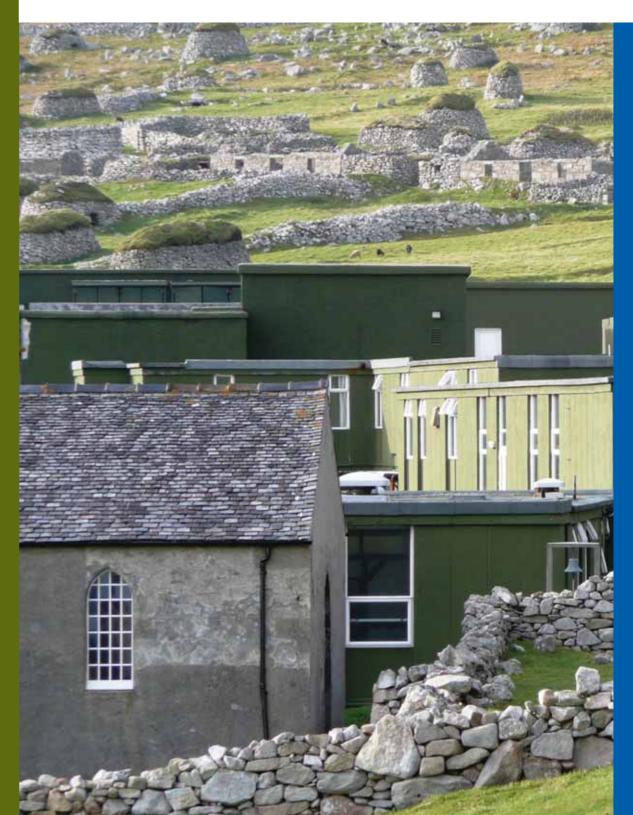


Winter 2009
Number 74

The ARCHAEOLOGIST



This issue:

ARCHAEOLOGY IN SCOTLAND

Battlefield archaeology

p10

Scotland's rural past

p18

Excavating prehistoric rock carvings on Ben Lawers

p34

Aerial photography by kite

p50



ONTENTS









- Contents
- **Editorial**
- From the Finds Tray
- A strategic statement for heritage in Wales Jenny Hall
- IfA 2009 AGM and seminar Alex Llewellyn
- **SGIfA recession seminar** Kenneth Aitchison
- Scottish Archaeology Month Mags McCartney
- 8 The Society of Antiquaries of Scotland Simon Gilmour
- **Battlefield archaeology** *Iain Banks* 10
- **12 Tree-rings and treasure: crannogs in south-west Scotland** *Anne Crone and Graeme Cavers*
- Fishy tales from a Scottish isle Kevin Colls and John Hunter 14
- People past and present: the industries of Prestongrange Melanie Johnson, Mike Cressey and Bridget Simpson
- 18 Scotland's Rural Past Brian Wilkinson
- **20 Doors Open Days** Abigail Daly
- **Logging the sites of Bute** *George Geddes* 21
- Airborne over Orkney RCAHMS aerial survey in 2009 Dave Cowley 22
- 24 **Defending the Past at Cape Wrath** *Laura Gutierrez*
- **25 Discovering roots in Scotland's forests** Sarah Phillips
- The Brough of Deerness, Orkney: research in a recession James Gerrard and James Barrett **26**
- 28 The National Trust for Scotland: access, enjoyment and education Daniel Rhodes
- **30** Cold War conundrum: the case of St Kilda Robin Turner
- The Scottish Archaeological Research Framework (ScARF) Jeff Sanders **32**
- **Excavating prehistoric rock carvings on Ben Lawers** Richard Bradley and Aaron Watson **34**
- **36** Involving the public in Glasgow's Industrial Archaeology: the M74 Dig Diana Morton
- **38** Amending Scottish heritage legislation Gordon J Barclay
- Historic Scotland and archaeological projects: how we work Noel Fojut and Peter Yeoman 40
- 42 Glenmorangie and Early Historic Scotland Alice Blackwell and David Clarke
- Maritime Archaeology in Scotland: a new era? Dan Atkinson
- Padlocks and pots: a good year for finds at Headland Archaeology Julie Franklin 46
- Archaeology on the (Edinburgh tram) line: reflections on a recording methodology Sorina Spanou 48
- Aerial photography by kite Rosie Wells and John Wells **50**
- **52** IfA Area and Special Interest Groups Kathryn Whittington and Geoff Morley
- **Special Interest Groups: The Diggers Forum** Jez Taylor **53**
- Special Interest Groups: Information Managers Martin Newman and Kieron Niven; Proposed SIG for **London** Rob Whytehead
- New members **55**
- Members news: Ian Ralston, Malcolm Atkin

Winter 2009 Number 74



Archaeology in Scotland

Your editor was overwhelmed this autumn with stories of wonderful Scottish discoveries and projects and so it seemed best to leave archaeology in Wales to be covered properly in the next issue (TA 75) and to concentrate this time on archaeology north of the border. Even at first sight the sheer range of proactive projects was impressive. Many are generated by the national organisations, Historic Scotland, National Museums Scotland, National Trust for Scotland and, above all, the Royal Commission on the Ancient and Historical Monuments of Scotland (abbreviated to RCAHMS throughout for obvious reasons and which we are proud to include among our IfA-Registered Organisations), but the projects are carried out by and for local people. This distinctive approach is paying off, especially in remote areas where to have many trained eyes watching out for archaeology is a huge bonus.

Also impressive are the ways the most serious and significant research fieldwork eprojects are so often undertaken with public involvement in mind, and vice versa – community projects all have valuable research outcomes. This marriage is not easy to arrange, but the stories told here all seem to have happy endings. This applies as much to commercial archaeological organisations (Headland, EASE, GUARD, CFA Archaeology, Birmingham Archaeology and Pre-construct Archaeology all feature here) as it does to publicly-funded bodies. Universities too prove in the following pages that this dual role is a spur to more exciting work and not a distraction, and

find that they can learn more from local people than they can ever give back. In fact, archaeology's move into spheres of local history, using reminiscence to inform interpretation on the ground, is itself an exciting aspect of the growth of our discipline, ranking alongside the scientific and technological advances that we also see featured in the stories of *TA 74*

One reminder – IfA's Annual Conference will be held in Southport at the Southport Theatre and Convention Centre from 14 to 16 April 2010. Details of sessions and how to book are already on the Conference page of the website, so start making your plans now.

Alison Taylor

Alison.taylor@archaeologists.net



Ben Lawers: walking up to a Scottish site.

© National Trust for Scotland

Notes to contributors

Themes and deadlines

Spring: Archaeology in Wales deadline: 10 January 2010

Contributions and letter/emails are always welcome. *TA* is made digitally available through our website and if this raises copyright issues with any authors, artists or photographers, please notify the editor.

Accessed digitally, web links are especially useful in articles, so do include these where relevant. Short articles (max. 1000 words) are preferred. They should be sent as an email attachment, which must include captions and credits for illustrations. The editor will edit and shorten if necessary. Illustrations are very important. These can be supplied as originals, on CD or as email attachments, at a minimum resolution of 500 kb. More detailed *Notes for contributors* for each issue are available from the editor. Opinions expressed in *The Archaeologist* are those of the authors, and are not necessarily those of IfA.

IfA, SHES, University of Reading, Whiteknights, PO Box 227 READING RG6 6AB

EDITED by Alison Taylor,

DESIGNED and TYPESET by Sue Cawood

PRINTED by Duffield
Printers Ltd (Leeds)

FROM THE FINDS TRAY

Archwilio: WATs online

The four Welsh Archaeological Trusts have just developed a joint web-based data management system for their regional Historic Environment Records (HERs) and are now building public access to this via a website called *Archwilio* – a verb commonly used in Welsh to mean explore. It also means to examine, audit, scrutinise, investigate, check, inspect or search – all activities facilitated by the new online record. Users will be able to explore records in each Trust area using a simple Google-style search that selects records ranked in order of relevance. The underlying data management system uses open source software commissioned by the Trusts and developed by Steve Smith, an independent IT consultant. This model will allow others to adopt and develop the system for their own needs, or to work with the Trusts to develop the existing system. *Emily Bateman*

Pennaeth Rheolaeth Treftadaeth / Head of Heritage Management Gwynedd Archaeological Trust emily@heneb.co.uk

Scottish Archaeological Internet Reports

The newest publications of the Scottish Archaeological Internet Reports (SAIR) series are now out. SAIRs 33 and 35 look at the social histories of two different settlement types, and SAIR 34 at prehistoric and medieval cist burials. SAIR is a joint publication venture between the Society of Antiquaries of Scotland and Historic Scotland. More details can be found on the SAIR website, http://www.sair.org.uk/.

Battlefields protected in Scotland

A new Inventory to protect Scotland's historic battlefields has been announced by Culture Minister Michael Russell. Compilation by Historic Scotland follows consultation on battlefields policy that generated more responses than any other issued by the heritage agency. Work will now begin to identify eligible sites, based on research by the Battlefields Trust as part of the newly-revised Scottish Historic Environment Policy (p38).

CANMORE: public input online

This RCAHMS online database, with information and images for more than 280,000 of Scotland's buildings and built archaeology, became interactive this August. Anyone can now add details to places of interest and upload photographs to share with other users, thanks to Heritage Lottery funding. By mid-September there were already more than 540 images uploaded (by 85 contributors) and 187 pieces of text. Images range from details of stonework or carved stones to cityscapes, pillboxes, power stations and houses, and include kite aerial shots (p50), and school and youth projects (Garnethill Synagogue, Elgin cathedral, Rough Castle). Owners of a cruck-framed thatched cottage have placed interior and exterior views. A woman placed pictures of her aunt's old cottage and other buildings she remembered but which have fallen into disrepair. Other photographs come from Shetland, the Western Isles, Islay, Fife, Edinburgh and Glasgow. For images placed so far, see the Flickr host site: http://www.flickr.com/photos/rcahms/. Contributions can be added on http://canmore.rcahms.gov.uk/.

Construction Code of Practice for the sustainable use of soils on construction sites

This Code, jointly published by Defra, the Department of Business, Innovation and Skills (BIS) and the Waste Resources Action Plan (WRAP), provides guidance to the construction sector which may be relevant to archaeological projects on construction sites. The aim is to protect soil resources. At pre-construction stage the *Code* recommends a soil resource survey, with results incorporated into any waste or material management plans. Different types of soil must be identified and stockpiles clearly marked. The *Code* can be accessed at http://www.defra.gov.uk/environment/quality/land/soil/built-environ/documents/code-of-practice.pdf.



A STRATEGIC STATEMENT for HERITAGE IN WALES

Jenny Hall

Glandwr Chapel, Pembrokeshire, a 19th-century Methodist chapel with an Early-Medieval inscribed stone, Trehywel Stone, in its graveyard, two classic Welsh heritage themes side by side

On 22 September the Heritage Minister, Alun Ffred Jones, announced his strategic statement and action plan for the Historic Environment (www.cadw.wales.gov.uk). Alun Ffred Jones is a minister in the Labour-Plaid coalition government established in 2007 whose agreement includes a commitment to celebrate and conserve Wales's outstanding heritage and has key pledges on extending free public access to heritage sites. He is also directly responsible for Cadw, which is a Directorate of the Welsh Assembly Government. His strategic statement outlines specific targets for Cadw and its partners to achieve over the next two years, before the next Assembly elections. Eighteen objectives have been identified and action points

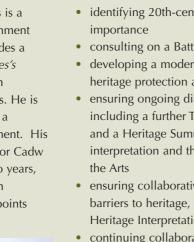
drawn up. Priorities in a period of tight funding include

- identifying 20th-century assets of historic importance
- consulting on a Battlefields Register
- · developing a modern, clear, accountable system of heritage protection and guidance
- · ensuring ongoing dialogue with all sector interests, including a further Treftadaeth conference in 2010 and a Heritage Summit in 2010 to discuss heritage interpretation and the links between heritage and
- ensuring collaborative action to tackle access barriers to heritage, and developing an all-Wales Heritage Interpretation Plan
- continuing collaboration on sustainable regeneration of heritage sites and townscapes
- promoting the study of Welsh history
- working with local communities to run events at Cadw sites and to encourage local projects which celebrate the Welsh language, place names, local heritage and folklore
- discussions with the third sector on opportunities for volunteering and skills development, and supporting creation of a heritage network

IfA Wales/Cymru has been invited to be a lead partner along with IHBC and ALGAO Cymru in developing a strategic continuing professional development training programme and in events for conservation professionals and heritage managers. This will be undertaken in conjunction with IfA's UK officers.

IfA Wales/Cymru has also been nominated as the lead body for Extending understanding of the Welsh Historic Environment, where the group will 'Review and clarify priorities for the archaeological research framework by the end of 2010'. If A Wales/Cymru instigated the Research Framework in 2001 and it has been an on-going commitment since then (for Research Framework see www.archaeoleg.org.uk). The group is honoured by the recognition this gives to IfA Wales/Cymru and are now, along with the Research Framework Steering Group, planning a national conference to carry this work forward.

Jenny Hall Chair, IfA Wales/Cymru Group jennyhall@lineone.net



IfA 2009 AGM and seminar

Alex Llewellyn

IfA's 2009 AGM took place on 12 October at the Society of Antiquaries of London. It was preceded by a discussion seminar at which Duncan McCallum, Policy Director, Policy and Communications Group, English Heritage updated the room on the latest drafting of PPS 15 for England: Planning for the Historic Environment and accompanying guidance, and welcomed comments from IfA members. Peter Hinton and Tim Howard pressed for increased reference to the existing IfA standards and guidance in the PPS and practice guide, and for greater encouragement of LPAs to recommend or require the use of recognised professionals and IfA Registered Organisations. These points and other issues were expanded upon by IfA members present, and were included in the formal IfA response to the consultation draft.

Andrea Bradley spoke briefly about progress with drafting IfA's Strategic Plan for 2011–2020, which had been posted for consultation on the IfA website. The timetable will see the final plan put to Council for adoption in April 2010. Kate Geary reminded all present about the Qualification in Archaeological Practice and the need for more experienced professionals to train as assessors. Anyone interested in this should contact kate.geary@archaeologists.net.

The AGM started with the announcement of eleven newly elected candidates to Council: Dan Atkinson, Peter Barker, Paul Belford, Virginia Dellino Musgrave, David Divers, Mark Newman, Martin Newman, Daniel Rhodes, Nick Shepherd, Gerry Wait and Roger White.

All five resolutions put forward to the AGM were successfully voted through, with some discussion about the annual accounts and CPD. Clause 1.4 of the Code of conduct and the accompanying note have now been altered to state

A Corporate member (Practitioner, Associate, Member) must ensure that

- a they carry out a minimum of 50 hours of Continual Professional Development activity in any two-year period
- b satisfactory evidence of such activity (which is expected to be in the form of Personal Development Plans and CPD logs) is provided to the Institute on request and according to such procedures decided by the Council

The meeting voted that the monitoring of compliance be run as a pilot scheme, reviewed by Council and reported to the 2010 AGM with any resolutions required to reform the requirements or process. A guide to the IfA CPD scheme can be downloaded from www.archaeologists.net/modules/icontent/index.php? page=20.

Thanks were given to retiring Council members Beverley Ballin Smith, Mike Bishop, Chris Clarke and John Sode Woodhead. All then enjoyed a wine reception courtesy of the Society of Antiquaries of London and Peter Barker (Tiltridge Vineyard and Stratascan).

Council would like to take this opportunity to encourage members to use their vote in future ballots and AGMs. We are lucky to have enthusiastic members who want to give their time to serve on the Council of the Institute, and as Corporate (MIfA, AIfA and PIfA) members you are able to elect the



Continuing Professional Development

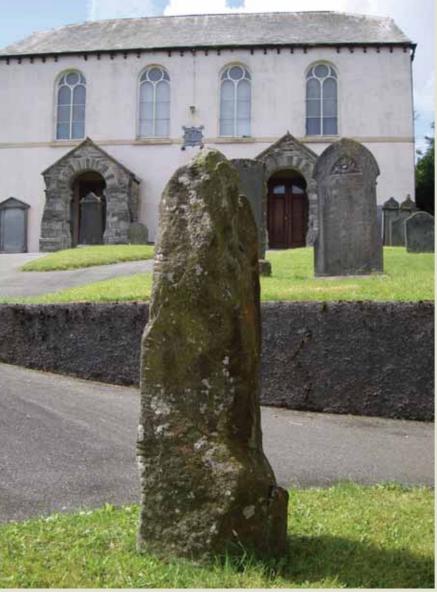
A Guide



individuals you wish to run the Institute on your behalf. This year we only receive 109 ballot papers (less than 10% of the voting membership) and even fewer proxy forms. The changes affect how members are expected to practise, for example the introduction of compulsory CPD (above), the expectation that all members (not just ROs) pay at least the IfA recommended minima, and the proposed future change to how members deal with the recovery of artefacts for sale (out for consultation on the website).

Alex Llewellyn

Head of Administration, Institute for Archaeologists alex.llewellyn@archaeologists.net



Scottish Group IfA AGM and recession seminar

Kenneth Aitchison and Carol Swanson



The Scottish Group of IfA held its AGM on 23 October, followed by a seminar on the effects of the recession on Scottish archaeology. At the AGM John Sode-Woodhead handed over the position of Chair to Ellen McAdam, and Daniel Rhodes was elected Hon Secretary.

Following Kenneth Aitchison's presentation, which included the latest figures on job losses, Alan Leslie of GUARD gave an overview from the FAME perspective on how commercial archaeology is faring – put simply, not well. Unlike the situation in the south, there have been no major infrastructure projects in Scotland since the completion of the M74 project. Development-led archaeology is in such a difficult position that SUAT, the oldest commercial firm in Scottish archaeology (founded 1982), has ceased trading this year.

Phil Richardson's presentation was the one hopeful view of the day, talking about Archaeology Scotland's involvement with community archaeology as a

rejuvenated area, with real potential for archaeologists to be employed in cross-over work to promote professional standards. Ian Ralston reviewed the position from the four Universities that deliver archaeology degrees in Scotland, and considered that the recession has not yet had a full impact on Higher Education but austere times are on the horizon. Noel Fojut's review from the perspective of Historic Scotland recognised that delivery budgets for all Government agencies will be constrained for the immediate future – which set the meeting up for the most significant paper of the day, Carol Swanson's view from local government (below), with chilling reminders of what local government budget cuts are likely to mean.

Stephen Carter then led a vigorous debate before participants adjourned to a neighbouring hotel for appropriate refreshments.

Kenneth Aitchison

kenneth.aitchison@archaeologists.net

From a peak early in 2008, the number of planning applications seen by the West of Scotland Archaeology Service (WoSAS) has been dropping steadily. The estimated numbers of applications that WoSAS will scrutinise in October – December 2009 will be about 175, roughly half the number seen in the first quarter of 2008. As a consequence, the number of archaeological watching briefs, excavation and surveys undertaken in 2009 could be as few as 75, a third of the 2007 figure. This reduction is the direct consequence of the economic situation on developers, but the next wave of the crisis is about to hit local government directly.

The Local Government Chronicle reported on 17 September that most council chief executives are preparing for funding cuts of up to 20% over the next five years, with PriceWaterhouseCoopers believing 'the size of the challenge could be in excess of 25% ... all our analysis suggests a perfect storm is brewing and will hit local government in 2012–13.'

These cuts will happen across the UK regardless of which political parties are in control of the local council, of Holyrood or of Westminster – and the cuts are going to fall hardest on non-statutory services, such as provision of archaeological advice. If HERs have to cut back, there will be less advice for local councils that archaeological work needs to be done, fewer briefs will be issued, and there will be less development-led work for commercial archaeologists.

Carol Swanson

West of Scotland Archaeology Service carol.swanson@wosas.glasgow.gov.uk

S C O T T I S H Month

SCOTTISH ARCHAEOLOGY

Mags McCartney

Scottish Archaeology Month (SAM) is one of the public's best loved initiatives. Through it we make archaeology accessible, with a programme of free events throughout Scotland every September. The first SAM took place in 1998 with just 38 events. The public response was overwhelming and the popularity of the event has attracted ever more event organisers. Now we have around 24,000 visitors taking part in over 200 events. This year's programme contained events as diverse as a guided tour of Traprain Law by Fraser Hunter and a CSI-style workshop of hands-on activities in which Archaeology Scotland's Education Officer, Meg Faragher, demonstrated the skills osteoarchaeologists use to 'read bones'.

One unusual event was hosted by Solway Heritage at Hallmuir PoW Chapel near Lockerbie. This chapel was built by Ukrainian Prisoners of War who, in 1947, were sent from Italy to Scotland rather than being handed over to the Russians and a potentially terrifying future. The basic building is an army hut clad with painted corrugated asbestos cement sheet. The chapel still presents an authentic Ukrainian interior, complete with tinsel chandelier, and is in use by the Ukrainian community who stayed in Lockerbie and Lochmaben, found work in the area, married locally and brought up their children to respect their traditions.

Scottish Archaeology Month was particularly special this year as Archaeology Scotland launched its new *SAM for Schools* programme. In response to feedback from teachers we introduced a new *Just for Schools* programme, highlighting events specifically targeted at school groups. We also, in partnership with Learning Teaching Scotland (LTS), provided suggestions and online resources to help classes

celebrate SAM. From trying out Iron Age recipes to surveying their playground, Archaeology Scotland suggested activities that could be carried out with just tape measures and squared paper, or a mixing bowl and a few ingredients.

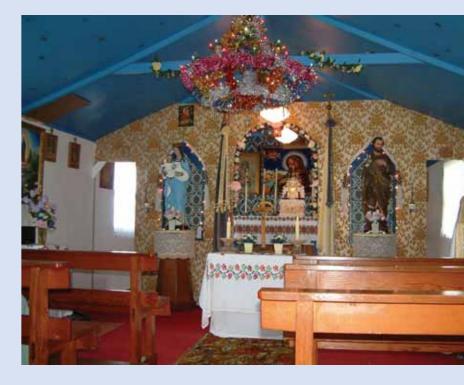
Every year more people are learning about Scotland's archaeology through free exhibitions, lectures, excavation open-days, re-enactments and workshops in archaeological skills and ancient technologies. Even more encouragingly, every year more people, whether professional archaeologists or keen amateurs, participate by sharing their knowledge and enthusiasm with the public.

Archaeology Scotland would like to thank all the event organisers who have contributed to SAM this year and over the past ten years and looks forward to continued collaboration.

Mags McCartney

Communications Officer
Archaeology Scotland
M.McCartney@archaeologyscotland.org.uk

Hallmuir PoW Chapel, built by Ukrainian PoWs and still used by their families, featured in Scottish Archaeology Month 2009's Dumfries and Galloway programme. Photograph: Andrew Nicholson



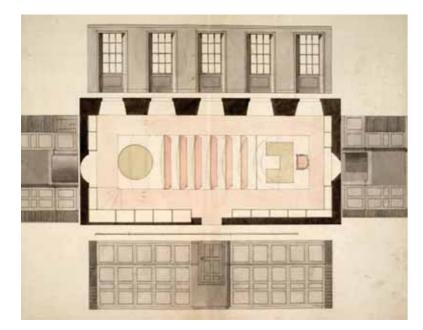


Simon Gilmour

The Society of Antiquaries of Scotland is the oldest antiquarian society in Scotland and second oldest in the UK, founded in 1780 by David Steuart Erskine, 11th Earl of Buchan. It was incorporated by Royal Charter in 1783 and its members, known as Fellows, number 3000, spread across the world. Its purpose is set out in the first of its governing Laws: '... the study of the antiquities and history of Scotland, more especially by means of archaeological research.' These aims are achieved through high-quality publications, excursions, lectures, local, national and international conferences, workshops and seminars, grants, prizes and other awards. We are based in Edinburgh, with offices in the National Museums of Scotland, but also have a thriving Aberdeen and North-East Section based in Aberdeen University (where our Edinburgh lectures are repeated).

David Steuart Erskine, 11th Earl of Buchan, founder of the Society of Antiquaries of Scotland

Seating plan of the original library



WRITING SCOTLAND'S PAST

The Society has been active in publication since the 18th century. Our first transactions were published as *Archaeologia Scotica*, between 1792 and 1890, and in 1851 we began the *Proceedings of the Society of Antiquaries of Scotland*, still the primary journal for archaeology, architectural history and the study of historical artefacts of Scotland in its wider British and European context. In addition to the *Proceedings* we publish a series of peer-reviewed papers, *Scottish Archaeological Internet Reports (SAIR)*, which are freely available online, as is our *Proceedings* with a five-year hiatus, and many of our out-of-print books. These can be accessed through our website.

RESEARCH AND REPORTING

Our biennial Archaeological Research in Progress conference draws papers from across Scotland. Co-

organisers, Archaeology Scotland, alternately take the event to other areas of Scotland and concentrate on research more local to the venue. We also host international conferences based on chronological themes, two of which have already been published as significant books, one on the Mesolithic and the other on the Neolithic and Bronze Age. The most recent conference on the Iron Age is in the process of publication, and further conferences are planned. Since 1874 lectures have included the prestigious annual Rhind Lectures, six academic lectures by a single expert over the course of a weekend. Support for research and publication is available through grants and prizes, and the Council warmly welcomes applications for these (see website for details). The recent inception of the Scottish Archaeological Research Framework (ScARF) (p32) project consolidates our involvement in Scottish archaeology.

ADVOCACY

We also have a strong advocacy role, discussing and promoting relevant issues and responding to Government and other consultations. We have made our views clear since the18th century when, in the first volume of *Transactions* in 1792 there is a plea by Mr John Williams for the creation of a Royal Forest of Oak in Scotland, a plea to which 'the ferocious attention of the Society and of the public' was called by the supportive Baronet Sir Alexander Dick of Prestonfield. The Society continues to direct its attention to matters of relevance to the historic environment of Scotland, although with varying levels of ferocity.

SERVICE ONLINE

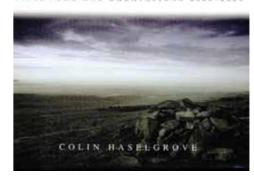
Our online shop provides a range of high-quality and well-illustrated books covering aspects of all periods of Scotland's history and archaeology. You can also find tickets to upcoming Society events and a range of Society merchandise on these pages; Fellows receive discounts on many products.

Our website is regularly updated and allows you to keep in touch with other Fellows around the world through our online Forum. There are also News pages, Society images and further background, a full list of our publications, programme of events, information on the ScARF project and on becoming a Fellow. For Fellows there are further secure pages to keep up to date with Society news.

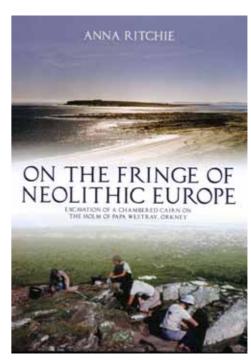
If you have an interest in Scotland's past we would be happy to welcome your application as a Fellow of the Society of Antiquaries of Scotland. Applicants are put forward for election at the Anniversary Meeting each year on Andrews Day – further details are on our website.



THE TRAPRAIN LAW



Recent publications by the Society of Antiquaries of Scotland



Simon Gilmour

Director Society of Antiquaries of Scotland c/o National Museums Scotland Chambers Street Edinburgh EH1 1JF

info@socantscot.org www.socantscot.org

Society of Antiquaries



Musket and
cannon - Cannon
used in ballistic
experiments by
the Centre for
Battlefield
Archaeology to
help with
archaeological
interpretation

Battlefield archaeology has been newsworthy of late and has attracted wide media attention. Yet for many archaeologists it is still the preserve of rather odd individuals with too great a fondness for the *Commando* comics they read as boys (the caricature identifies battlefield archaeologists as exclusively male). The truth is very different: battlefield and conflict archaeology is a lively and exciting sub-discipline of archaeology, where the rules are still being written and the landscape is wide open.

■ Scottish engagement

Since the start of this millennium there has been a great deal of activity relating to battlefield archaeology in Scotland. A comprehensive study of the archaeology of the Battle of Culloden has resulted in an award-winning visitor centre that explicitly promotes the results of the archaeological fieldwork, a conference on the battle, and a book drawing together its archaeology and history (Pollard 2009). There have been excavations at Fort William and Leith and investigations at Killiecrankie, Inchkeith, Sherrifmuir, Bothwell Bridge, Pinkie and Prestonpans. The world's first centre for the study of the archaeology of conflict and battles has been established – the Centre for Battlefield Archaeology at the University of Glasgow – and the *Journal of*

Battlefield Archaeology has been founded, alongside other activities of the Centre. Glasgow was also the scene of the inaugural Fields of Conflict conference in 2000, a biannual event that brings together the work of battlefield archaeologists from across the world.

■ Public Engagement

One major aspect of battlefield archaeology is the way it encourages engagement with the public. Battles are dramatic events, encompassing tragedy, heroism, loyalty and betrayal, lost causes and other elements that make a good story, and many will already know about the conflict itself, so it is not difficult to gain the public's attention. In telling the stories of battles and meshing traditional histories with the results of archaeological investigation, we can address issues of ethnicity, creation of national identities and mythologies, of memorialisation and commemoration and of the relevance of archaeology to the modern world. We can take the results of fieldwork into schools and give children an early understanding of the importance of archaeology in understanding history and society.

The process of investigating a battlefield brings another form of public engagement; a mutually beneficial relationship between archaeologists and metal detectorists. The most productive battlefield projects have been the result of such collaboration: Little Bighorn, Marston Moor, Towton, Culloden, Bosworth and Prestonpans have all benefited from

the input of metal detectorists. While there are still many unresolved issues between the two groups, messages about recording and context are being appreciated by some at least within the metal detector community.

■ Battlefields at risk

Although there are positive aspects to the archaeology/metal detector relationship as mediated through battlefields, metal detectors pose an enormous threat to the sites as well. Battlefields survive largely as the distribution of artefacts in topsoil and are thus at risk from unstructured, unregulated collecting. When threats from development are added to the situation, it is plain that there are major cultural resource management issues to be faced. The response has been to bring battlefields into the planning process, thus requiring consideration in determining applications. In England, the 1995 Battlefield Register was a response to development pressure on the sites of historic battles. Currently, Headland Archaeology are working on a battlefield register for Ireland, while in Scotland GUARD's Centre for Battlefield Archaeology has been working with Historic Scotland to produce a nonstatutory Battlefield Inventory. While this will not provide legal protection to sites, and it still focuses on battles considered to be of national importance, the inventory will ensure that planning decisions take the presence of battlefields into account, requiring protection or mitigation as appropriate.

■ Stewardship and commemoration

Why bother? If the location is known, what case is there for preservation? There is nothing for people to see, so how can this possibly be included in an already crowded series of constraints and complications faced by developers? One immediate answer is that this is hallowed ground, where people fought and died, and it requires stewardship and the commemoration of their sacrifices. A more economically-driven answer is that battlefields are an exploitable resource that relate to the tourism and heritage industries, and destroying battlefields is wasting an important resource. Many of Scotland's visitors come for historically driven reasons. Currently, there is little that does anything to service their interests. Where are the heritage trails and information that turn a green field or hill slope into an encounter with the Jacobite or the Covenanter past? Visitors will come from all over the world to see the fields where Bruce fought Edward II at Bannockburn, but will they bother when those fields are housing estates? Battlefield archaeology mixes historical analysis with an understanding of landscape and terrain, knowledge of artefacts with an understanding of the properties of materials, and it



examines the ways in which memories and national mythologies are constructed and expressed. It looks at very specific events on the micro-scale of the individual within very tightly delimited time frames.

Battlefields represent great opportunities on so many levels that it will be a major failure of archaeology not to ensure that our generation's stewardship will pass on historic battlefields to the future. There is plenty more on this topic on our website http://www.gla.ac.uk/departments/battlefieldar-chaeology/.

Iain Banks

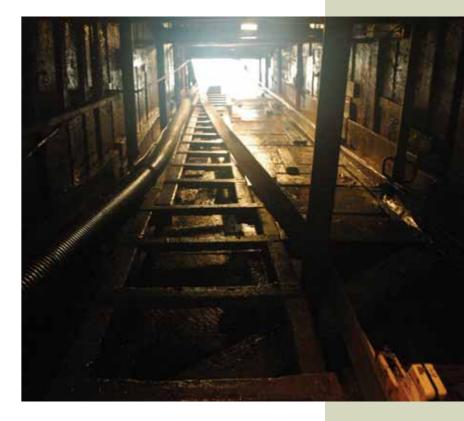
Director, GUARD

Executive Director, Centre for Battlefield Archaeology i.banks@archaeology.arts.gla.ac.uk

Pollard, T 2009 *Culloden: The History and Archaeology of the Last Clan Battle*. Pen & Sword Books Ltd

Scotland's Global Impact. Culloden: Tony Pollard leads a guided tour of the Culloden battlefield as part of the Scotland's Global Impact conference. Photograph: Natasha Ferguson

The shaft of a First
World War Vampire
dugout near Ypres in
Flanders, excavated
by the Centre for
battlefield
Archaeology in
2007. Its ladder is
still preserved.
Photograph: Tony
Pollard





Research into Scotland's wetland archaeology is taking a major step forward thanks to the first prehistoric dendrochronological dates in Scotland, those for timber excavated on crannogs. From these we are already able to shed new light on the northern Iron Age.

cotland's crannogs are a major archaeological asset, their well-preserved organic remains holding promise of fine chronological resolution. Recent excavations at two crannogs in south-west Scotland are beginning to make good that promise, with results which resolve dating issues that have bedevilled later prehistoric studies in Scotland.

Dorman's Island during excavation



Anne Crone and Graeme Cavers

Wetland sites

Since 2002 the Scottish Wetland Archaeology
Programme (SWAP) has been pursuing a targeted
programme of survey and excavation in wetland areas
across the country. The principal aim is to bring
Scotland's wetland sites into the mainstream of
archaeological research, focusing on their role within
wider physical, social and political landscapes. Southwest Scotland is particularly rich in crannogs. After
survey and evaluation of candidate sites work has now
concentrated on Cults Loch, Castle Kennedy, near
Stranraer, where a small loch containing two crannogs
is surrounded by a landscape rich in cropmark sites.

Another candidate site was Dorman's Island in Whitefield Loch. Excavation was limited because water levels were so high that at times the entire surface of the crannog was submerged. Nonetheless, deposits and timbers exposed during the excavation seem to lie within the interior of a structure and include a floor of large oak timbers, surfaces of prepared blue-grey clay some 300mm in depth, lightweight vertical stakes and a ruinous stone wall.

Tighter chronology

Prior to dendro-dating of oak timbers dating relied on eight radiocarbon dates from waterlogged wood, charcoal and carbonised cereal grain, all of which, when calibrated, indicate occupation in the latter half of the 1st millennium BC. Fragments of a blue-yellow cable glass bracelet broadly datable to the Roman Iron Age and of a Roman vessel glass were found in the upper, disturbed layers of the crannog, smearing the possible chronological range into the early centuries AD. Activity on the crannog is thus likely to be multi-period but the broad range of the dating

evidence impedes closer resolution. Now dendrochronological analysis of floor timbers has demonstrated that they were felled sometime between 153 and 122 BC. This range gives a more human perspective to the chronology and demonstrates that construction in the 2nd century BC was quite distinct from deposition of the Roman glass. Thus, vexed issues such as the relationship between Roman and native come into clearer focus.

Votive ard

A single dendro-dated site will not transform later prehistoric settlement studies but a crannog in Cults Loch has also produced large quantities of oak timbers, so we should soon have two neighbouring dendro-dated crannogs and can then examine relationships between them. Excavation at Cults Loch 3, which survives as a promontory projecting into the loch, has shown that the site is entirely artificial and is encircled by a 4-5 m wide swathe of stakes, thus forming in effect a crannog, albeit very close to the shore. Radiocarbon dates from the stakes indicate that the structure was built between 700 and 400 BC. Within the interior are several circular spreads of sandy gravel, one covered with a square framework of timbers and surrounded by a thick spread of compacted and highly laminated plant litter. The current interpretation is that the gravel spread and timber framework formed the base for a central hearth, with an outer floor of plant litter which was frequently renewed.

The nature of the superstructure is not clear, although the jumble of timbers across the interior includes large collapsed stakes with forked tips, giving some clues about the upper parts of the building. Lying under the floor was a complete ard-share of oak, around which a few small stakes had been driven and chopped off at ground level; its position under the floor, where it had apparently been pinned down, suggests votive deposition and finds resonances on many Iron Age sites. This is the 'treasure' of the title; it is only the second securely-contexted ard-share of Iron Age date found in Scotland, the other coming from an identical context, under the floor of Milton Loch crannog, also in south-west Scotland.

We are confident that dendrochronological analysis of the Cults Loch oak timbers (which begins next year) will produce a strong site chronology, and together with the Dorman's Island data we will have the first building blocks in the development of a robust treering chronology for the Iron Age of Scotland.

For more information about the project, see http://www.aocarchaeology.com/discoveries/news/ cults_loch_continues.htm

Anne Crone and Graeme Cavers

AOC Archaeology Group Edgefield Industrial Estate Edgefield Rd Loanhead, Midlothian EH20 9SY

Anne.Crone@aocarchaeology.com Graeme.Cavers@aocarchaeology.com www.aocarchaeology.com

Henderson, JC, Cavers, MG, & Crone, BA 2006 'The south-west crannog survey: recent work on the lake dwellings of Dumfries & Galloway', *TDGNHAS* 80, 29-51

Crone, BA & Clarke, C 2005 'A programme for wetland archaeology in Scotland in the twenty-first century', *Proc Soc Antiq Scot* 135, 5-17

Structural timbers during excavation at Cults Loch



The ard-share beneath floor layers on Cults Loch crannog



The Archaeologist

Winter 2009 Number 74

Fishy tales from

An opportunity to run a multi-disciplinary, community-led project to record evidence for post-medieval fishing on the Isle of Harris in the Western Isles was irresistible. It allowed us to draw together archaeological field survey, place-name research, local fishing history, archives and reminiscences to provide a record of fishing activities in the recent past and its impact upon the present landscape. Our novel project team included islanders, fisherman and maritime specialists alongside archaeologists from Birmingham and place-name specialists from Edinburgh University. The initial work was completed on the island of Scalpay (connected to Harris by bridge). The value of an interdisciplinary approach for this particular fishy tale can be seen from the results.

The Cretetree, a collier built of concrete, registered shortly after the First World War and now abandoned

The last three centuries have witnessed unprecedented changes in exploitation of marine resources on Harris. Social development, fishing technology and economic forces have all progressed significantly and have left behind local traditions of which there is currently little record. Many of the physical remains are now vulnerable to coastal erosion or development, and other parts of this resource survive only in human memory.

Scalpay

Described by one modern author as 'an inhospitable lump' where 'the Ice Ages [had] scraped away most

a Scottish isle

Kevin Colls and John Hunter

of the soil', Scalpay was settled in the 1840s after folk were cleared from Pabbay, Uist and Harris by the landowner. The 1841 census shows a mere 31 inhabitants; by 1881 the number had reached 540. The only resource was the sea, and a Scalpay man began curing herring in 1856. By 1900 the Scalpachs were adept fishermen and the island had nine curing stations and plentiful employment opportunities.

Coastline survey

During our coastline survey over 150 maritime or fishing-related sites were identified on Scalpay alone. Some of these were obvious, notably at the eastern tip of the island where the lighthouse at Eilean Glas represents a monumental complex of construction and engineering, or the abandoned collier Cretetree. Most sites are less obtrusive, often only identifiable at low tide, such as jetties, slipways, quays and nausts (safe havens). Others have been revamped or rebuilt and maintained, with several phases of change. Elsewhere there are traps for fish, usually built with low walls at the end of inlets or deliberatelydeepened small bays, where fish became trapped and easily picked out by hand as the tide ebbed. Lobster ponds were constructed using stone walls, an early form of fish farming, where lobsters caught in creels could be released into an area of defined captivity.



Fire-branding and evil spirits

Interviews with retired fishermen produced a wealth of information on the practicalities of fishing. This was seasonal and dovetailed with other crofting activities such as crop planting, harvesting, peat cutting, tweed weaving etc. The boats used were developed over the centuries according to the fishing methods employed. Men were usually away all week, so food was cooked on board, Bible readings took place and when vessels were anchored the combined crews would climb aboard one boat in order to read together. Superstitions included fire-branding (carrying a fire-flame around the boat to drive out evil spirits) and avoidance by the crew on their way to the boat of certain 'marked' elderly ladies who were deemed to have second sight and to bring bad luck. Green was an unlucky colour, even green socks, or anything coloured by the natural crotal dye, as were certain animals such as deer and rabbits. Swans were so unlucky there are tales of crewmen throwing overboard a box of Swan Vesta matches for that very reason. Packs of cards often received similar treatment, as works of the devil.

Fishy names

Fishermen working on

It became quickly apparent that many Gaelic place names associated with fishing existed in oral tradition only. Other names on the 1857 Admiralty chart no longer appear on modern examples. Reminiscence and fishing history studies identified around 150 such 'lost' names. These included inland lochs, headlands, cliffs, bays and natural harbours; places where boats could be moored, catches landed or nets mended, and rocks, reefs and channels. Some names were only used whilst at sea, and to use them from the shore was sometimes considered bad luck. Many will pass from recollection in the next decade. Some are personal, referring to people long since gone (eg Croit Eachain Hiorteach - Hector from St Kilda's croft). Purely topographical names predominate and identify inland



The lighthouse at

and coastal locations (Rubha (na) Trilleachan - Oystercatcher headland), hazards (Sgeir Ghobhainn - Rock of the Blacksmith) and navigational markers.

We can already see the potentials for many new avenues of research investigating recent histories and oral traditions in conjunction with archaeological fieldwork and characterisation of historic landscapes. Of primary importance has been the role of the local community – not only helping carry out the project, but also reminiscing about life experiences of a bygone way of life on a small island off the west coast of Scotland.

Special thanks go to the Carol Knott and the Harris Archaeology Group, Harris Development Limited, and the local maritime and linguistic specialists. For further details visit http://fishingheritage.info/.

Kevin Colls and John Hunter

Birmingham Archaeology Institute of Archaeology and Antiquity University of Birmingham Edgbaston Birmingham B15 2TT k.s.colls@bham.ac.uk

Scalpay illustrating key sites and 'lost' place names

Eilean Glas is in the

care of Historic

Scotland and

represents a

monumental

complex of

engineering

construction and



Winter 2009 Number 74 15

People past and present: the industries of Prestongrange



Melanie Johnson, Mike Cressey and Bridget Simpson

The site of Prestongrange Museum, on the coast between Musselburgh and Prestonpans, has major importance in the story of Scotland's Industrial Revolution. It was the location of a 13th-century monastic grange, used for coal exploitation and salt panning, a 16th-century harbour at Morrison's Haven, a 17th- and 18th-century glassworks, 18th- and 19th-century potteries producing wares that were exported across Europe, and a colliery and brick works of the 19th and 20th century. Remnants of these industries can still be seen, and intact structures include the rare Hoffman Kiln (built 1937) and the Cornish Beam Engine.

· Glassworks and pottery kilns

Excavations at the site of the former glassworks and pottery identified upstanding remains of an underground vaulted structure, an air flue for the glassworks. The kiln itself has not been discovered. The flue consisted of a narrow stone-built passage with a vaulted roof still surviving over half its length (partly converted into a Second World War air raid shelter). Buildings identified close to the flue, some contemporary and some later, may represent workshops or stores. Although no trace of the pottery was found, dumps of material within the flue contained two assemblages of late 18th-century locally-made pottery, as yet unparalleled in Scotland. Both the flue and the pottery assemblages are considered to be of national importance and demonstrate that the Prestongrange site was a wellestablished and significant industrial centre.

Busy port

We also worked at Morrison's Haven, an infilled harbour which was a busy port until the 1930s. Historical research showed that during the late 18th

The interior of a glass flue converted into an air raid shelter.

© CFA Archaeology Ltd

and early 19th centuries this Haven made a substantial contribution to industrial development in the area and was from the outset intended to be a significant commercial venture that could challenge the local dominance of Leith. The harbour master here recorded great quantities of pottery, salt, flint, coal, wood for pit props and clay coming into and leaving the harbour. The national significance of Morrison's Haven had never been truly realised nor appreciated until this project. Sadly it was the development of the Prestongrange Colliery railway that saw the abandonment and eventual demise of the harbour.

Community project

Work on this site has been undertaken by the Prestongrange Community Archaeology Project with professional support by CFA Archaeology Ltd (CFA). The Project has been studying the archaeology, history and people of Prestongrange since 2004, and was developed by the East Lothian Council Archaeological Service and Museums Service, grant aided by the Heritage Lottery Fund. CFA was commissioned to manage the fieldwork and to provide professional support to the volunteers. The main aims were to explore and investigate the pre-19th-century industries at the site through fieldwork, survey and historical research, and to document local people's stories and associations with the site through oral reminiscence work.

A central aim of the project was to involve local members of the community who have a keen interest in archaeology. Training in all aspects of archaeological excavation and recording, standing building survey, topographic survey, finds processing, palaeography and oral reminiscence interviewing (with thanks to colleagues at University of Stirling) and more was provided. The fieldwork is now over and the team is currently working on different ways of presenting the results to the public, including films, website material, popular and academic articles and a project booklet. Opening of the new interpretation facilities is planned for spring 2010. Already East Lothian Council and Archaeology Scotland have co-ordinated the first community archaeology conference in Scotland, in May 2009 at Musselburgh, which showcased the many and varied types of community archaeology projects happening across Scotland.



Recording the standing remains of glassworks at Prestongrange. © Chiaroscuro Productions

More information about the project can be found at www.prestongrange.org/pcap.

Melanie Johnson

Mike Cressey CFA Archaeology Ltd

Bridget Simpson

East Lothian Council Heritage Officer

Volunteers excavating the glassworks at Prestongrange. $\ensuremath{\mathbb{Q}}$ Chiaroscuro Productions



Scotland's Rural Past

Brian Wilkinson

Scotland's Rural Past (SRP) is a five-year, nationwide project hosted by RCAHMS. The SRP team works with local communities, schools and organisations across Scotland to research, record and raise awareness of the rural heritage.

Deserted rural settlements and field systems are still a significant feature of the Scottish landscape, most typically represented by sites abandoned or cleared in the wake of the wide-ranging and dramatic changes in land management and farming from the mid-18th until the late 19th century, during the Agricultural Improvements.

Abandoned settlements

Thousands of these derelict settlements are to be seen across rural Scotland, yet few have been comprehensively recorded or researched. These remains represent an invaluable record of Scottish rural life at a time of significant social change, a valuable asset and a tangible link to our own recent past and way of life. Through programmes of archaeological field survey and historical document training, and continuing professional support,

the SRP team enables local groups to focus on recording sites of interest to them, researching the history of their areas and the lives of past rural communities.

Simple survey

Field survey training provides SRP volunteers with a range of techniques, from drawing a basic sketch plan and plotting a grid reference with handheld GPS to measured survey with plane table and alidade, creating detailed written site descriptions and site photography. These methods are simple to understand and volunteers learn them over a two-day course at an abandoned rural settlement. A comprehensive field survey manual helps volunteers master the techniques while working on their own projects. Thirty survey training courses have so far been completed in different parts of Scotland for over 600 volunteers. These participants are now cascading the training down within their own communities.

Historical documents

Six historical document training courses have also been completed, with around a hundred participants. Volunteers learn how to research the wider landscape and historical contexts within which their sites are situated and are introduced to historic maps, vertical and oblique aerial photography, census reports, rentals, valuations and taxation records, and how to access these resources locally, nationally and online. Such training enables our volunteers to complement their fieldwork with historical understanding of changing land use and agricultural improvement, and to comprehend the factors which influenced development, phasing and abandonment of their site.

Training is available to everyone, regardless of their age, existing skills or experience. It overcomes barriers people may have about their own capabilities or about the complexity of techniques, and ensures people appreciate that their work makes a valuable contribution to our understanding of the rural heritage. SRP also provides support and encouragement. The website, annual conference and other activities provide opportunities for sharing results and ideas. A new online recording form makes results readily available and can be used for submitting records to RCAHMS. Data are validated by the SRP team, submitted to the national database and made accessible to all via Canmore, RCAHMS' online archive (http://www.rcahms.gov.uk/canmore.html).

Creative results

© RCAHMS

SRP also works with schools and young people to foster awareness of the rural heritage, wherever possible linking them with local projects. Fourteen schools are now involved, their creative results ranging from poems and prose in English and Gaelic to scale models of byre dwellings and a play performed at the township of Auchindrain, which is now managed as a folk museum. Teachers' resources have been created to develop archaeological skills in interpretation, linked to the latest developments in the Scottish school curriculum, 'A Curriculum for Excellence' and encouraging ongoing participation. Other forms of learning include online videos investigating and reconstructing life in a township, and interactive teaching through the GLOW network (the Scottish Executive's school intranet) linking remote schools to presentations and live tours of rural sites via a webcam.

SRP has initiated many partnerships within communities; including participation of local museums and landowners. A partnership between a group of artists with learning difficulties and an established group extended the reach of SRP project beyond the usual expectations of field recording, leading to an exhibition of art at the Project Ability gallery in Glasgow as well as more intangible benefits.

Sponsors
Heritage Lottery Fund
National Trust for Scotland
Historic Scotland
Highlands and Islands Enterprise

Host organisation Royal Commission on the Ancient and Historical Monuments of Scotland

Communities have come together for a common cause, and those in isolated areas have found their projects are of much wider interest. A good example of such new-found value is the High Morlaggan project at Arrochar in Argyll, where volunteers have researched and recorded an abandoned farmstead, worked with the local school, and created a trail and interpretive leaflet to explain the site to visitors. With funding from the Loch Lomond and The Trossachs National Park Authority they have excavated parts of the site in partnership with Kilmartin House Museum.

SRP participants across Scotland share overwhelming enthusiasm and capability. SRP has provided them with the skills and means to turn these into research for wider public benefit.

For more information, please see www.scotlandsruralpast.org.uk.

Brian Wilkinson
Brian.Wilkinson@rcahms.gov.uk

Recording township remains at Baliscate, Tobermory, Isle of Mull. © RCAHMS



Making a simple sketch plan of township remains.



SRP volunteers undertake field survey training at Aintuim, Isle of Mull. $\ensuremath{\mathbb{C}}$ RCAHMS



19

DOORS **OPEN** DAYS

Abigail Daly

oors Open Days gives free access to buildings and sites normally closed to the public or which charge an entrance fee. The event has been run by the Scottish Civic Trust every September since 1990, when it was pioneered as part of Glasgow European City of Culture celebrations. Why is a building 'good', 'ugly', 'boring' or 'beautiful'? And what should our shared spaces look like in the future? Behind the event is the concept that if people know about local heritage, and can discover it in a fun and interesting way, they are more likely to protect it. Doors Open Days also helps to stimulate debate about why architecture and the built environment are important.

Area coordinators working for local authorities, civic societies and heritage organisations develop and deliver events locally, while the Scottish Civic Trust, supported by Historic Scotland, provides national coordination. Each year the event has grown and this year over 220,000 visits were made to more than 900 sites and events. Over £2million is generated for the Scottish economy, and for every £1 of local authority money invested, more than £15 is returned. Over 5000 volunteers helped to welcome visitors to their homes, workplaces, sites of worship and local landmarks.

Irvine Burns Club

Ayrshire. 2009

marks the 250th

© Michael Hitchon,

Kyle and Carrick

anniversary of

Burns' birth.

Civic Society

This year, Doors Open Days formed part of the *Homecoming Scotland* celebrations. Tourists found the event a great insight into local heritage and culture, allowing them to meet ordinary people passionate about 'their' building or area. Support from VisitScotland and EventScotland has given us the chance to promote this message to visitors and tourists throughout the world. Their choices included exploring the underground Second World War Inchindown oil tanks outside Invergordon in the Highlands, a boat trip across the loch to Vaila Hall located on its own island in Shetland, or meeting artist Andy Scott at his studio in Glasgow.

2010 marks the 20th anniversary of the event and we hope that many people will join us in celebrating Scotland's best-loved and least-known architectural and historic gems. To find out more visit www.doorsopendays.org.uk or contact Abigail Daly, dod@scottishcivictrust.org.uk.

Abigail Daly

Outreach Projects Coordinator The Scottish Civic Trust The Tobacco Merchants House 42 Miller Street, Glasgow G1 1DT 0141 221 1466





RCAHMS has recently completed an archaeological survey of Bute, one of the larger islands in the lower Firth of Clyde. The project presented an opportunity to test a new, rapid model for area survey, designed to bring the archaeological record up to modern standards. The main phase of locating and updating records was undertaken with volunteers from local archaeological and historical organisations, many of whom have an intimate knowledge of the island's landscape and history and who played a vital role in locating sites as well as sharing invaluable local historical knowledge.

Field survey was divided between two teams using Trimble GeoXT handheld data loggers loaded with sub-metre GPS and Arcpad GIS software. The data loggers also carried GIS information, including current and historical OS mapping, 18th-century historic maps, the relevant Canmore records, and information on scheduled monuments. Brief site descriptions were added to the data loggers via an Arcpad form, the report was supplemented by field sketches where appropriate, and digital site photographs were taken.

The teams were able to visit about 500 known monuments in seven weeks and to record about 140 new ones. A significant number of national grid references were updated, the classification of nearly half the sites was altered, and about a quarter of site names were corrected. About a quarter of sites could not be relocated, the majority being rock art noted in the 1970s and 1980s when the locations were not adequately plotted. These remain a challenge for the volunteers to find. Work is now under way to process the data and add it to our website (www.rcahms.gov.uk), where much of it can already be seen.

Work on Bute was undertaken in partnership with the Discover Bute Landscape Partnership Scheme, supported by the Heritage Lottery Fund, with Bute Natural History Society and members of the Association of Certificated Field Archaeologists. RCAHMS' Scotland's Rural Past project (p18) worked with the survey team by training an island group to survey and record deserted post-medieval settlements.

George Geddes Archaeological Investigator

RCAHMS george.geddes@rcahms.gov.uk RCAHMS survey team and volunteers working together on Bute

Airborne over Orkney – RCAHMS aerial survey in 2009

Dave Cowley

Above Scotland

Above Scotland:

Photography by

David Cowley and

James Crawford is

now available (£25)

The National

RCAHMS is home to one of the largest collections of aerial photographs in the world covering

both our home patch in Scotland and the world-wide holdings of Aerial Reconnaissance Archives of declassified intelligence photographs. These photographs are among the most consulted parts of our holdings, and a key component is the product of our own aerial survey and photography programme. Now in its 33rd year, this was set up principally to explore cropmarks of plough-levelled archaeological sites but soon diversified to record earthworks, buildings, urban areas and landscapes.

This diversification continues, and results from our 2009 season demonstrate the continuing ability of aerial survey to turn long-held perceptions on their heads, to open up new avenues for recording and research and to complement other approaches to recording the cultural heritage. That these illustrations are from Orkney, traditionally difficult for aerial survey, reinforces the ability of the airborne perspective to break new ground.



The ancient monuments of Orkney are justifiably world famous, and its Neolithic landscape has World Heritage site status. The Ring of Brodgar is a powerful statement of this status. Iron Age remains are another major strength, as the broch tower and cluster of buildings at the Broch of Gurness show. In both cases the aerial perspective provides an illustrative and interpretative tool, throwing fresh light onto monuments that are already well known. And not all are well known. Every year serendipitous finds occur as tractor wheels break into the buried chambers of Neolithic tombs or Iron Age souterrains. By contrast concerted aerial surveys have put systematic exploration of Orkney's landscape on a new footing, revealing sites buried under ploughed fields, giving glimpses of landscapes inundated by rising seas and in low oblique light throwing earthworks into high relief.

A string of discoveries

Archaeological cropmarks are not the first thing that springs to mind when Orkney is mentioned, partly because of its damp climate. For years there was only

one known cropmark site (Overbigging). Then, on 5 and 6 August, prompted by the dry summer Orcadians were enjoying, our aerial survey team made a speculative sortie. A string of discoveries followed, ranging from ditched barrows to large enclosures, all previously unknown and revealed through differential cropmarking. Some are recognisable in the upstanding remains easily enough, but more importantly they include large oval enclosures for which analogies are difficult to find. In a single sweep, survey on two balmy summer days during a marvellous summer opened up a whole new perspective on Orkney's landscape and set up a new challenge for survey and recording.

Early prehistory under the sea

Challenging orthodoxies and opening new avenues for recording is also a theme for survey inspired by Aberdeen University's *The Rising Tide* project, where we looked for features under the sea. Despite complex geology and underwater vegetation, perseverance has brought worthwhile returns. These require further exploration, but anomalies in Mill Bay on Hoy may include prehistoric monuments among the debris of vessels salvaged after the First World War. Perhaps prehistoric monuments do survive below water in an archipelago whose land surface has halved in the last 6000 years.

Finally, building on prospective fieldwork by the Archaeology Department in Orkney College (University of the Highlands and Islands), aerial reconnaissance across unimproved ground during the late evening has revealed extensive head-dykes and other boundaries, cultivation remains and structures.

Cataloguing survey photographs is underway, to make them available through CANMORE (www.rcahms.gov.uk). Photographs from Orkney are also included in *Above Scotland; the National Collection of Aerial Photography*, which takes in all aspects of the RCAHMS collection from the 1920s to the present day. It covers diverse landscapes, from rugged mountains to the urban core, and ranges across the totality of the built heritage.

Dave Cowley

Archaeological Investigator RCAHMS dave.cowley@rcahms.gov.uk







The Ring of Brodgar – henge, stone circle and tourists © RCAHMS (left)

This large oval enclosure recorded as a cropmark at Marwick on Orkney does not have equivalents in the known monuments and may represent a new type of site © RCAHMS (below)





Looking across the World Heritage Area at the Ring of Brodgar towards Hoy © RCAHMS (middle, left)

The Archaeologist



Defending the Past at Cape Wrath

Laura Gutierrez

armoured
personnel carrier,
now used as a
target within the
training centre



The *Defending the Past* project works in and around the military training area of Cape Wrath, the most north-westerly point on the British mainland, to encourage access, enjoyment and understanding of the built heritage by the local community, visitors and visiting troops.

In 2008 RCAHMS undertook a survey of the architecture and archaeology of Cape Wrath Training Centre for Defence Estates. This survey recorded visible archaeological features and architectural structures, mapped them using differential Global Positioning System (dGPS), photographed them and recorded their condition using criteria defined by Defence Estates. Following publication of the survey in 2009, Defence Estates asked RCAHMS to share the heritage information amassed with the local community. This project will run until August 2010.

Artillery shell with Kearvaig Farmstead, Cape Wrath, in the background

The project is focusing on sites constructed for Second World War and Cold War defences, and historic buildings and archaeological sites under the stewardship of Defence Estates. These include later medieval settlements at Kearvaig and at Port Odhar, where the farm has lain largely untouched since the mid-18th century. For the first time, school children have access to heritage sites within the Training Centre. Already pupils have camped overnight within the Centre, exploring ways people used to live in this remote and difficult landscape, and have taken a small boat across the Kyle of Durness. Here they spent a night in a former shepherd's cottage and explored the area in detail. At Kearvaig they made a measured plan of the deserted farm and identified clues to show the way of life there in the past. Future activities will include creative exploration of the landscape and archaeology with staff from RCAHMS survey and recording team together with a local environmental artist. Work with the wider community will include workshops, talks and guided walks by locals, visiting experts and staff from RCAHMS, and preparing heritage briefing materials for visiting troops.

Laura Gutierrez

Project Manager

Defending the Past
laura.gutierrez@rcahms.gov.uk

Discovering roots in Scotland's forests

Sarah Phillips

Forest Heritage Scotland is part of the *Homecoming Scotland 2009* initiative and is run by Forestry Commission Scotland (FCS) and RCAHMS with the aim of inspiring exploration of heritage sites on Scotland's national forest estate. Sixty sites are highlighted. Using the theme *Homecoming - ancestry and innovation* we have four topics: 18th- and 19th-century deserted settlements, early industry, woodland use and Second World War defences. Linking the sites together is a new website, www.forestheritagescotland.com, which brings archaeology to life by telling the stories of people linked to these places. The website features material from RCAHMS and other archival collections, with aerial and historic photographs, map extracts and drawings.

Some sites are visible only as slight earthworks and ruined buildings, so it is a challenge to demonstrate how these looked in the past. We have therefore commissioned five films, each exploring an archaeological feature of the township of Rogie (such as a corn-drying kiln). We use reconstruction buildings at the Highland Folk Park at Newtonmore and costumed actors to demonstrate how each would have been used in the past. We are also producing audio for the website, using local storytellers to provide traditional Scottish folk tales associated to the sites and their localities. A national stage to promote Forest Heritage Scotland has been a year-long programme of events connected with Homecoming 2009, including Scottish Archaeology Month (p6), Doors Open Days (p20), Homecoming Whisky month, Highland Archaeology Festival, Highland Homecoming and the Scottish International Storytelling Festival.

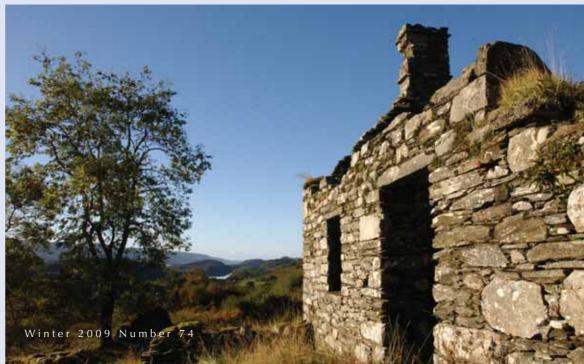
BTCV Conservation volunteers cleared vegetation at the township of Aoineadh Mor and there was archaeological field survey training at the township of Polmaddy. FCS Community and Recreation Rangers were often new to the historic environment, so Forest Heritage Scotland offered funding, resources, innovative ideas and historical expertise to enable FCS staff to develop their own heritage-themed events, such as site-specific plays, storytelling and Gaelic song, and live interpretation events.

Archaeological investigations to inform FCS interpretation and management of key sites include use of LiDAR survey to create 3D animated reconstructions of anti-glider defences at Culbin. AOC Archaeology also surveyed a Second World War coastal battery at Lossie Forest, producing a laser scan of the western gun emplacement. FCS Archaeologist Matt Ritchie also encourages outreach work on archaeological work on the national forest estate.

The website will outlast the project, developing into a heritage resource for all sites, from prehistory to the 20th century within Scotland's national forest estate.

Sarah Phillips

Forest Heritage Scotland Project Coordinator



The township of Arichonan, one of sixty heritage sites highlighted in this project.

© Forestry
Commission
Scotland

The Brough of Deerness, Orkney: research in a recession lames Ger

The Brough of Deerness is a 30m high windswept sea stack off the coast of Orkney. Access to the top is via a perilous narrow track and a flight of rock-cut steps. Its summit is crowned by the ruins of a small chapel (excavated by Christopher Morris in the 1970s) and the earthworks of about thirty Viking Age longhouses – arguably the best preserved Viking village in Britain. Research excavations on these longhouses are helping us understand how Viking Age society worked.

Glass and runes

The Viking building

partially excavated.

Ruins of the chapel

In 2008 two buildings were stripped and mapped, revealing that they were roughly contemporary (10th to12th century) and dug into large rubbish dumps radiocarbon-dated to the Pictish period. This season the project began excavation of another building which has also proved to be 10th to 12th century in its upper phases. The structure is a complicated building which has undergone substantial alterations – apparently beginning life as a domestic dwelling and ending as a storeroom. Finds include high-status objects such as a gold foil and blue glass bead and a fragment of glass from an early-medieval drinking vessel as well as more mundane objects such as a strap end, pins, spindle whorls and antler combs. Intriguingly, the building investigated this year also produced two weights and an object with runic decoration.

James Gerrard and James Barrett

look far removed from the economic woes and difficulties that are facing our profession – but recession has had a number of consequences on this project too. The most predictable has been for funding. Grant-giving bodies face diminished returns due to lower asset values and competition for it is fiercer. The four-week season this year was funded from a variety of sources and the total cost would buy very little commercial archaeology.

Professional skills

One less predictable impact was on the make-up of the field team. Traditionally this type of project has been staffed by under- and post-graduate students. However, the complexity of the site and its location require a more experienced crew. We were fortunate this year in that our small team of seven to eleven was drawn from a variety of sources. It did include talented students (from Orkney College, Cambridge, Aberdeen and Belgium) but the core staff were either on unpaid leave from their day jobs in commercial archaeology, or had just been made redundant. The benefits of this were that work proceeded in the manner of a professional commercial excavation while the students were exposed to the considerable field experience of professionals. The professionals also found themselves confronted with new situations. Teaching their day-to-day skills was a first for some. Others, for instance, were used to working in plough-truncated rural contexts and a building with complex and deep positive stratigraphy was a new experience, entailing a different recording system. Established archaeologists and students all learned new skills.

The local community's involvement was also critical. The Deerness peninsula has a small rural population for whom archaeological sites are an important part of both the landscape and local pride. The keenness of Orcadians to explore their heritage is also grounded in economic practicalities, for archaeological sites are an important part of an attractive tourist package. For this reason every visitor to the site (500 over the four weeks) was offered a guided tour, in addition to more official events such as an open day and evening lecture. In turn the project has received generous local support in cash, kind and kindness. Partnerships between communities and archaeologists are nothing new, but are certainly highly rewarding relationships to be appreciated and maintained.

For more information about the site, see http://www.mcdonald.cam.ac.uk/projects/Deerness/

James Barrett and James Gerrard

McDonald Institute for Archaeological Research University of Cambridge jfg35@cam.ac.uk

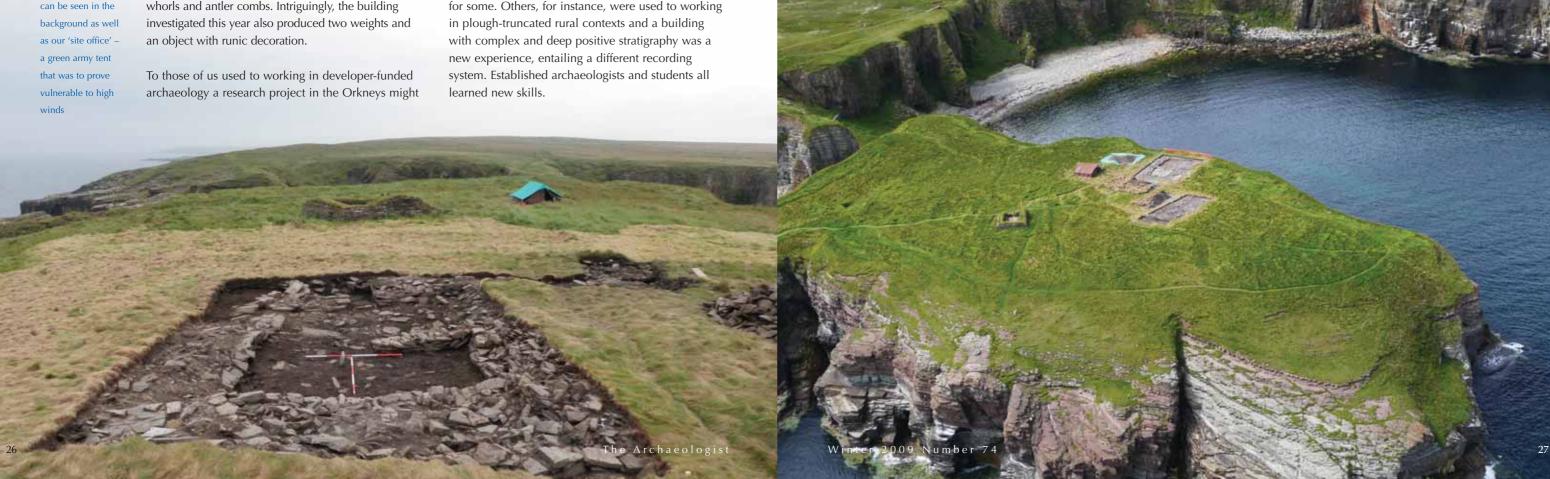
The Brough of Deerness from the air in 2008. Surrounded on all sides by the sea the cliff stack is reached by a tortuous path of rock-cut steps. The route is difficult on a calm day but treacherous in poor weather



Recording on the exposed cliff stack in poor weather was a challenge

A small copperalloy object pierced for suspension at one end. The scratched runes hint that this might be some type of amulet





The National Trust for Scotland:

The National Trust for Scotland (NTS) was established in 1931 as a conservation charity, but access, enjoyment and education are also key to our work. With that in mind the Archaeology Team runs events and activities to enhance public enjoyment of the Trust's heritage assets and to widen understanding of archaeology in Scotland (http://www.nts.org.uk/conserve/archaeology_bulletins.php).



Thistle Camp volunteers beginning the excavation at Burg





Guided tour of Kiltyrie Farmstead



Ancient skills

Outreach events this year included ancient skills workshops at Brodick Castle, Isle of Arran and Culzean, South Ayshire where Derek Alexander led adults and children in attempts at pot making, spinning, grinding, drilling and (ever-popular) fire making. Also popular were guided walks in the caves at Culzean and at the 6th-century trading post of Mote of Mark, Dumfries and Galloway. In partnership with Headland Archaeology Ltd there were more guided walks and archaeological survey demonstrations were also organised at St Abb's Head in the Scottish Borders.

Modern technology

More high-tech approaches involved Shannon Fraser presenting a podcast tour of Castle Fraser, Aberdeenshire (http://www.nts.org.uk/Multimedia/). The castle was first built in the 1500s and developed along with its gardens into the 18th century. The podcast gave an insight into the life of the Castle and its surroundings, and draws upon examples from similar Trust properties such as nearby Drum Castle. We are also developing a downloadable audio guide to the 18th-century water gardens of Newhailes Estate, East Lothian, and using webbased tools in more formal educational perspectives. There have been over a thousand downloads this year of the Trust's archaeology education pack (http://www.nts.org.uk/Learn/), which enhances understandings of the histories behind these beautiful and fascinating places as well as giving a taster of what waits to be explored.

Our own version of Facebook is PlaceBook Scotland (www.placebookscotland.com) - a living archive of pictures, writing, film and music uploaded by the public as a means of sharing feelings about what makes their place distinctive and gives it its identity. The website is managed by Peigi MacKillop, a Trust volunteer, and backed by Scottish Natural Heritage and the Scottish Government.

access, _____ enjoyment and education

Public participation

The principal national programme of public participation at present is Scotland's Rural Past (www.scotlandsruralpast.org.uk) - a five-year project that supports local communities across Scotland in investigating and recording deserted rural settlements dating from the medieval and post-medieval periods

Particularly rewarding for both staff and volunteers are the Trust's annual Thistle Camps (www.nts.org.uk/ThistleCamps). These residential working holidays offer the experience of professional archaeological fieldwork as well as contributing to conservation and management of the Trust's archaeological resources, all within some of Scotland's most spectacular scenery. There has been work on Iona, conserving machinery at the historic marble quarry and repairing and consolidating a medieval monastic enclosure, and this year a group surveyed and excavateding an Iron Age hill settlement at Blackpotts in the Scottish Borders. Participants included young students eager to learn the skills of archaeology and older professionals from all over the world keen to contribute to the knowledge and preservation of Scotland's heritage.

Through all of these initiatives the archaeologists of the National Trust for Scotland work to ensure that those principles of access, enjoyment and education are central to their role as stewards of the Trust's properties and of Scotland's wider historic environment.

Daniel Rhodes

Archaeologist and Union Learning Representative National Trust for Scotland Wemyss House 28 Charlotte Square Edinburgh EH2 4ET drhodes@nts.org.uk



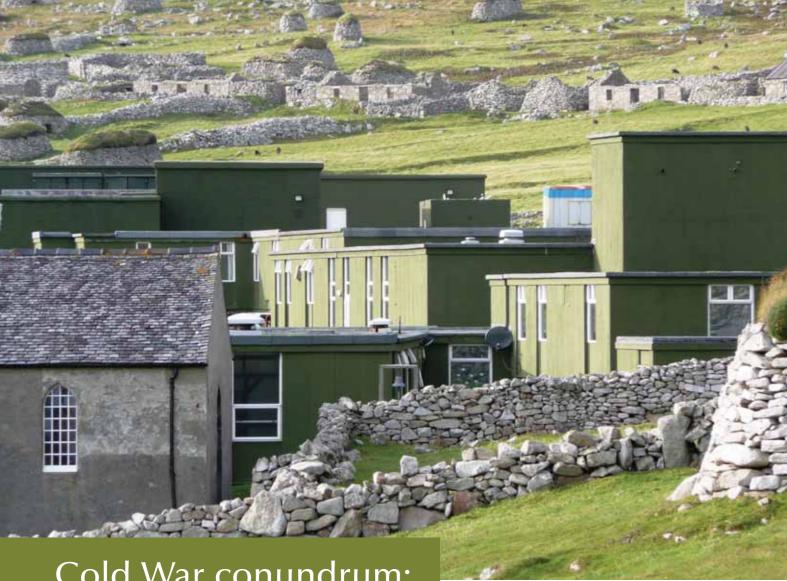
Ancient Skills Day at Culzean





Thistle camp volunteers excavating an Iron Age hill settlement at Blackpotts, Scottish Borders





Cold War conundrum: the case of St Kilda

Originally designed for a short life, the MoD buildings are mostly up to 40 years old. Once painted white, then grey, they are now green, to blend in better with the landscape

Robin Turner Most visitors to St Kilda approach from the sea. As their boats chug towards the pier tourists are bemused by a massive wall of grey gabion baskets, topped with ugly flat-roofed buildings: this is the MoD Base. At this point most people feel that the base is a blot on the landscape; most leave with the same impression.

Human history

Regardless of aesthetics, however, the base is part of the human history of the dual World Heritage Site – the UK's only example of the accolade for both natural and cultural heritage. The base, still part of a missile testing range, came sharply into focus when the MoD recently ran a consultation on 'de-manning' their operations on the islands, potentially handing

over the buildings and their maintenance to the owners of the St Kilda archipelago – the National Trust for Scotland.

Remove the blot

Reputedly designed for a desert environment, the late 1960s and 1970s buildings are long overdue for a major overhaul. They do not meet the key test of 'architectural quality' under current Listing criteria, and in most people's eyes they detract from the natural beauty of the landscape and from the historic atmosphere of the uniquely well-preserved 19th-century ruined village. Almost anyone will tell you to knock the base down and remove the blot on the landscape; but the answer is not that clear cut.

Associative significance

A military base was established on St Kilda in 1957 and became consolidated over the next fifteen years. This was at the height of the Cold War, when even this remotest outpost of the British Isles was enlisted to help guard against the thermonuclear threat from behind the Iron Curtain. It is this associative significance that has made us stop and think before making a decision, despite the fact that on other grounds – architectural merit, aesthetic impact, and lack of operational viability – the base might have been removed without a further thought.

Verdict deferred

As fate would have it the decision to retain the Hebrides missile testing range has spared us from making a final verdict. In 2009, had the buildings reverted to the Trust, our decision may well have been to retain the concrete bases but to remove the superstructures, after careful recording inside and out. This conclusion would have been influenced by the fact that the structures were not listable and it would take money to conserve the buildings which were of no obvious viable use. Leaving the concrete bases would have been a compromise that would not have satisfied people interested in the military and recent historical use of the islands, nor the majority

who would have disliked unsightly concrete vestiges. However this course of action would have been consistent with the 'Outstanding Universal Values' of the World Heritage Site, which the Scottish and UK Governments have made a commitment to care for.

One day the missile tracking facility on St Kilda will be redundant. Perhaps by then the Cold War will have become sufficiently 'historical' to become heritage. Or perhaps the buildings will have become un-repairable and been replaced with something more in keeping with the natural and cultural landscape of Village Bay.

Whatever we decide to do in the future, it will be a decision of its time. In the meantime, the towering gabion baskets will continue to greet visitors to the island, and perhaps to challenge their perceptions of what heritage is all about.

Robin Turner

Head of Archaeology National Trust for Scotland The Puffinn pub, situated within the MoD base, has a wealth of associated stories and traditions, many recorded in 1999 by the NTS St Kilda Archaeologist when the operations were 'civilianised' and soldiers ceased to man the base



Designed to halt coastal erosion in front of the MoD base, the gabions grew over a 20-year period to become a massive wall of stone-filled metal baskets

The ship's gun, dated 1896, was installed in 1918 after a submarine shelled the village in order to knock out a radio transmitter. The St Kildans were given a warning by the captain of the German vessel and there were no casualties, although several buildings were hit

The Scottish Archaeological Research Framework CARF

Teff Sander

Recent excavations at sites such Ness of Brodgar (Mainland Orkney), Links of Noltland (Westray, Orkney) and Forteviot (Perth and Kinross), are transforming our understanding of Scotland's past. Because of these changes it is important to be able to relate new finds, both the spectacular and the modest, to a broader framework of understanding. This makes the past more intelligible and thus accessible to the archaeological community and to the wider public.

The Scottish Archaeological Research Framework (ScARF) has been set up by the Society of Antiquaries of Scotland, with funding from Historic Scotland and support from across Scottish archaeology, to critically review current archaeological knowledge and to consider important future areas of

About 30 cattle skulls and jawbones were discovered within the wall of a structure at the Links of Noltland during excavations by EASE Archaeology. The preservation of animal bone at the site is exceptional, and is key to understanding the Neolithic and Bronze Age economy, as well as well as offering a glimpse of past ritual practice. © Historic Scotland

research. We aim to provide a context for decisionmaking, whether project design, mitigation or funding, while raising aspirations and encouraging active researchers within Scottish archaeology.

Panels for the past

Panels of specialists from across the sector are now examining Scotland's past. These panels are organised within six flexible and overlapping periods: *Palaeolithic & Mesolithic; Neolithic; Bronze Age; Iron Age; Medieval;* and *Modern,* as well as two thematic groups: *Marine & maritime;* and *Science in archaeology.* Each panel consults widely and holds a workshop in order to get feedback, identify gaps, and to address and remedy these issues. Most recently, the *Marine & maritime* panel held a workshop at the National Trust for Scotland Offices in Edinburgh, while the *Medieval* panel will host a workshop in Perth early in 2010.

Wiki

Each panel meets as necessary over the course of a year and provides a report which will be available through the ScARF website http://www.socantscot.org/scarf.asp?Menu. These reports will provide a snapshot of Scottish archaeology at the time of publication, and panels will be periodically reassembled to assess current

Overview of the primary trench showing some of the main structures under investigation at the Ness of Brodgar. The site, located near the Ring of Brodgar and Maeshowe, contains buildings of which a particularly massive one (20m long and roughly the same in width) was excavated this summer. Excavations have uncovered incredible stone-working, truly monumental construction, and examples of megalithic art.



understanding. Information from the panels will also be edited into a 'wiki' – online encyclopaedia – to be kept up to date between panel reviews.

Getting involved

As panel reports are published we hope to generate debate through the ScARF online forum, through comments on the wiki, and at panel workshops and other events. The framework is designed to provide both a platform on which to build as well as a context for debate and disagreement. As of autumn 2009 most of our panels are underway: some, such as the *Neolithic* and *Marine & maritime*, are close to finishing; while others, such as *Modern* and *Science in archaeology* are in their early stages. Details of activities and how to get involved are on the website.

Continuing discussion

Examining what we know allows us to consider what we would like to know and how we get there. By critically reviewing Scottish archaeology we can compare research questions with research needs, identify key challenges and consider how to target resources. There is value in the process itself – particularly in reinforcing existing links and creating new ones across the archaeological community. ScARF will also spark a continuing discussion framed around research in Scottish archaeology, recognising that research is not the domain of any particular 'type' of archaeologist.

Extracting value

The main challenge for ScARF is compiling useful information that can be converted for use by different

groups of archaeologists, as well as reaching wider communities of interest. A set of concise statements on archaeological topics is envisaged as being helpful for curatorial decision-making, while highlighting rich future research areas to inform funding decisions. The panel summaries will also help those planning projects - whether commercial, academic, museum-based or independent - to extract maximum research value from archaeological work and to help decide what to publish or display. ScARF will also be a resource map for keeping up to date with latest work and locating where useful information or resources are kept. The framework is designed too to provide a springboard for those interested in becoming research-active in Scotland's past, in turn highlighting archaeology's contribution and potential to society in general.

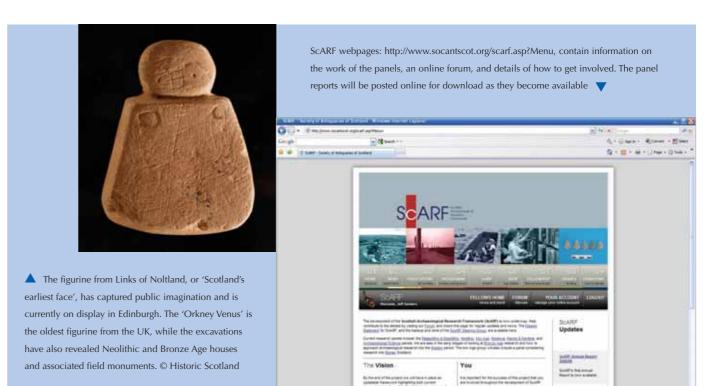
By the end of the initial phase of ScARF (early 2012) we will review our current state of knowledge, constantly updated in wiki format. This will include a succinct set of statements on where we are and where we might go next, and act as a guide for those interested in particular aspects.

The ultimate aim is to create a research hub, ensuring maximum research value and highlighting the potential and importance of what is a dynamic and exciting research environment.

33

Jeff Sanders

ScARF Project Manager Society of Antiquaries of Scotland jeff@socantscot.org





The second outcrop to be excavated has a natural basin surrounded by complex rock art designs and containing worked quartz. Photograph: Aaron Watson

The first outcrop to

be excavated has

concentric rings

carved into its

highest surface

Photograph: Aaron

Why were particular outcrops of rock decorated during the prehistoric period? Rock carvings are difficult to study, for those in Britain are entirely abstract, few are associated with monuments and still fewer can be dated, although they were probably made between 3000 and 2000 BC. When they are shown on maps they give nothing away - they are described as 'cup and ring marks'. Are there ways in which they can be investigated?

Siting in the landscape

embellish monuments, and occasionally cairns were constructed over decorated outcrops, but there is little evidence to shed light on their significance. Certain designs are shared with megalithic tombs, but these are rare. Another approach is to study the relationship between the decorated surfaces and their siting in the landscape. Where were carvings made?

In a few cases these distinctive designs were used to



Did the designs vary according to local topography? Were the carvings more complex where close to major monuments? These questions can sometimes be answered by fieldwork, one aim of this project.

Happenings at rocks?

A new approach is to ask a different question. What happened at the carved rocks, and did it leave traces behind? That requires excavation. A promising start has been the work of Blaze O'Connor in Ireland and that of Andrew Jones and his colleagues in the west of Scotland, but their sites were in landscapes with specialised monuments. For that reason they may be unusual. What was also needed was an area in which such monuments were rare or absent.

An ideal candidate is the Ben Lawers Estate overlooking Loch Tay in the southern Highlands. The estate is managed by the National Trust for Scotland and its archaeology has been investigated by RCAHMS. Over a hundred carved rocks have been recorded to a uniform standard. Many survive on the high ground above the area cleared in the postmedieval period, and there are no prehistoric monuments in the vicinity.

Test pits

Our project was located on the 400 metre contour. The work followed a simple procedure of excavating one metre-square test pits against the edges of decorated rocks, and another ring of pits five metres away. This would be enough to show whether they were associated with deposits of artefacts and whether the distribution of finds was limited to the stones themselves. Unless that happened, their discovery might not be significant. At the same time the procedure was repeated for an equally conspicuous

rock that had never been carved. Would it be associated with artefacts, or would they be absent?

Quartz connection

This procedure soon showed that deposits of worked and broken quartz were associated with the carved rocks and were rare elsewhere, but we wanted to know more about why these rocks had been selected and how they might have been used. Here the contrasts between different rock carvings proved to be important. Concentrations of artefacts were associated with prominent decorated outcrops and were not found with those on flat surfaces that did not stand out in the local topography. It made no difference whether the motifs pecked into their surfaces formed simple or complex patterns.

Two of the decorated outcrops contrasted in subtle ways. One was a large domed rock with a set of concentric circle pecked at its highest point. Quantities of worked quartz were found around its base, and a few artefacts, including a flint flake, were associated with fissures on top of the stone itself. There was only one place from which the carving could be viewed by people visiting the site. Here there was evidence of cobbling associated with concentrations of quartz. The second decorated outcrop was quite different, for there was a large natural basin on its upper surface. Two sides of that basin had been embellished with complex designs, and in the sediments around them were further quantities of worked and broken quartz. In this case there were virtually no finds from the base of the outcrop.

This work raises many questions. Were these sites decorated because they were significant? Did they receive deposits of artefacts for that reason? Why was quartz so important for the people who visited the site? It is used for making tools in regions that are poor in flint, but it also has unusual physical properties. It reflects the light and even glows when pieces are rubbed together. That may be why it is so common at cairns and stone circles. Some of the decorated rocks could have been treated as 'natural' monuments. If so, they may have been more important than archaeologists have supposed.

Our thanks go to the National Trust for Scotland, especially Robin Turner and Derek Alexander, to RCAHMS and to everyone who worked on the project.

Richard Bradley

Dept of Archaeology University of Reading r.j.bradley@reading.ac.uk

Aaron Watson

a.watson@monumental.uk.com

The site at Ben Lawers, showing outcrops of stone and the spectacular view across Loch Tay. Photograph: Aaron Watson

Cobbles revealed during excavation were placed where visitors have to stand in order to best see the concentric rock art and the view, over the profile of this domed rock. Photograph: Aaron Watson



The Archaeologist

Winter 2009 Number 74

Involving the public in Glasgow's Industrial Archaeology:

the Diana Morton

M74 Dig

Archaeological work along the planned route of the M74 south of Glasgow involved excavation of seven sites in what was once Glasgow and South Lanarkshire's industrial heartland. Given the location it was not surprising that all these sites were important

for their historical archaeology and for industrial remains. Foremost were Govan Iron Works, a mid-19th-century iron foundry; Pollokshaws Road Tenements, a group of buried tenement buildings dating back to the early 19th century, and the Caledonian Pottery in Rutherglen which dates from the 1870s. Finds here included gas-fired kilns invented by the pottery's owner, William Fullerton Murray, in the early 1890s. These were a system of four connected kilns heated by coal gas, less wasteful than firing separate kilns. A large dump revealed stoneware pottery damaged during firing.

Smaller sites included a brass foundry, an iron foundry/engineering workshop, a cotton mill, a biscuit factory and a section of a canal in the Kingston and Tradeston areas.

Display and activity

A joint venture comprising Headland Archaeology Ltd and Pre-Construct Archaeology Ltd (HAPCA) was responsible for excavations here, and alongside their work ran the M74 Public Archaeology Programme. HAPCA ran regular open days, and interpretive panels allowed the public to see the sites outwith the open days. Online, the public could visit the Transport Scotland website to access information on the sites, read dig diaries and articles and view objects that had been excavated. More activities were run by Glasgow Museums and Development &

Regeneration Services, with outreach sessions for community and special interest groups, family events, and master classes in archaeological techniques. There were two exhibitions, *Uncovering the Past* and *Uncovering Industry* at Scotland Street School Museum, accompanied by the Dig Discovery Centre, a resource centre offering opportunities to handle finds and to consult reports, maps, plans, archive photographs and reference books. Computers provided access to the M74 Completion website. In addition a volunteer programme enabled the public to learn new skills and helped the M74 Dig team carry out research.

Schools workshops included children filling two time capsules which will be buried beside the road in 2010, to be unearthed in 50 years time. Artistic

The kiln bases at the Caledonian Pottery
© HAPCA



Crawford Dick as a child © Culture and Sport Glasgow (Museums)



opportunities included making a film, music and drama.

The result is an oral history archive at the University of Strathclyde. Other legacies are a website about the excavation results at www.transportscotland.gov.uk/projects/m74-completion/m74-dig, *Simulated Digs* which will be used by partner organisations, and handling kits of finds for Glasgow Museums to use in archaeology workshops.

Evaluation collected for the exhibitions and activities suggests that many participants became actively engaged with the project and developed their knowledge of local history and archaeology. Staff who gave feedback also highlighted that they had developed professionally by taking part or that they felt their organisations had benefitted in some way, whether increasing visitor numbers, enabling staff development or learning new ways of working.



Dig Open Days © Culture and Sport Glasgow (Museums)

Oral histories

One fruitful element was an Oral History Programme, inviting those with a connection to the sites to contribute their memories. This fed into research taking place both on and off site, and informed the exhibitions, while participants found the programme enabled them to explore their family history. The memories offer a fascinating insight into life from the mid-1920s to the late 1970s. For example Crawford Dick, resident at the tenement site, remembers witnessing destruction of the local 'Greek' Thompson church from German incendiary

'I do remember that they were very clearly foreign planes and we looked out the kitchen window with the lights off of course and I remember my father saying 'they're coming down in basketfuls' and these were the incendiary bombs showering down, particularly onto this church, and we sat in the flat, we didn't go down to the air raid shelter. The church started to glow and we realised obviously the thing was on fire. We then left the house and went round the corner into Langside Road and by this time the church was well ablaze. And there were hundreds of people standing watching this church burning. Beautiful, absolutely beautiful church. And eventually the dome collapsed into the church and we were still watching the fire and eventually the police turned up and drew our attention to the fact that this plane was actually a pathfinder for the main raid and it might be a good idea if we sort of cleared off'.

Respondents' memories also helped interpret the sites. For example, Christina Wilson developed the archaeologists' understanding of worker's housing at Govan Iron Works, where she lived into the 1930s. Dr David Walker (M74 Oral Historian) explains

'The interview helped to confirm that these were single storey buildings and that some people slept in box beds. It also confirmed that one of the finds was indeed a communal washing area, that the homes had a hearth and range and that there had been stables in close proximity to the buildings as well as a fish smokehouse. This interview helped with the interpretations of what life was like for the residents of the Lower English Buildings'.

The M74 Completion was a partnership between Transport Scotland; Glasgow City Council; South Lanarkshire Council and Renfrewshire Council. Teams working in partnership to deliver events and activities including HAPCA and their subcontractors Culture & Sport Glasgow (CSG), Glasgow City Council's Development & Regeneration Services (DRS) and South Lanarkshire and Renfrewshire's Museums Services. The programme was administered by the West of Scotland Archaeology Service (WoSAS) on behalf of Glasgow City Council, who commissioned the dig.

Diana Morton Learning and Access Curator (M74 Dig)

Culture and Sport Glasgow

Amending Scottish heritage legislation

Gordon J Barclay

The Scottish Government's purpose is 'to focus government and public services on creating a more sustainable country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth', tying in with its aim to have a more open and trusting relationship with local government. For the historic environment this means stronger delegation to planning authorities through the 2006 Planning Act, and development of Joint Working Agreements between Historic Scotland and the 32 local authorities.

■ Revision of heritage legislation

In its aim to simplify the public sector Government is reducing the number of public bodies – including abolition of the Historic Environment Advisory

Council for Scotland – and ensuring that policy and guidance are focused and short, reducing the number and length of documents such as the new Scottish Planning Policy and the Scottish Historic

Environment Policy. As part of this drive for clarity Historic Scotland is streamlining its work, clarifying respective roles of central and local government and improving way it deals with the public – especially owners of historic assets. Key to this programme is revision of heritage legislation, to address gaps and weaknesses.

The historic environment has been devolved since the Scotland Act of 1998. While listed buildings were always the responsibility of the Scottish Office, ancient monuments, including properties in state care, were part of a UK department until 1978. During the 1980s historic buildings and ancient monuments were merged into one Scottish Office directorate, which became Historic Scotland (HS) in 1991. HS is an executive agency, part of the Scottish Government. Unlike most executive agencies HS also takes the policy lead for the historic environment, and therefore combines the functions of DCMS and English Heritage.

Proportionate maintenance

Scottish Ministers do not see a case for a fundamental review of the terrestrial heritage legislation, in particular feeling there is a sound rationale for having different legal frameworks for scheduled monuments and listed buildings, and they do not want to increase the scale and reach of legislation and regulation. Their emphasis is on proportionate maintenance of a system that in Scotland works well, and harmonising as far as practicable ancient monuments, listed buildings and planning legislation. At the same time Ministers did decide that, at a time of major legislative change at sea, they needed to make more radical changes to protection of the marine historic environment, through the Marine (Scotland) Bill.

Amended legislation

Until now we have operated largely under UK Acts but now *The Historic Environment (Amendment) Scotland Bill* (see *TA 72* 16-17) includes key amendments to the 1979 Act

- adding an offence of causing 'disturbance', to deal with problems of proving 'damage' in the courts
- removal of various defences of ignorance, as an anomaly unique to the 1979 Act
- increasing fines for summary conviction to £50,000 (the Act already contains provisions for unlimited fines and even imprisonment on indictment) and bringing over from the 1997 Act the power for the courts to consider financial gain in setting the level of a fine
- clarification of powers of entry and excavation of sites in imminent danger
- an enforcement notice to allow reversal or amelioration of unauthorised works, and powers for stop notices
- clarification of powers to manage monuments in guardianship, including spending and charging
- a wider definition of 'monument', to include, for example, scatters of artefacts
- power to refuse to consider repeated similar scheduled monument consent applications.

Key amendments to the 1997 Act include

- · a certificate that it is not intended to list a building
- a similar increase in fines to that for monuments
- a system of stop notices, to allow Ministers or local authorities to make an immediate stop to works, along with fixed penalty notices
- making it easier for a local authority to recover costs from the present or future owners of a building where it has undertaken urgent work.

Respondents to the consultation this summer welcomed the proposals while making valuable

suggestions for improvement, which we are following up with colleagues in national and local government, stakeholders and our legal advisors.

■ The Marine (Scotland) Bill

Neither the Protection of Wrecks Act 1973 nor the 1979 Act (as applied at sea) are fit for purpose. It was originally intended that UK-wide provisions for the marine historic environment would be included in the Westminster Heritage Protection Bill, but Scottish Ministers decided that a more joined-up approach for Scotland could be achieved by putting provisions into the Marine (Scotland) Bill. Once discussions began it quickly became clear that a system of Marine Protected Areas, covering both nature conservation/biodiversity and historic environment interests, could be developed. Additionally, the marine historic environment will be taken into account in the Marine Planning system that will operate out to 200 nautical miles. We will still have powers to schedule under the 1979 Act, and this may be used where scheduling is more appropriate.

Protecting Scotland's heritage: the Ring of Brodgar, part of the Heart of Neolithic Orkney World Heritage Site. © World Heritage Site Ranger Service

Historic Scotland will continue to take the lead on heritage protection. The marine elements of Scottish Government have been brought together as a Directorate of the Scottish Government – Marine Scotland – which will work with Historic Scotland to ensure that the interests of the historic environment are fully integrated. The benefits of this approach include opportunities for strengthened policing, coordinated survey and data sharing, which have already resulted in the discovery of new wrecks.

Gordon J Barclay Head of Policy

Historic Scotland

Key documents are

The Scottish Historic Environment Policy http://www.historic-scotland.gov.uk/index/heritage/policy/shep.htm

Scottish Planning Policy 23 http://www.scotland.gov.uk/Publications/2008/10/28135841/0

Historic Scotland Bill website page http://www.historic-scotland.gov.uk/index/heritage/environmentbill.htm

Marine (Scotland) Bill http://www.scottish.parliament.uk/s3/bills/25-MarineScot/index.htm









Historic Scotland (HS) and its predecessors have undertaken and funded archaeological work for over a century. At first this was primarily clearance work on properties in state care, but with the 1970s came recognition of the wider historic environment and our scope expanded to a substantial rescue programme on threatened sites, including many on the eroding coastline.

In the heroic days before NPPG5 (Scotland's PPG16) much HS-funded work was on sites threatened by development, including major road schemes. Most memorable was excavation in 1983 of a complete Roman fort, Elginhaugh, prior to a high-tech business facility – had we waited a decade, the developer would have had to pay for it all. As was the case south of the border, many rescue projects found difficulty in transiting post-excavation to final reporting, as their directors moved on through careers in academia or heritage management.

New criteria

Post-1994 and the (overdue) arrival of developer funding as government policy in Scotland, our archaeology budget, now running at over £1 million per annum, was not cut back (although sadly it has not been index-linked). Now we could switch attention to threats such as wetland loss, coastal erosion and agricultural attrition. Demand of course grew fast, so ever more selective criteria had to be applied. Increasingly, the contribution of each proposed project to broader understanding of Scotland's past or to the capacity to manage the archaeological resource became dominant selection criteria, as did the amount of non-HS resources brought to the table – 'leverage'.

Work underway recovering the Bronze Age logboat at Carpow on Tay (a joint local authority, NMS and HS-supported project) (above)

Volunteer surveyors recording eroding archaeology on the shores of Loch Hourn, West Highlands (middle)

Staff from HS, NMS, AOC Archaeology, Aberdeen and Glasgow
Universities examine carvings on the 4-ton capstone from the recently
discovered Bronze Age dagger grave at Forteviot, Perthshire (below)

In parallel, an increasingly active Properties in Care (PIC) division within HS was bringing forward ambitious access and interpretation proposals, many with archaeological implications for standing fabric as well as buried remains. Inspectors undertook fieldwork on these until the mid 1980s, when we finally realised how much time it took to write up such projects.

By 2000 finite funding was limiting development of a researched approach to our PIC estate, while external bidders felt that HS was unfairly advantaging itself when it distributed funds. This dissatisfaction was matched by concern about regulatory and advisory aspects; some even claimed that Historic Scotland gave itself permission to do things it would never have permitted for private owners. It was time for a change.

Embedded archaeological management

The solution was to create a new team within PIC division, with a small subvention from the archaeology budget, to manage all aspects of archaeology on the managed estate – to be the curatorial archaeologists for our PIC division. This Cultural Resources Team (CRT), currently headed by Peter Yeoman, has embedded archaeological management within care for heritage attractions and has launched its own monograph series to publish old and new research. With a renewed focus on archaeology from within PIC, CRT has gained additional funding and is developing coherent research agenda for the managed estate. Checks and balances ensure that HS does not unfairly favour itself on the consents front.

The remaining archaeology budget, £1.4 million last year, is now available only to non-PIC projects, and is for grants rather than commissions. The Archaeology Programmes and Grants Advice (APAGA) Team is headed by Noel Fojut. Support for projects increasingly relies on their strategic value, and the proportion of capacity-building as opposed to rescue grows each year.

Collaborative and consensual

Everyone is eligible, and we support long-term shared projects such as Historic Landuse Assessment with RCAHMS at one end of the spectrum, and one-off community projects at the other. Old backlog is being dealt with (see IfA *Yearbook* 2009), but the

need to catch up and publish as we go remains a constant theme: projects still find it easier to win fieldwork than post-excavation funding from other grant-givers, so a disproportionate amount of HS grant goes into publication. Projects also need to be collaborative and consensual – for example our strong support of the Scottish Archaeological Research Framework initiative (p32), led by the Society of Antiquaries of Scotland on behalf of the whole sector.

Like most separations, there were pragmatic adjustments to be made. For simplicity of contract management some support functions (artefact conservation, for example) followed the new team across to PIC while others remained with the Inspectorate (radiocarbon, grants for publishing excavation reports). We made a few judgements of Solomon – for example, should the excavation backlog on PICs go with the new CRT team, who would have a vested interest in getting them published, or stay with APAGA, who were responsible for the digs? (CRT won, not to the total disappointment of APAGA)

Building joint projects

Also like most separations, our two archaeological halves now feel more relaxed together. Indeed, we are already building joint projects which harness the potential of the PIC estate and the privately-owned archaeological resource. One current example is Links of Noltland in Orkney, where EASE Archaeology are excavating on one side of the guardianship fence for APAGA and on the other for CRT

Nowadays we come together when it makes sense, each side bringing needs and sources to the table. It all feels very different from the old days of arguing about whose needs were more urgent or important.

Noel Fojut

Archaeological Programmes and Grants Advice HS Inspectorate

Peter Yeoman

Cultural Resources Team HS Properties in Care

Historic Scotland, Longmore House Edinburgh EH9 1SH

Glenmorangie

and Early Historic Scotland

Alice Blackwell and David Clarke



National Museums Scotland and the Glenmorangie Company have formed a partnership to support study of Early Historic Scotland, one reason being that the magnificent Hilton of Cadboll sculptured stone was discovered close to Glenmorangie House and their distillery at Tain, and the intricate panel of spiral decoration on the slab inspired the new Glenmorangie brand insignia. This support has enabled National Museums Scotland to appoint a Research Officer to work full time on the project, along with Martin Goldberg, Curator of the Early Historic and Viking Collections, and David Clarke, Keeper of Archaeology.

Form, function and construction

We will be producing a book covering Early
Historic Scotland, AD 300 to AD 900, an accessible
but scholarly review of archaeological evidence
rooted in the surviving material culture of the period.
Glenmorangie's support is also facilitating new
academic research on specific topics. To date we
have concentrated on looking at the form, function
and construction of objects, particularly composite
objects. The Monymusk Reliquary for example, a
well-known object that regularly features in
discussion of the period, lacks a detailed and
definitive description. We are currently preparing
such an account, aided by CT scans undertaken by

the University of Abertay. These scans will enable us to investigate construction techniques through a fully manipulable 3D model and to examine sections at any angle across, or point on, the Reliquary. This study will be augmented by radiocarbon dates from samples taken from the inner wooden box and lid.

Pictish throne

The other strand of the project is building relationships with modern craftspeople by commissioning versions of objects which inform and enhance our understanding of how those early pieces might have been made. We have now completed a project to make a Pictish throne based on images on the sculptured stone from Fowlis Wester, Perthshire. Dialogue between craftsman Adrian McCurdy has thrown up issues that would not have arisen had the study been limited to an academic exercise, and resolving these constantly requires a return to the available evidence in order to extract more information.

Our collaboration with Glenmorangie is based on an enthusiastic desire on both sides to better understand and communicate Scotland's Early Historic archaeology. Their support for a research project on this scale is enlightened and unprecedented, and the project's success will, we hope, encourage others to engage in comparable ventures.

Alice Blackwell

Glenmorangie Research Officer

David Clarke

Keeper of Archaeology Department of Archaeology National Museums Scotland Chambers Street Edinburgh EH1 1JF



The Hilton of Cadboll (Ross-shire) Pictish stone. © Trustees of National Museums Scotland

Alice Blackwell, Glenmorangie Research Officer, examining a brooch from the St Ninian's Isle (Shetland) hoard. © Trustees of National Museums Scotland







The Monymusk reliquary. © Trustees of National Museums Scotland

Oak throne based on depictions from Pictish carved stones made by Adrian McCurdy. Photograph: Doug Simpson. © Trustees of National Museums Scotland

Maritime Archaeology in Scotland: A NEW ERA?

Dan Atkinson

he maritime historic environment in Scotland enjoys an enviable status, with a large and varied resource that is located off the coast, along the coastline and within estuaries and a network of inland waters. This marine environment is on the cusp of legislative change which is helping to engender growing appreciation and awareness of our maritime and marine cultural heritage.

SCOTLAND'S FIRST MARINE BILL

Exciting developments include Scotland's First Marine Bill (the Scottish Government, 2009). This document outlines measures in the Marine (Scotland) Bill to advance effective management of the marine resource, including its historic dimension, within the Scottish Marine Area (up to12 nautical miles). The document also outlines how planning and licensing provisions in the UK Marine and Coastal Access Bill would be executively devolved to Scottish Ministers

for the Scottish offshore region (12 to 200 nautical miles). It is hoped that on the back of new legislation, and the policies to be presented in the consolidated protection, conservation, management and management (ICZM) and terrestrial planning. IfA members continue to work within non-statutory bodies such as the Built Environment Forum of Scotland (BEFS) to issue responses to consultations and provide feedback on issues to ensure a voice

PROFESSIONAL ADVICE

The proposed changes have provided us with challenges and opportunities, many of them highlighted in the discussion paper Towards a Strategy for the Marine Historic Environment (Historic Scotland, 2009). Key areas deal with science, data and information; stewardship of the resource; marine

SHEP (Scottish Historic Environment Policy) next year, the historic environment sector will be afforded a platform on which to encourage and pursue better understanding of the marine historic environment; in tandem with developments in integrated coastal zone within these wider developments.

planning and integrated coastal zone management; licensing and enforcement; and understanding, enjoyment and capacity, partly realised through academic programmes, research initiatives and training. The question of capacity is particularly important. Professional advice could be provided through a cadre of maritime specialists, perhaps as a 'remote' entity or as part of a 'centre of expertise'.

The Scottish Government recognises the need to consider the historic environment within science and data initiatives - these include proposals for national seabed survey work as well as Strategic Environment Assessment work associated, for example, with opportunities for marine renewables development. Quantification and understanding of the submerged resource forms the focus of important on-going research through the Universities of Aberdeen, Dundee and St Andrews. Methods used are also under development at Dundee and St Andrews, with use of high resolution survey techniques.

MEDIEVAL BOAT

The maritime resource continues to yield significant new discoveries. Recent examples include a wooden sea-going vessel in the Western Isles with a provisional date somewhere between the mid-16th and early 17th century - perhaps the oldest coherent wreck in Scotland to date. Further exciting work includes that of the Morvern Maritime Centre in Skye, studying a shallow loch connected to the sea by a man-made canal, where fragments of a medieval boat have been found recently. This is part of a project to record the maritime landscapes of Argyll and the western highlands.

EMIGRANT CLIPPER SHIP

Elsewhere, there are plans to conserve HMS Unicorn, a Georgian-era Royal Navy frigate based in Dundee the most complete 'original' Georgian era vessel in the world, and to save the City of Adelaide (also known as the Carrick), the oldest and most complete emigrant clipper ship left. Detailed laser scan survey has provided an accurate archaeological record of the vessel prior to potential deconstruction or removal from its current site.

In other spheres, ScARF (p32) has a Maritime and Marine Panel charged with developing a long-term vision for maritime research, and there are continuing developments in maritime archaeological training for the voluntary and professional sectors. The former includes creation of Nautical Archaeology Society (NAS) training centres throughout Scotland and successful organisation of a practitioners' field school at Lochaline on the Sound of Mull in 2009. Further courses next year will encourage a sustainable

training base once more in Scotland. In addition, the Scottish Group of IfA hopes to run training courses to develop the maritime archaeological skills base. One current challenge is the lack of university-level education in maritime archaeology. St Andrews University, once world-renowned for maritime studies has recently founded the Scottish Oceans Institute, and Aberdeen University is developing expertise in submerged archaeology, but still significant challenges lie ahead.

We need to keep up this new momentum. This will need close working with colleagues in the UK and further afield in order to fulfil international commitments for better understanding, management and conservation of our maritime cultural heritage.

Dan Atkinson

Maritime Department Manager Headland Archaeology (UK) Ltd dan.atkinson@headlandarchaeology.com

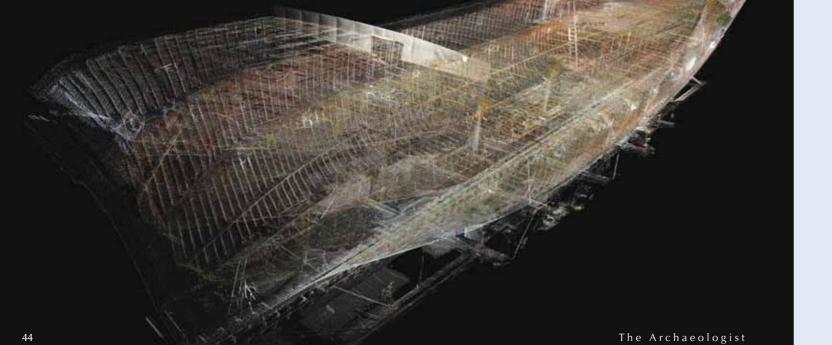


HMS Unicorn in Victoria Dock, Dundee. © Headland Archaeology (UK)

Remains of a vessel discovered on a beach in the Western Isles. Photograph: courtesy of Domhnall Iain Cambeul



Laser scan of the City of Adelaide © Headland Archaeology (UK)



Winter 2009 Number 74

PADLOCKS AND POTS:

a good year for finds at Headland Archaeology

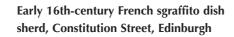
Julie Franklin – finds specialist at Headland Archaeology (UK) Ltd chooses her top six finds from this year's finds trays

The chosen finds are either unusual in their own right or survived in remarkably good condition or in surprisingly large numbers. The maiolica tile was expensive when made and was always special, while the sgraffito dish would have been a colourful addition to a 16th-century household. The 16th-century jug jumped out at me when I first saw it as I worked on the tiles from Cadzow Castle and was familiar with the designs and their meanings. It provided a link between an everyday object and a notorious historical figure. The metalwork provides an insight into uses of sites, whether the traffic of the marketplace or security issues.



Maiolica floor tile. Jeffrey Street, Edinburgh, 1530s or 17th-century copy?

Part of a hexagonal tin-glazed tile decorated with a polychrome floral design, this is identical to tiles made in Antwerp in the 1530s for Herkenrode Abbey in Belgium. However, preliminary results of ICP analysis indicate it was made at the Pickleherring factory in London, which did not begin production until 1618.



This Beauvais sgraffito sherd, imported from Northern France, has a design scratched through the red slip to reveal the white body underneath.



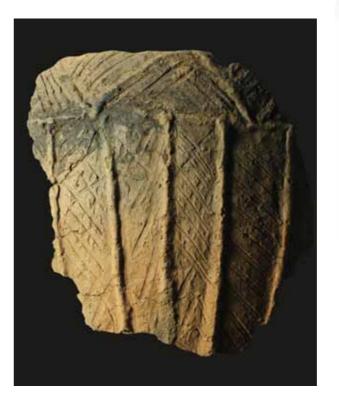
14th-century horseshoes, Grassmarket, Edinburgh

Horseshoes are surprisingly rare finds in archaeological deposits because they were usually replaced at a farrier's and recycled. This is a good collection of late medieval shoes, all of a similar size, about 128mm long by 110mm wide. They were all lost in one of Edinburgh's medieval market places.



Grooved Ware from Powmyre Quarry, Angus, 3100–2000 BC

This sherd, decorated with incised lines and applied strips, makes up most of the profile of a Grooved Ware pot, one of the most distinctive types of Neolithic pottery. It spread through Scotland by c. 3100 BC, centuries earlier than its appearance in southern England.





Medieval barrel padlocks, Carnmeen Ringfort, Northern Ireland

This x-ray image shows one of six barrel padlocks found in Anglo-Norman structures in a ringfort. Metalwork assemblages of this size, quality and date are not usually associated with ringforts.

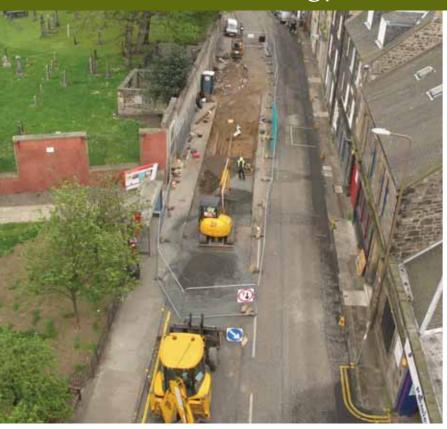
Seal from a 16th-century green-glazed jug, Glasgow

Such jugs are common in 16th-century contexts in Scotland, but less common is evidence for who owned them. The seal bears a stamped relief of a frame-saw and two cinquefoils, elements from the coat of arms of the Duke of Hamilton. There is a similar design on floor tiles found at Hamilton's Cadzow Castle.



Julie Franklin
Finds Specialist
Headland Archaeology (UK) Ltd
julie.franklin@headlandarchaeology.com

Archaeology on the (Edinburgh tram) line:



Constitution Street looking north, with the graveyard and wall to the west Headland Archaeology (UK) Ltd has been working alongside Carillion plc on advance works for Edinburgh's new tram system on behalf of the Transport Initiatives Edinburgh (TIE). There were various levels of archaeological response over the tram route, including full excavation of the South Leith Parish Church post-medieval cemetery.

The tram route passes through a variety of townscapes including the historic core of the New Town and the medieval burgh and port of Leith. The brief incorporated a useful 'traffic light' system which classified the level of archaeological mitigation response required. Red signified high risk, amber moderate, green low. Where the line was not monitored, there was a callout system. Carillion briefed their frontline managers well and at regular meetings kept us up to date with work in progress.

Discoveries during monitoring works included the defensive town ditch of Leith (constructed in the 16th and rebuilt in the 17th century), surfaces of early routes into Leith, culverts at Haymarket and brickbuilt chambers in Princes Street. Burials in Constitution Street led to full excavation of the burial ground within the footprint of the tram tracks.

Parish churchyard

Excavations yielded 295 inhumations in a variety of grave types. The graves, orientated north-west to south-east, were arranged in closely spaced rows, possibly reflecting the alignment of the adjacent town defences, an important landmark at the time. The majority were single, supine extended inhumations interred in wooden coffins or in earthen graves. Also present were shrouded bodies placed in simple graves, group burials in irregular pits including coterminous or multiple sequence interments, and double burials placed one on top of the other, usually of a child and an adult. Most artefacts were iron coffin nails, with a few shroud pins. A copper buckle was found in one grave, along with textile remains of clothing worn by the deceased. Two copper loops at the waist of one individual may have been part of a purse hanging from a belt.

Documentary and pottery evidence points to a date in the 16th and 17th centuries for most graves, and all pre-date construction of Constitution Street c.1790. There is a strong possibility however that medieval burials are located in the cemetery, associated with the 15th-century hospital and chapel which stood on and close to the present church. Radiocarbon dating and further stratigraphic analysis may give us a more accurate picture of their chronology.

'Death in two parts' techniques of urban excavation Our methodology had to take into account exceptional issues arising from digging up a narrow but busy road in the middle of residential and commercial Leith. Constitution Street, adjacent to the graveyard wall of the local parish church, was built in 1790 to improve access to the harbour. There was no previous evidence that burials extended this far.

Traffic restrictions, health and safety considerations and security issues dictated that opening the entire 110m length of road which contained graves was not possible in one stage, and in order for traffic to remain active during the five months of excavation the two 'lanes' of the street were excavated separately, giving a maximum working width of about 4m. The two areas were further divided into 10m lengths to adhere to traffic management regulations. In some sections as many as forty intercutting inhumations were present, along with modern services, and space was extremely tight.

As with any graveyard of this date, intercutting interments and a certain amount of charnel were the norm. Many burials extended from one side of the road into the other, and had to be excavated in two phases. We had the problem of matching context numbers of partially excavated skeletal remains, so to ensure there was no confusion every cut and skeleton was tagged and digitally surveyed. The section down the centre of the road and any remains close to the edge were covered with polythene before backfilling, and when the other side was opened tags were recovered and the section drawing used as a guide for matching continuing context numbers. This became especially difficult where there were several superimposed burials, but by reference to the survey and checking the levels of burials this could be overcome.

Digital recording was vital in these circumstances. An EDM linked to a ruggedised laptop with TheoLT (CAD compatible) software was used. Coordinate targets placed along the bodies were surveyed and photographed in order to allow drawings to be made from rectified photographs. The need for speed and accuracy meant this could only be achieved by having a robust but flexible survey and recording strategy, and incredible consistency throughout the project.

Key learning

The challenge in developer-funded archaeology is always to achieve a high quality of recording, meeting the clients' budgets and timescales, and allowing the story of the site to emerge. The logistical nightmares of working in pressured conditions on site are often forgotten back in the office, but opportunities for learning from these experiences and improving on best practice are valuable. Several issues crop up when digital recording is used as the primary record: archiving digital primary records, avoiding chaotic drawings, putting training into practice in the field, and quick decision making when surveying to name but a few. Our experience has been that although digital recording reduces time without affecting the quality and accuracy of recording it is little use without suitable training provisions for all staff. Continually updating guidance packs that address the specific priorities and issues of the specific project was essential, as were conventions and processes that would allow mapping of physical and stratigraphic relationships.



Sorina Spanou

Excavating a multiple burial continuing into the section. The inhumations had to be retrieved and their context numbers matched in two segments



Multiple burial continuing into the western segment

Introducing flexible conventions such as 'real', 'unreal', 'truncated' edges when surveying difficult-to-see grave cuts or poorly preserved wooden coffins meant that survey has to be used as an interpretative as well as recording tool. Although we may think of technology as a mechanical, thought-free process of objective recording, it becomes highly problematic if used solely in this way. What we have found in complex longrunning projects such as the M74 and the trams work is that thinking along the lines of 'surveying it quickly now' and 'sorting it out in the office' defeats the purpose of saving time by using digital recording. In this case, quick interim phasing and analysis of the survey data between the two phases of excavation proved crucial in matching context numbers and in identify and remedying problems.

Sorina Spanou

Project Officer, Headland Archaeology (UK) Ltd sorina.spanou@headlandarchaeology.com



Our original camera rig in action



Near infra-red kite aerial photograph of the south wall of Caerwent (Venta Silurum), taken in overcast conditions and very strong wind. Pentax Optio E35 camera. The simple technique and the compact equipment enable us to add an extra dimension to holiday snaps.



Aerial photography by kite

Photographs taken in overcast conditions or in vertical sunlight can provide useful information, especially after modification using standard (often free) image-processing software. This shot of Cairnpapple in West Lothian was taken when strong shadows were cast



Since publication of Arthur Batut's book on kite aerial photography (KAP) (*La photographie aérienne par cerf-volant. Paris: Gauthier-Villars*) in 1890, this simple technique has found many applications. The advent of digital cameras has made KAP even more accessible, with a capacity for stunning results and the rapid recording of many types of archaeological and historic sites at minimal cost.

Our interest in experimenting with this novel approach began in 2007, after we had moved to West Lothian and joined the History of Armadale Association in order to learn more about the town and its neighbourhood from its members. We created a heritage and community website as a free service for our fellow Armadalians, and this soon began to reflect our growing methods of photographing not only our town but other West Lothian locations. We explored archives and we photographed sites at various times of day, in all weathers and seasons, and from a variety of perspectives. We realised that aerial views of archaeological sites, as well as of our town generally, were especially informative for a wide audience as well as for research.

Shooting skywards

In 2007, using an old kite, we attached a digital camera to the kite line, set the shutter to fire after 10 seconds, and hoisted it skywards above a local field. A broken strut brought the camera (harmlessly) to earth, but we had our first kite aerial photo! We discovered many more avid kite-fliers on the internet (www.armadale.org.uk/kite03.htm) and improved the technique with a conventional camera rig and a more stable, flexible kite. We also started taking photos in the near infra-red. On wind-free days, we attached our camera to an 8m carp fishing pole (www.armadale.org.uk/pole.htm). Edinburgh Archaeological Field Society responded to our appeal to carry out geophysics surveys of the two sites in which we were interested, which opened up yet more avenues for further consideration by local historians. However, it is the technique itself that can make the most useful contribution to archaeological practice. Its advantages can be summarised as

- low cost
- low skill requirements
- portability
- high resolution (as, normally, the kite is flown below 60m)

- immediacy of use when needed, weather permitting
- single person operation (but two are preferred)
- zero environmental impact (no fuel / noise)
- upgradeable to remote control and video preview, and to replacement of the conventional kite with a (helium-filled) Helikite.

For archaeological applications, the primary advantage of KAP is that one has a quickly available technique, for example when excavations are in progress or when earthworks are newly noted, and when transient lighting / ground conditions are optimal, for example after a fall of snow, as at Gormyre Hill, Torphichen.

Technicalities

We prefer to use small compact cameras for our KAP work as they are light (eg Pentax Optio W60, 145g) and can be flown readily in a wide range of wind speeds. We suspend the camera from the kite line, about 15m from the kite, using a picavet suspension (www.armadale.org.uk/kitebasic.htm). We also have a cheap Pentax Optio E35, which was converted, from new, for use in the near infra-red (www.armadale.org.uk/phototech.htm). The camera plus conversion cost 120 euro. This camera enabled us to take kite aerial photos in overcast conditions, as shown in a vertical shot, taken in December, of St Ninian's Chapel on the Isle of Bute. The Pentax Optio E35 does not have an interval mode, so we had to choose the continuous shooting mode and keep the shutter button depressed during the kite's flight. The continuous shooting mode is available on many compact cameras and images are often taken at a rate of about one image per second, up to the limit of the installed memory card.

There is little doubt in our minds that KAP should be used more widely in archaeology. It can be a powerful tool that should have a place on the practical curriculum of undergraduate courses. Why should children have all the fun?

More details can be found on our West Lothian aerial archaeology webpages www.armadale.org.uk/archaeologyindex.htm.

Rosie and John Wells

History of Armadale Association rosie@armadale.org.uk

53

(IfA)

IfA Area & Special Interest Groups

Kathryn Whittington and Geoff Morley











IfA has a number of Groups which represent interests relating to various subject and geographical areas within the broader historic environment sector.

Members will have noticed that in their subscriptions renewal forms this year they were asked if they wished to join one or more of these, and all Groups significantly increased membership as a result.

All Groups have been set up and are run by IfA members who wish to share and develop their interest and expertise, and to inform Council's decision making about these particular areas. They also perform a useful recruitment role, reaching out to specialised areas of the sector as well as operating as a networking hub for specialists.

Council has a nominated Honorary Groups Affairs Officer (Geoff Morley) to provide a link with Council, to report on Group activities and to support and advise Groups on how they operate. If A Groups are one of the primary sources of information and knowledge and a prime area for discussion about their respective specialities. Over the next twelve months we hope to make them more inclusive and increase geographical and sector coverage. This will include re-starting dormant groups and initiating new ones. The intention is that eventually every area of Britain and most specialisms will be covered. This autumn, *Groups Guidance* has been updated to clarify roles and requirements to make the rules clearer.

We also hope that Groups will increase the outreach events they organise, promoting IfA and their various areas/disciplines to both established professionals and people early in their careers, to non-members and to the public. These sessions would be a good introduction to both IfA and the sector. Those that include a training or educational element, such as the MAG conference or the Finds Group brick and tile recording day, will count towards CPD. It is hoped that events such as these, and the recent conference jointly organised by the Scottish and Geophysics Groups, will become more commonplace.

Our Groups all have a page on our website for news, announcements and other information. Several also produce regular newsletters and run training events. Anybody who would like to join a Group or has suggestions for new ones should email groups@archaeologists.net.

Kathryn WhittingtonIfA Public Relations Coordinator

Geoff Morley Hon Groups Affairs Officer



Special Interest Groups

The Diggers Forum has been campaigning for the past five years on behalf of professional archaeologists working in fieldwork and postexcavation. During this period we have worked with IfA staff and committees and other organisations, including BAJR (British Archaeological Jobs and Resources) and Prospect, raising awareness of issues that confront our membership on a day to day basis. Since the Forum was established we have gradually increased our representation within IfA, Forum members currently holding three seats on Council (down from four last year). It is important that we maintain a voice on Council and we hope to get more members on board in future.

At present our Group Committee is too small and with work commitments we have been unable to develop key themes we would have liked, in particular our *Campaign for a living wage*. We had hoped to move further forward on the pay issue, using IfA's *Benchmarking archaeological salaries* report as the main focus, but the recession has had a massive negative impact, creating an environment where commercial archaeological organisations are less likely to look at improving pay and conditions.

The Salaries report concluded that pay levels need to increase by 13% to 53% to bring archaeology in line with comparable professions and suggested phased above-inflation pay increases as one way to achieve this, a view strongly supported by the Diggers Forum. If A Council has agreed to target a 13% increase in IfA-recommended pay minima by 2013, but because of the recession and its impact on the profession the initial increase has been postponed until the next financial year. Whilst we acknowledge the current harsh economic climate and the difficulties it has caused, not least for the many field staff who have been laid-off or who are now working three or four day weeks, we firmly believe the rise in salary minima should be pushed through at the earliest opportunity.

diggers' forum

Jez Taylor

We all know the issue of low pay within the heritage sector is not a new one and has been discussed at length over the years with little significant improvement. Raising pay levels within the competitive tendering system is challenging and unlikely to succeed without solid commitment from all involved, particularly those running organisations at high managerial levels. A few have managed to substantially increase wages beyond IfA recommended minima, but generally there is little evidence of firm, practical measures to address the issue, either historically or in more recent times, prerecession. The will needed to tackle the situation seems to be lacking. Once the economic crisis has eased we hope IfA Registered Organisations will be prepared to review IfA recommended minima with the Council as a whole, with a view to adopting a bolder approach. The differential outlined in the salaries report of 13% to 53% reflects a broad spectrum of jobs and grades. It would be encouraging to see commercial organisations aiming for a higher percentage increase than 13% at the bottom end of the scale.

The recession has brought issues affecting field archaeologists into sharp focus, but economic forecasts suggest signs of recovery *may* be on the horizon. After a lull in activity, this could be an ideal time to review and change the Forum, making us stronger and more influential. IfA has received feedback highlighting a growing interest in Special Interest Groups, including the Diggers Forum, so it seems a good time to reorganise and re-launch. Over the next few months we want to invite new people onto the DF committee, increase membership and revitalise the *Campaign for a living wage*. If any members are interested in joining, please email groups@archaeologists.net.

Chris Clarke chrisclarke600@hotmail.co.uk Sadie Watson swatson@museumoflondon.org.uk

Jez Taylor

c/o Museum of London Archaeology 46 Eagle Wharf Road London N1 7ED jtaylor@museumoflondon.org.uk



INFORMATION MANAGERS

Martin Newman and Kieron Niven

Special Interest Groups

2009 has seen the creation of a new IfA Special Interest Group for Information Managers (IMSIG), bringing together professionals working or interested in information management, IT and informatics across the historic environment sector. In addition, we hope to develop good relations with other disciplines which have overlaps and common areas of interest. A current example of these outreach activities include a forthcoming review of the group's initial conference session which will appear in ERCIM News, the quarterly magazine of the European Research Consortium for Informatics and Mathematics. We are also involved in organising a session at the Theoretical Archaeology Group (TAG) conference, looking at philosophical aspects of recording.

The group was launched at IfA's April conference in Torquay with a session on Information Management for Archaeologists and an initial AGM. Papers from this session are published online in our first newsletter, available via the IMSIG group page on the If A website. We have also become the first If A SIG to be set up as a sub-group of the IfA's Linkedin group (www.linkedin.com). IMSIG has established links to others working in the area, including meeting with the Forum on Information Standards in Heritage (FISH).

IMSIG is now planning its activities for the forthcoming year. These will include a guide to the principles of information management in the historic environment, a session and AGM at the 2010 IfA conference in Southport and CPD events for members. Input from members is required to develop

these plans further; for example it would be useful to know what training events you would like to see us organise. Members will also have the opportunity to get involved in developing relevant guidelines and standards, including participating in peer reviews.

Kieron Niven of the Archaeology Data Service and founding Chair of the group will be standing down at the 2010 AGM and a call for nominations and other Agenda items will be going out shortly. If A members who wish to join this fast-growing group should contact the IfA office with their membership details.

Martin Newman

martin.newman@english-heritage.org.uk

Kieron Niven

kjn103@york.ac.uk

Proposed Special Interest Group for London

It is felt that the London region has sufficient coherence, based on a concentration of IfA members living or working there, a single SMR/HER, and regional government, to provide a focus for a SIG. Subjects of likely interest include: sustaining the regional archaeological research strategy; training/CPD events for IfA CPD requirements; regional IfA responses to planning and other consultations; regional study papers; and liaison with CBA:London with a view to joint working. These will be up to the members to decide. If A members would have free membership, and non-IfA members might join for a nominal payment,

An inaugural meeting will be held on 28 January 2010, 6.00pm, in the Board Room at the Museum of London, London Wall. It is hoped to have a speaker from IfA and a member of an existing SIG, members will be asked if they support the idea of a London SIG and, if they do, to vote for a committee which will be tasked with seeking Council's approval; preparing a constitution; establishing open elections at a regular AGM; establishing frequency of meetings; and initiating events.

Everyone is welcome to attend.

Rob Whytehead

Robert.Whytehead@english-heritage.org.uk

New members

ELECTED

Rosalind Aitken Richard Sambrook **Bob Sydes** Emma Tetlow

Member (MIFA)

Associate (AIFA) Catherine Edwards

Iames Gidman Rachel Ives James Newboult Gerwyn Richards Jeremy Rogers Jane Stewart Christopher Swales

Paul Wordsworth

Practitioner (PIFA)

Richard Crockett Beniamin Cullen Christine Hopwood-Lewis Tara-Jane Sutcliffe David Williams

Affiliate

Gregg Allison Kate Boulden Sarah Baker Ellen Chapman Paris Daykin-Laura Binns Robert Birtwistle Iliopoulous Graham Dixon Phredd Groves Catherine Dougla Dario Guiducci Vikki Gallagher Beverley Kerr Tristram Hall Alexandra Key Zoë McAuley Marc Harrison Kimberly Ginette Murray Hemming Courtney Nimura Brian Powell Graham Hill Samantha Virginia Pringle Hodgson Leslie Rimell Sandra Thomas Jennifer Angela Trentacoste Humphries

David Weir

Student

TRANSFERS Member (MIFA)

Sarah Court Toby Gane Matt Garner Jill Hind Diana King Bruce Mann Amelia Pannett lennifer Wood

Associate (AIFA)

Matthew Astill Stephen Nicolay Jonathan Millward Lorna Richardson Kate Page-Smith Laura Scott

Affiliate

Practitioner (PIFA)

Nicholas

Iohnstone

Tim Lewis

Sarah Pickin

Chris Stewart-

Kimberley Teale

Colin Tingey

Richard Watts

Moffitt

Glen McCormack

Paul Bowen



Members news



lan Ralsto

Professor Ian Ralston *MIfA* 588

CFA Archaeology Ltd was delighted to learn that their Non-Executive Chair, Professor Ian Ralston, was awarded an OBE for services to archaeology in Scotland.

lan started his career as the first archaeologist at Aberdeen University in 1974. He joined

Edinburgh University's Department of Archaeology in 1985 and in 1998 was promoted to a personal Chair in Later European Prehistory. He is the author or coauthor of numerous books and papers including *Archaeological Resource Management in the UK*. He has been extensively involved in the development and practice of applied archaeology, and led the University of Edinburgh's Centre for Field

Archaeology from 1990 until 2000, when it became CFA Archaeology Ltd. He directed archaeological studies for Shell Chemicals UK Ltd North West Ethylene Pipeline Project, the first major Environmental Assessment project conducted in Scotland in which archaeological considerations were prominent.

lan is a past President of the Council for Scottish Archaeology and was formerly Chairman of the then Institute of Field Archaeologists. He is also a former Councillor of the National Trust for Scotland where he was active in establishing field archaeology within that body. He is currently Chair of the Treasure Trove Advisory Panel and of the Standing Committee for Archaeology (SCFA), and is a Vice-President of the Society of Antiquaries of Scotland. We hope that lan will be serving Scottish Archaeology for many years to come!

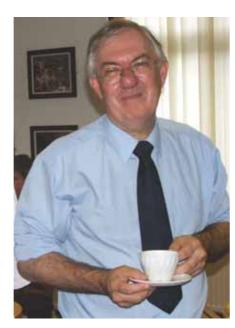
Melanie Johnson CFA Archaeology Ltd

Malcolm Atkin MifA 22

Malcolm Atkin retired this August as the County Archaeology Officer for Worcestershire County Council. Commencing with Hereford and Worcester County Council in 1993, his 16 years have seen many challenges and triumphs. His previous work included some of the heroic archaeological sites of the 1970s, such as Wharram Percy and Norwich, before becoming City Archaeologist for Gloucester.

Many universities have given birth to commercial archaeological organisations but, contrary as ever, Malcolm was a moving force (with Martin Doughty) behind the Service's move to accommodation at what is now the University of Worcester, and creation of a first degree course in Heritage Studies and Archaeology. The course (now Archaeology and Heritage Studies) is partly taught by members of the Service, Malcolm amongst them, and the University has also appointed its own archaeological staff to cope with increasing numbers.

His leadership will be sorely missed by staff (themselves rather contrary also), all of whom received considerable support through good and not so good times, and all wish him well for the future. The future, it would appear, will be made



Malcolm Atkin

up of being roadie to his daughter's (Kate) photographic business and bothering the Records Offices of the West Midlands.

Simon Woodiwiss

SWoodiwiss@worcestershire.gov.uk

The Archaeologist