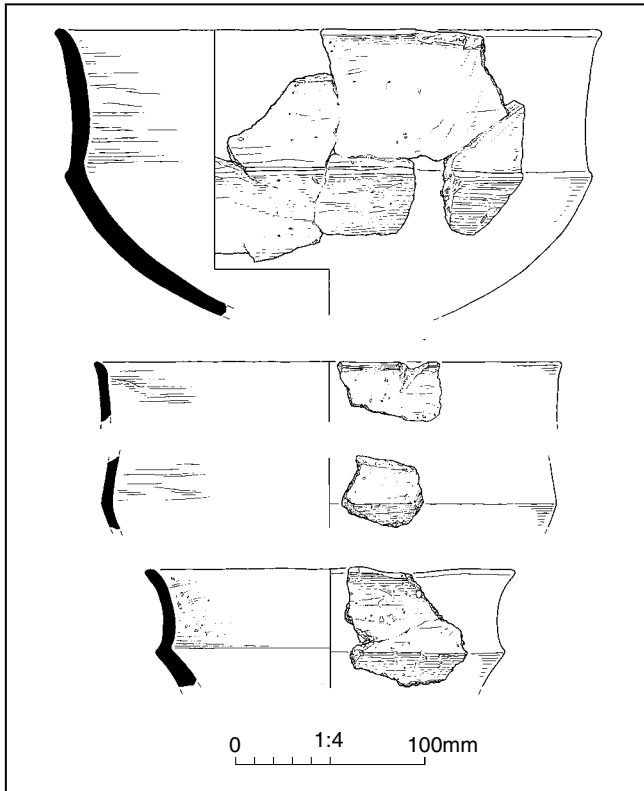
Neolithic features at Tregunnel Hill, Areas B and D

A small number of residual Mesolithic flints were recovered from later features, including a couple of Early Neolithic ones, but there were no features of clear Mesolithic date. The relationship between the Mesolithic and Early Neolithic activity is unclear. Early Neolithic pits, often intercutting, occurred in Area D of the site, suggesting repeated activity. Several pits produced pottery, flint, and charred plant remains, charcoal and unidentified animal bone in various combinations and they bear many of the characteristics of other pits recorded from Cornwall and elsewhere, although a couple stand out as potentially having a special function.

Pit 4258 was the largest pit in the densest group of features. It was bowl-shaped, sub-rectangular in plan, 1.85 m in length and 1.6 m wide, and had vertical sides and a shallow, flat base, 0.5 m deep. The pit was filled by a series of apparently intentionally deposited fills, the earliest of which was a thin charcoal-rich ashy layer, dominated by oak, with some



Pit 4258 with a scatter of Early Neolithic pottery in the base



Examples of carinated bowls from the site

hazel and hazelnut shells. On this had been placed sherds of several pottery vessels, worked flint tools (in elevated numbers, in common with other possibly 'ritual' pits), raw flint nodules, flint cores, animal bone and several beach cobbles. While some cobbles were unworn, others had been used as hammerstones. A rubbing stone or quern fragment, and a cobble possibly used as a hone, were also present, along with a ground lamprophyre axe fragment of local origin and a flake struck from a polished flint axe. Overlying these artefacts was a layer of large angular stones, on top of which soil layers had been deposited, presumably as 'sealing' layers. These layers also contained numerous Early Neolithic pottery sherds and worked flints.

The Early Neolithic pottery in the placed deposit was mainly gabbroic, with a few sherds in fabrics with vein quartz inclusions, and other more local granite-derived fabrics. There was a minimum of five carinated bowls and two open bowls. Two consistent radiocarbon dates (SUERC-80122, 5126±29 BP and SUERC-80126, 5126±29 BP) were obtained from charred hazelnut shells in the deposits providing calibrated ranges of 3990–3800 cal BC and 3960–3790 cal BC respectively,

providing the earliest confirmed dates for Early Neolithic activity in Cornwall.

A smaller oval pit 4410 was located 3 m to the north-east of pit 4258. This pit measured 0.9 m long was cut to a depth of 0.3 m and was filled by three charcoal-rich deposits. Each of these contained a considerable assemblage of broken and burnt worked flint debitage. All three deposits contained the remains of cereals, with hazelnut, sloe and vetch/pea-type seeds as well as charcoal of alder/hazel, oak, hawthorn/rowan/crab apple and cherry species. The lowest deposit also contained fragments of unidentified burnt bone. This pit may have functioned as a fire-pit due to scorching of the upper edges and the predominance of oak in the charcoal assemblage of the initial fill. Such an interpretation is possibly supported by the presence of two substantial postholes, 4250 and 4349, flanking pit 4410, one of which contained carinated bowl fragments. A radiocarbon date on a charred hazelnut shell from middle fill of pit 4410 produced a date range of 3950–3760 cal BC (SUERC-53869, 5018±35 BP), supporting the relative date suggested by a single sherd of an Early Neolithic gabbroic carinated bowl, and indicating broad contemporaneity with Pit 4258.

In Area B, two curvilinear, facing ditches, 7332 and 7058, were possibly of Early Neolithic date, producing respectively malvoideae charcoal which yielded a radiocarbon date of 3710–3630 cal BC (SUERC-80119, 4880±29 BP) and hazel charcoal which returned a date of 3710–3530 cal BC (SUERC-80118, 4849±29 BP). The function of these ditches is not entirely clear.

The pits identified in Area D are of a form now widely recognised in Cornwall and in Britain more generally. The radiocarbon dates indicate activity in the 39th to 38th century BC, and as observed by Henrietta Quinnell in her report on the pottery, this puts back by a century the earliest reliable date for the use of Early Neolithic gabbroic ceramics. The only forms present are carinated bowls, with fairly pronounced carinations and shapes verging on neutral and simple open bowls. Lugs are lacking, as are bag-shaped deep vessels. These features are also absent at the slightly later site at Penhale Round but were established by the 37th century BC in pits at sites such as Tregarrick Farm, Roche. The radiocarbon dates associated with these vessels at Tregunnel Hill will no doubt contribute to the continuing discussion regarding the directionality of spread of the 'Carinated Bowl' Neolithic in Britain during the early centuries of the 4th millennium BC.

Clare Randall (clare.randall@cotswoldarchaeology.co.uk),
Cotswold Archaeology

Subscription reminder

We would kindly like to remind you that subscriptions will be due on 1 January 2023. Please renew online or using the enclosed renewal form. If you are a UK taxpayer, remember that your subscription is eligible for Gift Aid, which is a valuable source of income for the Society. If you are unsure about your membership, need a paper form or want to query your payment status, please email admin@prehistoricsociety.org.

We hope you agree that the Proceedings (including online availability), newsletter, discounts on Society volumes, our packed events programme including many online lectures, membership is well worth the subscription fee. Please do continue your support for our many activities and the research we fund. Thank you!

Chatterpast: tolerant futures through ancient identities



The fictional cast of characters developed as part of the Chatterpast project.

Have you ever wondered what it might be like to talk to someone from the Iron Age or Roman period? A new education resource has been developed to allow young learners to experience just that, and to learn about tolerance and inclusivity at the same time. The AHRC-funded *Iron Age and Roman Heritages: Exploring Ancient Identities in Modern Britain* project (UCL, the University of Stirling and Durham University), assessed how the Iron Age, Roman and early medieval pasts of England, Scotland and Wales are drawn upon today and documented the wider values of interacting with the past for different individuals and groups. Following this project, the team were successful in obtaining further funding from the AHRC through a 'Follow-on Fund for Impact

and Engagement', with a project running from January to July 2022, entitled *Co-Producing Tolerant Futures through Ancient Identities*.

As part of this project, the team have produced an education resource called Chatterpast, developed in partnership with nine museums and heritage venues, and designed to inspire teaching about tolerance and inclusivity through the shared experiences of fictional characters from the Iron Age and Roman past. It is an imaginary messaging app that allows users to interact with seven different young characters from the past, exchanging ideas and information in an engaging way. The resource for use by primary school teachers and heritage educators and is designed to encourage discussion and reflection about how our experience and understanding of the past influences the ways in which we perceive ourselves and others in the present.

Have a go for yourself! You can access Chatterpast and find out more about the project at <https://chatterpast.tolerantfutures.com/>. The team would like to share this resource as widely as possible, so please do pass on to those you know involved in teaching the Iron Age and Roman past at primary level. There is also a survey for those who have used the resource to feedback their thoughts <https://forms.gle/62G9VfDnbSuPSHvJ9>.

Kate Sharpe (kate.sharpe@durham.ac.uk), Durham University, Chiara Bonacchi, University of Edinburgh and Richard Hingley, Durham University

A recently discovered wristguard from Debenham, Suffolk

A complete Early Bronze Age stone bracer or wristguard was recently discovered by a metal detectorist and reported for recording to the Portable Antiquities Scheme (Record ID: SF-76516B). The find comes from the parish of Debenham in Suffolk. The bracer is broadly rectangular although slightly tapering in plan. In section it has polished bevelled edges and is overall slightly curved. At either end are located central circular drilled apertures and the faces of the stone have been smoothed. This bracer is interesting in two respects. Firstly, linear striations on both faces appear to be the result of the bow having snapped back during firing, or perhaps relate to some form of binding. The bracer has also been modified, perhaps at a later date, with indentions at one end on either side, perhaps for hafting or suspension, and suggesting later re-use.

Phil Hughes (phil.hughes@suffolk.gov.uk),
Finds Recording Officer (PAS), Suffolk County Council



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Programme of meetings 2022–2023

TIME/DATE	VENUE/FORMAT	DETAILS
2022		
Sat 5 Nov 2.15pm	Lecture In-person Norwich Castle Museum, Castle Meadow, Norwich	<i>Using visual psychology to interrogate early prehistoric art</i> Dr Lisa-Elen Meyering, Durham University Annual joint lecture with Norwich and Norfolk Archaeological Society
Mon 7 Nov 12.00noon	Lecture Online	<i>Early China and prehistoric silk routes</i> Professor Li Zhang, Zhengzhou University, China Global Pasts lecture
Sat 12 Nov 10.00am	Conference Online	<i>Sourcing prehistoric materials – new perspectives: the contribution and legacy of Joan Taylor</i> Day conference with South West Implement Petrology Group
Weds 30 Nov (time tbc)	Lecture Online	<i>In conversation with Professor Colin Haselgrove (working title)</i> Prehistoric Society Europa 2021 event
Sat 3 Dec 2.00pm	Lecture In-person (possibly also hybrid) Swarthmore Education Centre, Woodhouse Square, Leeds, LS3 1AJ	<i>Recent advances in our understanding of the Neolithic in northern and south-west England</i> Dr Gill Hey, University of Oxford and Dr Jodie Lewis, Bradford University Annual joint lecture with Yorkshire Archaeological and Historical Society
Mon 5 Dec 7.00pm	Lecture Online	<i>Un-erasing the indigenous Palaeolithic: re-writing the ancient past of the Western Hemisphere (the Americas)</i> Dr Paulette Steeves, Algoma University, Canada Global Pasts lecture
2023		
Mon 9 Jan 6.00pm	Lecture In-person Cambridge (venue TBC)	<i>Excavations at Star Carr 2004–15: new insight into an old site</i> Professor Chantal Conneller, Newcastle University Annual joint lecture with Cambridge Antiquarian Society
Mon 9 Jan 7.00pm	Lecture Online	<i>Title tbc</i> Dr Shanti Pappu, Sharma Centre for Heritage Education, India Global Pasts lecture
Mon 6 Feb 7.00pm	Lecture Online	<i>Title tbc</i> Dr Sada Mire, University College London Global Pasts lecture
Thur 16 Feb 7.00pm	Lecture Online	<i>Hunting and gathering time</i> Professor Chantal Conneller, Newcastle University Annual joint lecture with Cornwall Archaeological Society
Weds 8 Mar 7.30pm	Lecture In-person County Hall, Topsham, Exeter EXQ 4QD	<i>Horse domestication as a two-stage process: the latest archaeological and palaeogenomic evidence</i> Professor Alan Outram, University of Exeter Annual joint lecture with Devon Archaeological Society
Mon 3 Apr 7.00pm	Lecture Online	<i>Human evolution research in South Africa: the role of HERI in shaking up our family tree</i> Professor Rebecca Ackermann and Dr Robyn Pickering, University of Cape Town Global Pasts lecture
Sat 4 March 10.00am – 4.45pm	Day School Blended (in-person/ online)	<i>Prehistory in the past and the past of prehistory</i> See details in this issue
Fri 2 June – Sunday 4 June	Conference In-person University of Cambridge	Prehistoric Society Europa Conference 2023 <i>Peopling the past: reflecting on prehistoric Europe, in honour of Professor Marie Louise Stig Sørensen</i> See details in this issue

All times stated are GMT. Please note that meetings may be liable to change. Further details, including how to join virtual meetings, will be available online: <http://www.prehistoricsociety.org/events/>.

Statement of financial activities for the year ended 31 December 2021

	2021 £	2020 £
Income		
Income from donations and subscriptions	40,763	31,238
Income from charitable activities:		
Publication grants	-	-
Copyright fees	-	193
Publications	19,329	20,759
Conferences	895	-
Other income	78	-
Investment income	5,623	6,257
Total income	66,688	58,557
Expenditure		
Expenditure on raising funds	11,150	7,068
Expenditure on charitable activities:		
Grants	(128)	8,027
Education support	-	-
Lectures	486	476
Proceedings	23,005	18,512
PAST	7,637	7,056
Research Papers	4,946	2,126
Conferences	6,537	2,940
Expenditure on governance	8,295	7,533
Total expenditure	61,928	53,738
Net income/ (expenditure)	4,760	4,709
Total funds at 1 January	228,163	215,343
Unrealised investment gains/(losses)	(1,864)	8,444
Total funds at 31 December	231,059	228,163

The Statement of Financial Activities is an extract from the full accounts of the Society. Copies of the full accounts for 2021 are available on the website or can be obtained from Tessa Machling at the registered office.

Report of the Treasurer

Society's accounts remain reasonably healthy despite the continuing adverse conditions during 2021, generating an overall surplus of £2,896. The investments did not perform as well as in previous years (which I doubt few will be surprised by given the global circumstances), leading to a loss in the investments of £1,864.

Costs have remained reasonably stable this year compared to 2020, as we again had a reduction in events. There was however an increase in the cost of producing the *Proceedings*, research papers costs were increased due to the publication cycle and we committed more to events which have actually taken place in 2022. Our assistance continues for conferences and events not organised by the Prehistoric Society and we again increased partnerships in this area.

We continue to benefit from income from royalties from CUP in respect of institutional subscriptions to PPS, although the value of this has fallen slightly whilst holding down the costs of member copies. The amount for grants given in 2021 is in negative territory on the statement as, whilst we made and paid out grants during 2021, the grants which we had awarded in 2020, which were deferred and then largely not taken up during 2021, have now been cancelled and taken out of the amount for 2021. Things should be back to normal in 2022.

Our reserves remain healthy with an increased proportion easily accessible. The cash position has decreased slightly this year although remains stable.

[Joie] sans frontières: the 2022 Europa conference in honour of Professor Eszter Bánffy

Scorchio! On a sizzling day in June, over 60 Prehistoric Society members gathered in Bournemouth University for a weekend conference celebrating the achievements of the 2022 Europa prize winner, Professor Eszter Bánffy Corr FBA FSA MEASA.

Professor Bánffy is a Titan of European archaeology, whose considerable achievements extend well beyond her own area of expertise on the Neolithic of the south-east and central Europe – the topic of her 2019 book, *First Farmers of the Carpathian Basin: changing patterns in subsistence, ritual and monumental figurines* (Prehistoric Society Research Paper 8), and of her Europa lecture, ‘Encounters, networks, and social change in the Early Neolithic of southeast and central Europe’. As President of the European Association of Archaeologists she oversees activities, including the annual EAA conference, that connect archaeologists across the Continent and beyond. As Professor at the Eötvös Loránd University in Budapest and at the University of Szeged, and as Director of the Roman-Germanic Commission of the German Archaeological Institute since 2013, she has enabled and promoted many research projects. One such project,

featuring large-scale geophysical surveys of megalithic landscapes in the Boyne Valley and Orkney (for the *Boyne to Brodgar* initiative) and Falbygden, was the topic of Knut Rassmann’s excellent keynote lecture.

The topics covered by the other speakers did full justice to the title of the conference, ‘Sans frontières: mobility and networks in Neolithic Europe’, ranging widely across Europe and covering matters such as the politics of migration (Dani Hofmann), Atlantic rock art (Joana Valdez-Tullett), history and agency in the European Neolithic (Alasdair Whittle) and Neolithic expansion and climate variability in the Aegean (Niklas Hausmann).

Aspects of the Neolithic in and around the Carpathian Basin featured prominently, as befits Eszter Bánffy’s research interests, with a series of presenters – Peter Tóth *et al.*, Margaux Depaermentier, János Jakucs, Kata and Márton Szilágyi, Krisztián Oross and Pál Raczky – all paying tribute to the support and guidance they had received from our distinguished honorand. For those not already familiar with



There can be no better way to sum up the variety and huge geographical spread of the topics than this brilliant cartoon, created during the conference by council member Rob Hedge



Left: The outgoing President, Professor Clive Gamble, with his Upper Palaeolithic carving. Photo: Michael Bott

Right: Our Treasurer Clare Randall is presented with her replica pot of gold. Photo: Michael Bott

the wealth of information about the Neolithic in central and south-east Europe, we were treated to a feast of research findings and insights, and given a sense of the huge advances made there in the recent past through survey, excavation and the application of cutting-edge scientific techniques. Themes that ran through these and other presentations include the significance of place; the importance of understanding small-scale, local interactions that helped to shape broader trajectories of change; the materialisation of identity through material culture and settlement architecture; and the huge variety in social organisation and subsistence strategies encompassed within the label 'Neolithic' across Europe.

The conference organisation was splendidly masterminded by Bournemouth University's Professor Tim Darvill, and he and his Department did us proud on the 'comfort and joy' front, keeping the participants from melting by drafting in cooling fans. We were also given an update on Tim's excavation at the Sisters long barrow during his 'Revisiting Cotswold long barrows' lecture, and his colleague Harriet Sams presented a moving account of how heritage can be deployed as an agent of healing, helping people in need of therapy. Tim was also responsible for a memorable conference party for presenters, featuring your correspondent actually cooking! – on a barbeque! (veggy, of course), while the Europa honorand whipped up an enormous, and by all accounts delicious,

paella. An inordinate amount of fun was had by all – and yes, Eszter's suitcase did eventually arrive in time for her to present her lecture.

This was the final Europa conference presided over by Professor Clive Gamble, and his demitting of office was marked by a splendid presentation of a specially carved Upper Palaeolithic figure during the AGM. In addition, our outgoing Treasurer Clare Randall was presented with a spectacular replica Collared Urn, filled rather appropriately with chocolate gold coins as thanks for her many years of hard work for the Society, and this year's Baguley Award for the best paper published in PPS in 2021 was present to Mark Houghton, for his co-authored paper on Bronze Age woollen textiles.

The Sunday saw intrepid attendees joining a highly enjoyable field trip to Maiden Castle, with a tour provided by Susan Greaney, and to see the newly refurbished Dorset Museum, where Clare Randall gave an introductory talk and there was chance to see the impressive displays on prehistoric Dorset, and much else. Thanks are extended to Tim and all involved in the organisation of this highly successful and enjoyable conference, and to Cambridge University Press for the wine reception.

Alison Sheridan (a.sheridan@nms.ac.uk)

Europa Conference 2023

The Prehistoric Society Europa Conference 2023, entitled *Peopling the Past: Reflecting on Prehistoric Europe*, will be held at the University of Cambridge from 2–4 June 2023. This year the conference honours the achievements of Professor Marie Louise Stig Sørensen in the field of European prehistory.

Confirmed speakers include John Robb (University of Cambridge); Philipp Stockhammer (Ludwig-Maximilians-University of Munich); Katharina Rebay-Salisbury (Austrian Archaeological Institute of the Academy of Sciences); Helle Vandkilde (Aarhus University); Harry Fokkens (University of Leiden); Joanna Sofaer (University of Southampton) and Magdolna Vicze (National Museum of Hungary).

Along with two full days of lectures, the conference will also include a half-day visit to the Museum of Archaeology and Anthropology in Cambridge, and to Wandlebury hillfort on Sunday 4 June. The conference will feature exhibitors and a poster display. If you would like to display a research poster, please send a 150 word abstract to organiser Jess Bates at jessica.bates@york.ac.uk by Sunday 30 April.

A full programme and bookings via Eventbrite will be available on the Prehistoric Society website shortly.



New day school series – Prehistory: Past, Present and Future

Our new series of Day Schools will be examining the discipline of prehistoric studies, from how prehistory has been studied in the past, to how we may approach the subject in the future. The first event in the series will focus on the past.

Prehistory in the Past – Saturday 4 March 2023

This day school will look at how the discipline came into fruition and examine the history of the study of prehistory. Speakers will explore the development of, and changes in, research paradigms and analytical practices. Reflecting on these histories, we will critique how to take the discipline forward today.

Speakers include Tim Champion (University of Southampton), Chantal Conneller (Newcastle University), Jago Cooper (Sainsbury Centre, University of East Anglia), Rose Ferraby (University of Cambridge), Melanie Giles (University of Manchester), Rachel Pope (University of Liverpool), Jennifer Wexler (British Museum) and Neil Wilkin (British Museum).

This event will be hybrid, being held at the Society of Antiquaries of London and online. A full programme will be available on our website, where bookings can be made.

Organic residue analysis sheds new light on the uses of Bronze Age daggers

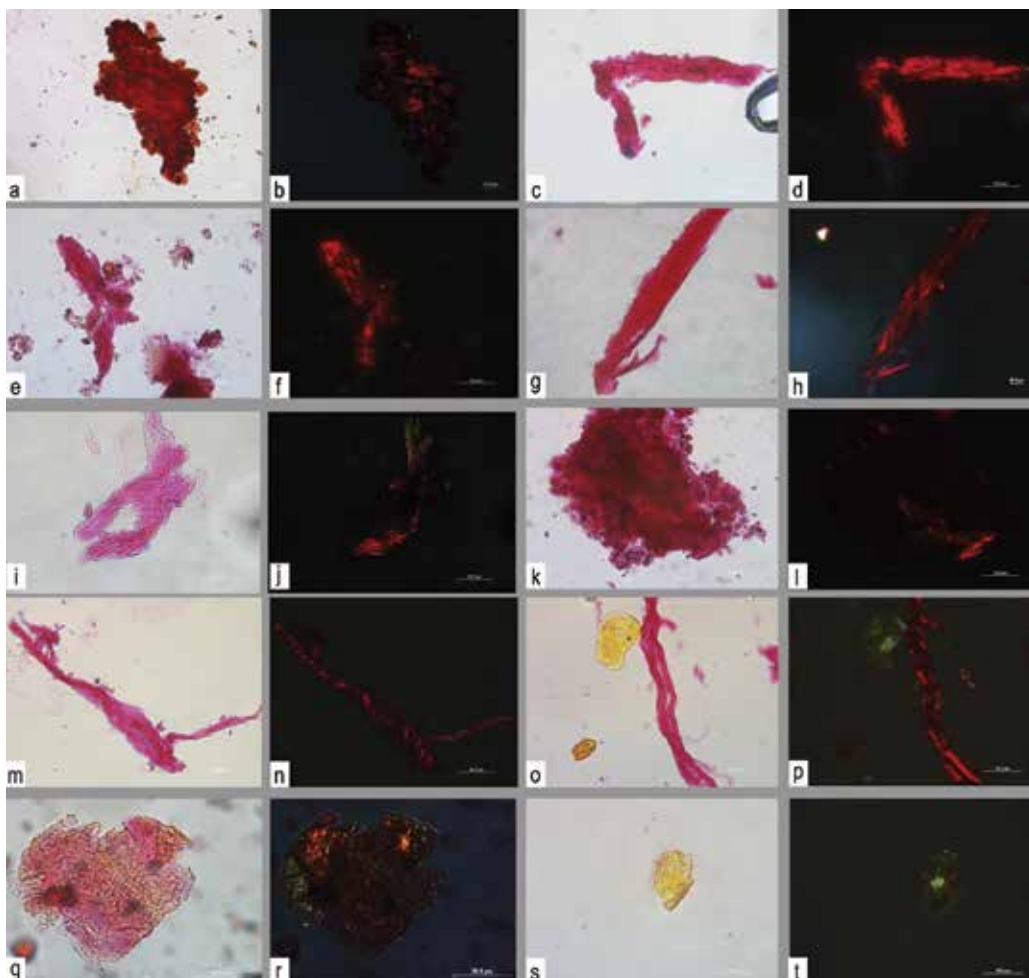
Students of Chalcolithic and Bronze Age Europe have long debated the intended uses of metal weapons and tool-weapons. For most of the 20th century, the prevailing consensus was that, by and large, these objects were symbolic signifiers of male identity and power. In the last two decades, experimental archaeology and metalwork wear analysis (an offshoot of lithic microwear analysis) have exposed the limits of these interpretations. Several studies have shown that, not only were early metal weapons designed

with lethal combat in mind, but they were also used to this end, sometimes extensively. However, most of the research focused on swords and shields, while daggers received limited attention.

Copper-alloy daggers first appeared in the 4th millennium BC; by the Early Bronze Age, they were made and exchanged all over Europe, including Britain and Ireland. Daggers were doubtless valued by prehistoric society, as shown by their



Pragatto, Italy. A: Site location; B: Aerial view of the site highlighting excavation areas; C: Copper-alloy daggers analysed as part of the research.



Archaeological residues observed in transmitted and cross-polarised light with staining compound PSR. a–b) sheets collagen with an angular outline; c–f) amorphous compact residues with a rough/cratered surface and peripheral crystalline fragments; g–h) tissue with longitudinal grooves; i–p) bundles of fibre; q–r) striated muscle tissue; s–t) amorphous matter.

broad diffusion and frequent placement in burials, most notably in ‘warrior graves’. But where exactly did their social value originate? Did it stem from the material they were made of, their shine, and their exoticism? Was it due to their ability to cut across cultural boundaries? Or did it originate from use?

Thanks to generous EU funding and substantial help from a world-class international team, we set out to address these questions as part of the EuroDag project, a Horizon2020 Marie Skłodowska-Curie Fellowship carried out in 2019–21 at Newcastle University. The project deployed a multi-method approach combining (1) wide-ranging use experiments with copper-alloy and flint dagger replicas; (2) the microwear analysis of c.200 prehistoric flint and metal daggers; and (3) a trial application of organic residue analysis on ten Bronze Age daggers. The trial shed new light on how early metal daggers were used, for what tasks, and on what materials. The research was recently published in *Nature: Scientific Reports* (doi: <https://doi.org/10.1038/s41598-022-09983-3>).

Materials and Methods

Recent excavations from Pragatto, an expansive domestic site near Bologna, northern Italy, provided the opportunity to trial residue extraction from prehistoric daggers. Pragatto

is part of the broader *Terramare* settlement system, which characterized human occupation of the Po valley from about 1650–1200 cal BC. *Terramare* sites are square villages ranging from 1 to 20 hectares in size. They were normally built near rivers or streams, whose courses were diverted to fill the ditches surrounding the villages. Embankments and palisades encircled most sites. At Pragatto, controlled excavations investigated a 6,900 square metre area corresponding to the southern portion of the Bronze Age village. A raging fire swept part of this area in antiquity, destroying (yet at the same time preserving for posterity) the remains of nine houses and of all the objects they once contained, including over 150 bronzes. Ten daggers from this remarkable fire-swept cache were selected for the research.



Experimental archaeologist Alberto Rossi showing a copper-alloy daggers replica manufactured for the project (image: I. Caricola).



Use experiments with copper-alloy dagger replicas. Left: butchering and skinning a deer carcass; right: harvesting cereals (image: I. Caricola).

We isolated organic residues on the cutting edges, blades, and hafting plates of eight out of ten daggers. The residues were observed under several types of optical, digital, and scanning electron microscopes, and chemically characterised by energy-dispersive X-ray analysis (EDX). We developed a micro-residue sampling and observation protocol using Picro-Sirius Red Solution (PSR), a biochemical stain used in histology for biological tissues and collagen from millennia-old contexts. In this way, we identified collagen and associated hard and soft tissues suggesting contact with animal products. We isolated the following micro-residues: (1) collagen including striated muscle tissue, bone tissues, and bundles of tendon fibres; and (2) fur/hair fibres and plant material interpreted as remnants of dagger sheaths. We then extracted the plant material for botanical analysis. The analysis revealed anatomical structures that are typical of at least two species of broadleaf plants, one probably being alder. The orientation of the wood elements suggests that prehistoric crafters weaved together small strips of young plant branches to build the dagger sheaths.

To corroborate the analytical results, we carried out wide-ranging experiments with purpose-built dagger replicas. First, we asked experimental archaeologist and bronzesmith Alberto Rossi to prepare eight daggers based on Chalcolithic and Bronze Age templates including blade geometries close to the Pragatto specimens. He cast three daggers from 4% tin-bronze (a compositional proxy for Early to Middle Bronze Age low-tin alloys) and five daggers from 10% tin-bronze (reflecting Middle to Late Bronze Age high-tin alloys). He then hammer-hardened all replicas, hafted them, and sharpened their cutting edges with a whetstone.

Subsequently, one of the authors (IC) used the replicas for cutting, scraping, and drilling activities lasting 3–5 hours each. Four daggers were used to process animal bone, tendons, muscles, and cartilage and then isolated the residues and described them through microscopic observation. Furthermore, two daggers were used for butchering and carving the carcass of a pig and of a red deer, helping document associations between residues. Finally, two daggers

were used to work green and dry wood and harvest *Triticum monococcum* and *Triticum dicoccum* wheat. Seven to ten days after use, oxidation structures were observed appearing on top of the plant and animal residues, ranging in colour from orange/green to black. Microscopic observation and chemical analysis of these structures returned results comparable to what had been observed on the archaeological daggers, confirming the interpretation proposed.

Results

Overall, the research has demonstrated that Bronze Age people primarily used metal daggers to process animal carcasses. The evidence shows interaction with both hard and soft tissues. This suggests that daggers were used for a wide range of tasks that followed (and perhaps comprised) the slaughter of livestock and game including butchering the carcass and carving the meat from the bone. The evidence tallies with use-wear studies of metal daggers, showing high rates of curation, frequent size reduction due to sharpening, and a widespread desire for keeping these tools sharp.

Significantly, this reading is independently validated by the microwear analysis of butchered animal remains from several prehistoric sites, which often display cut marks inflicted by metal blades. Of course, daggers may have had additional functional and symbolic uses, and they probably did. In Chalcolithic and Early Bronze Age Europe, in particular, daggers might have been utilised as close-range weapons – a reading supported by rare skeletal injuries inflicted by metal daggers – and also as iconic markers of gender identity; the latter function is hinted at by widespread warrior burials and rock carvings.

Future research directions

The research has shown that it is possible to adapt the methods of organic residue analysis as developed on ceramics, stone, and shell, and apply them to copper alloys. This is excellent news for archaeologists, bearing in mind that, at present, residues can only be extracted from freshly excavated metals. Although this is not different to other applications of organic residue analysis, metals are rare finds and opportunities to analyse them must not be wasted. Therefore, archaeologists interested in organic residue analysis should not rush to clean and conserve any copper alloys turning up in the field but should place them in a clean bag (including any soil that might be sticking on) and send them off to a specialist at the earliest opportunity.

If you are interested in extracting residues from *freshly excavated* copper alloys, could you please contact Isabella Caricola. For Chalcolithic and Bronze Age awls and other craft tools, please contact Andrea Dolfini. A charge would normally apply. However, we might be able to analyse selected objects free of charge. Enquiries are welcome.

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Reconstructing agricultural practices during the Italian Early–Middle Bronze Age

Agriculture spread in Europe during the Neolithic, bringing with it new techniques to improve soil productivity. During the Copper and Bronze Ages, exploitation strategies were improved and intensified, leading to a better soil fertility and productivity; nonetheless archaeological signs of agricultural practices are scarce, or at least are very hard to detect. Carbon and nitrogen stable isotope analyses are noteworthy tools with which to identify agricultural change and production methods, such as fertilization and irrigation.

This research aims at obtaining the first stable isotope data, at the best of our knowledge, on plant remains dated to the Early–Middle Bronze Age from three Italian archaeological sites (Grotta di Pastena, Grotta Nuova and Ledro). Stable isotope analyses on seeds are not common in Italian protohistoric contexts, therefore this project can partially fill the void in such data that characterized the Italian peninsula during the Bronze Age. Studies have demonstrated that manuring raises nitrogen values of cereals between +2.5‰ and +6‰. Regarding legumes, only intensive fertilization can alter their nitrogen values: only animal cages above 70 tonnes per hectare can increase $\delta^{15}\text{N}$ by up to +3‰. Watering modifies carbon values, and the alteration is calculated based on $\Delta^{13}\text{C}$ values.

Grotta di Pastena is located in central Italy (Latium) and dates back to the Early–Middle Bronze Age. It is a funerary and ritual cave which provides one of the richest seed deposits of Italian Protohistoric contexts. Grotta Nuova, also in Latium and chrono-typologically dated to the Early–Middle Bronze Age, is an important ritual cave, characterised by the presence of several vessels containing burnt seeds. Ledro, in northern Italy (Trentino Alto Adige), is a famous pile-dwelling (palafitta) dated to the Middle Bronze Age. The peculiar environmental conditions there have favoured the conservation of numerous unburnt seeds, belonging to both domestic and wild plants.

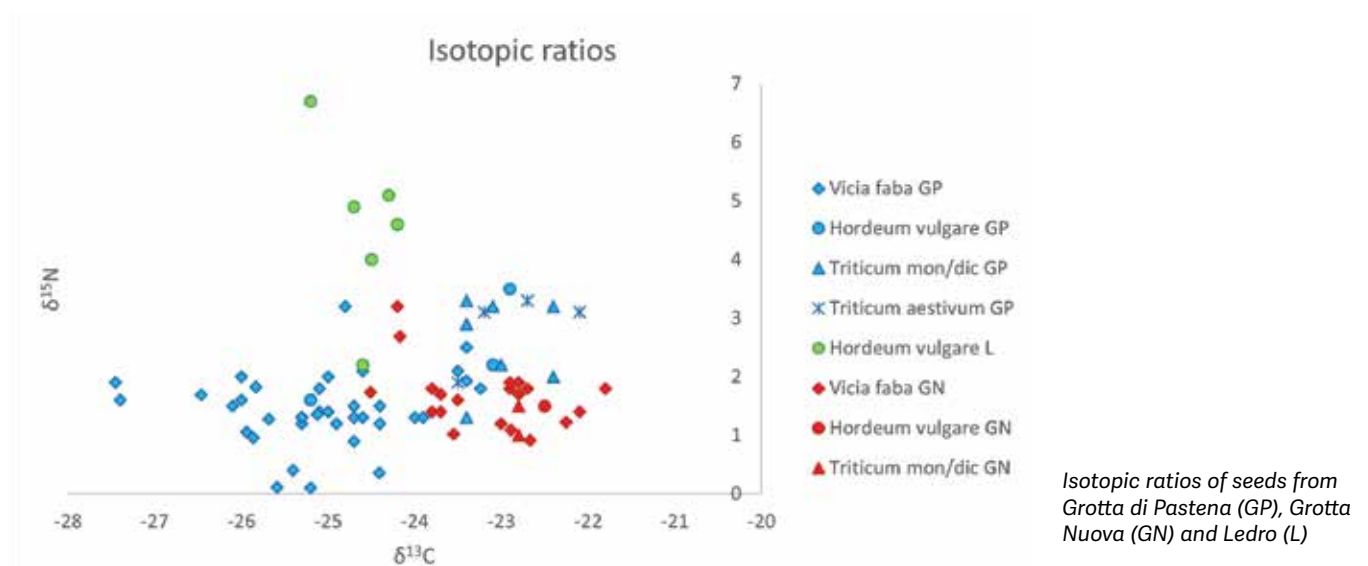
80 seeds have been analysed through stable isotope analysis. Some samples were subjected to ABA pre-treatment protocol;

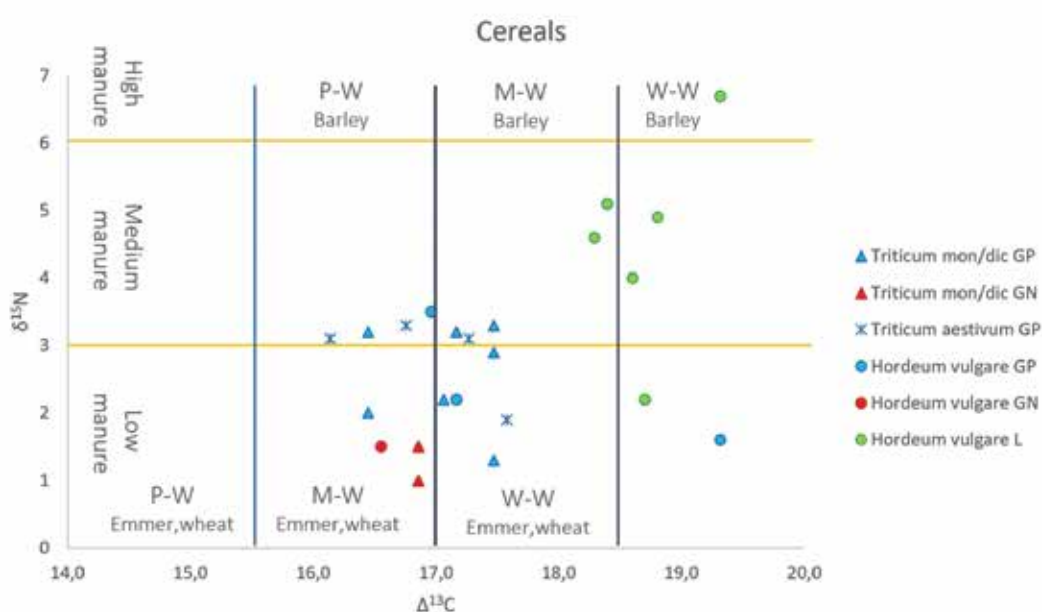
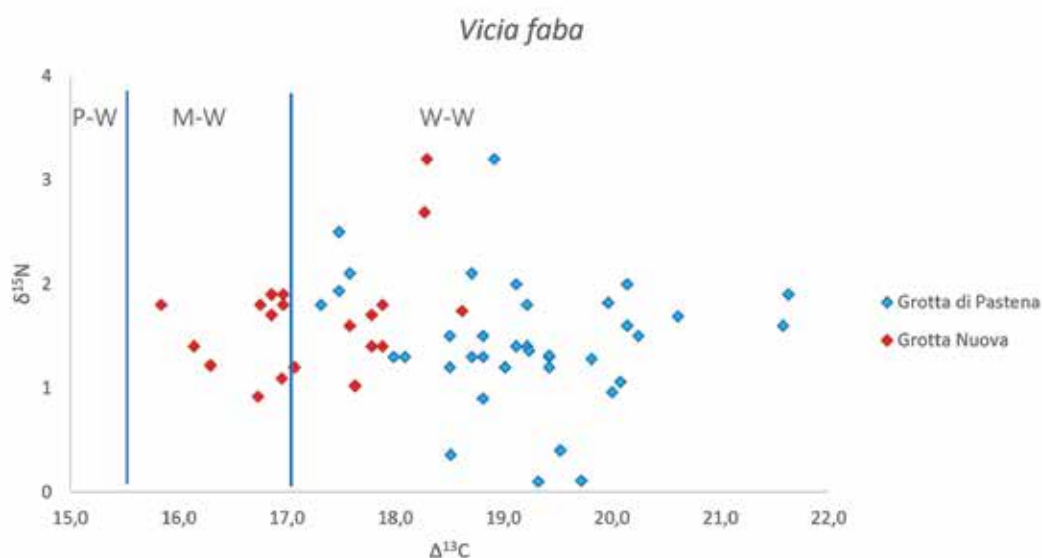


Location of the three archaeological sites: 1) Palafitta of Ledro; 2) Grotta Nuova; 3) Grotta di Pastena

others were analysed without chemical treatment. The results obtained from the two protocols were similar, and therefore they were considered together. Our data suggest that artificial management was applied to growing plants. Carbon values of broad beans from Grotta di Pastena and Grotta Nuova suggest that they were moderately and well-watered, with nitrogen values that lead us to hypothesize that they were subjected to fertilization. Cereals from the three sites were also moderately and well-watered but conversely $\delta^{15}\text{N}$ suggest that only barley from Ledro was subjected to fertilization.

Therefore, the situation outlined for Grotta di Pastena and Grotta Nuova is quite similar, while Ledro differs





Estimations of manuring rates and watering status (P-W= poorly-watered; M-W= moderately-watered; W-W= well-watered) of cereals and legumes

significantly from them. The outlined situation can be related to local environment and further analysis from other Italian archaeological sites would be necessary to form better interpretation. This preliminary work returns a first ecological baseline for protohistoric Italy, with the hope that it will be

useful for future research and that the available data can be supplemented with new material.

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The 4th Joseph Déchelette European Archaeology Prize

The 4th Joseph Déchelette prize was awarded in June 2022 to Dr Thibaud Poigt of the universities of Toulouse-Jean Jaurès and Bordeaux-Montaigne, for his doctoral thesis on 'Weighing Instruments in Western Europe during the Metal Ages (14th–3rd centuries BC): Design, Uses and Users'. The title of the prize refers to Joseph Déchelette, a scientist born in 1862 in Roanne, Loire, France, who was one of the founders of European archaeology but who sadly died prematurely on the front line of the Great War in 1914. The prize was presented to the winner in the library of the Joseph Déchelette Museum in Roanne.

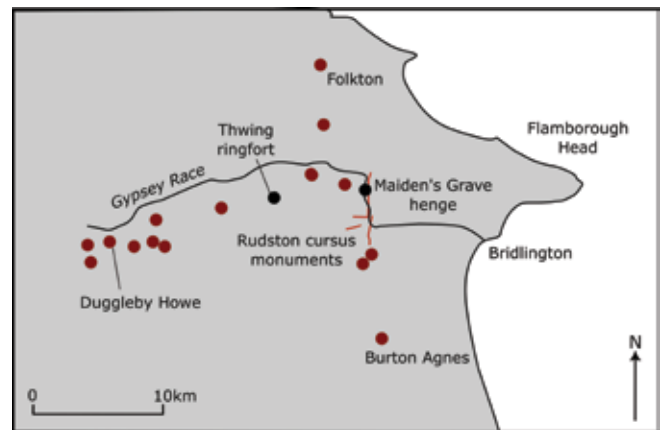
The aim of the prize is to highlight the work of a young archaeologist, by supporting them following the defence of their doctoral thesis. Thibaud's thesis was praised for its original subject matter and analytical protocols, offering a renewed vision of the exchanges and economy of protohistoric societies. The jury also appreciated the ambitious further research proposed, as well as the prize winner's active involvement in the scientific community. The prize was €10,000 and several research stays at European institutions, as well as membership of the Prehistoric Society.

Sophia Adams, British Museum

Was Bridlington Harbour an early prehistoric ‘landing place’?

Richard Bradley's latest book (*Maritime Archaeology on Dry Land – Special Sites along the Coasts of Britain & Ireland from the First Farmers to the Atlantic Bronze Age*) examines a group of coastal sites where early prehistoric finds are surprisingly concentrated. Starting with those located north of the Solway and the river Tees, where the prehistoric coastline has stayed above the prevailing sea level due to isostatic recovery, he has identified the key topographic and archaeological features which aided the development of special ‘landing places’ on the protected seashore. These sites, such as Luce Sands, Ardeer, Tentsmuir and the Culbin Sands, were used at differing periods throughout the Neolithic and Early Bronze Age. He goes on to describe other English and Irish beaches, outside the area of isostatic uplift, where the coastal topography makes it likely that similar, but now lost, ‘landing places’, could similarly have facilitated maritime exchanges and, via the local river, provided access to major contemporary ceremonial centres. One example is Hengistbury Head, the gateway via the River Avon to henge sites at Durrington Walls and Marden. He also reviews the later development of these sites, with their links to EBA barrow cemeteries and to nearby LBA ring-forts.

Bradley mentions Flamborough Head as one of his prominent headlands, whose chalk cliffs are easily identified from the sea and whose flint was exploited for specialist tool manufacture at Beacon Hill, but without drawing any further conclusions. It struck me that this idea could be followed up, as these protective cliffs would have sheltered boats accessing the gently sloping, sandy Bridlington beach, where the Gypsy Race enters the North Sea at the current harbour. Significantly, the Gypsy Race drains the Great Wold Valley, where 12 km from the coast, we find the Rudston cursus complex and its monolith, together with a local concentration of imported polished stone axes. Overlooking the valley are the two henges known as Maiden's Grave and Thwing, the latter re-used as a ringfort, testifying to continued Late Bronze Age activity in the area. Further upstream are a whole series



Map of the Great Wold Valley in relation to the coast, showing key Neolithic and early Bronze Age monuments. Dark red circles denote round barrows.

of Neolithic round mounds, including the famous mound and enclosure at Duggleby Howe. A further indicator of the significance of the area is the recent recognition that the decoration on the Folkton Drums and the new find from Burton Agnes (whose sites collectively straddle the Great Wold Valley) have Grooved Ware motifs which only occur at a few key ceremonial monuments in Northern Britain around 3000 BC.

When these parallels were discussed with Richard, he agreed that the Bridlington/Flamborough complex ticks all the relevant boxes. He noted that the relationship between the Rudston cursus complex and coast is particularly striking, as it is a similar distance upriver as the Scottish examples. It will be interesting to see how quickly the ideas from this thought-provoking book are taken up by future research agendas in England and Ireland and, in particular, by any reconsideration of prehistoric activities in the Great Wold Valley.

John Cruse (john.cruse1@btinternet.com)

	Culbin Sands	Luce Sands	Littleferry Links	Walney Island	Merthyr Mawr	Dundrum Sands	Dalkey Island	Hengistbury Head	Bridlington
River estuary or delta	X	X	X	X	X	X	-	X	X
Presence of still water	X	X	X	X	?	X	-	X	X
Sand dunes or gravel bar	X	X	X	X	X	X	-	X	?
Shelter provided by island/ rock	X	-	X	X	X	-	X	X	-
Visibility from open water	X	?	X	X	X	X	X	X	X
Access to a wider hinterland	X	X	X	X	X	X	X	X	X

The best documented prehistoric coastal sites in Britain and Ireland in relation to the defining features of medieval landing places.

The deadline for submissions for PAST 103 is 3rd Feb 2023. Contributions to Editor, Susan Greaney, University of Exeter, Laver Building, North Park Road, Exeter, EX4 4QE. E-mail: 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 N1 7ED. 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: t.machling@ucl.ac.uk.