# DAST



NUMBER 58 April 2008

THE NEWSLETTER OF THE PREHISTORIC SOCIETY

Registered Office University College London, Institute of Archaeology, 31–34 Gordon Square, London WC1H 0PY http://www.ucl.ac.uk/prehistoric/

# PREHISTORIC SOCIETY VISIT TO SILBURY HILL, OCTOBER 2007

There can few greater experiences for archaeologists and members of the Society than to have the opportunity to visit a place which, by the time this is published, will never be visible to anyone again. I am referring to the chance to enter the tunnels inside Silbury Hill, cleaned out, spruced up for recording, as preparation for its final backfilling. The organisation of the visit was excellent, with an interesting and informative briefing on arrival followed by an enthusiastic tour with Jim Leary and Mark Kirkbride. Even though it was their third of the day, they still inspired those of us who stood in wonder at being in the centre of this most ancient mound. Individual turf-shaped features were still visible in the section, squashed but still identifiable as a sod of ground laid there some 4,500 years ago.



Silbury Hill from the air, 5th October 2007, © R. H. Bewley

Antiquarians and archaeologists have been fossicking inside Silbury Hill since 1776. The first was a vertical shaft sunk in 1776 by the Duke of Northumberland, followed by Merewether's horizontal tunnels in 1849, and most recently by Professor Richard Atkinson in 1968-1970 (for the BBC2 Chronicle programme). All these investigations found very little in terms of artefacts. Their discoveries have allowed some tentative theories about the date of the Hill's construction and subsequent phases but the real legacy has been one of damage and de-stabilisation of such an important place - the largest Neolithic man-made mound in My personal inclination towards investigative explorations in archaeology is to encourage them, because "people want to know", but there can be no doubt that in this case the three documented intrusions into the Hill have been a disaster for its survival.

The plan for stabilising Silbury Hill (for which I have to declare an interest, as I did have some responsibility from 2004-2007) aims to remedy and rectify the appalling condition of the inside of the Hill. When Atkinson drove his tunnel into the centre of the mound, constructed from turf and gravel, the mound was dry; now it is saturated and unstable. The intention is to return the centre to its dry state. The project now reaching its culmination began because of a collapse of the fill of the vertical shaft in May 2000, leaving a gaping hole at the summit of the Hill. Since then, English Heritage has masterminded a research programme to investigate the cause of the problem and devised a project to produce a long-term solution for the Hill's This project, with its focus on conservation. conservation and stabilisation was essentially an engineering undertaking. However, archaeologists

The copy date for PAST 59 is 1 June 2008. Contributions to Joanna Brück, School of Archaeology, Newman Building, University College Dublin, Belfield, Dublin 4, Ireland. Email: joanna.bruck@ucd.ie Contributions on disc or as e-mail attachments are preferred (either word 6 or rtf files) but hardcopy is also accepted. Illustrations can be sent as drawings, slides, prints, tif or jpeg files. The book reviews editor is Dr Mike Allen, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wilts, SP4 6EB. Email: aea@themolluscs.com Queries over subscriptions and membership should go to the Society administrator Tessa Machling at the London address above.

had to be allowed the opportunity to investigate, record and take samples of the inside of the Hill to increase our understanding of its formation and subsequent archaeology.

The engineering company, Skanska, have been involved from 2000, providing the expertise to understand the nature of the impact of the shaft and the tunnels and the subsequent 'voids' which have been created by poor backfilling. Their commitment has been over and above the call of duty and thanks goes to Mark Kirkbride, the Skanksa project director, and his team for their skill and determination to see this project through.



Jim Leary at the door into Silbury Hill, © R. H. Bewley

The Society's visit had to be delayed from July 2007, as a second collapse occurred shortly before we were going to be allowed in: this collapse was the consequence of the very wet conditions of the summer of 2007. This was confirmation that the Hill was in dire need of stabilisation (not that anyone needed further confirmation). The extent of the 'voids' in the vertical shaft and horizontal tunnels was greater than the research suggested.

Recording what has been done has been an important aspect of the project and this is the bread and butter of modern archaeology, undertaken by English Heritage. However there is a wider responsibility too, to the public. With this in mind a filmed record has been made (and a TV programme aired on BBC4) with the assistance of local professional expertise, in the shape of Chris Corden. The BBC 4 documentary is an attempt to mesh the prehistoric context of Silbury Hill with the current project.

The remedy - to fill the shaft and the tunnel with chalk, squirted, rammed and packed depending on the nature and size of the voids to be filled - will stabilise the hill for the foreseeable future. There are three aspect to the final stabilisation: to re-fill the tunnels, to re-fill the vertical shaft and cap it with chalk (removing the current temporary polystyrene blocks) and finally to fill the surface depressions

which have occurred above the tunnels. Untouched, the Hill had been stable for the best part of 4,500 years; in the past 225 years we have, through our curiosity, begun to destabilise this magnificent edifice. This project with its conservation objectives will mean that the Hill will return to a stable condition for the next 4,500 years.

Two sets of samples have been taken, one for working on now and a second for future generations, to be analysed when techniques have developed (in ways we cannot yet imagine, but at least 20 years hence). Monitoring studies are part of the project for the foreseeable future (every 5, 10, 20 years) and these should continue for at least 100 years to ensure there is not a slow or gradual change in the Hill's surface, an indicator that all may not be stable beneath.

The samples taken from inside the Hill will be analysed and many of the questions about the date, length and nature of the construction, and the habitat at the time will be answered. There appears to have been at least three phases of construction: the original earth, gravel and turf mound and subsequent chalk mounds to create what we see today (named so usefully as Silbury 1, 2 and 3). The excavations will also shed light on the possibility of tenth or eleventh century (AD) constructions on the summit.

What we will never know for sure is what was Silbury Hill for? Who built it and why? Interpretations on this occupy metres of bookshelves and that's what makes archaeology so fascinating despite all the evidence and knowledge, it is a matter of interpretation and judgement as to what we think such monuments were for. The positive aspect of the project has been landscape investigations which have been undertaken to begin to set Silbury Hill in its Neolithic (and subsequent) landscape contexts. There is no doubt that water is key to understanding Silbury's past: as is so often the case with Neolithic monuments, their location in relation to water sources is crucial - for without water there would be no survival. That is why it is so important to ensure that Silbury is conserved for future generations to provide for their understanding, as well as to care for and enjoy this remarkable place.

Bob Bewley

### Acknowledgements

It is important to thank all those staff at English Heritage who have been involved, but in particular Kevin Brown, Amanda Chadburn, Rob Harding, Lorraine Knowles, Fachtna Mcavoy amd Jim Leary. Equally thanks to all those at Skanska - especially Mark Kirkbride - and their advisers, particularly Professor Richard Chandler (University of London),

and to those involved making a filmed record of the work, especially Chris Corden. Thanks are also due to Jonathan Last and Tessa Machling for organising the visits.

### GEOPHYSICAL SURVEY ON A SOUTHERN FRENCH OPPIDUM

Archaeologists studying the European Iron Age have often been preoccupied with the relationships between the populations of temperate Europe and the urbanised societies of the Mediterranean. One important area of contact was the Lower Rhône Valley in southern France, where the foundation of the Greek colony of Massalia (modern Marseille) around 600 BC exposed indigenous communities to a range of new cultural influences, including urbanisation, literacy, coinage and monumental stone sculpture. Yet, despite the Greek presence, Celtic-speaking groups remained independent both culturally and politically for nearly 500 years, until the annexation of the region by Rome.

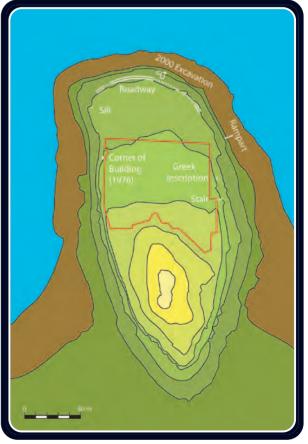


The oppidum of Le Castellan lies on a promontory projecting into the étang d'Olivier, just north of the historic centre of Istres.

Recently, archaeologists from the University of Bradford have begun a programme of fieldwork in collaboration with local archaeologists. In particular, work has begun on the examination of Iron Age settlement around the étang de Berre, the largest of the numerous lagoons close to the mouth of the Rhône. The west side of the étang has a dense concentration of sites from the Iron Age and Gallo-Roman periods, including major oppida such as Saint-Blaise, L'Île de Martigues and Le Castellan, Istres. Unusually, however, many unenclosed sites are also known through surface scatters of pottery. It is this density of varying site-types that makes the area so promising for the analysis of changing Iron Age settlement patterns, as the relationship between indigenous societies and colonists evolved.

In April 2007, an initial programme of geophysical survey was carried out by staff from the University of Bradford and the Musée Archéologique d'Istres on the oppidum of Le Castellan, Istres. Le Castellan occupies a natural limestone promontory projecting into the étang d'Olivier, a smaller lagoon immediately west of the étang de Berre. The site was occupied, apparently discontinuously, from the sixth century BC to the early Gallo-Roman period. Although most of the surrounding ramparts have long since eroded into the étang, it was clearly heavily enclosed for most, if not all of this time.

Le Castellan has had a long history of excavation, much of it undertaken by local amateur archaeologists. Despite the presence of a large collection of Iron Age artefacts, there was until recently a complete absence of stratigraphic information. Recent small-scale excavations at the northern extremity of the site by one of the authors (FM) have begun to remedy this situation, producing evidence for buildings of second century BC date, and a substantial terrace-rampart dating to the first half of the first century BC, as well as artefactual evidence for settlement as early as the sixth century BC. Despite this, however, the nature and layout of the internal occupation remained entirely unknown.



Simplified plan of Le Castellan, Istres.

Geophysical survey in 2007 concentrated on the upper of two gently sloping terraces which occupy much of the interior of the oppidum. A high resolution earth resistance survey revealed numerous anomalies, many of which can be seen to

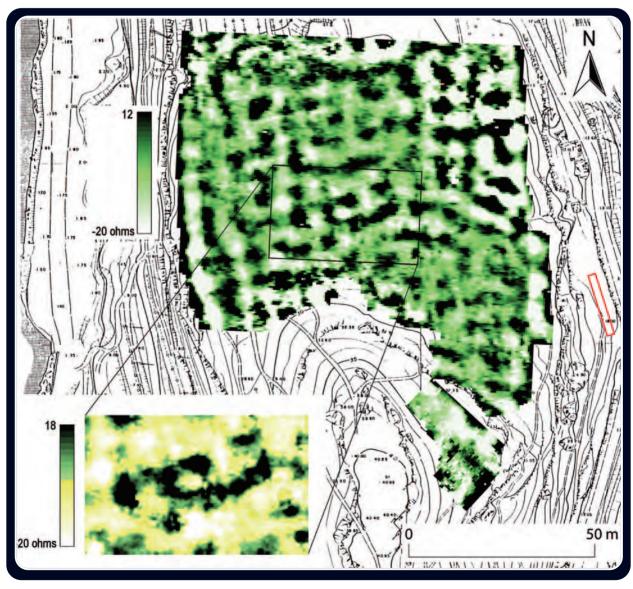
run roughly parallel and perpendicular to each other. These are consistent with the type of responses one would expect over collapsed stone walls. The illustration below shows this resistance data after double application of a High-Pass filter. Whilst such 'over-processing' may be questionable in some contexts, care has been taken to ensure that the patterns shown can be related to anomalies present in the raw data. The resulting image strongly suggests the presence of a buried network of streets and buildings resembling the excavated plans of other southern French oppida such as Entremont and La Cloche. This interpretation appears to be backed up on the western periphery of the site, where a buried stone building, partly exposed by early excavations, lies on the same alignment as the resistance anomalies.

Of particular note is a particularly strong anomaly close to the centre of the survey area (shown in the inset). This appears to relate to a buried stone building, perhaps with three distinct rooms. It is

possible that it lies closer to the modern ground surface than the other buildings, or it may be of more substantial construction. In favour of the latter interpretation is the presence of a large architectural block on the ground surface adjacent to the anomaly.

The accompanying magnetometer survey was hampered by technical difficulties and by the presence of large amounts of recent ferrous debris. Consequently, it was limited to a smaller area. Despite this, the results generally supported those of the resistance survey and suggested that wider coverage by this method would be worthwhile, as would ground-penetrating radar survey.

Further work is planned on Le Castellan itself, but the next stage of the project will focus on a series of smaller, unenclosed sites south of Istres, in the area between Le Castellan and the neighbouring oppidum of Saint-Blaise. It is hoped that over the next few years we can begin, through further prospection and



The results of earth resistance survey hint at a buried network of roads and buildings set on a fairly regular alignment, similar to those revealed at extensively excavated sites in the region such as Entremont and La Cloche. In the central part of the survey area are indications of a more substantial (or simply shallower) structure, seen here in the inset.

targeted excavation, to build up a picture of the dynamic settlement patterns of this pivotal region.

Ian Armit (University of Bradford), Tim Horsley (University of Bradford) and Frédéric Marty (Musée Archéologique d'Istres)

### PREHISTORIC SOCIETY UK STUDY TOUR 2007

This year's summer study tour took us down to Wiltshire to visit some of the sites that have made Wessex one of the best known and best studied regions in the UK. This is an area so rich in earthworks, monuments and hillforts that you can hardly pass a field that doesn't contain a site or barrow of some kind. And although many of the sites we visited are accessible to the public, our path also took us to some of the restricted sites on the Military's Salisbury Plain Training Area.

We arrived on Monday morning to Urchfont Manor, our home for the week. This is a lovely old manor house that has been converted into a centre for training groups and it provided a central location for our outings. That afternoon we visited Potterne, a Late Bronze Age midden site, and the Devizes Museum where a reception was hosted for us by the curator Paul Robinson. Devizes contains collections covering a wide range of topics, including a temporary exhibit of paintings featuring Stonehenge. After leaving the museum, we met Dave Norcott who showed us All Cannings Cross and Rybury. We also stopped at Knapp Hill and climbed to the top of the enclosure for a beautiful view of the countryside which included other sites such as Wansdyke and Adams Grave. Then it was back to Urchfont for dinner and a talk by David Field on the prehistoric archaeology of Wessex.

On Tuesday, we toured the Avebury landscape with visits to Silbury Hill, West Kennet long barrow and the great henge itself. We were very lucky to visit Jim Leary of English Heritage at Silbury Hill and find out what the current excavations were turning up before the tunnels are backfilled to stop collapses. Current work includes high-resolution images of the tunnel sections, which will provide better insight into the building phases of the mound.

We left Silbury for Avebury where Ros Cleal, the curator for the museum, escorted us around the henge. This prehistoric monument has a compelling historic component as well. From the Medieval people who buried or broke up the original stones to the vicars and later archaeologists whose excavations and reconstruction made Avebury what it is today, this monument is a testament to the changing perceptions of Britain's prehistoric past. It

reminds us that these places have lives and meanings that extend beyond what the original builders intended. We finished up our day with a visit to West Kennet long barrow, another of the interconnected sites that make up the Avebury landscape.



Wednesday was my favorite day of the trip - Stonehenge day. We started off the day with a visit to the extensive excavation project at Durrington Walls and the Cursus, where we met with Mike Parker-Pearson, Josh Pollard and Julian Thomas who talked us through their recent findings. We saw the remains of Neolithic houses, which were so close to the surface that archaeologists were lucky the site wasn't obliterated by ploughing. They also uncovered timber structures that might have functioned as ritual structures before the henges were built.

Our next stop was the Salisbury Museum, which has galleries covering prehistory to modern day Salisbury, including finds such as the Early Bronze Age skeleton from Stonehenge as well as extensive displays on the building of the monument itself. After Salisbury, we were on our way to Stonehenge. The best way to see this monument is via the Avenue, the way its builders intended. As you make your way down the Avenue, Stonehenge disappears behind a hill in the distance only to reappear on your final turn looking much larger and more impressive than before. As we approached, the sun was beginning to set. Even though it wasn't solstice, sunset at Stonehenge is still enough to take your breath away. Andrew Lawson was kind enough to meet us there and take us on an after-hours tour where we had the monument all to ourselves.

Thursday, our last full day, was spent on the Salisbury Plain Training Area. Defence Estates Archaeologist Richard Osgood met us at the training area and he, along with David Field, walked us around Weather Hill, Snail Down barrow cemetery and Sidbury Hill. This is an amazing area with excellent preservation of sites. The military presence has kept much of the area from being farmed with

modern ploughs, which are the bane of many sites in Wiltshire. Lots of signage and clear marking keeps tanks and digging from destroying them. The biggest threats now are badgers and bunnies. Our drivers Mike Allen and John Cruse were put to the test on the training area, but did a great job of maneuvering mini-buses over tracks meant for all-terrain vehicles. We only had to get out and push a couple of times.



We were joined on the Plain by Paul Tubb from Bristol University who showed us East Chisenbury, a Late Bronze Age/Early Iron Age midden writ-large. It's hard to not to be impressed by this site, knowing you are standing on top of a refuse heap covering around 2 hectares. After Chisenbury, Paul showed us Casterly Camp, a large Iron Age enclosure that has interior enclosures and several exterior linear works. That evening Paul gave our final lecture of the week on his work in the Pewsey Vale.

Friday was our final day on the tour and we spent the morning at Battlesbury, a very impressive hillfort which one Society member remarked "looked like a surfacing whale." From this site we could see a great deal of the surrounding area including another Iron Age site at Scratchbury. Then we headed off to Codford Circle, which was often overlooked because it did not seem very big or impressive. However, work by Mike Allen and Julie Gardiner showed that it is in fact quite unique. It is an Iron Age enclosure that contains a series of at least 34 pits, which have no parallel in the chalk areas of southern England. Finally we rounded off our day at Mike and Julie's back garden with a lovely picnic lunch.

This was a wonderful experience for me, and I feel very lucky to have been able to come. I want to thank all of those in the field who took the time to talk to us about their sites, and the museums for welcoming us. Especially I'd like to thank the organizers Julie Gardiner and David McOmish, our drivers Mike Allen and John Cruse, and Brendan O'Connor for his knowledge and assistance. Thank you everybody! It was a great trip!

### NOTICE OF THE 2008 ANNUAL GENERAL MEETING

The AGM will be held on Saturday May 17 at 4.00 p.m. in the Martin Wood Lecture Theatre, Dept of Physics, Oxford.

### Agenda

- 1 Minutes of the 2007 AGM (papers available from the website or from the Hon Sec)
- 2 President's report
- 3 Secretary's report
- 4 Editor's report and R. M. Baguley Award
- 5 Treasurer's report
- Report on meetings, study tours and research days
- Awards
   John and Bryony Coles Award

  Research Grants (Bob Smith Award and Leslie Grinsell Award)
- 8 Election of Officers and Members of Council

The meeting will be followed at 4.45 p.m. by the 17th Europa lecture' The lecture will be followed by a wine reception.

Registered Office: University College London, Institute of Archaeology, 31-34 Gordon Square, London WC1H 0PY.

### Notes:

- 1. A member entitled to vote at the meeting may appoint a proxy to attend and, on a poll, vote in his or her stead. A proxy must be a member, other than an institutional member.
- 2. To be valid, an instrument of proxy (together with any authority under which it is signed or a copy of the authority certified notarily or in some other way approved by Council) must be deposited with the Secretary, The Prehistoric Society, c/o Department of Archaeological Sciences, University of Bradford, Bradford, BD7 1DP, by 4.30 p.m. on the 1st May 2007.
- 3. Forms of proxy may be obtained from the Secretary at the above address.

### PREHISTORIC SOCIETY ACTIVITIES 2007

This report covers the period January-December 2007.

### Meetings and Study Tours

Prehistoric Society events over the past year have been held across most of Britain and in collaboration with other archaeological bodies thus increasing access to members and promoting the Society's aims and objectives whilst also demonstrating our commitment to reach wide regional audiences.

The January lecture in association with the Devon Archaeological Society heard Prof. Barry Raftery talk about his excavations at Rathgall, a Late Bronze Age hillfort in County Wicklow, and in February Dr Mike Allen gave a paper entitled Beaker settlement patterns and the prehistoric environment in Sussex. This was organised in Lewes jointly with the Sussex Archaeological Society. In March, a day school in Norwich to celebrate the life and work of John Wymer was hosted jointly with the CBA Eastern region and the Quaternary Research Association. A weekend conference was organised together with Bournemouth University in April. Entitled Unquiet lands: people and landscapes in prehistoric northwest Europe, the conference looked at the way peoples interacted prehistoric with their environments.

In June, David McOmish led a field trip to the Neolithic flint mine complex at Grimes Graves. In August, the UK study tour was based in Urchfont and concentrated on some of the important but less well-known prehistoric sites in Wessex. This year, an ambitious overseas study tour to the American South West was well attended and deemed a great success. The student study tour had unfortunately to be postponed but this will be resurrected in 2008. The 2007 study weekend at Dillington focussed on henge monuments followed by an excursion to some local Somerset sites. The Society would like to thank all who assisted in the organisation of these events. The seventh Sara Champion Memorial lecture in October was by Dr Jodie Lewis (University of Worcester) entitled A crystal world from weeping stone: considering the relations between Neolithic cave use and monument construction on Mendip. In October, David McOmish led a successful trip to the Cissbury flint mines. This was a joint trip with the Sussex Archaeological Society. Prof John Coles gave a lecture hosted by the Society of Antiquaries of Scotland in Edinburgh entitled Forgotten Sites and Elusive Images: Prehistoric Rock Carvings of Southern Scandinavia.

### Europa Prize

The 2007 Europa Lecture took place on 23rd May and was given by Prof Lars Larsson of the University of Lund, Sweden. His wide-ranging talk entitled *Ritual Buildings in Prehistoric Scandinavia* covered the Mesolithic to Viking periods.

#### Research Grants

Research grants totalling grant-aid of £3408 were awarded to a diverse range of prehistoric research projects ranging from Scotland to Libya and Macedonia.

Leslie Grinsell Award: H Cobb - survey on the Ardnamurchan Peninsula

Bob Smith Award: L. Hulin - survey of prehistoric sites on the Libvan coast.

### The John & Bryony Coles Award

The President announced that the John and Bryony Coles Award was presented to M. K. Williams to take part in Tell Brak Excavations, Syria.

### **Annual General Meeting 2007**

The AGM was held on 23rd May, 2007 at the Geological Society, Burlington House. The retiring members of Council were thanked for their help and inputs during their terms of office: Bob Bewley retiring Vice-President, Mel Giles, Barrie Hartwell, Mark Edmonds, Patrick Clay, Brendan O'Connor and Adam Gwillt.

The following officers and members of council were elected:

President Prof Clive Ruggles Vice-President Dr John Chapman Hon Sec Dr Alex Gibson Hon Treasurer Mr Alastair Ainsworth Dr Julie Gardiner Hon Editor Hon Meetings Secretary Mr David McOmish Council Members Duncan Garrow, Gill Hey, Nicky Milner, Rachel Pope, Jane Siddell, Graeme Warren

### The Baguley Award

The Baguley Award was presented to Chris Evans, Mark Edmonds and Steve Boreham for their article 'Total Archaeology' and Model Landscapes: Excavation of the Great Wilbraham Causewayed Enclosure, Cambridgeshire, 1975-6 in Volume 72 of the Proceedings.

### Membership

There was a decline in membership over the year which causes concern to Council.

## STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2007

	2007	2006
	£	£
<u>Incoming resources</u>		
From generated funds:		
Voluntary income	50,324	50,418
Investment income	10,434	10,143
	60,758	60,561
From charitable activities:		
Publication grants	7,101	12,423
Copyright fees	2,091	1,170
Merchandise	129	186
Advertising in publications	s 200	250
Back numbers of Proceeding		2,021
Conferences	-	970
Study tours	16,017	11,934
	28,729	28,954
Total incoming resources	89,487	89,515
- · · · · · · · · · · · · · · · · · · ·	,	,c
Resources expended		
Costs of generating volunta	ry 6,844	7,347
income		. ,
Charitable activities		
Grants	3,822	4,231
Lectures	3,957	3,891
Proceedings	41,704	47,343
PAST	10,808	10,963
Back numbers of Proceeding		1,608
Conferences	143	1,545
Study tours	13,517	12,564
Study tours	76,614	82,145
	76,614	02,143
Governance costs	4,940	4,247
Total resources expended	88,398	93,739
Net incoming/(outgoing) resources	1,089	(4,224)
Total funds at 1 Ianuary	172 755	174 011
Total funds at 1 January	163,755	174,811 (4,224)
Net incoming/(outgoing)	1,089	(4,44)
Revaluation of investment	es (1,325)	(6,832)
Total funds at 31 December	163,519	163,755

The Statement of Financial Activities is an extract from the full accounts of the Society. Copies of the full accounts for 2007 can be obtained from Tessa Machling at the registered office.

### Report of the Treasurer

The Society had an operating surplus of £1,089 in 2007 compared to a deficit of £4,224 in 2006. The Society received fewer publication grants for the 2007 issue of PPS compared to the previous year but

this was offset by lower production costs. The 2007 study tours made unplanned surpluses due to the unexpected generosity of many of our hosts, who waived entry and other fees, especially during the very successful trip to the USA. The disappointment for the year was that voluntary income remained at the same level as 2006, notwithstanding the increase in subscription rates. This was due to a decline in membership numbers during the year. Several initiatives are being implemented to reverse this trend.

### PREHISTORIC SOCIETY WEBSITE

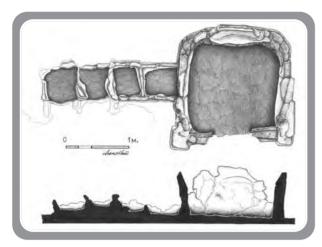
We aim to please and improve . . . What do you want from your website? Tell us. Email your thoughts direct to Council member Mike Allen at aea@themolluscs.com

### PREHISTORIC SOCIETY EMAIL MAILING LIST

We are putting together an email mailing list to keep members informed about various events, offers and other items that might be of interest to Society members. If you would like your email to be added to this list (we promise not to give out the information to third parties), then please send an email with EMAIL LIST as the subject line to prehistoric@ucl.ac.uk

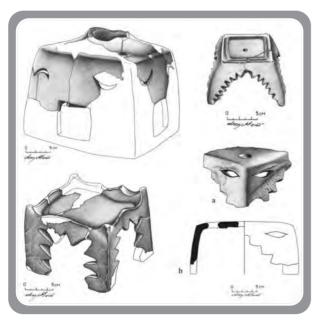
### A NEOLITHIC STRUCTURE OF POSSIBLE RITUAL SIGNIFICANCE FROM THE REPUBLIC OF MACEDONIA

Numerous Neolithic settlements have been found in river valleys in the south-west of the Republic of Macedonia. One such settlement was discovered near Vrbjani in the Prilep region. Excavations carried out at this site between 1979 and 1989 identified a Middle Neolithic settlement. One house was fully excavated and this is the subject of the present paper. This building was oriented north-west - south-east and had two phases of construction: in its earlier phase, the house measured 9 x 12m, while in its later phase, it was enlarged to 11 x 13m. In both phases, the house had identical constructional elements: wooden pillars and horizontal planks, covered with plaster mixed with chaff. The floor was made of beaten clay, partly covered with soot. There was no evidence that the building had been subdivided by internal walls. The interior was filled with fragmentary and complete vessels, ceramic weights, small clay balls interpreted as slingshots, clay tables interpreted as 'altars' and bone tools.



Plan and section of the Vrbjani structure (© Aleksandar Mitkoski)

A series of features found inside the building are unique not only in Macedonia, but in the Balkans as a whole. The largest of these comprised a square structure, 2 x 2 m in size, with a small entrance and walls of clay 0.76-0.88m in height and 0.18-0.28 m thick; the beaten clay floor was 0.05 m thick. The way in which this was built was visible in the walls which were made by plastering several levels of clay one over the other. Of particular interest is the marked stairs-like relief decoration located both at the front corners and along the south-eastern wall. Immediately abutting this structure were four conjoined rectangular features that formed a row oriented south-west. These were constructed using the same technique as the larger structure and the total length of the row was 2m. The walls of these smaller features measured 0.25m internally, although the base of each was at a slightly different height. Inside them, traces of burning were noted, although no artefacts or organic remains were recovered. The whole of the structure (including the large square element and its four conjoined features)



Clay altars from Vrbjani (© Aleksandar Mitkoski)

was situated on a platform that raised it above the floor. Its dimensions, decoration and central position inside the dwelling suggest that it may have had a symbolic role as well as a practical use.

A large number of ceramic vessels, slingshots, stone tools and animal bones were deposited behind the structure. The size and typology of the vessels suggest that they were used for the storage of liquids and grain. Significant quantities of riverine shells were found in the south-west corner of the main square feature, but no other organic materials that could indicate its function were recovered. addition, a complete clay 'altar-table' and fragments of several others were found inside the main square feature. The front and lateral relief decoration on these artefacts deserves special attention as it closely resembles the stairs-like decoration found on the walls of the square feature itself. Similar 'altars' have been recovered from Neolithic settlements throughout Pelagonia (south-west Macedonia) and more widely across Macedonia. The similarities between the decoration of these objects and that of the structure in which they were found suggests that the latter may also have been used as an altar. The remains of burning has been identified on both the small 'altar-tables' and in the large square feature and this may support the suggestion that they played a similar role.

On the other hand, similarities in the decoration of the small altars and the large structure may simply indicate that the latter was symbolically protected, perhaps to ensure an increase in the quantity of whatever was stored inside it. Identical stairs-like motifs are painted on a small vessel found behind the structure. This type of stairs-like decoration is a familiar element of Early and Middle Neolithic assemblages across the Pelagonia and Ovce Pole regions (north-east Macedonia); it forms part of a well-developed decorative system which was employed in several media including sculpture, architecture and painting. In many cases, the symbolism may relate to the function of these objects and to the materials stored in their interior.

Aleksandar Mitkoski (Museum of Prilep, Republic of Macedonia; email amitkoski@yahoo.com) and Goce Naumov (University of Skopje, Republic of Macedonia; email gonaumov@mail.net.mk)

### RUN OF PPS FOR SALE

A complete run of the *Proceedings* of the Society from 1947, mainly in mint condition (some earlier editions may be available). Offers please to Jonathan Riddell, email

jonathanmark@rutherfordriddell.freeserve.co.uk or tel. 01252-712628.

### **BOOK OFFER**

The Prehistoric Society in conjunction with the publishers can offer *The Archaeology of Kent* to our members at a special 25% discount price (please quote offer reference: 08087).

The Archaeology of Kent to AD 800, edited by John Williams (ISBN: 978 0 85115 580 7), with contributions by Timothy Champion, Martin Millett, Martin Welch, Francis Wenban-Smith and John Williams. Published in 2007 by Boydell & Brewer Ltd (email trading@boydell.co.uk). Full price: £25.00, 25% discount price: £18.75, plus £3.00 postage UK or £6.50 overseas.

# THE AMERICAN SOUTHWEST: AN ARCHAEOLOGICAL STUDY TOUR

For two weeks last autumn, 31 members of the Prehistoric Society visited the American South West, known as the Four Corners, covering parts of Arizona, Colorado, Utah and New Mexico. The tour was led by Peter Topping, and covered 2268 miles, based in hotels at Phoenix, Flagstaff, the Grand Canyon, Farmington and Santa Fe. Most of the area we covered is part of the Colorado Plateau, so we were at an elevation of 6000-7000 feet. Within the four states is an older web of communities of Hopi surrounded by Navajo, who are surrounded by Apache, with Comanche and Pawnee to the east, and Paiute to the west. There are other tribes on smaller reservations. The name 'Hohokam' is Pima for 'those who have gone': the people around Casa Grande, south of Phoenix. The 'Anastazi' is Navaio for 'enemy ancestors', a term often now corrected to Ancestral Pueblo. The 'Sinagua' is Spanish for 'people without water'. The modern Hopi consider themselves the successors of the original pueblo or town dwellers, whereas the Navajo migrated from the north.

### Pueblo 'villages'

The sites visited varied in size and situation, but all the buildings showed the extraordinary capacity of the ancient puebloans to construct complex structures, some of which were as much as five storeys high. The 'great houses' were constructed of mud brick, and made up of series of interconnecting square rooms combined with round rooms, known as kivas, where ceremonies central to the belief systems of these ancient societies took place. Kivas are often subterranean, and were accessed from above by ladders. Some sites, such as Salmon Ruins, Aztec and the tiny Tusayan, are compact and easy to



explore, while at others, such as Pueblo Bonito, there are hundreds of rooms and passages. The entire area is scattered with stone tools and sherds of the distinctive black and white pottery of the Anasazi: visitors are encouraged to observe but not remove.

A highlight of the tour was our visit to Chaco Canyon (AD 900-1130), accessed by a 16 mile dirt track bravely negotiated by our intrepid driver Pete Rossell. Here, a number of great house sites, kivas, smaller dwellings and towers are placed in and around the area of Chaco Canyon. Our day here included a cliff-bottom walk, admiring rock art on the way, to the central structure of Chaco, Pueblo Bonito. This 'D' shaped great house was built in stages, ending up with more than 600 rooms and 40 kivas. Across the canyon floor from Pueblo Bonito is Casa Rinconada, constructed in the AD 1100s, and one of the largest great kivas in the South West.

Chaco demonstrated the organisational capacity of the ancient puebloans. By AD 1050, Chaco Canyon had become the centre of a huge ceremonial, administrative and economic network covering several hundred miles. A distinctive Chacoan architecture existed, marked by skilled masonry techniques and 'T' shaped doors, which were spotted at other Chaco-related sites. Chaco connected to many smaller 'outlier' great houses such as Salmon Ruins and Aztec to the north, down to Casas Grandes, Paquimé, in the south. These were linked to Chaco by over 400 miles of prehistoric roads running straight across the desert. These roads facilitated communications and the movement of trade goods, including turquoise, copper bells from Mexico (the Ancestral Puebloans did not develop metals themselves) and exotic birds, macaws being particularly prized for their colourful plumage.

#### Cliff pueblos

Ancestral Puebloan sites were also built in cliff overhangs. These cliff dwellings varied in size. The simplest consisted of small houses built against the cliff, for example at Walnut Canyon. In the Mesa Verde National Park, we visited the two cliff sites of Spruce Tree House and Cliff Palace. Cliff Palace (AD 500-1300) is spectacularly constructed more than 100ft above the canyon floor. It is almost a small town with various buildings and kivas, and those of us challenged with vertigo learned a new respect for these peoples who had no fear of heights, climbing from the cliff palaces to their cliff top fields by a series of small hand and foot holds, still visible, carved into the rock. The visit to Cliff Palace culminated in an exit route via five wooden ladders up the side of the cliff to the mesa top, and the group rose to this challenge bravely!

All the sites that we visited were abandoned by the early AD 1400s, and one of the mysteries still to be solved is what happened to the ancient puebloans to make them leave. Whether drought, overworking of the land, warfare, or a combination of these factors was involved is a continuing debate. Modern native Americans in this region, particularly the Hopi and Zuni tribes, consider themselves to be descendants of the Ancestral Puebloans, and this gives a complex added dimension to American archaeology. The group visited Taos, a living pueblo today. The modern inhabitants of Taos live in the same types of mud brick puebloan buildings as their ancestors. They make their living by opening the pueblo to tourists and selling native craftwork from tiny individual shops. However, many parts of the pueblo are off-limits to tourists, and they keep their traditional lifestyle and beliefs - on the day we visited, all tourists had to leave by 1.30 pm as the pueblo was closed for a religious festival in the afternoon.

### Landscape, wildlife, Grand Canyon and Monument Valley

Although the archaeology was the main object of the trip, there were many opportunities to enjoy the wild beauty of this area of America. There was a delightful walk into Walnut Canyon, where the archaeology in the cliff overhangs had to compete with the wonderful geological formations of the canyon itself and its wildlife - bird watchers were able to see turkey vultures and red-tailed hawks here, and we also met a tarantula spider. On our last full day, a rattle-snake came almost uncomfortably close to us, and we were also able to watch two road runners at Pecos. The tour also visited Sunset Crater, volcano that erupted in AD 1064-1065, devastating the surrounding area. We were driven through the extensive area still blackened by lava flows from this eruption. Beyond Sunset, we visited Wukoki and Wupatki Pueblos, situated in a rich red desert area, and with magnificent views of the Painted Desert shimmering in the distance. We finished this site in the early evening at Lomaki Pueblo, where we heard coyotes calling as the sun went down.



No visit to the Colorado Plateau would be complete without seeing the Grand Canyon and Monument Valley, and this trip provided the chance to do both. The immensity of the Grand Canyon is difficult to comprehend, and about half the group took advantage of Pete Rossell's kind offer to take our coach back to the Canyon in the evening to see the full moon, a magical opportunity to see the Canyon in a different way. An afternoon tour of Monument Valley by four-wheel drive jeep included views made famous in the Western films of John Ford. Nearby, in a modern Hogan, a traditional Navajo circular building made of logs with a corbelled log roof, we were introduced to a 90 year old Navajo lady who showed us her carding and weaving skills.

On behalf of everyone on the trip, grateful thanks must be offered to Peter Topping for his organisation and knowledge of the area, without which this trip would not have been possible, to Dave McOmish who organised us, ensured that we kept (roughly) to schedule and dealt with the administrative aspects of the trip, and to Pete Rossell our coach driver who became one of us, looking and wondering at the sites we visited, but who was also constantly available to help with our every need. Thanks also to Mike Allen and Julie Gardiner, who provided stalwart backup at crucial moments.

Veronica Edwards & Graham Steele

### STONEHENGE ROAD SCHEME AND VISITOR CENTRE

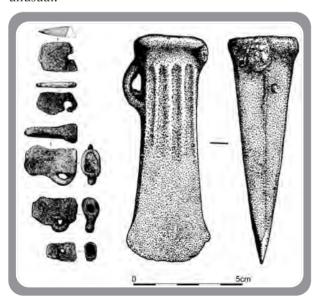
In December, the Government announced that plans for a 2.1km tunnel through the Stonehenge World Heritage Site have been withdrawn. The Government now intends to consult with interested parties on how it will achieve its goal, voiced by Margaret Hodge, of delivering "environmental"

improvements to Stonehenge, including new visitor facilities, in keeping with its status as a world heritage site by the beginning of 2012." The Society will continue to present its views during the consultation process. If members wish to keep up-to-date or comment on the Society's position, please visit the website (www.ucl.ac.uk/prehistoric/) or contact the Conservation Coordinator, Bob Johnston, email

r.johnston@shef.ac.uk, tel. 0114 2222941.

### GEOPHYSICAL FIELDWORK AT WHITCHURCH, WARWICKSHIRE

The site at Whitchurch lies in the valley of the River Stour, approximately 6 miles south of Stratfordupon-Avon, England. Field survey in the 1980s by Peter Foster and Richard Hingley, and excavation in 2006 by a team from Cardiff University, have revealed a settlement dating to the Late Bronze Age/Early Iron Age transition. The complex is characterised by thick occupation soils rich in animal bone and pottery and a metal detector survey of the ploughsoil resulted in the recovery of over 70 pieces of copper alloy metalwork. The site is best compared with the 'midden' deposits of Potterne and East Chisenbury, and although it is not as substantial a deposit, the quantity of metalwork produced is unparalleled, and its position in the West Midlands unusual.



In 2007, work at Whitchurch comprised a geophysical survey, funded by the Prehistoric Society and the Royal Archaeological Institute. The results were spectacular and have dramatically enhancing our understanding of the site.

#### Magnetic susceptibility

Magnetic susceptibility proved to be an excellent method for defining the extent of the midden, which covers an area of approximately 300m by 175m. This corresponds to the material spreads identified by field walking in the 1980s and the trial trenches excavated across the site in 2006. An unexpected feature was a linear spread of enhanced susceptibility running 170m north from the main concentrations towards the River Stour, which might indicate a route-way approaching the site.

A detached area in the north-western corner of field 1 was examined because of the presence of a well defined enclosure visible in the aerial photography and confirmed in the gradiometer survey. This area was not productive in surface finds, and moreover, the very limited enhancement of magnetic readings confirms that this settlement area is unconnected with the midden spreads (see below).

### Gradiometer survey: an Iron Age enclosure complex

An aerial photograph taken in the 1980s suggested two enclosures were present in the north-western corner of field 1. It was felt that this would be a good place to start the geophysical survey due to the clarity of features within the photographs. The absence of Bronze Age pottery and metal finds from this area suggested that these enclosures belong to a different period to those in the main area surveyed, probably the Iron Age.

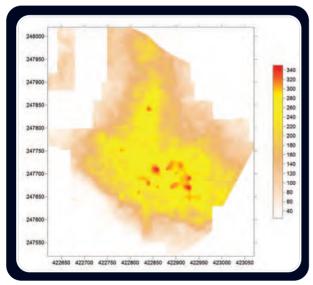
The gradiometer revealed the presence of three enclosures and a substantial linear boundary. The linear boundary appears to be running roughly parallel to the modern field boundary and could therefore be relatively late, although it does give the impression of being an early feature that the enclosures overlie. Two sides of an angular enclosure were located in the northern part of the area examined and the southern boundary was broken by an elaborate out-turned entrance that faces south. At the southern end of the surveyed area are two conjoined enclosures. The eastern enclosure was polygonal and a pair of linear features inside the north-west edge suggests that it was originally a smaller enclosure with a narrower boundary ditch. At least three overlapping arcs are visible in the north-west corner of the enclosure suggesting a shifting sequence of roundhouse construction in this area. There is also a small circular feature in the southern corner of the enclosure which may represent another small roundhouse.

### Gradiometer survey: the midden complex

Gradiometer survey of the midden area located evidence for six enclosures and a series of linear boundaries, indicating a surprising density of activity. Recent ridge and furrow is clearly visible running roughly parallel with the principal field

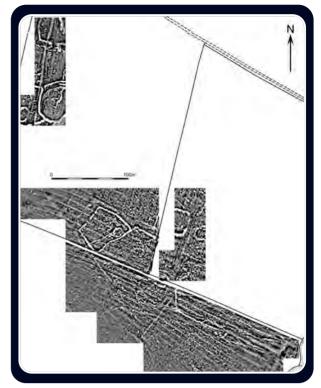
boundary, and it overlies a complex sequence of prehistoric anomalies. Several linear boundaries, running roughly north-west to south-east, are important landscape features; they comprise at least two straight boundary lines and an irregular and sinuous one. The sinuous boundary appears to be closely related to the southern edge of the midden for much of its length before it veers off to the southwest, and this may link to another straight boundary that appears to follow the south-western edge of the midden. It could therefore be argued that the features delineated the accumulation of materials in these areas.

The most striking feature is a large trapezoidal enclosure in the north-east field, which abuts an earlier enclosure that lies to the south-east - both were aligned on a pre-existing linear boundary. The former enclosure has an entrance facing north-west and is approximately 50m by 40m. Within the interior a large ring ditch and a cluster of anomalies would suggest the presence of at least two roundhouses: a large building in the east corner and a smaller one in the west. The latter group of features coincided with an arc of post holes exposed at the base of the midden sequence in trench 1, and this may suggest that the enclosure is contemporary with the midden.



Magnetic susceptibility survey

To the north is another sub-rectangular enclosure, approximately 37m square with an entrance in the north-east corner. Much of this enclosure has yet to be surveyed as it lies across the boundary between fields 1 and 2. Immediately east, a small oval enclosure approximately 13m by 16m was identified, although this extends outside the surveyed area. Two related oval enclosures appear to exist at the centre of the hill where the three fields meet, although the pattern is unclear as the area was not completely surveyed. The most convincing feature is a small enclosure about 10m by 13m that underlies the modern field boundary. Many other features can be observed in this survey but their significance is as yet unclear.



Gradiometer survey

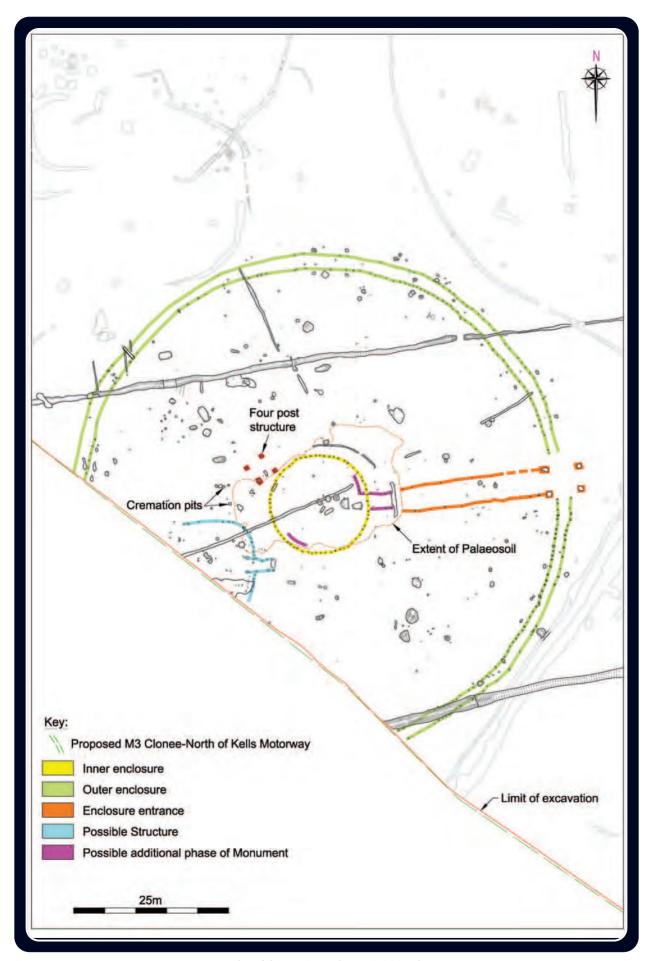
#### Future work

The surveys have proved to be very successful and provide a considerable amount of new information, not only about the nature of the site but also about midden formation processes generally. A future programme of fieldwork will hopefully complete the gradiometer survey and continue with the exploratory excavations of the midden and enclosure sequences in 2008. This site is transforming our understanding not only of the Late Bronze Age-Early Iron Age transition in the West Midlands but also of the complex nature of depositional practice in general.

Niall Sharples, Kate Waddington and Tim Young

# PREHISTORIC RITUAL AND CEREMONY AT LISMULLIN, COUNTY MEATH, IRELAND

Archaeological excavations were undertaken at Lismullin 1, Co. Meath, between February and December 2007. The excavations were undertaken by ACS Ltd on behalf of Meath County Council and the National Roads Authority under ministerial directions A008/021 and A042. Lismullin was one of 167 sites excavated between 2005 and 2007 along the route of the M3 motorway which will extend for 60km north-south through the County Meath from the border with Dublin to the border with Cavan (for further information on archaeological discoveries on the scheme, see http://www.m3motorway.ie/). Forty-one of the sites are located along section 2 of the scheme, the route



Plan of the Iron Age enclosure (@ ACS Ltd)

of which has been the subject of much controversy as it passes close to the Hill of Tara. Lismullin, which was the final site to be excavated, received much publicity and media coverage over the course of 2007. Multi-period activity at the site pointed to its episodic use from at least the Middle Neolithic until the present day. However, by far the most prominent discovery at the site was a post-built ceremonial enclosure dating to the Early Iron Age. The post enclosure has been declared a National Monument and ministerial directions pertaining to its full excavation within the road corridor were issued in June 2007 by the Minister of the Environment, Heritage and Local Government in consultation with the National Museum of Ireland. A committee of experts comprising representatives from the Department of the Environment, the National Museum, the National Roads Authority and two prominent academics was established to act in an advisory capacity over the course of the excavations.

Lismullin 1 is located 850m to the north-east of the existing N3, about half way between Navan and Dunshaughlin. It is 2.1km north-east of the Hill of Tara and bounded to the north-west by the River Gabhra. The site extends to the south-west from the Gabhra through a natural saucer shaped depression and occupies an area of 27360 m<sup>2</sup>.

### Prehistoric ritual

A sequence of prehistoric pits excavated at the southeast of the site, 58m from the eastern side of the post-enclosure, is currently the earliest dated activity at Lismullin. The three earliest phases, which consist of a range of pits of varying size and with largely sterile fills, remain undated. The fourth phase consisted of four pits, the largest of which was associated with the deposition of three sherds of Middle Neolithic broad bowl pottery (3500-3000 BC) and five small fragments of bone, possibly human skull. A second, smaller pit from this level was associated with a deposit of burnt bone, possibly a token burial deposit.

These pits were succeeded by a four-post structure which was subsequently dismantled. One of the post cavities contained two separate deposits of cremated bone. A second contained thirty one fragments of Early Neolithic carinated bowl (3850-3700 BC). The deposition of Early Neolithic pottery in this context (Middle Neolithic pottery was recovered from an earlier phase) may have been invested with ritual meaning. It appears that the people who dismantled the four-post structure curated the Early Neolithic pottery before depositing it in one of the post cavities. The final pit in this sequence contained further cremated bone deposits associated with Beaker pottery, a broken macehead of Early Bronze Age type and two further sherds of Early Neolithic pottery. This may represent a token burial of the Early Bronze Age. Significantly, this burial was associated with a highly prized prestige object (the macehead) and further sherds of curated pottery. All these features were sealed by a thin layer of soil with large stones, possible fragments of cremated bone and a final sherd of Middle Neolithic pottery.



Early Bronze Age macehead

The location of this activity is at a point in the landscape that would have had a clear line of sight to the Mound of the Hostages passage tomb on the Hill of Tara. The Middle Neolithic broad bowl pottery is broadly contemporary with the use of the passage tomb which would have been a significant visual reference. Another (presumably destroyed) passage tomb may have been located in the immediate vicinity of the Lismullin complex. This can be inferred from the discovery of a kerbstone bearing megalithic art which was re-used in an early historic souterrain located 186m to the west. The Neolithic activities at Lismullin appear to represent the smallscale sporadic ritual actions of a small group of people, possibly a family unit, carried out in the shadow of two passage tombs.

Further Final Neolithic/Early Bronze Age activity consisted of a small pit at the northern corner of the site that contained 204 sherds of domestic Beaker pottery. A small ringditch located at the south-east of the site is as yet undated and has no known funerary association. It was located on the brow of a north-facing ridge of high ground at the southern end of the site. A second ringditch, located outside the road corridor was discovered in the course of a geophysical survey undertaken by Archaeophysica Ltd and occupies the same north-facing ridge.

### Ceremonial Enclosure

The post-enclosure occupies a natural saucer-shaped depression at the west of the site, surrounded on all sides by a ridge of higher ground. Both the enclosure and this high ridge extend beyond the south-western site boundary. There are three surviving enclosure elements: an outer enclosure, 80m in diameter, defined by a concentric double ring of postholes; a central inner enclosure defined by a single ring of closely spaced postholes; and an eastern entrance.

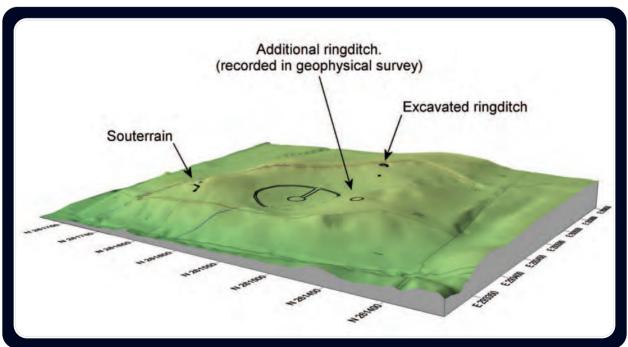
The two outer enclosing rings were 1.5-2m apart and individual postholes were arranged at 0.4-1m intervals (averaging 0.6m). The excavated postholes from the outer enclosure averaged 0.15-0.23m in diameter and 0.15-0.23m in depth. Charcoal from post-pipes associated with two of the postholes has been dated to 520-380 BC and 490-370 BC, placing the enclosure firmly within an Early Iron Age context. The inner enclosure was located at the centre of the site and at the lowest point of a pronounced topographical hollow. It had a diameter of 16m and consisted of sixty-two closely spaced postholes with average dimensions of 0.15-0.29m in diameter by 0.18-0.29m deep. The enclosure entrance is located at the east and is defined by a gap in the (outer) double ring of postholes. This gap coincided with a rectangular arrangement of four substantial posts enclosing a space approximately 6m east-west by 4m north-south. An avenue formed by two parallel rows of small stakeholes extended between this four post structure and the inner enclosure. Additional clusters of postholes and stakeholes were recorded in the enclosure interior and the recovered artefacts include a fragment of a rectangular stone chisel or adze from the subsoil surface within the northern area of the enclosure, Middle Bronze Age domestic pottery collected from a pit between the two outer rings, and numerous sherds of Later Bronze Age coarse ware pottery from internal pits.

The Lismullin excavations have afforded an opportunity to examine a rare site type from a perceived dark age in Irish prehistory. The enclosure occupies a discrete sheltered position, with the surrounding higher ground giving the effect of an amphitheatre. Topographical survey at the site has demonstrated that the inner enclosure occupies the lowest point in this natural hollow rather than its exact centre. This suggests that the activities taking place within the enclosure could be viewed from the outside.

The form and construction of the Lismullin post enclosure is also distinctive. The rings of posts appear to have been free standing and utilised large numbers of relatively small closely spaced posts. This would have given the impression of a perfectly circular construction when viewed from the external ridge of higher ground. We can therefore begin to imagine an extensive unroofed structure, simply constructed with a large number of relatively small posts and taking advantage of the unusual local topography which would have afforded a naturally elevated viewing platform. In contrast, other prominent Irish Iron Age ceremonial sites are characterised by the use of much larger timbers in association with slot trenches and enclosed by large earthworks in prominent locations.

The excavations have offered us a tantalising glimpse of the archaeology and early history of the site. It is to be anticipated that the completion of the excavations and the subsequent programme of post-excavation analysis and publication will significantly enhance our knowledge of an already rich archaeological landscape.

Aidan O'Connell



Topographical survey of the site (© ACS Ltd)