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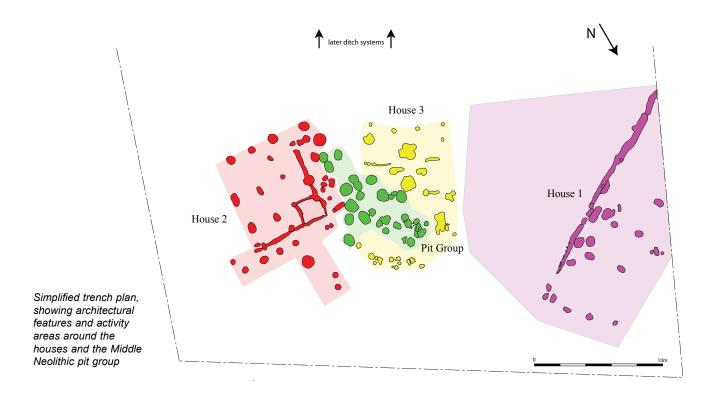
http://www.prehistoricsocietv.org/

Neolithic houses from Llanfaethlu, Anglesey

C.R Archaeology was commissioned by Isle of Anglesey County Council to undertake a programme of archaeological works at Llanfaethlu, Anglesey. The site is located on the north-eastern slope of a low hill overlooking a river. Three Early Neolithic houses, a large Middle Neolithic pit group and two features with Grooved Ware pottery have been excavated. Llanfaethlu is the first Early Neolithic multi-house settlement in north-west Wales, and whilst it has some striking resemblances to the houses at Llandegai and Parc Cybi it is exceptional in terms of the artefactual assemblage and the level of preservation. There is a strong resemblance to Irish sites where a recurring pattern of two or three buildings clustered together is evident. Analysis is still ongoing and interpretation very much in its initial stages, but there are some interesting trends appearing through preliminary work.

The houses

House 1 is the largest of the structures and associated with a large but ephemeral spread of relict soil which had accumulated in a natural hollow outside the building. This probably represents an activity or refuse disposal area. The house is not yet fully excavated (excavation will be completed this autumn), but is in excess of 16 m by 7 m and is oriented on a north-east—south-west axis. A number of different construction methods were utilised in the erection of the outer walls, ranging from stone-lined postholes in the north-east to wall slots and stakeholes in the south-east wall. Charcoal in one of the wall slots suggests that fire played a significant part during the closing down of one phase of the house, before it was renewed on the same spot.



Number 81 Autumn 2015



Aerial shot of the site under excavation (photo by Adam Stanford)

Two postholes define what is thought to have been the entrance. Between them is a shallow feature containing a large flat stone. A second flat stone created a step or threshold into the building. Directly behind this and blocking the gap between the postholes is a stone-lined pit, probably for a further pair of postholes sealing off the earlier entrance into the building.

The interior of the house is subdivided into compartments by rows of stone-lined postholes. One of these was apparently of special significance. It contained the cremated remains of an ovine or possibly cervid leg joint at its base. The cremation either took place in-situ or while the material was still very hot, as there is reddening of the surrounding clay. A heavily decayed saddle quern had been placed on top of the cremation and formed the base for a stone-lined posthole. The final act associated with this feature was the removal of the post and the backfilling of the posthole with stone, probably an act of 'closing' the life of the house. The backfill contained a beautifully polished rubbing stone which was carefully pressed into the side of the feature. It is interesting to think of one feature representing the whole sequence from establishing to decommissioning of the house, and further work is needed to see if a timeframe for this sequence of activity can be established.

House 2 is a solidly constructed sub-square structure consisting of an external circuit of large posts and smaller internal posthole rows. The structure measures approximately 11 m by 9 m. A particularly large posthole north of the building once held a substantial timber post, which could have served as a marker for the house. Two smaller postholes in the north-eastern corner may have formed a porch-like entrance.

Within the structure is a clearly gridded arrangement of stone-lined postholes. A possible wattle-and-daub partition

creates a clearly delineated square area without an obvious entrance which was replaced/renewed at least once. Such small chambers, although very unusual, are not entirely unknown; similar internal divisions for instance exist at Corbally 5, Kildare and Stretton-on-Fosse, Warwickshire. It is unclear what this area, which had been very carefully delimited from the rest of the building, was used for. It could have been something as mundane as a separate storage area or instead something like a shrine.

House 3 was built from a series of postholes, stakeholes and beam slots forming a rectangular structure measuring approximately 6 m by 11.5 m and oriented roughly north-east—south-west. The exterior walls are considerably less substantial than those used in neighbouring house 2. Neither has the floor surface of the building survived, and it is believed that at least the top 10 cm of the old ground surface have been lost through erosion and ploughing. Features within this structure contained Irish Sea Ware pottery sherds, worked stone and flint.



Posthole in house 2 under excavation

The interior was divided into clear zones. There is an area of heavy burning approximately in the centre and a clear compartment defined by beamslots at the south-western end. Within this compartment was a large circular feature containing pieces of worked stone, Irish Sea Ware pottery and struck flint along with hazelnut shells. To the north-east of the beamslots, and positioned so as to narrow the entrance into the structure's south-western compartment, are two sets of double postholes. One contained a burnt leaf-shaped arrowhead and a fragment of a polished Graig Lwyd axe. It is postulated that these 'special items' were specifically chosen for deposition following the decommissioning of the house and the removal of the posts.

Middle Neolithic Pit Group

This group of features comprises 19 pits, four hearths and a number of post- and stakeholes. The pits tended to contain more artefactual material and two of the four hearths had been cut by later pit features. The concentration of features within this pit group, together with the number of hearths and the presence of inter-cutting contexts, is strongly indicative of repeated use of the same site.

Two of the hearths had stones remaining within them and are likely to have been used as cooking pits. One hearth was surrounded by a number of other small features thought to represent the remains of a small structure, either to allow items to be suspended over the fire or to be hung near it for cooking or drying purposes.

Four of the pits had pottery sherds (mostly Mortlake Ware) placed around their sides. Pit fills also contained worked stone, including local and imported flint, chert, struck local stone, fragments of at least one Graig Lwyd axe and considerable quantities of hazelnut shells. The pit group is situated adjacent to the square house 2, but does not impinge on either the building or its associated features. This indicates that the house had perhaps survived at least as an earthwork, which then became the focus for later activity.



Large sherd of Middle Neolithic Mortlake pottery from the pit group

Overall, this location was chosen as a focal point to return to – potentially over a period of several centuries. We hope that future radiocarbon dates, as well as the detailed analysis of the finds material (to date comprising approximately 900 pottery sherds, 650 lithic artefacts and botanical remains), will help us narrow down the chronological range and provide greater detail on this exceptional site.

Acknowledgements

C.R Archaeology would like to thank the following people for all their help, advice and support on the project: Gareth Thomas and the Isle of Anglesey County Council, landowner Mr. Tom Carpenter, the staff at Anglesey and Bangor University Archives, finds specialists Frances Lynch and Dr Ian Brooks, Adam Stanford of Aerial Cam, Cadw and all our visitors. Thank you very much Llanfaethlu for the support and interest, school visits and generally making us so welcome!

Catherine Rees and Matt Jones, C.R Archaeology

EUROPA 2016

Edinburgh: 3-4th June 2016

Dynamics of Art, Design, and Vision in Iron Age Europe In Honour of Prof Peter Wells, University of Minnesota

The 2016 Europa Conference will be held in Edinburgh and be hosted by the University of Edinburgh and the National Museum of Scotland. The recipient, Prof Peter Wells, is well known for his work on Iron Age art and the Iron Age/Roman transition and the conference will coincide with the Celtic exhibition at NMS. As has now become tradition, the Friday session will be given by new researchers on topics related to Celtic Art and the Saturday session will feature lectures by well-known authorities personally invited by Prof Wells. Speakers include Colin Haselgrove (Leicester), Lotte Hedeager (Oslo), J.D. Hill (British Museum), Fraser Hunter (NMS), Jody Joy (Cambridge) and Simon Stoddart (Cambridge). The Europa lecture itself will be in the lecture theatre at the National Museum of Scotland and will be titled *Design for Communication in the Iron Age*.

On the Sunday morning, there will be an optional visit to the Celtic Exhibition at the NMS. Places for the Europa lecture itself are strictly limited so early booking is advisable. See the website for a full programme and booking details.

Early low-density egalitarian urbanism in late Neolithic Ukraine?

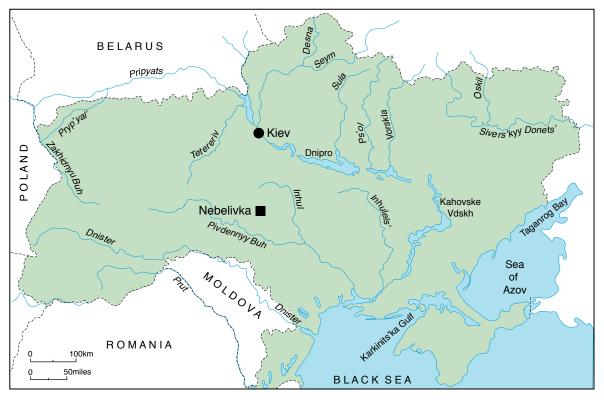
The Anglo-Ukrainian research project 'Early urbanism in Europe? The case of the Trypillia mega-sites of Ukraine' seeks to tackle head-on the issue of how to characterize urbanism in a way that deals with the acknowledged diversity of early urban sites. We have moved far from V. Gordon Childe's early (1950) definition of high-density urbanism based upon a trait-list suited to a small fraction of Graeco-Roman (essentially European) cities. An important alternative to Childe is the notion of low-density urbanism, theorized by Roland Fletcher and meaning large sites with lots of unbuilt space and fewer than 50 people per ha. While there is still much diversity in the sites grouped under the 'low-density' rubric, the crucial common feature is their size and density characteristics, which contributed to strikingly different social formations. It seemed that this idea of low-density cities was appropriate to the Trypillia mega-sites - a specific group of around 30 sites of over 100 ha dating to the fourth millennium BC and located mostly in south central Ukraine.

After a trial season of our methodology in 2009 at the megasite of Nebelivka, in County Kirovograd, the project began in 2012 with the aims of completing a geophysical plan of the 236 ha settlement, producing a pollen diagram for before, during and after the mega-site's occupation, creating an internal AMS-based chronology accounting for the number of houses dwelt in at one and the same time over the total duration of site life, and gaining a better understanding of the deliberate burning of the houses at the end of their lives.

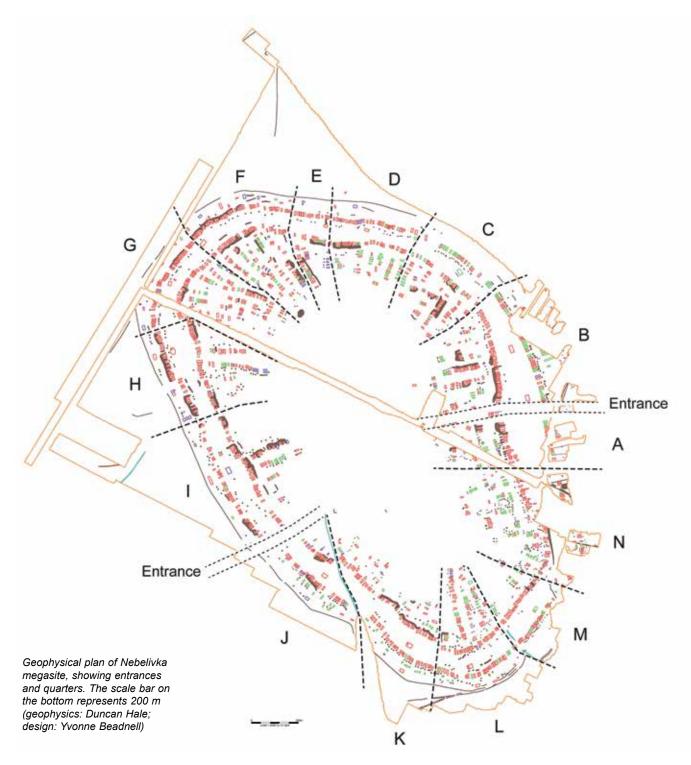
The key first aim was achieved in October 2014; the plan showed a total of over 1,500 structures, grouped in 60

neighbourhoods which in turn were clustered in 14 quarters, each focused upon one or two larger-than-usual buildings, which we have termed 'assembly houses'. The fundamental planning principles comprised a shallow perimeter ditch, more symbolic than defensive, two concentric house circuits and the inner radial streets. Three internal unbuilt spaces were thus created - a space for gardens between the ditch and the outer circuit, a second space for gardens and fields between the two circuits and a large (65 ha) empty space for animals within the inner circuit and the radial streets. While these design principles appear to have produced an orderly, planned settlement, in fact there was a huge amount of variability between the neighbourhoods and between each of the quarters; there is much evidence for a bottom-up approach to creating a mega-site plan while not violating the overall design principles.

Geophysical research in 2009 identified a massive structure – then and now the largest structure in the Trypillia world. The project excavated this building – dubbed the 'megastructure' – in 2012, focusing mostly on the burnt building (37 × 20 m) rather than the open courtyard (27 × 18 m) in front of the assembly house. There were also small rooms at both ends of an unroofed inner courtyard, perhaps used for meetings. The fired clay features of the mega-structure were just like those found in 'ordinary' houses, only much bigger. It was a great surprise that there were very few special finds deposited in the mega-structure: no copper, only one gold hair-ornament and very little stone material. There were also no obvious storage facilities or storage-jars. Instead, there were masses of decorated pottery, some figurines and some



Location map of Trypillia - Cucuteni groups, with key sites (Christina Unwin)



animal bones. This crystallized what for us is the central issue of mega-site archaeology: a huge structure, but hardly any prestige goods — no materialization of social difference, of elites! How could such a large settlement, with a population numbering thousands, have functioned without some kind of orderly, that is to say, hierarchical structure?

This conundrum led us to question whether the mega-sites were permanently occupied in massive numbers or whether there were other ways of living at a smaller scale. This leads us to the pollen analysis of a core located by Dr Bruce Albert only 1.5 km from the edge of the mega-site. Dr Albert has pioneered ways of concentrating pollen from previously intractable alluvial sediments and realized that short valley

segments have incorporated strictly local sediments related to mega-site social practices. The surprise was the relatively low level of human impact on the environment – hardly more than in the periods before and after the mega-site. In particular, the expectation of massive burning horizons marking the deliberate burning of hundreds of houses at the end of the site's occupation was not met. Rather, Dr Albert identified seven different fire events, only three of which fell inside the mega-site period. The preliminary conclusion is that mega-site inhabitation was far less intensive than previously thought, meaning that site population was rather smaller than we had believed or that the dwelling was structured differently – perhaps seasonally or with a special, pilgrimage function. The project is actively investigating





The burning of the experimental Trypillia two-storey house, Nebelivka, April 2015 (photo: Marco Nebbia)

these alternatives to large-scale, permanent occupation at Nebelivka.

The third aim of modelling the numbers of contemporary houses at different stages of the settlement is still under way, with Dr Andrew Millard using Bayesian models for the 80 AMS dates from the mega-site. Initially, the project had planned to date carbonized seeds trapped inside the house daub formed during house fires, but the high temperatures had destroyed all the seeds. From 2013 onwards, the project

excavated test pits in over 70 houses located through geophysics in order to recover animal bones or organic materials. Since such materials were available in 90% of the houses, the project has a spatially well-spread sample of AMS dates to date the different phases of the mega-site plan.

The central feature of Trypillian archaeology is the house, with no cemeteries known until the very final phase. While the burnt clay masses of these houses (in Russian, 'ploshchadka') have been excavated since the 1890s, there are still many aspects of house burning that archaeologists do not understand. Many house burning experiments with look-alike Trypillia houses have been designed, but the basic questions have still not been answered. The principal uncertainty is whether the houses were mostly one-storey or two-storey with humans living on the upper floor. In summer 2014, two experimental houses were designed and built by Mr Stuart Johnston; over Easter 2015, one of these was successfully burned down following the packing of 30 m³ of timber into the house. The remains will be excavated in several years' time. Important lessons have already been learnt from this house burning.

The Durham – Kiev project has reached its final year and has opened up many key issues of Trypillian archaeology. The interpretation of mega-sites as low-density egalitarian towns is still a serious possibility. Readers interested in these debates are invited to attend the final project conference in Durham in April 2016 (for details, see project website: http://community.dur.ac.uk/j.c.chapman/tripillia/links/; and advertisement in PAST 80).

John Chapman & Bisserka Gaydarska, Durham University

Living on the Avenue: investigating settlement histories and other events at West Kennet, near Avebury

The Avebury region of north Wiltshire has attracted considerable archaeological attention due to the presence there of a series of major Neolithic monuments, which include the eponymous henge and its megalithic avenues, Windmill Hill, Silbury Hill and the Sanctuary. However, less attention has been paid to the record of human settlement

that accompanied, and even provided the conditions for, the creation of these monuments. Addressing this imbalance is the aim of the Between the Monuments Project (see *PAST* 68), which is focusing research on the character of human settlement in the Avebury landscape during the fourth to mid second millennia BC, and its relationship to changing

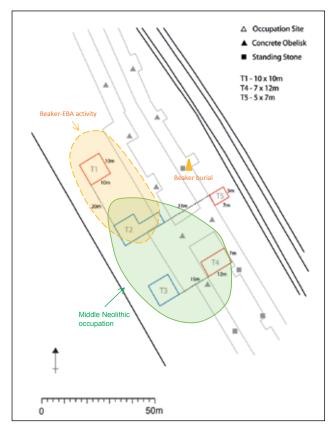


Aerial shot of the 2015 trenches; the trench bordered by orange fencing spans the line of the West Kennet Avenue (photo @ Adam Stanford)

environmental and social conditions, including the demands of monument building.

Supported by grants from the British Academy/Leverhulme and Society of Antiquaries of London, during 2013 and 2015 further excavations were undertaken on a site first encountered by Alexander Keiller during his restoration of the West Kennet Avenue in 1934. Located c.500 m south-east of the henge, the 'West Kennet Avenue occupation site' was identified as a spread of worked flint and Neolithic ceramics bisected by the line of the Avenue. At the time, Keiller believed this represented an area of habitation immediately pre-dating the Avenue, and that its core had been marked by the Avenue builders through the omission of one of the Avenue stones. Pits and postholes were also present. We were struck by the survival of soft prehistoric ceramics from what seemed to be a topsoil context, and by the remarkably fresh condition of the worked flint, now housed in the Alexander Keiller Museum at Avebury. Had material survived so well because it was held in a protective environment such as a midden? Was it generated by settlement activity? And did the artefact scatter have any immediate relationship with the Avenue?

Five trenches were excavated adjacent to those of Keiller, positioned across an area of 70×50 m centred on the zone where the main concentration of Neolithic artefacts and features had earlier been encountered. This corresponded roughly to the area defined by stone pairs 28-32 of the West Kennet Avenue. It was soon apparent that the scatter of flint and pottery had survived so well because it was contained in the base of a thick brown earth and rendzina. Prehistoric artefacts originally deposited on the ground surface had been



West Kennet: the main zones of Middle Neolithic and Early Bronze Age activity

vertically displaced through worm sorting – taking them below the level of later ploughing – but they preserved their horizontal position. Unpatinated and effectively *in situ*, the



The large posthole adjacent to the tree-throw

worked flint was in such fresh condition that it was possible to undertake microwear analysis (conducted by Dr Ben Chan).

The Middle Neolithic settlement

Several thousand pieces of worked flint were recovered, along with c.300 sherds/crumbs of prehistoric pottery (predominantly Peterborough Ware). Bone had not survived well. Densities of up to 50+ pieces of worked flint per metre square were encountered. The flint includes a distinctive Middle Neolithic (c.3400–2900 BC) component that comprises the bulk of the assemblage. This is characterised by numerous often finely worked scrapers, serrated flakes, a range of lightly retouched/utilised straight-edged flakes, several chisel arrowheads and discoidal cores. Microwear analysis has identified polish on serrated flakes consistent with their use in preparing fibres, perhaps nettle for cord production. The small number of cores, the underrepresentation of primary flakes, the high numbers of implements and utilised pieces and the presence of pottery argue that this phase was one of settlement. Given the flintrich geology of the surrounding landscape, it was surprising to find several evidently non-local pieces, including tools and utilised pieces in greensand chert (from geologies to the west) and even Bullhead flint (the closest source of which is the Windsor region 80 km to the east). Were these pieces brought in by people rather than exchanged, and if so, could they stand as proxy evidence for wide-ranging mobility?

Here, a conventional approach of topsoil stripping would have removed most of the archaeology. Very few sub-soil features were encountered: a small number of pits, stakeholes, tree-throws and solution features. Even those anthropogenic features identified need not be directly related to the main phase of settlement, but rather to abandonment/post-abandonment marking and commemoration. One small pit set within the middle of the area later occupied by the

Avenue produced eight complete chisel arrowheads. In the trench to the west of this was a similar small pit containing a rich assemblage of worked flint and short-life wood charcoal, which gave a date of 3311–2918 cal BC (SUERC-59896).

Analysis of wood charcoal (by Ellen Simmonds) hints at the presence of established oak woodland early in the Neolithic and of scrub, woodland margins or open woodland in the vicinity during the Middle Neolithic. No charred plant remains were present.

The late fourth millennium phase of settlement belongs to a critical phase in the region's Neolithic. The pace of monument building had decreased substantially from that seen during the 37th-35th centuries BC, though one or two late long barrows might fit into this horizon (e.g. Millbarrow), along with re-cutting part of the Windmill Hill outer ditch and the secondary filling of the chambers of the West Kennet long barrow. While the Avebury Cove tentatively fits here, other elements of the Late Neolithic monument complex were yet to be created. Evidence from Avebury and elsewhere in the region shows that the landscape was still quite busy during the Middle Neolithic, even if monument building was down-scaled and economic practice possibly changed substantially (to a more pastoral focus?). The lithics from the excavation evidence a major change in technology - different reduction strategies, new tool forms such as chisel arrowheads, etc. - which might be linked to such subsistence shifts; but the focus here and elsewhere was on places already with a history, highlighting the importance of tradition, memory and the past in structuring the use of this landscape. Change was mediated in relation to the past.

Earlier and later goings on

While the key period of occupation occurred during the Middle Neolithic, a Mesolithic, Early Neolithic, Late Neolithic and Early Bronze Age presence is also attested. The latter phases relate to the progressive monumentalisation



Trench 4 under excavation

of this location. The detail of this was quite unexpected. In the southernmost trench a large tree-throw pit of Neolithic date was partially cut through by a massive (1.5 m deep) posthole, perhaps replicating/reinstating the erstwhile tree itself. Stakeholes suggest the area immediately around this was fenced off. To the east and north of this, three linear pits stand out in terms of their morphology, and because they may be of natural origin, but subject to human modification. We are reasonably certain that they result from the removal of large, naturally occurring sarsen stones. In one case stratigraphic and artefactual evidence indicates a post-medieval date for this; but two others contained substantial and deliberate deposits of fresh worked flint, demonstrating prehistoric extraction. Both of the latter would have yielded reasonably sized stones (in the order of

3–4 metres), dimensions that correspond well to megaliths that make up adjacent sections of the West Kennet Avenue, created *c.*2500–2200 BC.

It is the Early Bronze Age phase that is particularly intriguing. This is marked by a localised concentration of barbed-and-tanged arrowheads, invasively-flaked knives and unfinished 'fancy' flintwork, but, curiously, few other diagnostic tools or ceramics. This activity post-dates the creation of the West Kennet Avenue, and we do not think it was routine settlement. Its focus may well have been an adjacent Beaker burial against stone 29a (discovered in 1934), raising the possibility that the artefactual signature is the fall-out of mortuary-related gatherings.

Mark Gillings, Mike Allen, Charly French, Rosamund Cleal, Nick Snashall, Alistair Pike & Joshua Pollard (c.j.pollard@soton.ac.uk)

Prehistoric Society to launch new award in 2016 for the study of museum collections

A new award is to be launched in February 2016 aimed at promoting artefact and assemblage based studies in UK museums. Unusually, it will be available to partnerships between a museum and a named early-stage researcher (postgraduate or equivalent experience) and both parties will be eligible for a contribution to the costs of the project. In this way we hope to get both museum curators and researchers thinking about worthwhile collaborative projects. The full details of the award and the maximum grant available are to be decided by Council this October and will be announced quickly thereafter. The closing date for applications will be 31 January 2016.

Applications will be invited for any area of human prehistory from any part of the world, but it is likely to be a requirement that the collection in question is housed in the United Kingdom. The other criteria will be that: i) there are new

and pertinent avenues of study of the particular material that lie within the competence of the applicants; ii) the project is contained and deliverable on a specified time-scale.

Awards will not be made for sub-sets of larger projects (such as doctoral research), but related spin-off research will be eligible. A condition of the grant will be that a brief project interim will be published in the Society's newsletter, *PAST*. Furthermore, the Society will expect to exercise first refusal on the publication of final results in their *Proceedings*; acceptance will remain subject to the standard refereeing process.

If you are potentially interested in this award, please register your interest or make enquiries with the administrative and membership secretary, Dr Tessa Machling at t.machling@ucl.ac.uk; you will be sent the full details as soon as they are finalised.

A new store for the archaeology and history collections of National Museums Scotland

Researchers keen to study archaeological artefacts from the reserve collections of National Museums Scotland (NMS) will be relieved to hear that they are once again accessible, a year after the closure of the Custom House store in Leith. In June 2015, Fiona Hyslop MSP (Cabinet Secretary for Europe, Culture and External Affairs) opened a new, purposebuilt store at the National Museums Collection Centre in Granton on the Firth of Forth, 6 km to the north of the National Museum in Edinburgh city centre. Costing £12 million, 'Building 17' houses the collections not only of the

Department of Scottish History and Archaeology, but also of the Natural Sciences Department, thereby facilitating cross-disciplinary research.

Moving an estimated 1.5 million archaeological objects was a huge undertaking, but the hard work was worthwhile because the storage conditions are far superior to any provided before in the collections' 230± years' history, and it has been possible to order the items in a much more accessible manner. Different kinds of material are stored separately, with



The new NMS store. (photo: Alison Sheridan)



Osteologist Aida Romera with one of the Caisteal nan Gillean human bones (photo: Alison Sheridan)

the ground floor given over largely to stone objects (ranging from large sculptured stones to microliths) and the first floor mostly to ceramics and metal items. There is also a cold store for dendrochronology samples and a post-excavation room on the ground floor, and a large, well-equipped workroom on the first floor (including a photo-microscope), along with NMS' first ever dedicated store for human remains. Storage geeks will be interested to hear that the 4 metre-high roller racking offers efficient high-density storage of boxes, trays and drawers, and that the formerly arduous task of making cut-outs to accommodate objects in plastazote foam is now achieved in mere minutes thanks to the laser-cutting wizardry of an Ayrshire-based company called Replicade.

No object (or indeed curator) was lost or broken during its air-cushioned ride in a pantechnikon along the Forth shoreline, but the move did throw up some intriguing discoveries and rediscoveries, including finds from William Galloway's 1880s excavations of a Mesolithic midden on Oronsay that had been crated up in preparation for World War II and never since opened! (For details of the excavation, see Alan Saville's publication in the online journal *Mesolithic Miscellany*, 22:2, July 2014). This material includes four human bones and one human tooth, bringing the grand total of pieces of human remains from Mesolithic Scotland – all from the Oronsay middens – to 74. A further surprise came in the form of a fragmentary hat made from horse hair, which

had been discovered in Sutherland during peat-digging in 1961 and was meticulously and promptly recorded by Audrey Henshall before ending up among social history items at the back of a cupboard in the Custom House store! A sample of the horse hair was radiocarbon dated for NMS in 2014 and found to date to 1127–931 cal BC (95.4% probability; SUERC-52101), making it comparable in date to a plaited horsehair cord from the enigmatic 'Sheshader Thing' from the Isle of Lewis, and thus among the earliest evidence for domesticated horse in Britain and Ireland.

Rehousing such a large amount of material has underlined the importance of some simple, but often-overlooked rules of storage – including labelling boxes of excavation finds with full site names, not just site codes(!), and ensuring that any re-packing of items does not lead to the loss of any key pieces of information about those items. Original handwritten labels can, for example, give vital clues about the provenance of an otherwise poorly-documented find.

Initial reactions from researchers who have used the new store all appear very positive, and the proximity of Building 17 to the building where the analytical equipment of NMS is housed is a bonus. It is intended that, in due course, the store will be used for hosting training workshops as well as for facilitating study access to the collections. Happy 'customers' so far include Professor Ian Armit, who has sampled around 90 specimens of human remains spanning the Neolithic to Norse periods for an exciting aDNA project with Harvard University's Professor David Reich, and Dr Hugo Anderson-Whymark, who has studied and photographed Orcadian Neolithic stone items for Professor Mark Edmonds' AHRC-funded project on the use of lithic resources in Neolithic Orkney.

Much work still remains to be done, and it will be some time before a definitive on-line inventory of NMS' archaeological collections will be available; but in the meantime, *bona fide* researchers are welcome (subject to staff availability) to come and marvel at Scotland's national holdings. Contact Alison Sheridan at a.sheridan@nms.ac.uk, or the Departmental Secretary Kerry Allan, k.allan@nms.ac.uk.

Alison Sheridan, National Museums Scotland

Europa 2015

Some 150 delegates gathered at University College Dublin to attend the 2015 Europa weekend in honour of Prof Friedrich Lüth from the German Archaeological Institute in Berlin. The theme of the conference was the origins of monuments and, fittingly for Ireland, focussed largely (but not exclusively) on passage graves and megaliths. After a welcome and introduction by Prof Gabriel Cooney (UCD) and the President of the Society, the Friday sessions, largely devoted to new researchers, started off with a description of the early fifth millennium cemetery at Fleury-sur-Orne delivered by Serge Cassen (Nantes) (the original presenters were unable to make the conference). This was followed by two papers on the development of megalithic landscapes, one using Bayesian radiocarbon modelling (by Bettina Schultz Paulsson, Kiel) and the other based on the intervisibility and interconnection of mounds within linear barrow cemeteries in north-western Europe (by Quentin Bourgeois, Leiden).

After (a substantial) lunch, the audience managed to stay awake for more general but fascinating papers on the use of rollers (or not) in the transportation of megaliths, the virtual phenomenology and reconstruction of temple building in Malta and possible similarities with aspects of megalithic art in Sardinia, and feasting and burial practices involving buffalo bucrania in south-east Asia, respectively delivered by Barnabas Harris (UCL), Eimear Meegan (UCD) and Guillaume Robin (Edinburgh). The third session focussed on Ireland, with Robert Hensey (OPW) describing the origins and development of the passage grave tradition, Lynda McCormack (NUI Galway) looking at the construction of ritual space between passage graves in the earlier and middle stages of the great cemeteries, and Neil Carlin (UCD) suggesting that whilst passage graves continued to be used through the late Neolithic, they were no longer being built. Instead, there was a reinvention of the megalithic tradition in the form of wedge tombs in the post-Grooved Ware Chalcolithic.

A short break allowed delegates to make their way to the rooms of the Royal Irish Academy on Dawson Street in central Dublin where, in the wonderfully atmospheric library and lecture room, Ann Lynch (National Monuments Service) described her recently published work at the early dolmen of Poulnabrone on the Burren. This was followed by a wine reception generously sponsored by Devenish Nutrition, the owners of the land around the passage grave of Dowth.

The Saturday lectures were delivered by speakers invited by the Europa prize winner and the President of the Society. It was a wide-ranging series of talks starting with the early pre-pottery Neolithic complex of Göbekli Tepe in eastern Turkey with its decorated pillars, rich artefacts and artwork dating to the eleventh to eighth millennia BC, presented by Mehmet Özdoğan (Istanbul). We continued round the Mediterranean via Caroline Malone's (QUB) exciting research into Neolithic Malta and the new light being shed on the island's ancient economy. Antonio Carlos Valera (ERA, Lisbon) took us to Iberia, especially Portugal, and



Presentation of the Europa Prize to Prof Friedrich Lüth (photo: Mike Allen)

the large enclosure complexes such as Perdigoes, with their rich array of exotic finds and materials and evidence for the continuous remodelling of complex ditch systems. After coffee, Serge Cassen retook the stage to talk on the use and re-use of the monuments of north-west France. Tim Darvill (Bournemouth) introduced the earliest monuments in England and Wales and Alison Sheridan (NMS) those in Scotland, very much complementing the Irish lectures from Friday. Recent works in Denmark and Sweden were respectively described by Niels Andersen (Moesgaard) and Karl-Göran Sjögren (Gothenburg), who explained the difficulties in working with sites where absolute dating materials proved elusive. Indeed, after the breath-taking material outlined by Mehmet and Antonio at the start of the day, the general decline in the amount of material culture as we moved northwards was distinctly noticeable.

During the Society's AGM, the R. M. Baguley award was presented to Jonathan Tabor for his joint authored article with Duncan Garrow, John Meadows and Christopher Evans entitled 'Dating the dead: a high-resolution radiocarbon chronology of burial within an Early Bronze Age barrow cemetery at Over, Cambridgeshire' in vol. 80 of the Proceedings.

The AGM was immediately followed by the main event, the presentation of the Europa Award to Prof Friedrich Lüth for his services to European Prehistory whilst President of the European Association of Archaeologists. Prof Lüth then delivered a fact-filled lecture on his work on buried surfaces in the Baltic Sea and related monuments entitled 'Early monumentality and the role of fisherman societies'. The day was rounded off with lively and informal discussions at a wine reception generously sponsored by Cambridge University Press.

Being in Dublin for the weekend, the opportunity to visit some of the most iconic sites in the Boyne Valley seemed too good to miss, so a field trip was arranged for the Sunday,



Prof George
Eogan guiding
delegates
around the
Knowth Passage
Grave cemetery

starting at Newgrange with a guided tour of and entry into the passage tomb and chambers. Unable to all fit into the tomb at once, guided tours around the tomb and the associated monuments were offered to those outside. Then on to Knowth and we were privileged to have a guided tour by Prof George Eogan himself. George has been excavating at

Knowth since 1962 and the site and associated monuments are now reconstructed and displayed to the public. Lunch was taken next to the third great passage tomb at Dowth and then we visited some of the smaller satellite tombs, as well as the impressive Dowth henge.

All in all an excellent weekend, and we must thank a number of people who helped make the event such a great success. Firstly Courtney Nimura, Neil Carlin and Jo Gaffrey arranged the Friday speakers. Karen Dempsey, Bernard Gillhooly, Niamh Kelly, Hytham Martin and Stephen Matthews acted as student ambassadors to guide and assist delegates over the three days. Steve Davis introduced us to the henge and the sites around Dowth. George Eogan guided us round his life's work at Knowth. Receptions were sponsored by CUP and Devenish Nutrition. A special thanks to Prof Gabriel Cooney for his great help in setting up a superb celebration of prehistory. We look forward to Edinburgh 2016.

Alex Gibson

Replicating prehistory

Replicated artefacts are becoming more and more common. With the increasing development of community archaeology, the inclusion of prehistory on the Schools National Curriculum and a need for Museums to further engage with their public to create revenue streams, many replicas are being made for use in museum handling collections and displays, as well as in school outreach work. In addition, recent work by the Micropasts team at the British Museum has led to a number of prehistoric artefacts being reproduced using 3D printing.

All of the above are remarkable steps forward, allowing archaeologists, curators and members of the public a chance to get their hands on the past and to examine what these artefacts were like when first made. However, all too often the replicas stand alone, with little information regarding their manufacture, the techniques employed, or the insights which the process of replication can yield. In most cases, even the name of the craftsman who replicated the artefact is missing from displays, making it very difficult to track down who made what, when and how – rendering them almost as enigmatic as the original makers of the objects.

Initially, the authors started working together on a project to recreate a Bronze Age Sussex loop. These enigmatic objects, found almost exclusively within the South Downs region (although a recent hoard find from Near Oakham in Surrey has suggested that there may be more outliers), have been traditionally assumed to be armlets/bracelets. However, the creation of two modern examples, of similar size and weight to the originals, has suggested that the traditional interpretation may not be entirely correct. For most adults the loop does not sit well on the arm, only being wearable on the upper forearm. By experimentation with the modern

examples, a possible use as a cloak fastener has been suggested. In addition, replication has highlighted a number of possible technical difficulties (including fracturing and the necessity of using more than one craftsman to form the loop) that would have been encountered by the prehistoric smith, and which only further replication may help to elucidate.

During the process of making the loop, as archaeologist and replica maker we soon discovered we had much to teach each other about our respective fields of expertise. In literature searches, and in discussion with curators, it became apparent that all too often archaeologists and craftspeople work separately, with little shared information and with replicated artefacts being delivered to their new owners with little more than a comment of how lovely the new item was. Rarely is the process fully documented or feedback from the craftsman added into the museum display and information material regarding the new artefact.

As a result of this, following the replication of the loop, we have embarked on a series of reproductions which will both replicate the artefact and build up a narrative – through photographic images and documentation – of the process



Bronze replica (left) and steel prototype (right) Sussex loops



The South-West Norfolk torc replica

with the aim of providing a fuller story of these items. In addition, we hope to develop additional resources (e.g. tools, examples of materials, etc.) to aid interpretation and to allow these artefacts to be not just a display case item, but a fully interpreted and understood object (at least: as much as possible!). In choosing which objects to replicate, a key requirement for us is to identify a technological issue that has yet to be fully explained. In this way, it is hoped that the information we produce can be used by the academic community also.

Currently, we are working with Newark Museum on a project to replicate the Iron Age Newark torc. Such torcs are not fully understood and there is much debate as to the precise method of manufacture. There are many assumptions regarding the length of wire used, the method of terminal attachment and so on which we will explore through this replication. Insight into this process has already been partly achieved through a previous replication, carried out by Roland, of the South-West Norfolk torc, which is held in Norwich Museum.

It is hoped that this new approach, with documentation at its core, will lead to a better understanding of some of this country's most important artefacts and will allow both archaeologists/curators and members of the public to fully appreciate the objects in the flesh and as manufactured items. We would also invite anyone who has an object they feel deserves attention to contact us.

As a special treat, a copy of the South Cave sword made by Roland for Beverley Museum will be available for members to view at the Europa conference in 2016. The original sword is one of the items included in the British Museum/ National Museums of Scotland 'Celts – Art and Identity' exhibition which will be at NMS at the time of our visit. We hope members will enjoy this rare opportunity to interact with such a stunning item and to compare it to the original in the exhibition!

Tess Machling & Roland Williamson (Bodgit and Bendit)

A Grand Day Out: People of the Heath

Many people will be familiar with the town of Petersfield in Hampshire, nestling close to the foot of the South Downs chalk escarpment, but fewer will know about the excellent and remarkably well-preserved archaeological landscapes on the Heath which lie on its southern fringes. All of this is changing due to the research now being undertaken as part of 'The People of the Heath' project led by Stuart Needham, one of the Society's Vice-Presidents, and George Anelay, on holiday from his day job with West Sussex County Council! The project is receiving good support from Petersfield town council and local residents. This four-year project commenced in 2014 and has focused on one of the most complex barrow cemeteries in the country comprising at least 21 individual monuments, though this number may change with new discoveries. Incredibly, there are no records of excavation at any of the sites and the team's investigations – including ground survey, geophysical survey and excavation - are the most detailed to date. The overarching aims of the project are to assess the monuments and deepen understanding about their structure, chronology, inter-relationship and wider context, but also about the interplay between the 'natural' and what we might call the 'modified' environments. Laudably, at the heart of this is

a drive to ensure that the results resonate with the local community so that they can enjoy an enriched relationship with the Heath and its archaeological remains.

The setting for the cluster of mounds is worthy of note. Hidden from view by trees and shrubs is the massive South Downs chalk escarpment, a prominent 'wall' of topography forming an impressive backdrop to the area and the archaeological monuments. Curiously, despite this visual interplay, the Heath feels very different, detached, and it almost seems as if the chalk elevation forces an intense concentration on this lower-lying area. It is not only humanly-constructed elements that are of interest here – the Heath hosts a large pond (a popular boating and fishing venue) which probably existed in prehistory, perhaps as a series of ponds set around, and within, a generally wetter area. This interplay between strikingly different topographies, geologies, and drainage patterns has created a dramatic arena for the development of the complex landscape now being revealed by Stuart, George and the team on the Heath.

The first year's fieldwork examined a number of places on the Heath but perhaps the highest profile discovery was



There are many barrow 'types' on the Heath including bowl, bell and disc. Others incorporate formal enclosed elements, such as this one, Barrow 14

of a burial within the round barrow, Barrow 11, probably placed within a wooden chamber and accompanied by grave goods which included a whetstone, fragments of a bronze dagger blade, as well as an interesting lithic assemblage. The construction method for the barrow was clearly revealed by layers of ancient turf interleaved with bands of sand -Stuart described this as resembling zebra stripes. That clear structure implies some form of constructive design element - a careful meshing together of locally available materials: the presence of turf may well mean that there were good supplies of pasture available, too. Our on-site discussion focussed on the location of the barrow, on a slight ridge probably overlooking a wetter lower-lying zone, but also on the status of the wooden coffin and the later mound. Stuart believed that the coffin had been placed on the old ground surface, so the structure may well have been free-standing before the mound was built. This suggests a complex mortuary practice that could have involved repeated opening and closing of the coffin, the construction of the mound ending this option for change. ¹⁴C dates place the burial between 1885–1690 cal BC (SUERC-57807 (GU36295)).

The morphology of the monuments on the Heath also varies dramatically, and includes a variety of round and elongated

mounds, ditched components, and at least one enclosure, Site 24. This is an oval enclosure defined by a low bank with an external ditch and, superficially, resembles enclosed cremation cemeteries seen elsewhere. Sadly, excavation has not revealed a 'function', but 14C dating suggests that the enclosure is contemporary with the burial in Barrow 11 (1890-1695 cal BC: SUERC-57808 (GU36296)). The only finds are blade-dominated flints of Late Mesolithic/Early Neolithic date, and these may well be residual. There is a much wider context for this, as revealed by the excavation of a Mesolithic site on the Heath (Site 23) close to the nursery school, and first uncovered in 1907. Stuart and the team worked in collaboration with local schoolkids and despite the site being compromised by the construction of a golf green, good amounts of Mesolithic material were recovered. Radiocarbon dates have confirmed its early origin in the eighth millennium cal BC (7325-7060 cal BC: SUERC-57806 (GU36294)).

The most recent bout of fieldwork has focussed on two other barrow sites, Barrow 18 and Barrow 21. The latter is an elongated mound thought to be a small long barrow – and therefore early and key in the monumental sequence here – but excavation has shown it to be an entirely natural mound. This might sound disappointing, but the work has provided an important contribution to the understanding of the natural setting of the cemetery. It also raises a basic question: were the built mounds replicating natural features: a clear manipulation of the 'constructed' landscape and the 'natural' components? Is it plausible that early communities on the Heath were playing at merging with/mimicking natural, barrow-like, features and embellishing these with 'de novo' constructions?

Barrow 18 proved less contentious, but just as thoughtprovoking and informative. Again, the pattern of turf and soil mound construction noted at Barrow 11 was evident, but the soil was different and procured from another source.

Why such a concentration of built mounds developed here in the first place can only be guessed at. It is a significant location – at the head of the Rother Valley, close to a watershed – and with an important Mesolithic and Neolithic backstory. There



Excavation of Barrow 21, previously thought to be an oval or short long barrow, showed that it was likely to be a natural, elongated mound



Excavation at Barrow 18 revealed a lump of ironstone close to the mound's centre. There are similar inclusions in other barrows on the Heath, and this may well be an intentionally placed deposit.

are at least eight other barrow cemeteries along the Rother valley, which flows eastwards into the Arun near Stopham. The Arun, of course, is a major gap through the South Downs chalk massif and affords good access to a navigable river that feeds into the Channel. Throughout much of later prehistory and, again, in the early post-Roman period, there is a suspicion that the river marked some sort of social divide, too. Perhaps this was being articulated at an even earlier date.

The day was rounded off with a visit to the excellent Petersfield Museum, where we were warmly welcomed by the curator, Kathrin Pieren, and able to view some of the finds from the previous year's work.

Keep up to date with the research by visiting the project's website 'People of the Heath': http://www.peopleoftheheath.com/

or Petersfield Museum: petersfieldmuseum.co.uk

David McOmish, Historic England

A Middle Bronze Age stone head from Slievemore, Achill Island, Co Mayo

Since 2006 students attending the Achill Archaeological Field School have been investigating a series of large Middle Bronze Age buildings on Slievemore Mountain, Achill Island, Co Mayo, Ireland. The buildings are large and complicated structures defined by extremely thick walls. To date three buildings have been partially excavated, each located on the lower slopes of the mountain, at around 110 m above sea level. The buildings are set within an extensive pre-bog field system, represented by collapsed boulder-built walls, intermittently visible through the surface of the bog. The settlement may have consisted of many more buildings spread along the 110 m contour line, and a further dozen or so have been identified for future examination.

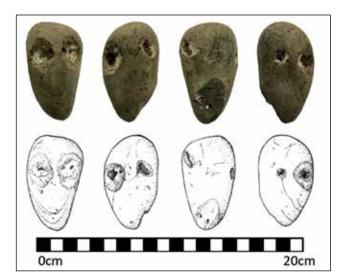
Roundhouse 1 was located at the western end of the settlement area. It measured 11.6×10.4 m externally and 6.8×6.6 m internally. A radiocarbon date of 1296-1115 cal BC was obtained from a centrally located hearth, whilst a date of 1411-1210 cal BC was obtained from a postabandonment soil. Roundhouse 2 was located 50 m east of roundhouse 1. It measured 11.3×11 m externally and 6.3×6.2 m internally. A radiocarbon date of 1431-1314 cal BC was obtained, again, from a central hearth. These two buildings are very similar, consisting of wide dry stone walls with long entrance passages at the south-east.

The third building is located about 1875 m east of roundhouse 1, at the eastern end of the settlement area. It is part of a multiperiod site known since the nineteenth century as the 'Cromlech Tumulus' and variously identified as a megalithic tomb, a cluster of early medieval huts and a post-medieval agricultural complex. The site is connected to a nearby court tomb by a pre-bog field wall. Excavations in 2014 and 2015 have revealed that the main structural element is a large oval building defined by a stone-faced wall with a thick earth core. The building must measure at least 11 m in length externally and 7 m in length internally. The interior contains many large postholes around the perimeter, whilst

the central area is dominated by a large number of pits and stakeholes. A radiocarbon date of 1409–1229 cal BC was obtained from the basal fill of one of the internal pits. The number of internal features suggests an extended period of use. The building is overlain by two late medieval/early post-medieval huts.

Apart from their overall appearance, these three structures have another striking similarity: their artefact assemblages are very small, limited to diminutive worked flint and chert pieces and a few hammerstones. The flint was sourced from very small beach pebbles which created specific technical challenges that required considerable skill to overcome, and the quality of workmanship is higher than typically associated with Irish sites of this period.

During the 2015 excavations, the first two pieces of pottery were found, but given the large assemblages typically



The Slievemore head. Although a relatively simple object it does seem to have been deliberately altered to create a representation of a face, presumably human.



The north-west interior of the third Middle Bronze Age building with the stone-faced earthen core wall at the right of the photo. The large oval pit in which the modified pebble was found is towards the front of the photo.



The modified pebble on the day it was first discovered. The wet surface certainly lends the object a particularly striking appearance.

associated with Bronze Age buildings across Ireland and the extent of the excavations, it is still thought that the community living on Slievemore in the Middle Bronze Age was essentially aceramic.

The 2015 excavations concluded with the discovery of a most remarkable object in the upper fill of a large oval pit located towards the northern perimeter of building 3. The object is a small rounded beach pebble $(7.4 \times 4.3 \times 4.3 \text{ cm})$ with a quartz vein running through its interior. Two conical holes have been pecked into the pebble to reveal the white quartz inside, giving the impression of a pair of eyes. Two smaller holes, one on each side of the stone, seem to mark the position of ears. It is suspected that these were natural holes that have only been slightly modified, rather than being deliberately created, and that they perhaps provided

the inspiration for carving the eyes by revealing the pebble's white quartz interior. On the front of the pebble a curved natural striation may represent a mouth. As with the ears this seems to have been slightly modified to make it marginally more prominent. On the rear of the pebble the removal of a chip of stone towards the bottom point is ideally positioned to create the impression of a jaw line. We are not certain if this resulted from purposeful modification, but the surface where the chip has been removed is far less weathered than the rest of the pebble, indicating the chip probably occurred after the pebble was removed from the shore. A final feature is a plug of hard orange soil behind the bridge of the nose, where a horizontal hole connects the two eyes. It may be that when the eyes were being pecked out a void was encountered, or that a piece of the quartz was accidentally removed and this plug was used to seal the gap. Alternatively this may have been a deliberately created suspension hole, although the source of the soil infill would then require explanation because it differs from the fill of the pit from which the object was recovered.

Although aware of the dangers of pareidolia (perceiving a pattern where none exists), we think this particular pebble is a convincing example of early representative art in Ireland. The simplicity of the work should not detract from the rarity of this artefact and the clever workmanship that exploited the specific properties of the pebble to create the image of a face. Prior to the Iron Age, art styles in Ireland were overwhelmingly abstract, and only the elaborately carved flint macehead from Knowth, Co Meath (c.2500 BC), the carved wooden figure from the Lagore Crannog, Co Meath (2135-1944 cal BC) and the pair of Early Bronze Age 'face cups' from Mitchelstown in Co Cork (1916–1696 cal BC) can be cited as definite examples that are earlier in date than the Slievemore head. The next clear example is a carved wooden figure from Co Cavan, known as Ralaghan Man (1096–906 cal BC), which belongs to the Late Bronze Age. A charcoal sample from the uppermost deposit of the pit in which the Slievemore head was found may provide a date for the deposition of the artefact, although the precise date of manufacture may never be known.

Work will continue at the 'Cromlech Tumulus' site in the 2016 field season and it is hoped that more details about the function of the Middle Bronze Age building will be recovered, which may in turn permit a proper discussion of the function of this remarkable pebble.

For further information and details on this project please visit www.achill-fieldschool.com or contact info@achill-fieldschool.com

Stuart Rathbone, Director of Fieldwork, Achill Archaeological Field School

The copy date for PAST 82 is the 18th of January 2016. Contributions to Editor, Daniela Hofmann, Archäologisches Institut, Universität Hamburg, Germany. Email: daniela.hofmann@uni-hamburg.de. Contributions on disc or as e-mail attachments are preferred (either Word or rtf files) but hardcopy is also accepted. Illustrations can be sent as drawings, prints, tif or jpeg files. The book reviews editor is Jacky Nowakowski, 4 Melrose Terrace, Campfield Hill, Truro, Cornwall TR1 1EZ. Email: jnowakowski@cornwall.gov.uk. Queries over subscriptions and membership should go to the Society administrator Tessa Machling at the London address on page 1.