Arran pitchstone (‘Scottish obsidian’) – new dating evidence

Introduction

In 2009, I concluded the project ‘Archaeological Pitchstone in Northern Britain’ with the publication of a monograph in which I discussed various issues relating to this topic. The main reason for undertaking the project was that the number of artefacts in this raw material, as well as the number of pitchstone-bearing sites, had multiplied exponentially. When Williams Thorpe and Thorpe published their important paper on the topic in 1984, only approximately 1,400 pieces of worked pitchstone were known from c.100 find locations, but in 2009 approximately 20,300 pieces had been recorded from c.350 sites.

Alongside the procurement of pitchstone on the Isle of Arran west of Glasgow and the manufacture, use, and deposition of pitchstone artefacts throughout northern Britain, one of the most interesting questions relating to prehistoric pitchstone use is the exchange of this raw material and artefacts made from it, and what this tells us about the territorial structure of a tribal society. For this discussion to take place it was necessary to date archaeological pitchstone on the source island of Arran and elsewhere. After all, any interpretation of a pitchstone exchange network would be affected by whether the exchange took place between, for example, Mesolithic bands, Neolithic tribes, or Bronze Age chiefdoms.

In the 1980s the dating evidence was weak, and it was generally thought (and understandably so) that pitchstone might have been exchanged across northern Britain during most of Scottish prehistory, including the Mesolithic, Neolithic and Bronze Age. In 2009, I could show that the exchange of this raw material, from Arran to the rest of northern Britain, probably mainly took place during the Early Neolithic, although with some later use in Argyll (which might have formed one part of a social territory in which Arran was also included) and Orkney in the far north (which in so many respects represents a ‘special case’). Since 2009, substantial new dating evidence has been brought about, confirming a Late Neolithic phase of pitchstone use and exchange along the western seaboard of Scotland and extending as far north as Orkney. This appears to be part of a reciprocal movement of ideas, objects and people at that time – the use of Grooved Ware and timber/stone circles spreading south-westwards down the Atlantic façade and, among other things, pitchstone northwards along the same route. This new evidence generally relates to the recovery of pitchstone from pits which have associated absolute dates, as well as indirectly dating the pitchstone through association with prehistoric pottery.
General dating evidence

The dating of archaeological pitchstone relies partly on negative evidence (the absence of diagnostic elements), and partly on positive evidence (the presence of diagnostic elements).

On Arran itself, pitchstone was clearly used throughout prehistory. The project *The Early Settlement of Arran: the archaeology of the Water Ring Main*, carried out by GUARD Archaeology, University of Glasgow, in 1999 showed that all diagnostic types usually associated with Mesolithic lithic assemblages are known from Arran, such as microliths and burins (pers. comm. John Atkinson, GUARD Archaeology Ltd.). Other diagnostic pitchstone artefacts have also been found on Arran, such as leaf-shaped, chisel-shaped, oblique and barbed-and-tanged arrowheads.

My examination of almost all archaeological pitchstone found on the Scottish mainland and on other Scottish islands showed that although most pitchstone blades are as narrow as those usually associated with Late Mesolithic assemblages, the majority of artefacts from these parts of Scotland included no diagnostic Mesolithic types – not a single microlith was identified! Furthermore, the probable absence of pitchstone microliths on the Scottish mainland has recently been confirmed by the recovery of a large pitchstone assemblage at Stanton West, near Carlisle, which included microblades but no diagnostic Mesolithic types (mentioned in a previous issue of *PAST*). Although the pitchstone artefacts there were associated with a Mesolithic scatter, the context from which they were recovered was unsealed (pers. comm. Gill Hey, Oxford Archaeology North), and as the site also includes diagnostic Neolithic material this association cannot safely date the pitchstone artefacts.

However, leaf-shaped points are known off Arran, as are a small number of chisel-shaped arrowheads. This, and other supporting evidence, led me to suggest that, in general, the pitchstone exchange network on the Scottish mainland probably dates largely to the Early Neolithic, with exchange slowly decreasing around the Early/Middle Neolithic transition, at the time when we see a massive increase in the importation of Yorkshire flint from the opposite direction, as well as the introduction of an innovative Levallois-like technique.

Pitchstone from radiocarbon-dated pits

In 2009, only a small number of pitchstone artefacts were known from radiocarbon-dated pits, and several of these were characterized by quite large standard deviations. Since then numerous pits with pitchstone artefacts have been excavated in Scotland. They are listed in Table 1 (available in the online version of this newsletter).

It is obvious from the figure below that deposition of pitchstone in pits, and thereby the exchange of pitchstone between Arran and the rest of Britain, is predominantly an Early Neolithic phenomenon. Although some of the pitchstone in the pits is in the form of flakes, several pieces are microblades or very narrow macroblades (mostly narrower than 8 mm). Most of the pits also contained other lithics, either flint, chert or quartz. A flint artefact from Pit 7 underneath Fordhouse Barrow was identified as a leaf-shaped point. As many as 12 of 14 pits contained Early Neolithic pottery of the Carinated Bowl Tradition, four pits contained one or more flakes struck off Group VI axeheads, and four pits contained burnt bone (in two cases human).

The pit underneath Fordhouse Barrow has not been dated by charcoal from the pit itself, but the leaf-shaped flint point defines the small assemblage as definitely post-Mesolithic. The three radiocarbon dates are from the barrow's phase 3B immediately above the pit, thus providing a *terminus ante quem*.

As only two of the 14 pits which were dated have no Early Neolithic pottery recorded, it is tempting to believe that pottery generally formed part of the artefact assemblages deposited in these pits (whatever their prehistoric purpose). It also provides an indirect date for associated pitchstone. Three pitchstone blades/microblades were recovered from three pits at the Elginhaugh Roman fort (Midlothian), all containing Early Neolithic pottery of the Carinated Bowl.
Tradition (Alison Sheridan pers. comm.). From a pit at the Roman fort of Bishopton, Whitemoss (Renfrewshire), two pitchstone ‘chips’ were recovered, also associated with pottery of the Carinated Bowl Tradition.

In general terms, the evidence provided by the pitchstone artefacts from radiocarbon-dated pits, and the common association of the worked pitchstone with pottery of the Carinated Bowl Tradition, strengthens the idea that archaeological pitchstone and the exchange of pitchstone from Arran and across northern Britain was predominantly an Early Neolithic phenomenon which slowed down and finally fell apart as a new exchange system, and probably a new form of social organization, was born, that of Yorkshire flint.

Acknowledgements
I would like to thank Alison Sheridan, Principal Curator, Early Prehistory, National Museums Scotland, for taking the time to comment and advise on this paper. I would also like to thank John Atkinson, Maureen Kilpatrick and Iraia Arabaolaza, GUARD Archaeology Ltd., Gill Hey, Antony Dickson, and Fraser Brown, Oxford North, as well as Clare Ellis, Argyll Archaeology, for permission to mention unpublished results from their excavations.

Firestone – Kents Cavern as an educational and scientific resource

Kents Cavern, once home to Neanderthals and Britain’s very first early modern humans, and gateway to UNESCO’s English Riviera Global Geopark, has created a charitable organisation called the Kents Cavern Foundation (KCF). It is dedicated to delivering education, scientific research and conservation at the caverns. In 2014, the Foundation received a grant from the Heritage Lottery to fund an exciting two-year project called ‘Firestone’. It aims to encourage the general public to identify, look after and celebrate the exceptional prehistoric heritage in the area and in particular the ancient human occupation of Kents Cavern.

As Project Firestone’s Education, Community and Outreach Officer, I am working with national and international partners to develop interpretation and improved access to the caverns and their collections, showcasing the connections between human evolution, the natural environment and geological heritage. Firestone will also support the wider ambitions of the KCF charity to deliver a centre of excellence for earth heritage and human evolution.

Since September 2014, Firestone has begun work on four major ongoing projects: primary school education, the Kents Cavern Collection, development of a woodland trail, and the very first Stone Age School.

Project Firestone was introduced just as the Stone Age became part of the national curriculum for 7–11-year-olds. Firestone is providing support to teachers and schools to integrate the Stone Age into their framework in a cross-curricular fashion, using engaging and challenging materials that are newly developed. The materials accompany learning in the classroom with a visit to Kents Cavern.

Using this topic in the national curriculum, Project Firestone is able to spread awareness of the importance of Kents Cavern in the world’s Stone Age story, initially to local people, but with the aim of creating educational materials that can be used on a national level. We have created activities for school children which involve selling a Stone Age home, figuring out the chronology of Kents Cavern and trying to reconstruct what the local landscape would have looked like.

The second major project which Firestone has been involved with is to create an archive of the Kents Cavern collection. In 1825, the first recorded excavations were carried out by

Torben Bjarke Ballin, Lithic Research, Stirlingshire
Honorary Research Fellow, University of Bradford
Fr. John MacEnery. His work was followed up by William Pengelly, who undertook the first major excavation of the cave from 1865–1880. Since MacEnery’s work, it is estimated that in excess of 80,000 artefacts have been found in Kents Cavern during numerous digs, the greatest part being recovered by Pengelly.

While many were sent to Torquay Museum, the Natural History Museum and the British Museum, other artefacts were sent to smaller institutions and to museums and collectors all over the world. For conservational and educational purposes it is important for us to know where the artefacts are housed now and the condition they are in. Firestone has been tasked with locating the Kents Cavern collection and creating an online reference point for anyone to view, detailing what each item is, where it is kept and its condition.

Contact has been made with a few museums throughout the UK and from this around 3000 of the artefacts have been located – so only 77,000 to go!

The third project is to develop the woodland trail area of Kents Cavern. This will be ready to use within a couple of months. Firestone has developed an Ice Age animal hunt activity, involving seven panels with information about different prehistoric species which lived during the Ice Age. The panels are complemented with animal images from cave art, provided by our partner sites within the Ice Age Europe network. The woods will also see the development of a Stone Age trail, with nine different stations depicting some of the key aspects of Palaeolithic life, such as examples of different shelters, methods of making fire, hunting and art.

The final project is the development of the very first Stone Age School. On the third Saturday of every month, children can come to Kents Cavern and learn some of the skills which were key to Palaeolithic life. Each session will focus on a different aspect and involve making something which can be taken home at the end of the day. The sessions will be delivered by a member of the Firestone team. However, the School is currently looking for specialists in prehistoric technologies to run a tool-making session during August. It is challenging to combine the creation of resources for such different target audiences, and this promises interesting times ahead as the project develops.

If you would like to know more about any of these projects, and especially if you can help with the location of further parts of the Kents Cavern collection, then contact Elliot on firestone@kents-cavern.co.uk

Elliot Ling, Education, Community and Outreach officer, Project Firestone

Firemaking activities at Kents Cavern.

The Kirkhaugh Cairn: an old find and a new tale

The Kirkhaugh project was grant aided by the Society’s Research Fund and awarded the 2014 Leslie Grinsell Prize as the project most closely related to Leslie’s interests.

In 1936 the young Leslie Grinsell announced his arrival as an archaeologist of substance with the publication of the first edition of The Ancient Burial Mounds of England. The same year also saw the appearance of Herbert Maryon’s report on the ‘Excavation of two Bronze Age barrows at Kirkhaugh, Northumberland’ in Archaeologia Aeliana.

Maryon’s excavations, undertaken in 1935, are best known for the Bell Beaker gold basket-shaped ornament found in Barrow 1. Associated with an All-Over-Cord beaker, the ornament dates to about 2300–2200 BC and is the earliest gold object yet found in northern England.

During research for the excavation report on the burial of the Amesbury Archer it was recognised that amongst the other finds from Kirkhaugh was a stone tool for metal-working. These two graves are the only ones of early Bell Beaker metalworkers known in Britain. A closer study of the account of the 1935 excavations raised a number of questions. No traces of a body were found, nor was a grave cut. This would be very unusual for an early Bell Beaker burial, as funerary rites were rigidly prescribed at this time.
The grave also appears to be isolated from contemporary finds. It is also high up in the South Tyne Valley and, intriguingly, on the edge of Alston Moor.

In the 18th and 19th centuries Alston Moor was famous for its extensive deposits of lead ore, but copper was also exploited on a smaller scale. Across central and western Europe, the graves of most Copper Age and Early Bronze Age metalworkers are located far away from ore sources. Yet this was not the case at Kirkhaugh – so was the metalworker buried there also a metal prospector?

To explore this, a new study of Kirkhaugh was started in 2012 concentrating on ‘Barrow 1’. The finds from Maryon’s excavation, which are in the Great North Museum, Newcastle upon Tyne, were reassessed alongside a study of the mining history of Alston Moor. But as no records of Maryon’s excavation survive, the only way forward was back into the field. The subsequent fieldwork has been undertaken by volunteers from the ‘All Together Archaeology’ community project, the Award winning HLF-funded project led by Paul Frodsham of the North Pennines Area of Outstanding Natural Beauty. English Heritage supported a new field survey of the cairns, and this was followed by a geophysical survey of ‘Barrow 1’. These surveys clarified the character and setting of the monuments. They were stone cairns rather than barrows which had been carefully sited on distinctive natural knobs near the edge of a limestone plateau.

Cairn 1 was re-excavated in the summer of 2014, revealing a shallow east-west oriented inhumation grave that had not been identified in Maryon’s trench. Although only fragmentary traces survive, it is possible that the grave was originally covered by a small earthen mound. The stone cairn was added subsequently and was smaller than Maryon had thought, comprising just a few layers of small sandstone blocks that lacked a kerb.

Despite sieving all the excavated soil no bone was found. Most of the additional grave goods were discovered during manual excavation, either in the backfill of Maryon’s trench or in the upcast from it, which had been spread over the cairn. Most objects were of types found previously, such as the three additional barbed and tanged arrowheads, but two jet buttons represent a type not found in 1935.

When Maryon prepared his report he was advised on the gold ornament by Christopher Hawkes, then at the British Museum, and Graham Callander, of the then National Museum of Antiquities in Edinburgh. At the time the only other gold basket-shaped ornament known in Britain was that from Orbliston, Morayshire. Although two ornaments were found in 1863 only one was illustrated, so in 1935 it was not clear that these ornaments were usually placed in graves in pairs.

In some regards the discovery of a second gold ornament at Kirkhaugh was unsurprising, but who found it is a story that...
Leslie Grinsell would have enjoyed. Although best known for his work on barrows, Leslie Grinsell was also interested in the folklore associated with archaeological sites, which rather appealed to his whimsical sense of humour. In 1935 he devoted a chapter to the subject, prefiguring his 1976 book *Folklore of Prehistoric Sites in Britain*.

On a blisteringly hot July morning in 2014 two pairs of brothers came to take part in the Kirkhaugh excavation. Their interest had been inspired in school when they took part in the ‘Dreaming the Land’ story-telling project organised by the North Pennines Area of Outstanding Natural Beauty. The stories included the tale of the ‘Kirkhaugh Prospector’ and a visit to the cairns led by Paul Frodsham.

Ten minutes after they had started helping with the cleaning of the cairn, the boys struck gold. Well, not initially. One of them mooched up to me before asking sheepishly ‘Is this anything? It looks like plastic.’

Ten minutes later, just as we realised that the cleaning layer was partly comprised of upcast from the 1935 excavation, the boys found a plain v-bored jet button. In an improbable twist, it transpired that two of the boys were the great-great-grandsons of Joseph William Alderson, who had helped Maryon on the 1935 excavations. ‘Old Joe’ had lived in the Old School House close to the cairn and had worked in mining, travelling to Africa and Canada. One of the metals that he had mined was gold…

Leslie Grinsell would surely have enjoyed this addition to his ‘Treasure tradition’. There are some tales about archaeological sites that you simply couldn’t make up.

Acknowledgements

In addition to the Prehistoric Society, the project is being supported by the North Pennines AONB, English Heritage, National Museums of Scotland, The Society of Antiquaries of London, The Society of Antiquaries of Newcastle upon Tyne, University of Southampton, and the University of Wales AHRC-funded ‘Atlantic Europe and the Metal Ages’ project. The field survey was led by Al Oswald, University of York, and Dave Went, English Heritage, the geophysical survey by Duncan Hale, Durham University Archaeological Services. The re-excavation of the cairn was undertaken with the assistance of a team from The Archaeology Practice, Newcastle upon Tyne, including Marc Johnstone, Michael Coates, Mike Parson and Richard Carlton. Special thanks are due to all the volunteers, including the Raine family who farm the land and who helped in many ways.

Andrew Fitzpatrick, School of Archaeology and Ancient History, University of Leicester, af215@le.ac.uk

Colin Brian Burgess passed away on Tuesday 18th November 2014. He will be remembered for his major contribution to Bronze Age studies, particularly metalwork, where he laid the foundations for much current research. However, his enthusiasm and interests also led him into settlement/enclosure studies at Kilellan Farm, Islay, and Meldon Bridge in Peeblesshire — not forgetting his wide-ranging work nearer home in the Northumberland Cheviots. The latter fieldwork inspired him to establish the Northumberland Archaeological Group in the early 1970s, which still flourishes today. His seminal work ‘The Age of Stonehenge’, which was published in 1980, helped to further the discussion of the periodization of Late Neolithic and Bronze Age studies, and is still a key reference work to this day. He published widely, and his work associated with the *Prähistorische Bronzefunde* series led Colin into much fruitful collaboration with friends and colleagues in both the UK and Europe. He was one of the founding members of the Bronze Age Studies Group, a pan-European network of researchers. Indeed, his tireless championing of the Bronze Age resulted in much mentoring which has helped many archaeologists into their careers. After early retirement and a move to France, Colin continued to publish his research and lead archaeological tours to Europe and beyond. Colin will be remembered for his peerless knowledge of the Bronze Age and his friendship and helpfulness to so many archaeologists and students for over half a century. Colin was 75 and is survived by his wife Norma and sons Christopher and Simon.

Pete Topping
The Prehistoric Society 2014

This report covers the period of January to December 2014.

Meetings and study tours
The Society has continued to fulfil its commitment to reach a wide range of regional audiences and to promote its aims and objectives through a varied and wide range of lectures, conferences and tours throughout Britain, some in collaboration with a number of other archaeological bodies and societies.

In January and March joint lectures were given with the Devon Archaeology Society and Cotswold Archaeology. Rob Hosfield and Chris Green talked on ‘Searching for early humans at Broom’ in Exeter and Robert Van de Noort gave a talk on ‘Building a Bronze Age-type sewn-plank boat and exploring prehistoric seafaring through experimental archaeology’ in Cirencester. In April and June there were joint lectures with the Society of Antiquaries of Scotland – where Rachel Pope talked on ‘Prehistoric roundhouses of northern Britain: Origins and development’, followed by a reception – and Cambridge Antiquarian Society, where Anwen Cooper talked on ‘The English Landscape and Identities project’. In October Ian Leins spoke on ‘Coins, kings and tribes? East Anglia and beyond in the Iron Age’ in a joint lecture with the Norfolk Archaeology Society. Also, Neil Wilkin delivered the 13th Sara Champion, ‘Evaluating the relationship between the social and physical geographies of Bronze Age Britain (c.2500-800 cal BC)’. This was combined with the presentation of the Society’s Undergraduate dissertation prize (see separate articles). Our President, Alex Gibson, also made the University of Bradford’s weekly Archaeology Guest Lectures open to the Society’s membership.

The second in the Society’s springtime People in Prehistory one-day conferences (exploring different scales of analysis used by prehistorians) focused on the identification and categorisation of the house and household from the Neolithic to the Iron Age across Britain and Europe. The conference, again held at the Society of Antiquaries, proved very successful and was reported on in PAST 78.

This year an impressive range of tours to on-going excavations were offered. In June members were treated to tours of Bradford Kaims in Northumberland by Paul Gething (Bradford Kaims Wetland Project) and Burrough Hill hiltfort by Jeremy Taylor. In July there were tours of Yarnbury henge and Neolithic settlement, led by our President, Alex Gibson, while Rebecca Scott led visits to a number of prehistoric sites, exhibitions and excavations on Jersey. In August members had the chance to visit Penycloddiau Hillfort with Rachel Pope.

The Society has continued to support student-led events, namely the 17th Iron Age Research Student Symposium (held at the University of Edinburgh) and the 1st Neolithic and Early Bronze Age Research Student Symposium (held at the University of Bradford).

Europa Prize
Professor Alasdair Whittle (Cardiff University) was the 2014 recipient of the Europa Prize, awarded at an event held at Cardiff University from the 30th–31st of May 2014. For the seventh year, the Europa Lecture was preceded by a day-conference, this time dealing with various aspects of the Neolithic of Britain. The following day had a more European emphasis and included Professor Whittle’s collaborators on the ‘Times of Our Lives’ project. Professor Whittle’s Europa Lecture, ‘People, place and time in Neolithic and Chalcolithic Europe’ followed the presentation of the Europa award and the Society’s AGM (see below). A review of the Europa prize conference appeared in PAST 77.

Research Grants
Research grants were awarded to A. Fitzpatrick (Leicester University) for research into the Kirkhaugh Beaker grave, Northumberland (see this issue); E. Baysal (British Institute, Ankara) for the study of blue beads from Neolithic Turkey; D. Hallam (University of Bradford) for research into the Early Bronze Age Pygmy cups of Northern Britain; L. Silvestri (Durham University) for fieldwork on Italian Central Apennine caves; N. Uomini (University of Liverpool) for the Wyoming Rock Art & Archaeological Survey Project; and J. Horn (Edinburgh University) for research into Iron Age tankards.

The John and Bryony Coles Award went to J. Roe (UCL Institute) for fieldwork at Kharaneh IV, Jordan, and C. Spiering (Leiden University) for fieldwork at Çatalhöyük, Turkey. The Leslie Grinsell Prize went to A. Fitzpatrick, and the Bob Smith Prize to L. Silvestri. Awards were made from the Conference Fund to S. Derbyshire (Oxford University) to attend the 79th SAA conference; J. Taylor (University of York) to attend the 20th EAA conference; and A. Trentacoste (University of Sheffield) to attend the 12th ICAZ conference. The SUERC Award went to T. Kador (Bristol University) for work on material from Carrowkeel passage tomb complex, Co. Sligo (see this issue), and S. Neil (Durham University) for work on material from Ty Isaf long cairn, Powys.

The Annual General Meeting for 2013/14
The AGM was held at 4pm on 31st May 2014, in the Julian Hodge Lecture Theatre, Cardiff University, immediately before the Europa Lecture. The President reported on a very successful year and thanked all Council and members who have assisted with the range of events. Special thanks were offered to retiring Officers and Council members: Ann Woodward, Tom Moore, Rebecca Scott and Marie-Louise Sørensen. Alison Sheridan then stepped down as President and Alex Gibson took the Chair, praising the outgoing President’s energy, enthusiasm and leadership. A full appreciation of Alison’s contribution as President appeared in PAST 77.
The following officers and members of Council were elected:

President: Alex Gibson
Vice-Presidents: Christopher Evans, Joshua Pollard (co-opted)
Treasurer: Clare Randall
Secretary: Neil Wilkin
Managing Editor: Julie Gardiner
Editor, Prehistoric Society Research Papers Series: Mike Allen
Meetings Secretary: Marcus Brittain
Conservation Coordinator: Jim Leary
Council: Penny Bickle, Judie English, Janet Montgomery and Matt Pope

The Baguley Award
The Baguley Award was presented to M.K. Holst, M. Rasmussen, K. Kristiansen and J.-H. Bech for their paper on ‘Bronze Age “Herostrats”: Ritual, political and domestic economies in early Bronze Age Denmark’ in Volume 79 of the Proceedings.

Publications
During 2014, the Society published Volume 80 of the Proceedings of the Prehistoric Society, which contained thirteen refereed papers and one shorter contribution. Volume 6 of the Society’s Research Papers series, Settlement in the Irish Neolithic: New discoveries at the edge of Europe by Jessica Smyth was also published. As usual, three editions of PAST, the Society’s newsletter, were published during the year. Number 78 was the last to be edited by Joanna Brück and an appreciation of her work was offered by our new editor (Daniela Hofmann) within its pages.

Advocacy
The Society continued its active role in advocacy. Statements have been drafted in opposition to cuts to the archaeology staff of Herefordshire County Council, to the proposed development around Old Oswestry hillfort and apparent wrongdoing at Banks chambered tomb, Cleat, Orkney. The Society began the process of supporting the inclusion of prehistory in the primary school’s National Curriculum (from September 2014) by seeking to include a range of free and trusted teaching resources relating to prehistory and prehistoric sites on the Society website (see this issue). It is hoped that these resources will also prove useful to a wider audience, including members.

Membership and administration
Membership of the Society is healthy and is continuing to rise.

As ever, the Society would not be able to function without a large number of individuals giving freely of their time and knowledge to organise events and to deliver the results of their fieldwork and research. The Society offers sincere thanks to all those who have helped throughout the year, and especially to its administrator, Tessa Machling.

The 13th Sara Champion Memorial Lecture, October 2014

The publication in 1932 of Cyril Fox’s ‘The Personality of Britain’ explored the connection between regional variation in landscape character – most famously distinguishing upland from lowland zones – and the evolving ‘personality’, primarily in terms of population mobility, of Britain’s inhabitants in response to the changing ecological circumstances manifested by those regions. Fox presented a tour de force overview of the distributions of material culture across prehistory and beyond and vastly expanded the scope in space-time presentation of archaeological data. The reception of Fox’s book is reflected by its commercial success: it became a standard school text and a bestseller in four editions, and with the exception of guidebooks sold more copies for the National Museum in Cardiff (where Fox was curator) than any other publication.

In any estimation it would be a considerable challenge to attempt an overview at a similar scale today. Yet this is the challenge that lay at the heart of the 13th Sara Champion Lecture, presented by Dr Neil Wilkin, Curator of the European Bronze Age collection at the British Museum. In ‘The Personality of Britain’ reconsidered: evaluating the relationship between the social and physical geographies of Bronze Age Britain, c.2500-800 cal. BC’, the reality of a distinction in regional distributions, and most notably the upland-lowland duality, was tested against swathes of new material, while site-type distributions data was cross-referenced against a nuanced and mobile environmental picture. Dr Wilkin (who has also recently been appointed as the Society’s secretary) illustrated the great potential that resides in the collation of multi-period data. Expertly executed and very well attended, the lecture also offered testimony to the early achievement of Fox, one of the twentieth century’s great masters of the profession, and highlighted the value of his legacy, irrespective of proof or refutation that a revision through new data may bring.

It was a pleasure to attend an interesting and impressive lecture that looked beyond topography as either a barrier or a border to human endeavour and imprinted a further step beyond pure environmental determinism in studies of British prehistory.

Marcus Brittain
On the 15th of November the University of Bradford hosted the first Neolithic and Early Bronze Age Research Student Symposium (NEBARSS). The symposium aimed to provide an opportunity for postgraduate, early career and independent researchers concerned with the Neolithic and Early Bronze Age to meet with their peers and to present the results of their work. The event, which was attended by over forty delegates from across Britain and Ireland, was generously supported by the Prehistoric Society and was preceded by a keynote lecture on the 14th of November by the Society’s president, Dr Alex Gibson.

A busy programme of fourteen presentations covered a variety of themes and geographical areas. Topics addressed in the early session included new research into the Neolithic ceramics of the Hebrides (Mike Copper), Early Bronze Age pottery in Shetland and Orkney (Owain Mason), and the funerary cups of northern England (Debbie Hallam). The second session included presentations on the Neolithic of the Yorkshire Dales (Yvonne Luke), houses and mobility in the Neolithic of Northumberland (Dr Seren Griffiths and Dr Ben Edwards), and a call for a greater emphasis upon the Neolithic and Early Bronze Age in the north of England (Emma Watson).

After lunch, delegates were treated to presentations on new research into the halberds of Scotland (Rachel Faulkner-Jones), the bronze axes of Ulster (Caroline Chestnutt), the stone tools of Orkney (Robert Leedham), and the geochemical provenancing of flint (Seosaimhín Bradley). The final session covered the perception of trees and woodland in the Mesolithic and Neolithic (Ellen McInnes), activity within causewayed enclosures on the South Downs (Dr Brian Albrecht), feasting at Newgrange (Thor McVeigh), and the afterlives of Orkney’s Neolithic monuments as reflected in the folktales of the later Norse settlers (Nela Scholma-Mason).

The character of the symposium was friendly, relaxed and, importantly, supportive of new and less experienced presenters. Both the encouraging attendance and positive feedback from delegates serve to underline the importance of a forum specifically for new researchers in the Neolithic and Early Bronze Age, and the organisers are pleased to report that this highly enjoyable symposium now looks likely to become an annual event to be held at a different institution each year.

Mike Copper (University of Bradford)
Owain Mason (University of Edinburgh)

The Europa Conference 2015: The Origins of Monumentality
Moore Auditorium, Science Centre, Belfield Campus, University College Dublin

The 2015 Europa conference celebrates the achievements of Professor Friedrich Lüth, German Archaeological Institute, in the field of European prehistory. Friday 29th May 2015 will consist of lectures by young researchers and students concluded by a wine reception. Saturday 30th May 2015 will consist of three sessions of lectures on Aspects of Earliest Monumentality in a range of countries, concluded by a wine reception. Sunday 31st May 2015 features a fieldtrip to the Boyne Valley to visit some of Ireland’s most iconic Neolithic sites.

Confirmed speakers for the Saturday programme include: Mehmet Özdogan (Istanbul), Karl-Jöran Sjögren (Gothenburg), Niels Andersen (Moesgaard), Serge Cassen (Nantes), Antonio Valera (Lisbon), Tim Darvill (Bournemouth), Alison Sheridan (Edinburgh) and Ann Lynch (Dublin).

Europa lecture: Friedrich Lüth, German Archaeological Institute

For more information or to book please visit the Prehistoric Society website: http://www.prehistoricsociety.org/events/event/europa_2015_dublin/
Prehistoric Society Undergraduate Dissertation Prize 2014

There were ten nominations for the Society’s 2014 Undergraduate Dissertation Prize. The awards to the winner and three runners-up were presented in the Society of Antiquaries before the Sara Champion lecture on the 22nd of October. The overall winner of last year’s prize was Ed Treasure (Durham University) for his dissertation on ‘An archaeobotanical and experimental study of Vicia faba (broad beans, horsebean) in prehistoric Britain’. Ed received three years’ free membership of the Society, his choice of one of the Society’s in-print monographs, a cheque for £100, and the opportunity to submit an abridged version of his dissertation for publication in the Proceedings. The three runners-up, each receiving a current copy of the Proceedings, were Alison McQuilkin (York) for her dissertation on ‘Is it possible to determine plant material utilised in the construction of a Mesolithic domestic dwelling from an examination of phytoliths’; James Dilley (Southampton), ‘Testing axe material efficiency in Neolithic Britain’; and Will Attard (Reading), ‘An experimental investigation into impact damage on replica Mousterian points in relation to different modes of hand-delivery’.

Tim Champion (far right) congratulates the winner and runners-up of the 2014 Undergraduate Dissertation Prize (from left to right: Alison McQuilkin, Will Attard, Ed Treasure and James Dilley).

Prehistoric Society Undergraduate Dissertation Prize 2015

The Prehistoric Society invites submissions for the 2015 undergraduate dissertation prize. The award celebrates the dissertation that has made the greatest contribution to the study of prehistory in any part of the world. The prize is open to students from any University in Britain and Ireland.

Each Department is invited to submit one dissertation by a candidate who completes her or his degree during the 2014/5 academic year. The judges will assess entries on the basis of the quality of work, the originality of the approach and the degree to which the research advances our understanding of prehistory.

The winner will receive three years’ free membership of the Society, the choice of one of the Society’s in-print monographs and £100. Three runners-up will be awarded a current copy of the Proceedings of the Prehistoric Society. An abridged version of the successful dissertation will be considered for publication in the Society’s Proceedings. The prize will be presented prior to the Sara Champion lecture on the 28th of October 2015.

This prestigious prize represents an excellent opportunity for outstanding young scholars to have their work publicly recognised in the magnificent setting of the Society of Antiquaries, Burlington House in Piccadilly. Entries for the current academic year are to be sent as pdf documents by the host Department to Professor Bob Chapman at r.w.chapman@reading.ac.uk, by Friday 24th July. Entries can only be accepted if accompanied by details of the email address, postal address and contact phone number both for the candidates and for their supervisors.

New Editorial Assistant for PPS

We are delighted to announce that Courtney Nimura has been appointed Assistant Editor for PPS. A fairly large field of candidates was set a couple of preliminary editorial tasks and a considerably smaller field then went on to complete copy-editing and proof-reading texts. There were three very strong candidates, of whom Courtney had by far the most experience of both editing and publishing (or nearly so in the case of two books she is working on just now!). Courtney will already be well known to members, as she is currently on Council, and those who know her personally will be well aware of her boundless energy and enthusiasm. She has just been appointed Post-Graduate Research Assistant at Oxford, which will be very handy given that the Editor works in Oxford two days a week. We would like to extend our thanks to all those who applied for this unpaid post and in particular to the two unsuccessful short-listed candidates.
The AGM will be held on Saturday the 30th of May 2015 at 4.40pm in the Moore Auditorium, Science Centre, Belfield Campus, University College Dublin.

**Agenda**

1. Minutes of the Annual General Meeting held at Cardiff University on Saturday 31st of May 2014 (papers available from the website or from the Honorary Secretary)
2. President’s report
3. Secretary’s report
4. Editor’s report and R. M. Baguley Award
5. Treasurer’s report
6. Report on meetings, study tours and research days
7. Future composition of Council
8. Awards
   - John and Bryony Coles Award
   - Research Grants (Bob Smith Award and Leslie Grinsell Award)
   - Conference Fund
9. Election of Officers and Members of Council

The meeting will be followed at 5.00pm by the 24th Europa Lecture by Friedrich Lüth. 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 notably or in some other way approved by Council) must be deposited with the Secretary, The Prehistoric Society, c/o Department of Britain, Europe & Prehistory, The British Museum, Great Russell Street, London WC1B 3DG, by 4.30pm on the 15th May 2015.
3. Forms of proxy may be obtained from the Secretary at the above address.

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_YAC/Prehistoric Society Prehistory Day_

Recently, the Prehistoric Society joined forces with YAC groups from St Albans, Hatfield/Welwyn, Aylesbury and London to hold a one-day Prehistory conference. Two of our young prehistory enthusiasts were keen to let members of the Prehistoric Society know more about their day.

On Saturday the 31st of January the Hatfield/Welwyn and St Albans YAC groups hosted a prehistoric conference at the Verulamium museum in St Albans. They were joined by five archaeologists and members of YAC from other local groups. The day was kicked off with a flint knapping demonstration from James Dilley, who has worked with flint to create prehistoric weapons and tools. He is studying for his MA in archaeology and has met many famous people and gives demonstrations on how to do flint knapping.

After this we had a demonstration by Matt Pope on how to skin a deer. He also talked about the evolution of humans. Once the deer had been skinned and cut up we were given a prehistoric lunch prepared by Sarah, head of the Hatfield YAC group. The lunch included things like bread and meat [no venison? – Ed], also cheese and apples.

Once we had had our lunch, Kris Lockyear came in and he showed us how to find archaeological sites by using things like aerial photography and geophysics.

This was then followed by Mike Parker Pearson who told us about the work that he has been doing at Stonehenge and the latest theories and finds from the site and that it is now believed to have been a burial site.

Then James Dilley came back and told us about his journey from being an archaeology enthusiast and YAC member to becoming a professional in an ancient craft.

Finally, Courtney Nimura came in and told us about the work that she does as an underwater archaeologist and the work that she does along the Thames and in other places around the world.

In all, the day was a great experience that has showed us more about the world of archaeology.

_Fiachra Ó Cuanacháin, 13 and Matthew Halling, 13_
Your chance to win!

As this year marks the 80th anniversary of the Prehistoric Society, we have taken this opportunity to delve back into our archives to see how former members celebrated such momentous occasions. This photograph is of participants at the 50th anniversary get-together in Norwich, showing off a wide variety of fashionable coats for the active archaeologist. But who is who? Dive into your own private archives, interview your PhD supervisors and send us your answer! There is a mystery prize for whoever correctly identifies the greatest number of attendees (and don’t fear, it’s not a coat). Answers to prehistoric@ucl.ac.uk. Photograph courtesy of Andrew Lawson.

Invitation to the membership to submit ideas on important sites and educational resources

Council has recently been looking at improving the Society’s website item ‘places to visit’. This was prompted by the change last autumn in the school key stage 2 curriculum, which introduced prehistory as an obligatory element of learning for the first time. This is welcome indeed and we would like to generate information that will be of service to teachers who are desperate for relevant online resources. The Society should be able to offer key information on a selection of prehistoric sites covering all regions of Britain, benefitting a much wider spectrum of the archaeology-interested public at the same time. In addition to fact-sheets on visit-worthy sites, we will produce cross-reference sheets to define and explain periods and categories of site such as hillforts.

We are inviting members of the Society to put forward their suggestions on sites they know, locally or elsewhere in Britain, that they think would rank highly as well preserved or particularly interesting examples. They do not have to be exceptional – the ‘typical’ is good – and please alert us to sites worthy of a visit that have been relatively overlooked. A short-list will be drawn up which gives as even a geographical and chronological spread as possible.

In addition, the Council are also creating a list of links to high-quality and fun educational resources, for which we also invite suggestions. To submit your suggestions please follow the link below to complete our short survey by Sunday 31st of May 2015: https://www.surveymonkey.com/s/7YK6ZND, or send an email to prehistoric@ucl.ac.uk with the following information: Site name, county, grid reference, site type, ease of access, why you think it is a high priority, your contact details.

New dates from Carrowkeel

The Neolithic passage tomb complex at Carrowkeel, Co. Sligo in north-west Ireland arguably represents one of the most significant clusters of passage tombs in north-west Europe. Despite this, only limited excavation has been undertaken, with eight of the 25 cairns having been excavated. The only major campaign of fieldwork was led by R.A.S. Macalister in 1911 and published in the Proceedings of the Royal Irish Academy in 1912. While this publication reports the recovery of a substantial amount of human bone, analysed by Professor of Anatomy (and father of the lead excavator) Alexander Macalister, their whereabouts remained unknown for most of the past century. This was until Dr Alison Sheridan (a recent President of the Prehistoric Society) came across them in the Duckworth Laboratory, Leverhulme Centre for Human Evolutionary Studies at the University of Cambridge, in 2003 and alerted a number of Irish archaeologists. A group
involve three members of the current team (RH, PM & SM) obtained access, and two of them (RH & SM) carried out a preliminary inspection of the material in June 2012. Subsequently, isotope analysis was initiated (TK) and Jonny Geber was engaged to undertake a full osteological assessment of the assemblage in late 2013. With the potential of gaining significant new understanding of the interred population at Carrowkeel, it became crucial to provide some chronological support for our research. As fieldwork at the complex in the past 100 years had been limited (and the 1911 remains missing), only a small amount of material had previously been available for dating. Three directly dated human bones and one tooth sample had provided two Middle Neolithic and two Early Bronze Age dates.

In early 2014 the Prehistoric Society, in collaboration with SUERC, kindly granted us two AMS radiocarbon dates – the first ever on the remains from Macalister’s 1911 excavations. The burials at Carrowkeel are disarticulated and the collection is relatively evenly split between inhumed and cremated bone. Moreover, contextual information from the 1911 campaign is extremely problematic, making it difficult to relate the remains to specific contexts within the tombs. Bearing these limitations in mind, we did our best to identify two relatively secure contexts in the hope of choosing samples that could be related to the monuments’ construction or early use. We selected two cremated adult human bone fragments from the burial chamber of cairn F, one of the largest monuments within the complex: a femur fragment labelled ‘end recess’ (SUERC-53151) and an ulna fragment labelled ‘east recess’ (SUERC-53150). These samples were submitted to SUERC in East Kilbride.

The results confirmed a Middle Neolithic date for both samples. More specifically, they appear to date to the most intense period of passage tomb construction across Ireland (i.e. the centuries leading up to 3000 cal BC). Interestingly, one of the results is almost identical to the recently obtained date on a cranial fragment from cairn G at Carrowkeel (3346–3094 cal BC). Unfortunately there is a plateau in the radiocarbon calibration curve at this key period for Irish passage tomb construction (c.3300–3100 cal BC). However,
Recent excavations in advance of car park construction at Escalles in the Pas-de-Calais have uncovered a causewayed enclosure dating to around 4000 cal BC. This is the first site of its kind to be discovered on the north French coast and as such is highly relevant for research into the spread of the Neolithic at this time from the Continent to the British Isles.

The enclosure is located on the Mont d’Hubert, less than 1 km inland from Cap Blanc Nez (Figure 1a, c–d). At 150 m, this hill dominates the surrounding landscape and offers stunning views of the Dover Strait and the Kent coastline. Excavations revealed a 120 m stretch of causewayed ditch, barring the widest part of the chalk spur and enclosing a surface area estimated at 4.5 ha, bordered on the west by an abrupt slope (Figure 1b). There are four ditch segments, on average 3.50 m wide and 1 m deep (Figure 2a). The investigated area inside the enclosure produced about ten pits, some of which are contemporary with the ditch.

The finds from the enclosure ditch reflect both abundant use of locally available resources and intensive social activity. The ditch fill contained over 1500 kg of flint, 500 kg of sandstone, 174 kg of pottery, 160 kg of faunal remains (mostly from domestic cattle, caprines and pig), as well as around 100 bone or antler tools and 3865 litres of shells of the marine species Mytilus edulis and Patella (blue mussels and limpets; Figure 2b, c, f). Carbonised plant remains include cereal grains and hazelnuts. Last but not least, around 2000 fragments of human bone were found. These show signs of breakage of fresh bone, including skulls, together with cut-marks from defleshing or dismemberment. Some fragments have signs of exposure to fire (Figure 2c, d). There are numerous small fragments, but altogether the human bone corresponds to nine adults and eight immatures.

Spatial patterning can be observed in some of the data. For example, complete pots were only placed in one part of the enclosure ditch, whereas sherds show a more random pattern of discard. Similarly, caprines received particular treatment, with some partial deposits in the ditch. The pottery assemblage displays a range of forms dominated by bowls, beakers, jars and flasks. Directly accessible on the site, cretaceous flint was extensively exploited. Debitage was mainly aimed at producing flakes, although a few blades were made, mostly quite large. Some of the longer flint nodules were worked into axes. Arrowheads are mostly of transverse type. Two small axes and a long blade attest to the rare use of exogenous flint materials.

While the pottery seems related to the Belgian Spiere group, the flint assemblage shows northern French Chasséen affinities. Covering an area between the south-western Scheldt basin and the North Sea, the Spiere group is bordered by the northern Chasséen to the south and by Michelsberg to the east.

Twenty-two AMS radiocarbon dates on animal or human bone, as well as plant remains, clearly place the Escalles enclosure at the transition between the fifth and the fourth millennia. Integrating observations on ditch sections and the
distribution of conjoining sherds, the dating evidence suggests a short period of occupation between c.4050 and 3950 cal BC.

All this raises the question of possible cross-Channel relations. First of all, a number of parallels can be drawn with the Carinated Bowl pottery of the British Early Neolithic. If one takes just a small sample from this chronological horizon (Figure 3, 11–14), characteristic pots have low rounded bellies to which long, oblique necks are attached. Rims are mostly everted and slightly bulging. Similar forms occur in the Spiere group, for instance at the settlement site of Raillencourt-Sainte-Olle (Figure 3, 9–10), or at enclosure sites like Escalles and Carvin. The notched rims present for example at Balbridie in Scotland are also found at Escalles and Carvin. One observes, too, that some ceramic traits regularly occurring in Spiere, northern Chasséen and Michelsberg contexts, such as *plats à pain* (‘baking dishes’), *coupes à socle* (footed bowls) and high frequencies of lugs on vessels, are all missing from Escalles. This also recalls the Carinated Bowl assemblages from Britain and Ireland.

Another issue widely discussed for this period is diet. Escalles is the only Neolithic enclosure so far discovered on the north French coast and...
the only site with archaeological evidence for consumption of large quantities of invertebrate marine food alongside meat from domestic animals and cultivated or wild plants. Stable isotope analysis was undertaken on several human bone samples from the enclosure ditch. While the isotopic values for collagen indicate consumption of protein mostly from terrestrial animals and plants, stable carbon isotope ratios of apatite highlight a contribution of marine resources to the whole diet. Given the large quantities of shells in the ditch fill at Escalles, there is a strong possibility that the isotopic data actually reflect their consumption. These results, albeit preliminary, are of interest for the ongoing debate on change in diet between the Mesolithic and the Neolithic in the British Isles.

Interpretation of the human remains from the enclosure ditch at Escalles is difficult, especially in the absence of any clear spatial pattern of deposition. Yet the quantity and variety of treatments observed on the bones is intriguing. Two hypotheses can be suggested. The first is secondary burial, as has been suggested for human remains from megalithic tombs in south-east England and elsewhere, and the second is cannibalism, an interpretation which has been proposed for several European Neolithic human bone assemblages in recent years. The weight of the evidence seems rather more in favour of the latter hypothesis. One can mention here the traces of exposure to fire, the selection of certain parts of the body (skull and long bones), the green-bone fractures and the cut marks. The same traits can be observed on the faunal remains from the site and there is little doubt that the animals were eaten. Furthermore, the visible cut marks on the skulls were carried out before fracturing the bone. The type of fracture observed on the skull fragments is characteristic of bones broken when fresh, which suggests a preparation phase involving the extraction of the brain. We are very much looking forward to what further analysis of this assemblage will tell us.

Acknowledgements
I would like to thank my colleagues at INRAP, the Centre Archéologique Départemental du Pas-de-Calais and the CNRS for their help in analysing the material, notably L. Hachem (animal bone), W. Devriendt (human remains), F. Bostyn and A.-L. Sadou (flint), E. Panloups (pottery), C. Dupont (marine animals) and G. Goude (isotopes). M. Ilett has kindly translated this contribution from French.

Ivan Praud, Institut National de Recherches Archéologiques Preventives, UMR 8215 du CNRS (ivan.praud@inrap.fr)
Appendix 1 for the contribution 'Arran Pitchstone'.
Radiocarbon-dated pits containing worked pitchstone, plus details of the radiocarbon dates that provide a TAQ for pitchstone use at Fordhouse Barrow.

<table>
<thead>
<tr>
<th>Cat</th>
<th>Site</th>
<th>Local authority areas</th>
<th>Ref.</th>
<th>Context</th>
<th>Code</th>
<th>Lab date BP</th>
<th>cal BC, 95.4% probability</th>
<th>Carinated Bowl pottery</th>
<th>Group VI</th>
<th>Full assemblage (CB = Carinated Bowl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carzield</td>
<td>Dumf &amp; Gall</td>
<td>Maynard 1993</td>
<td>Pit</td>
<td>Beta-68480</td>
<td>5010±70</td>
<td>3960–3660</td>
<td>x</td>
<td>x</td>
<td>2 pitchstone microblades, 3 flint flakes, 3 flakes from Group VI axehead; CB pottery</td>
</tr>
<tr>
<td>2</td>
<td>Maynard 1993</td>
<td>Pit</td>
<td>Beta-68481</td>
<td>4920±110</td>
<td>4000–3350</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake, 61 lithics, 64% of which flint, 36% quartz, 1 leaf-shaped point in flint; CB pottery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Deer's Den</td>
<td>Aberdeenshire</td>
<td>Alexander 2000</td>
<td>Pit 1028</td>
<td>OxA-8132</td>
<td>4945±40</td>
<td>3800–3640</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake, 13 chert flakes, 1 flake from a Group VI axehead; 1 piece of burnt bone; CB pottery</td>
</tr>
<tr>
<td>4</td>
<td>Alexander 2000</td>
<td>Pit 1028</td>
<td>OxA-8133</td>
<td>4895±40</td>
<td>3770–3630</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake, 13 chert flakes, 1 flake from a Group VI axehead; 1 piece of burnt bone; CB pottery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Nether Hanginshaw</td>
<td>S Lanarkshire</td>
<td>Ward 2014</td>
<td>Pit F20</td>
<td>GU-12113</td>
<td>4780±40</td>
<td>3650–3380</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake, 13 chert flakes, 1 flake from a Group VI axehead; 1 piece of burnt bone; CB pottery</td>
</tr>
<tr>
<td>6</td>
<td>Brownsbank</td>
<td>S Lanarkshire</td>
<td>Ward 2014</td>
<td>Pit F2</td>
<td>GU-9303</td>
<td>4865±45</td>
<td>3709–3538</td>
<td>x</td>
<td>x</td>
<td>1 microblade and 1 flake in pitchstone, 4 chert flakes, 1 flake of 'siltstone', burnt bone, and CB pottery</td>
</tr>
<tr>
<td>7</td>
<td>Chapelfield</td>
<td>Stirling</td>
<td>Atkinson 2002</td>
<td>Pit VIII</td>
<td>GU-7202</td>
<td>4640±90</td>
<td>3650–3050</td>
<td>x</td>
<td>x</td>
<td>4 pitchstone microblades, some coarse stone tools; CB pottery</td>
</tr>
<tr>
<td>8</td>
<td>Fordhouse Barrow</td>
<td>Angus</td>
<td>CANMORE 2014</td>
<td>Barrow's Phase 3B</td>
<td>OxA-8222</td>
<td>5035±40</td>
<td>3960–3710</td>
<td>x</td>
<td>x</td>
<td>7 pitchstone microblades, 3 pitchstone flakes; 1 burnt leaf-shaped point in flint, 1 chert chunk [provide TAQ dates for pitchstone in C507 (Pit 7) beneath Ph. 3B]</td>
</tr>
<tr>
<td>9</td>
<td>CANMORE 2014</td>
<td>Barrow's Phase 3B</td>
<td>OxA-8223</td>
<td>4920±45</td>
<td>3790–3640</td>
<td>x</td>
<td>x</td>
<td>7 pitchstone microblades, 3 pitchstone flakes; 1 burnt leaf-shaped point in flint, 1 chert chunk [provide TAQ dates for pitchstone in C507 (Pit 7) beneath Ph. 3B]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CANMORE 2014</td>
<td>Barrow's Phase 3B</td>
<td>OxA-8224</td>
<td>4965±40</td>
<td>3910–3650</td>
<td>x</td>
<td>x</td>
<td>7 pitchstone microblades, 3 pitchstone flakes; 1 burnt leaf-shaped point in flint, 1 chert chunk [provide TAQ dates for pitchstone in C507 (Pit 7) beneath Ph. 3B]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Donich Park</td>
<td>Argyll &amp; Bute</td>
<td>Clare Ellis pers. comm.</td>
<td>Pit 41</td>
<td>GU-29791</td>
<td>4714±33</td>
<td>3632–3376</td>
<td>x</td>
<td>x</td>
<td>2 pitchstone flakes</td>
</tr>
<tr>
<td>12</td>
<td>Snabe Quarry</td>
<td>S Ayrshire</td>
<td>Maureen Kilpatrick pers. comm.</td>
<td>Pit 22</td>
<td>GU-32479</td>
<td>4872±42</td>
<td>3763–3535</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake, 5 flint chips, 2 flint microblades, 1 edge-retouched flake from a Group VI polished stone axehead; sherds of CB pottery</td>
</tr>
<tr>
<td>13</td>
<td>Maybole</td>
<td>S Ayrshire</td>
<td>Becket &amp; MacGregor 2009</td>
<td>Pit 10</td>
<td>GU-16716</td>
<td>4939±30</td>
<td>3780–3650</td>
<td>x</td>
<td>x</td>
<td>14 flaked lithics, mostly flint but also pitchstone; CB pottery; burnt human bone</td>
</tr>
<tr>
<td>14</td>
<td>Becket &amp; MacGregor 2009</td>
<td>Pit 18</td>
<td>GU-16715</td>
<td>4940±40</td>
<td>3780–3650</td>
<td>x</td>
<td>x</td>
<td>14 flaked lithics, mostly flint but also pitchstone; CB pottery; burnt human bone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>The Carrick</td>
<td>Argyll &amp; Bute</td>
<td>Becket &amp; MacGregor 2012</td>
<td>Pit 0510573</td>
<td>SUERC-19349</td>
<td>3950–3700</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone flake; CB pottery)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Newton Farm</td>
<td>S Lanarkshire</td>
<td>O’Brien 2009</td>
<td>Pit 104</td>
<td>GU-17330</td>
<td>4835±35</td>
<td>3700–3520</td>
<td>x</td>
<td>x</td>
<td>2 pitchstone flakes and various other lithics; CB pottery</td>
</tr>
<tr>
<td>17</td>
<td>O’Brien 2009</td>
<td>Pit 110</td>
<td>GU-17331</td>
<td>4685±35</td>
<td>3630–3360</td>
<td>x</td>
<td>x</td>
<td>Various lithics, including aphyric pitchstone; CB pottery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>O’Brien 2009</td>
<td>Pit 102</td>
<td>GU-17329</td>
<td>4710±35</td>
<td>3640–3370</td>
<td>x</td>
<td>x</td>
<td>1 pitchstone blade, 1 burnt flint flake; CB pottery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Iria Araboaza pers. comm.</td>
<td>Pit 114</td>
<td>GU-35500</td>
<td>4966±39</td>
<td>3915–3653</td>
<td>x</td>
<td>x</td>
<td>9 chips of flint/quartz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


