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INSTITUTE OF FIELD ARCHAEOLOGISTS





THE **Annual Conference**
FOR ARCHAEOLOGISTS
READING

IFA

2-4 April
2007

 In Association with the Department of Archaeology,
Reading University



Photographs: Dept. of Archaeology, Reading University, Matthew Whittington and Christopher Stanley



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This issue:

**ARCHAEOLOGICAL
FIELD SURVEY**

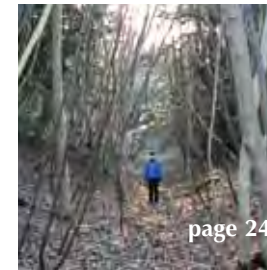
**English Heritage
and landscape
archaeology**
p17

**Involving the
community in
field survey**
p20

**Investigating
modern
landscapes**
p28



C O N T E N T S



- 1** Contents
- 2** Editorial
- 3** Finds Tray
- 4** A guide to charge-out rates for archaeological specialists *Phil Mills*
- 6** From disability to inclusion: the Inclusive, Accessible, Archaeology Project *Tim Phillips & Roberta Gilchrist*
- 8** A new qualification in archaeological practice *Kate Geary*
- 9** Coastal Zone Assessment Surveys: recording coastal erosion in Scotland *Mike Cressey, Melanie Johnson, Phil Richardson and Tom Dawson*
- 12** Climate change: a threat to the historic environment *Patrick Foster*
- 14** Fieldwork and monasticism: field survey at Sempringham Priory, Lincolnshire *Glyn Coppack and Paul Cope-Faulkner*
- 17** English Heritage and landscape archaeology *Peter Topping*
- 18** Investigating a Tudor garden *Sarah Newsome*
- 20** Involving the community in field survey *Alastair Oswald*
- 22** Nature takes its course: understanding a threatened lead-mining landscape *Abby Hunt and Stewart Ainsworth*
- 24** Tracing an oppidum in a wooded landscape *David McOmish and Sarah Newsome*
- 26** New interpretations in the Quantock Hills *Hazel Riley*
- 28** Investigating modern landscapes *Wayne Cocroft*
- 30** Getting a better view *Derek Ashman*
- 32** Understanding plough damage: research in field and lab *Steve Trow, Vince Holyoak and Fachtna McAvoy*
- 34** Professional training in analytical earthwork survey and landscape investigation *Mark Bowden and Marcus Jecock*
- 36** Technical developments in archaeological investigation *Trevor Pearson*
- 37** Maritime records for the future *Gary Green*
- 38** Slipping through the net: maritime archaeological archives in policy and practice *Jesse Ransley*
- 40** Archaeology and politics *Christopher Catling*
- 41** Westminster debates the heritage *Alison Taylor*
- 43** New members
- 44** Members news

In the last *TA* we tackled topical issues of urban regeneration, in which MPs and ministers (see this issue, p41) recognise that archaeologists have a useful role to play, and this time it seemed a good idea to get out into the fresh air of the countryside and look at some of the practice issues surrounding field survey. This was greatly improved by input from English Heritage, especially by Phil Newman who encouraged many officers to contribute articles on their work. Thanks to traditions that came to EH with the RCHME this is cutting edge work that is being made increasingly available to the wider profession. Taken with new opportunities for discovering and interpreting archaeological sites and landscapes described in our new *Yearbook and directory*, archaeologists should feel empowered to enter a new age of widening horizons.

This is timely for, as we see on p40 and p41, archaeology is at last being taken seriously by politicians (and even by civil servants, if rumours of support for topics we hold dear come true through the Heritage Protection Review). Increasing width of understanding and depth of responsibility makes this a time for public and commercial organisations to give full support to each other,

appreciating the reality that we need all branches of archaeology to be strong. Only then can we develop the discipline in a way that truly expands our understanding of the past *and* serves the public in a modern world.

Two notes from IFA office – firstly, a final reminder that the Annual Conference will be in Reading this year, 2-4 April (we may even tidy up the offices for you to visit), and there is still just time to book. The full programme and an offer of bursaries are on our website. It will as usual cover many topical issues, some, such as plough damage, disability, workplace learning, politics and scientific advances, relating to pages in this *TA*. Lastly, your Editor needs continuing support from IFA Editorial Board to keep ideas flowing. Are there any members who would like Council to consider them for joining this board? It usually meets only twice a year so is not too onerous, and it's a great help to have voices from different parts of the archaeological world. Do phone or email if you would like to know more.

Alison Taylor



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Notes to contributors

Themes and deadlines

Summer: Post-medieval archaeology in Britain
deadline: 15 March 2007

Autumn: IFA Conference papers and Annual Report
deadline: 15 June 2007

Winter: Archaeology, sustainability and climate change
deadline: 15 September 2007

Contributions and letter/emails are always welcome. It is intended to make *TA* digitally available to institutions through the SAL/CBA e-publications initiative. If this raises copyright issues with any authors, artists or photographers, please notify the editor. 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 emails, 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.

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FROM THE FINDS TRAY

Stop VAT on listed buildings

There is currently a petition on the Downing Street website that reads 'We the undersigned petition the Prime Minister to remove all VAT charges on building repairs to listed buildings.' Currently, there is no VAT on new buildings but there is on repairs, a considerable burden for those maintaining churches and other historic buildings. To sign, go to <http://petitions.pm.gov.uk/NoVAToldBuildings>. (Yes, the spelling mistake is for real).

British Archaeology magazine

A recent mailing to IFA members promoting membership of CBA at a specially reduced price yielded fifty new members. Now about a quarter of IFA's members also belong to CBA. The offer remains open and any IFA member wanting to receive a free copy of *British Archaeology* and to join CBA at a reduced rate of £28 should contact CBA on 01904 671417 or at admin@britarch.ac.uk

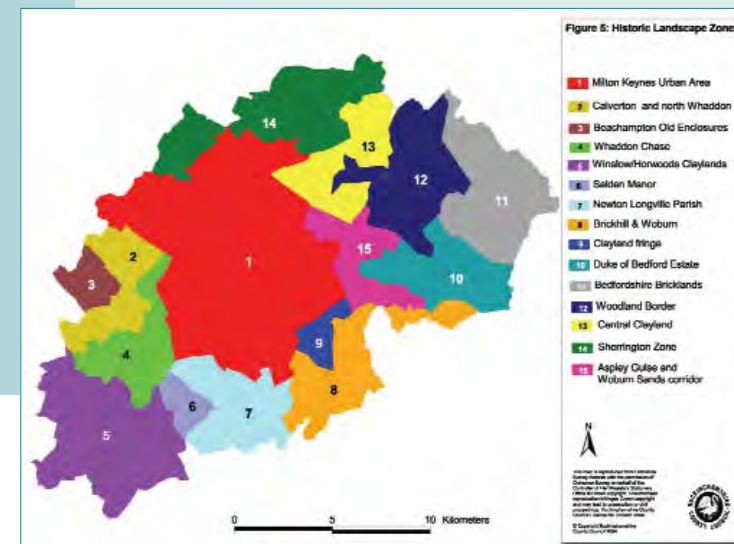


Ratification of the European Landscape Convention

In November, it was announced that the UK had signed up to the European Landscape Convention. This means that it agrees to implement four general measures. The first is to recognise landscapes in law, as an essential component of people's heritage, identity and surroundings. The second is to establish and implement landscape policies aimed at landscape protection, management and planning. The third is to establish procedures for public participation in the definition and implementation of landscape policies. The fourth is to integrate landscape into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies as well as in any other policies with a possible impact on landscape. Defra's view seems to be that the UK need not undertake immediate changes to policy or legislation, but Ministers in departments where policy reviews might incorporate aspects of the Convention are being encouraged to support changes. The Convention became binding on 1 March 2007.

Buckinghamshire & Milton Keynes Historic Landscape Characterisation project

More locally, Buckinghamshire & Milton Keynes Historic Landscape Characterisation project, sponsored by English Heritage, has been published, useful for anyone concerned by how we manage our landscapes in the future. It can be found on <http://www.buckscc.gov.uk/bcc/content/index.jsp?contentid=2005089152>, or the non-technical introduction (26 full colour pages plus fold-out map) is available, price £5, from Buckinghamshire County Council.



A guide to CHARGE-OUT RATES

Phil Mills

A recommendation for IFA to produce guidelines for charge-out rates was made in Aitchison (2000). The necessity for this has been echoed by various groups of finds specialists over the last few years. It was recommended that for charge-out rates the following factors should be considered

- 1 average salaries for this kind of work
- 2 average salaries for similar kinds of work
- 3 IFA recommended minimum salaries
- 4 appropriate overheads for
 - premises
 - facilities
 - seeking work
 - training / CPD
 - leave – sickness, parenting, holiday
 - pensions

It is not appropriate to set out a compulsory rate as costs can be extremely variable and flexibility should be maintained for the mutual benefit of specialist and client – for example a senior expert may charge more than average, but would be likely complete work faster. Considerations underlying the setting of the charge-out rate are

- **WAGES**
The highest cost of the business is the wage that the specialist pays him/herself. The work carried out by an experienced specialist sole trader is by definition at MIFA level, so this grade should be taken as the initial wage. With the wage should be included National Insurance contributions and pension contributions made by a company, which are currently recommended at a minimum 6% for RAOs.
- **OVERHEADS**
Premises: unless the specialist works exclusively at the client's premises, it is probable that s/he will need to maintain an office and workspace, with the associated costs of utilities (fuel,

telephone, web space) and 'business rates'. Provision for travel time to a client may also be appropriate. Further costs should be considered in terms of 'support services' for the business itself. This would include the costs of an accountant, professional indemnity insurance, money placed into reserves and legal services.

- **EQUIPMENT**
Essential equipment to carry out tasks, including IT equipment and software, microscopes etc, sundry expenses for stationery, postage and similar.
- **SEEKING WORK**
The costs in developing a client network and seeking work vary enormously, from an email shot to likely clients to advertising in trade journals and displays at conferences, as well as discussing and negotiating individual contracts, depending on the nature of the service covered. The time and costs taken to reply to enquiries and supply estimates and details about services offered should also be included. There is also a cost in terms of the time taken to network at meetings of potential clients.
- **TRAINING / CPD**
This will represent a financial cost, as well as time. The financial cost will include membership of the relevant professional bodies and specialist groups; subscriptions to specialist journals; acquiring copies of relevant publications, attendance of relevant professional and specialist conferences and the costs of attending formal training courses. The time cost will be the amount of time that carrying out formal CPD/ training takes, as well as research relevant to the specialist field. Currently that is set at 50 hours over 2 years, which can be taken as 7 days over 2 years (3.5 days a year) for a day of 7.5 hours.

for archaeological specialists

- **LEAVE**
The current recommendation for annual leave is 20 days in addition to statutory holidays (8 days). Provision should also be made for potential absences due to illness (which will average out to perhaps 5-10 days in a year, but could disproportionately effect a sole trader), parenting and caring, and for periods when work is not available.

Estimating the cost

Table 1 suggests some figures for calculating a daily charge-out rate. The numbers given are illustrative only and should not be taken as an official IFA guideline. The first calculation estimates the amount of money that the business needs to generate to cover salary, costs and overheads. The second section estimates the number of productive days that may be reasonably available in the year, with the final charge out rate derived by dividing total amount to be met by the number of days available.

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Aitchison K 2000 **Survey of Archaeological Specialists** Landward Archaeology Research Reports 00/08 January 2000
http://ads.ahds.ac.uk/catalogue/adsdata/aitchison_ah_2001/htm/FrontPage.htm

This paper has benefited from comments from IFA Council, the Committee for Working Practices in Archaeology and IFA Finds Group, Duncan Brown, Roy Stephenson, Peter Hinton, Hester Cooper-Reade and Gerald Wait, although the opinions expressed are my own.

Table 1 Estimate for calculating a daily charge out rate

Money		
Salary	20898.00	
26% on-costs	5433.48	
Overheads	8000.00	
Total	34331.48	
Days		
365		
Minus weekends	104	261
Public holidays	8	253
Leave	22	231
Illness	8	223
CPD	3	220
So	34331.48	
Divided by		220 Days p/a
Is	156.0521818	Pounds p/d
50 non-productive days		
	34331.48	
Divided by		170 Days p/a
	201.9498824	Pounds p/d

From disability to inclusion: the **Inclusive, Accessible, Archaeology** Project

Archaeological fieldwork is often seen as a 'macho' activity carried out by fit young men; the idea that people with disabilities may participate in it is just not thought practical. This is a misconception: quite a number of people involved in field archaeology have some recognised disability. Approximately 14% of undergraduates are disabled. Many have dyslexia, but a substantial number have restricted mobility.

The usual perception of disability – wheelchair-user mattocking in the Controlled Tests. Photograph: Stephanie Le Scouiller



A questionnaire survey of employers and interviews with disabled professional archaeologists found a similar situation in commercial archaeology, so that

- at any one time up to 10% of the workforce may have a disability, less than the national average but greater than previously estimated
- the greatest incidence comprises hidden disabilities, especially diabetes and arthritis which tend to be late onset conditions, followed

Tim Phillips & Roberta Gilchrist

- by dyslexia and work-related conditions such as back problems and repetitive strain injuries
- disabled employees are mostly employed in field investigation whatever their impairment, including restricted mobility
- most employers are aware of the implications of disability legislation and consider that they have either satisfactorily altered, or do not need to alter, their procedures
- major concerns of the employers are the ability to do the job, risk factors and Health and Safety, and full disclosure during recruitment
- positive comments tend to outweigh the negative ones.

The Disability Discrimination Acts make it illegal to discriminate against someone with regards to employment and access to education and services on the grounds of their disability. Employers and service providers have to make 'reasonable adjustments' to ensure that disabled people are not excluded. These adjustments must not be 'responsive', ie just to the needs of individuals when required; they must be 'anticipatory'. In Higher Education, fieldwork training remains a key component of undergraduate courses and procedures must be in place to ensure disabled students are included.

Can do

This can be a major challenge for fieldwork directors. How can they anticipate the specific needs of every individual student who may, or may not, be present on fieldwork training? Moreover, in a totally new environment, can individual students fully anticipate their own needs? It is therefore more useful to determine *individual abilities* to undertake the typical tasks that are part of fieldwork training. It is about what people can do, not what they cannot.

Many universities offer established archaeology field schools as an integral part of their courses. It is through this training that students acquire and develop practical archaeological skills, and also transferable skills. The latter are increasingly important to employers, being key 'competencies'. Not all Archaeology students will pursue a career in

It is about what people can do, not what they cannot.

fieldwork but key competencies of self-motivation, analytical ability, decision making, communication and inter-personal skills, team working, organisation and mental and physical stamina learned in archaeological fieldwork training are relevant to *all* students.

Tool kit

Working with the Research Group for Inclusive Environments (RGIE) at the University of Reading, the IAA project team characterised the physical and cognitive demands of various archaeological tasks taught in fieldwork training. Secondly, a self-evaluation tool was developed with which students can identify their individual abilities and transferable skills, and track their development. This is a tool for use by both disabled and non-disabled students. It was refined through controlled tests with disabled and non-disabled volunteers. This was followed by field trials on the University of Reading and Bournemouth University's Field Schools.

The tool kit has been designed for users with little or no previous experience of archaeological fieldwork and is suitable for use by anyone interested in archaeology. It gives users an idea of their potential to successfully complete various archaeological tasks, their physical and cognitive abilities and transferable skills. Abilities and skills are not static, so the tool kit can be used to track development. The incorporation of transferable skills makes the tool kit useful for CPD.

Developing abilities

Within universities, disabled students have successfully participated in fieldwork training when there has been understanding and knowledge of their potential abilities and possible limitations. There is no reason why this should not be the case in commercial archaeology. No one knows their own potential ability and limitations better than the individual concerned. In a totally new environment this self-awareness can be enhanced by self-evaluation. The tool kit allows a user with no previous experience to anticipate what reasonable adjustments may need to be provided. Good practice involves reviewing provisions and

procedures after participation in fieldwork. Because the format of the tool kit allows for the dynamic nature of ability, future provision can be changed or adapted to suit the individual.

Guidelines – for students and for visitors

The project has produced guidelines of good practice for including people with disabilities in archaeological fieldwork training, partly based on the observations of the project team but mainly on the experiences of Archaeology departments and disabled archaeology students, commercial employers and disabled professional archaeologists. This document includes guidelines to making archaeological excavations accessible to visitors.

The guidelines will be published by the Higher Education Academy's Subject Centre for History, Classics and Archaeology as one of their series of *Guides to Teaching and Learning in Archaeology*. The tool kit and the guidelines for good practice are available at www.hca.heacademy.ac.uk/access-archaeology/inclusive_accessible www.britarch.ac.uk

The IAA Project was funded as part of the Higher Education Funding Council for England's Fund for the Development of Teaching and Learning, Phase 5 (FDTL5). It was run jointly by the Department of Archaeology at the University of Reading, the School of Conservation Sciences at Bournemouth University and the Research Group for Inclusive Environments (RGIE) at Reading. The project received active support from stakeholders including IFA, CBA, English Heritage and Oxford Archaeology, as well as the Higher Education Academy's Subject Centre for History, Classics and Archaeology.

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Blind archaeologist identifying finds at Silchester during the Field Trials – would you know that this person is disabled? Photograph: Stephanie Le Scouiller



A new qualification in archaeological practice

Kate Geary

The *Qualification in Archaeological Practice* is a vocational qualification developed by the Archaeology Training Forum which is being launched early in 2007. Based on National Occupational Standards (NOS) in *Archaeological Practice*, it will be awarded by Education Development International (EDI), currently the awarding body for Cultural Heritage NVQs in the museum sector. The qualification will be offered at levels 3 and 4 initially, with a level 5 (strategic management) qualification still in development. Each level has core units, covering research, health and safety and personal development, and a range of options. Quality control is maintained through internal and external verifiers attached to the assessment centres and awarding body answering, ultimately, to the Qualifications and Curriculum Authority.

How is it assessed?

Vocational qualifications are assessed mainly in the workplace. Candidates register with an assessment centre and, working with an assessor, submit evidence that they meet the requirements of the core units and the options they have chosen until they gain their qualification. Prior learning can be accredited through submission of work completed prior to registration, and there is no time limit for completion.

IFA has registered as an assessment centre and is training some staff to be assessors, but the qualification will also be available through EDI's existing network of centres. Other specialist organisations may also wish to offer it. IFA is aiming to recruit a network of assessors from amongst its members and RAOs and has developed an on-line recording system, allowing evidence to be submitted and assessed remotely.

Who can register?

The qualification is available to everyone working in archaeology, whether on a paid or a voluntary basis, or anyone seeking to develop a career and who can gather appropriate evidence. It will enable archaeologists to demonstrate that they have particular sets of skills, competencies or experience, and will be of benefit when applying for jobs, promotion or membership of IFA. It will also provide a means of accrediting informal training and on-the-job learning, particularly important for those in the early stages of their careers. All IFA training initiatives will be structured around NOS, enabling them to contribute towards the qualification.

How much will it cost?

Because this is completely new, we can only estimate the costs at present, based on the Cultural Heritage NVQs currently available. Colleges offering these qualifications charge candidates around £1000 to £1500 to cover registration and assessment fees and all supporting documentation. This is expensive, and IFA is currently exploring mechanisms for funding candidates, particularly through the Learning and Skills Council. We will also be encouraging employers to contribute towards the cost.

Why is it being developed now?

The Qualification in Archaeological Practice allows competence to be assessed within a consistent, nationally recognised, framework and has the potential to revolutionise vocational training in archaeology. In order to be successful, it needs to be valued by individuals and employers. Over the coming months, IFA will be publicising and promoting the qualification and we welcome any comments. More information on the NOS and the Qualification can be found on the training pages of the IFA website at www.archaeologists.net.

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Coastal Zone Assessment Surveys: recording coastal erosion in Scotland

Mike Cressey, Melanie Johnson, Phil Richardson and Tom Dawson

Coastal erosion in Scotland is an everyday occurrence, varying from a few millimetres to several metres a year. Loss of coastal sediment and exposure of important archaeological sites and artefacts are not new phenomena, but our response to the rate of erosion is now an important issue. Coastal erosion is predicted to get much worse over the next fifty years, particularly in areas of soft sediment, as extreme storm frequency will increase as a result of climate change.

It is ten years since Historic Scotland commissioned the first Coastal Zone Assessment Survey (CZAS), which was carried out by CFA Archaeology along the north shoreline of the Solway Firth between Drumore Point west and Gretna Green, a distance of 317km. Since then more than 25% of the coastline of Scotland has been surveyed.

Recording exposed archaeological remains in the cliff on the island of Baile Sear, North Uist. © CFA



The Scottish coastline covered by Historic Scotland-funded Coastal Zone Assessment Survey (CZAS)

Assessing erosion

The Coastal Survey methodology was originally devised in 1994 by Patrick Ashmore and published as *Archaeological Procedure Paper 4 – Coastal Zone Assessment Survey*. The strategy was devised to obtain maximum information from a strip extending 100m inland, including the foreshore and intertidal zone. Three essential classes of information were gathered and noted on maps and gazetteers

- hinterland geology and coastal geomorphology – identifying surface and underlying coastal deposits and landform processes and highlighting coastal areas below 10m OD
- erosion class – estimating the extent and severity of erosion, with areas of accretion and stability
- built heritage and archaeological sites – indicating all known and new sites, recording their condition and recommending future actions.



Eroding cliffs at Newshot Island, River Clyde. This land is retreating at over 1m a year. An anchor and chain seen in the foreground were originally on dry land and would have been used to control large ships being launched from one of the ship building yards at Clydebank. © CFA

Underlying geology and local topography are critical in understanding how a site may be affected, and areas where active erosion is on-going are assessed by a coastal geomorphologist to establish the rate of sediment loss, instability and other factors. In place of the original hand-coloured maps showing each section of coastline as stable or eroding we now use GIS mapping techniques, and differential GPS receivers help speed up data recovery in the field, yet Patrick Ashmore's methodology still underpins each CZA survey.

SCAPE projects

The SCAPE (Scotland Coastal Archaeology and the Problem of Erosion) Trust was established as a charity in 2001 to research, conserve and promote the archaeology of Scotland's coast. SCAPE has managed all Historic Scotland-sponsored coastal surveys since 2001, the charity's affairs being coordinated by Tom Dawson, Katinka Stentoft and Labhaoise McKenna. A key SCAPE project is the award-winning Shorewatch initiative, which encourages and assists local groups to locate, record and monitor archaeological sites. These groups are in an ideal position for this work, as they are able to draw upon local knowledge and are on-hand to note damage or changes that occur after storms or extreme high tides.

Public outreach, particularly for Shorewatch groups, is a requirement of all coastal surveys managed by SCAPE, and CFA has aided several groups. Clyde Shorewatch Group for

example was helped to develop expertise to produce detailed surveys of fishtraps within the intertidal zone close to Helensburgh and to record the rate of cliff recession at Newshot Island. In 2006, the Group set up monitoring stations at an intertidal crannog near Dumbarton, the first step in a programme of long-term monitoring of erosion of exposed timbers

Storm damage

In January 2005 the western side of North Uist was battered by the worst storm in living memory. This had a massive impact on the machair dunes facing the Atlantic, an area of coast already seriously affected by erosion. The island of Baile Sear lost at least 20m of coast in places, including a huge stretch of dune containing a large later prehistoric site. In response to this damage CFA undertook a coastal survey which recorded erosion affecting 41% of the coast and identified over 450 new sites, more than doubling the number of known sites along this stretch of coast. In response, SCAPE encouraged a local group, Access Archaeology, to monitor threatened sites, with special emphasis on Baile Sear. The group have made regular visits to vulnerable sites and one member, Ronnie Mckenzie, has been photographically charting change at sites at regular intervals since spring 2005.

Then, in October 2006, parts of the eastern seaboard of North Uist were surveyed by CFA. This region is characterised by a fjord system of lagoons and small semi-tidal and freshwater basins. One project aim was to see whether particular parts of a coastline could be prioritised for survey from desk-based assessment alone. Although the effects of erosion were less dramatic than on the Atlantic side, 660

previously unrecorded sites were found, amounting to a fifteen-fold increase in archaeological sites. The desk-based assessment identified certain geomorphological regions that were more likely to be eroding, and preliminary analysis indicates that these correlated with the field survey results. We are confident that it will prove possible to classify stretches of Scotland's coastline as at greater or lesser risk to erosion and hence be able to focus our surveys where needed most.

Time and tide

'Time and tide wait for no man', so funds are being sought for new CZA surveys, community involvement and collaborative research over the next ten years. SCAPE is also currently reviewing all Historic Scotland-funded coastal surveys and will shortly be publishing recommendations for the methodology to be employed in future surveys. Time and tide won't wait for us, but we can be better prepared for them.

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Access Archaeology, monitoring the same site (below) on Baile Sear, North Uist. © SCAPE Trust

For more information about SCAPE, including all completed coastal survey reports, see www.scapetrust.org. More information about Shorewatch, including the work of the various groups, can be found at <http://www.shorewatch.co.uk>.

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Previously unrecorded remains exposed in a section of peaty soil on the east coast of North Uist during the 2006 CZA. © CFA



A member of Clyde Shorewatch team plotting a fish-trap in the River Clyde using a GS50 GPS recorder. © CFA



CLIMATE CHANGE: A THREAT TO THE HISTORIC ENVIRONMENT



The transformed isthmus beach between Eilean an Tighe and Garbh Eilean, the Shiant Islands after the summer gales of 2001 and 2004

This article is a personal view of climatic change and its effects on archaeology and the heritage, and an exploration of what the future may hold. I am resident in the Czech Republic and in 2002 saw the country, including my own town and house, swept with devastating floods. Prague itself was extensively inundated. The Institute of Archaeology there was almost destroyed, site archives and photographs, library, computer rooms, offices and artefact storerooms were severely affected, many terminally. This well publicised disaster bought a wonderful, world wide response from the archaeological profession and the Institute was in some aspects restored to a better state than its former self. Such traumatic events are becoming increasingly common in Central Europe and the surrounding countries of Poland, Germany and Austria.

ERODING THE HEBRIDES

I also direct an archaeological landscape project on the Shiant islands in the Western Isles of Scotland. Each year we expect at least one severe, gale-force storm during our summer stay. This weather had become a familiar aspect of Hebridean life and Historic Scotland, aware that coastal erosion is a problem, invited the University of Sheffield to



Structural elements being washed out and away at the Sheader site, Sandray 1995

conduct surveys along the coasts. In 1995 on Sandray an important multi-cultural site, also the one time home of the notorious 'Vatersay Raiders', was found to be under erosional attack from winter gales. Evaluation excavations revealed that the site was built on and within a sand dune formation and that the gale-driven sea was progressively sucking its way around to the rear, removing cover-sand and revealing stone structural elements temporarily perched on sand columns (From Barra to Berneray, Sheffield Academic Press and Historic Scotland 2000).

Familiarity with the Yorkshire coastline had shown me the erosional consequences of sea action on the glacial clays and vulnerable deposits of Holderness, but this island survey work bought home the realisation that the archaeology of every coastline was endangered. During the summer seasons of 2001 and 2004 of the Shiant Islands Project gale force storms completely and dramatically remodelled the isthmus beach between the islands



Sandray. The Sheader site, dating from the Late Bronze Age to 1911, under threat 1995

of Garbh Eilean and Eilean an Tighe. By this time climatic change was being discussed and reported with greater detail and seriousness and the connection with the transformation of the Shiant coastline was readily understood. Then in January 2005 a winter gale hit the islands with unprecedented ferocity. The west coastlines of Scotland and the islands as far north as the Shetlands were hit.

DESTRUCTION INLAND

On the Shiant's great chunks of the columnar basalt cliffs were detached and collapsed and large areas of the low foreshores were eaten away, but probably most alarming was that waves thrown into the air after hitting the reefs and bottoms of the cliffs were snatched by the wind and driven inland. After the airborne water cascaded to the ground the sucking action as it raced back to the sea plucked any loose part of the cover soils away with it. Areas away from the sea edge, on previously safe ground, were deeply eroded. Many were archaeologically sensitive, a newly revealed Late Bronze Age-Early Iron Age site on the edge of Eilean an Tighe bay and the foundation soils around Compton Mackenzie's old cottage for example. An early medieval, possibly monastic, and Iron Age site was substantially eroded along its sea front, and sites on the northern end of the Eilean an Tighe lower settlement area were similarly threatened. Details are published on www.shiantisles.net.

Weather in Central Europe and the Western Isles of Scotland illustrate increasingly rapid development of erratic weather patterns combined with the accumulating increase in world wide sea levels.

Elsewhere for example the permafrost of Siberia is thawing, causing buildings to collapse. Ice melt in Greenland is much faster than expected and a sea rise is forecast which is higher than much of Norfolk. While Spain and Portugal become a European desert, England may become some new pattern of island chains, yet archaeologists rarely consider the implications. In the forthcoming IFA seminar *Get ready for 2007: new developments in archaeology and heritage* the themes are curation, stewardship, professional qualifications, training etc, not imminent environmental change, though the subject will feature in the session *Visions for the future*, looking at challenges facing our profession.

Such rhetoric as expressed here may appear extreme, but in the Czech case the actual cost of the annual floods, both the extreme cases and the lesser inundations can be calculated in many millions of pounds, as can forest fires in Spain, Portugal, Greece and Italy, and floods and mudslides in Central Europe and Italy. Far worse will be the permanent loss of land, and more imminent still great loss and damage to archaeological sites.

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January 2005 storms. The massive bite taken out of the foreshore and the exposed foundations many metres behind the foreshore. The cottage was filled with beach gravel after the front door was smashed open

Fieldwork & monasticism: field survey at Sempringham Priory, Lincolnshire

Glyn Coppack and Paul Cope-Faulkner

How much can fieldwork without excavation tell us about a medieval religious site?

At the Gilbertine priory of Sempringham, one of the great lost monasteries of medieval Europe and the mother-house of the only English monastic order, worsening problems caused by agriculture encouraged us to find out. The survey, which was supported by English Heritage, comprised interpretation of all available aerial photographs, extensive geophysical survey and fieldwalking over the site of the priory and the former village.

An English compromise

Sempringham was developed by Gilbert of Sempringham in the 1130s in collaboration with Bernard of Clairvaux and Ailred of Rievaulx, both Cistercians, the two people who had the most

profound influence on the development of the monastic church in 12th-century Europe. It was the first of a series of double monasteries, with nuns, lay sisters and lay brothers following something akin to the Cistercian rule, with canons to provide spiritual guidance following a version of the Augustinian rule, a great English compromise. The rule has been the subject of intense historic debate but there is no sound archaeological or architectural context in which to understand it.

Celibacy in the village

Gilbert's influence was such that he had persuaded virtually all the village to become celibate by 1148, both men and women entering the monastery, although this just may be a bit too simplistic. All that is now left of the village is the isolated church of St Andrew, dating to approximately 1160 and probably subsumed into the monastery precinct at



Sempringham Priory from the air. The east end of the priory church with the dividing medial wall is clearly visible, with cloister ranges to the north and south. The earthwork in the foreground is the outer court of Edward Clinton's mansion. © Ministry of Defence EU8



A contrasting aerial view of soilmarks above the priory and village. In the central foreground, most of the soilmarks relate to the post-suppression house with garden areas to the west and east of the outer court earthwork. Part of the monastic precinct can be identified in the immediate foreground. Sempringham village lies west of the church where darker soilmarks, representing cultural material, and the lighter rectangular marks of buildings can be seen. Photograph: Simon Erskine Crum

an early date. This presumably replaced the church in which Gilbert first established a house or cloister for women.

The monastery was suppressed in 1538 and replaced by a substantial mansion by Edward Clinton, Earl of Lincoln. A monastic building was converted to use as a kitchen, and gardens were enclosed by stone walls to the east, south and west. The layout is akin to Wolsey and Henry VIII's Hampton Court or Lord Chancellor Audley's great house at Audley End in Essex.

The site of the priory was unknown until small-scale excavations in 1938 revealed walls of the post-suppression house and the ground plan of the church. Evaluation in the 1980s assessed the damage caused by agriculture to buried remains.

Tracing the structures

Aerial photographs, plotted by Rog Palmer of Air Photo Services, showed the east end of the monastic church with associated claustral buildings, including two cloisters sitting astride the church. The village survived as hollow ways and enclosures. Fresh photographs by Simon Erskine Crum displayed soilmarks across the site, and individual walls, with dense spreads of darker soils containing cultural material, could be traced, mostly relating to the post-suppression house. Garden areas and courts of the mansion are clearly visible.

Magnetic survey proved quite useful in determining the layout and extent of the village, although a number of features could not be interpreted. The piped water supply to the monastery was identified,

leading from the 'Holy Well' at St Andrew's church towards the northern cloister. Selected areas of resistivity survey were carried out over buildings in the outer precinct, though here the results were not good due to demolition material. However, over the church results were exceptional, with St Gilbert's shrine, steps in the southern church, buttresses and vaulting shafts all discerned.

Saxon origins?

Fieldwalking by Archaeological Project Services produced a massive quantity of finds, some 47,600 items, dating from the prehistoric to post-medieval periods. The site of the village showed continued occupation from Early Saxon times to the end of the medieval period. Saxon finds are also recorded from the site of the subsequent monastery, giving rise to discussion on whether there was a precursor to the 12th-century monastery during the Middle Saxon period. Clusters of finds from the village were related to the darker soil marks of the individual tofts which were further marked by denser quantities of loose limestone and roof tile. A discrete area of burning is thought to be a tile kiln and kiln props are recorded in the assemblage.

Over the priory, finds mostly related to the post-suppression house and medieval finds were not as numerous as should be expected. Tile was rare but the priory was known to be covered in lead which was removed at the King's orders in 1539. The area of the south alley of the southern cloister produced

Results of the resistivity survey south and east of the outer court. The east end of the priory church, a chapter house and elements of the west range of the east cloister are clear. Photograph: EAS Ltd



Geophysical survey showing the magnetic results from the priory area. The white square is the outer court earthwork. Monastic buildings are not clear and the rectangular anomalies are principally of the post-suppression house. Photograph: EAS Ltd

Fieldwalking in progress, the rope grids used can just be discerned. Photograph: Archaeological Project Services



a rare 12th-century gilt bronze tap, where we may expect the *laver*. Other metalwork includes a decorated travelling chalice case lid, along with inscribed lead weights and book fittings of remarkable quality.

Fieldwalking identified buildings of the outer precinct set around smaller courtyards and along the southern boundary, perhaps including a gatehouse. Ironworking residues were collected adjacent to a mill-pond. Outside of the precinct, a bell-casting pit was visible on the field surface.

A context for Priory and mansion

Fieldwork therefore has put pre-war excavations into a meaningful context, established the extent and layout of the first Gilbertine priory and

identified both its cloisters, identified a major Tudor mansion (with partial building accounts), recovered cultural material identifiable to individual structures that will provide their date range and untangle the monastic buildings from post-suppression house, and demonstrated that the site is actively threatened from continuing cultivation, with the northern and southern extremities at severe risk.

Now we hope these results will lead to a research project, with a long-term management plan and interpretation for a major archaeological site. Other Gilbertine houses in Lincolnshire, Haverholme and Nuns Ormsby, have undergone unpublished excavations during the 1960s, and Lincolnshire County council and APS have recently completed an earthwork survey at Catley Priory, again incorporating fieldwalking data, so the years ahead look to be an exciting time for the rediscovery of the Gilbertine Order.

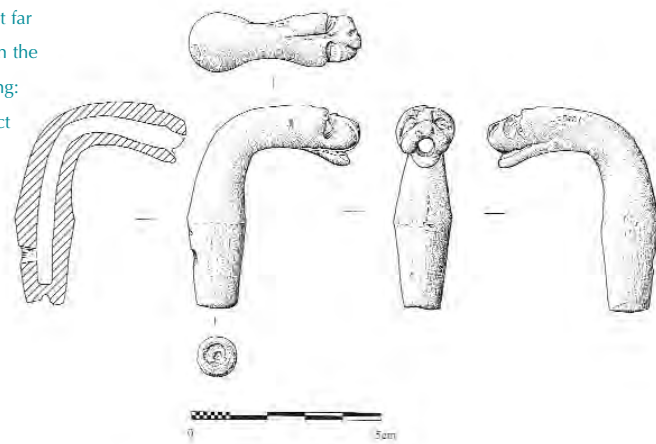
Glyn Coppack (English Heritage)
Paul Cope-Faulkner (Archaeological Project Services)

Golding B 1995 *Gilbert of Sempringham and the Gilbertine Order c. 1130 - c. 1300* (Clarendon Press: Oxford)

Graham R & Braun H 1940 'Excavations on the site of Sempringham Priory', *J British Archaeol Assoc* Third Series 5, 73-101

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The 12th-century gilt-bronze tap head retrieved not far from the *lavatorium* in the south cloister. Drawing: Archaeological Project Services



ENGLISH HERITAGE and LANDSCAPE ARCHAEOLOGY

Peter Topping

English Heritage's Archaeological Survey and Investigation Team (AS&I) has a long-held reputation for delivering cutting-edge, definitive analytical fieldwork as part of the Research Department's multi-disciplinary approach to studying the historic environment. The specialism of landscape archaeology is non-invasive and rapid; it develops understanding of archaeological sites in their settings through detailed observation and research. As such, our projects draw on the work of other disciplines including architectural investigation, geophysical prospection, aerial survey and excavation, to provide the widest understanding of a given area.

Partnerships

In most cases, EH's integrated fieldwork has been undertaken in partnership with National Parks, Areas of Natural Beauty (AONBs), Heritage Coasts, Defence Estates, Natural England, the Environment Agency and local authorities – over a hundred organisations during the last decade. This research has fulfilled joint agreements and underpinned management and interpretation strategies, particularly at sites of national importance like Silbury Hill or those threatened, such as the 19th-century alum works eroding from the North Sea cliffs in Yorkshire. Key foci for EH's landscape projects currently include protected landscapes in the Dartmoor National Park and AONBs in the North Pennines and Mendips, sites of national importance with conservation concerns such as St Mary's Garrison, Isles of Scilly, and Guardianship monuments where improved understanding can enhance public enjoyment.

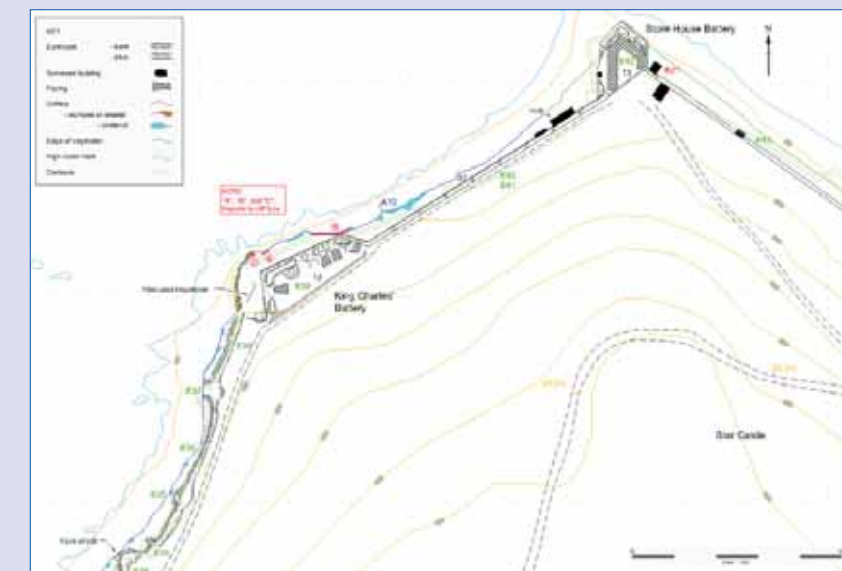
Management and interpretation

Landscape archaeology provides holistic understanding of the historic environment, from the role of its component parts through to the structure and functioning of its totality over time. Fieldwork can identify priorities for management, recording erosion impacts or predicting threats, and contextualise monuments of cultural significance. The value of landscape archaeology to conservation professionals lies in its rapid, cost-effective response which provides definitive documentation to define the detail and full extent of a monument or landscape for management and interpretation. In those cases where sites cannot be preserved, such as the coastal alum works, it can also provide a record for future generations.



The threat from coastal erosion at The Garrison, St Mary's Isles of Scilly

An excerpt from the AS&I survey of St Mary's Garrison. Along the cliff edge a gun battery of mid-18th century date is visible, with its curtain wall. To the south three Civil War earthen gun batteries are linked by a bank and ditch earthwork, now on the cliff edge and threatened by coastal erosion. This survey demonstrates the ongoing damage to the sea cliffs and the threat to these rare and largely untouched examples of early fortifications. Copyright: English Heritage



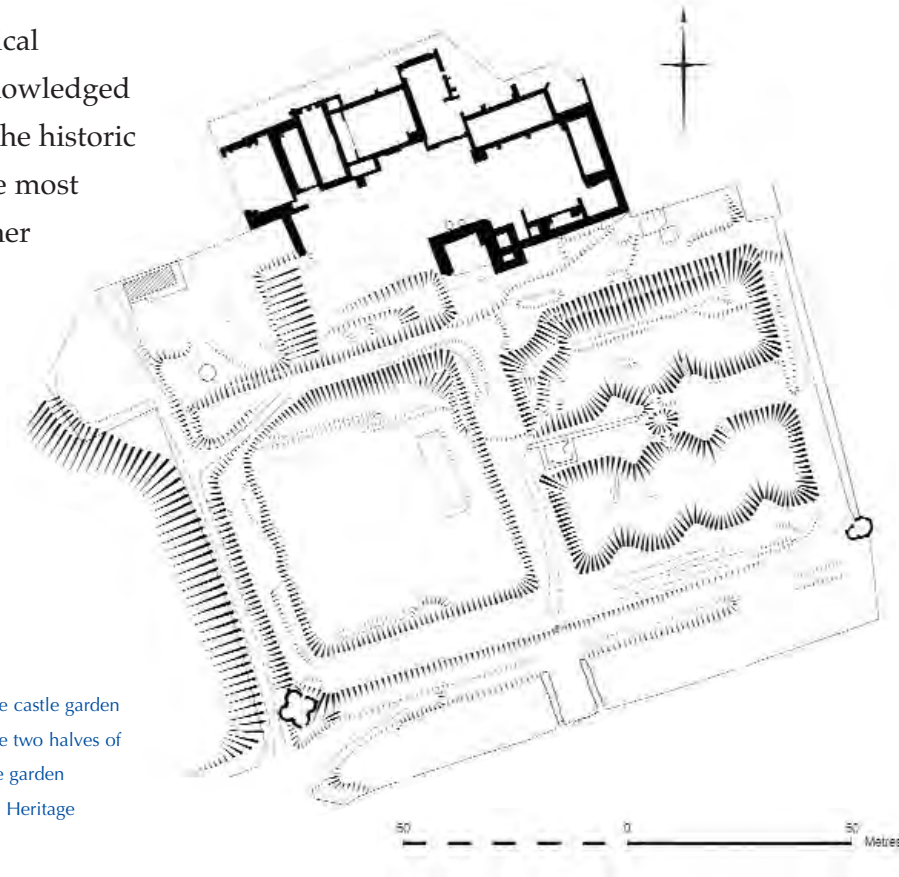
Despite the recognised value of landscape archaeology to the broad heritage sector, few professionals are employed in the subject, partly because developer-funded archaeology is not often able to move from excavation to broad contextualisation of landscapes. Yet it is precisely the grand narratives of landscape change and development which engages the public imagination, and helps conservation professionals to manage and prioritise the monuments in the wider historic environment.

Peter Topping
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Investigating a Tudor garden

Sarah Newsome

As Peter Topping reminds us, analytical landscape survey has long been acknowledged as an effective tool for investigating the historic environment. However, its results are most informative when used alongside other techniques. One example is a multi-disciplinary research project undertaken at Ashby-de-la-Zouch Castle, Leicestershire in 2006 by English Heritage, supported by a grant from the Wolfson Foundation Gardens Challenge Fund.



The 1:500 scale survey plan of the castle garden shows the differences between the two halves of the garden and the position of the garden buildings (not to scale). © English Heritage



Eastern section of the garden viewed from the top of Hastings Tower. The elaborate scalloped sides of the sunken areas were originally more angular.

© English Heritage

Interpreting a Tudor garden

Ashby-de-la-Zouch Castle, currently under English Heritage guardianship and open to the public, is not a castle in the true sense but the ruins of a grand fortified manor house, once owned by the powerful William, Lord Hastings, Lord Chamberlain to Edward IV. Immediately adjacent to the castle lies a poorly understood garden, thought to date to the Tudor period. It comprises sunken areas surrounded by terraced walkways and the ruins of two brick garden buildings. The aim of this project was to improve understanding and on-site interpretation of the garden, perhaps even with a virtual reconstruction. Survey of the surface remains informed the subsequent geophysical surveys, coring and excavation, all aimed at understanding the date and nature of the garden remains and their relationship to the castle and its wider landscape.

Garden compartments

Analysis of the earthworks and buildings has revealed that the garden, originally enclosed by a high brick wall, was just one part of a designed landscape. Earthwork terraces and in-filled ponds west of the site relate to former garden compartments which can be identified on historic maps. Careful study of the sunken areas demonstrated that their previous interpretations as a bowling green and ornamental ponds were incorrect. Geophysical survey and excavations confirmed the conclusions of the analytical landscape survey in these areas.

Garden buildings and beds

The survey also demonstrated that the hole in the terraced walkway across the eastern garden was a modern break in the scarps defining the sides of the terrace, suggesting a garden building or a fountain may have been located in the hole. Excavations subsequently revealed the foundations of brick-built circular structure, interpreted as a third garden building. This find is particularly important as it has implications for symmetry and access within the garden.

Inevitably certain techniques revealed more information about particular aspects than others. Excavations in particular revealed important details of the garden design, such as flower beds picking out the elaborate shape of the eastern sunken areas and bands of multi-coloured sandstone, possibly laid out in a pattern to be viewed from the top of Hastings' Tower.

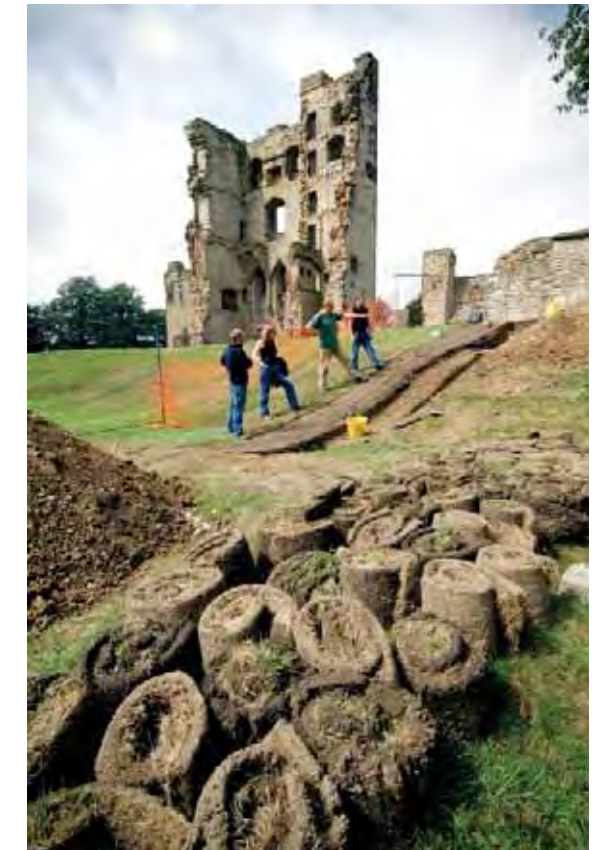
A garden in wartime

A trench positioned to examine the demolished garden wall and parallel features detected by geophysical survey revealed how the garden was constructed, with terraces built up against the wall. This trench also highlighted the role the garden later played in the defence of the castle during the Civil War. It appears that a ditch was dug in front of the garden wall to increase its defensive value, with a covered way constructed behind. Excavations closer to the castle also revealed that a bank recorded during the analytical survey related to Civil War activities.

Early Tudor date

Historians examining documents relating to the castle, gardens and wider landscape have highlighted possible contexts for the creation of the garden and provided information on the nature and extent of the estate in which it was created. Interim dating evidence suggests the sunken garden was created in the first half of the 16th century, making it an extremely important and well preserved example of an early Tudor garden. Final results should be available by summer 2007.

Sarah Newsome (Investigator)
EH Archaeological Survey and Investigation Team,
Cambridge



Archaeologists discussing the excavation evidence in front of the ruins of Hastings' Tower. © English Heritage

Involving the community in field survey

'... the potential for understanding the historic environment through its most accessible and tangible elements – buildings, earthworks, vegetation – is still widely overlooked.'

Alastair Oswald

Over recent years, archaeology in the British Isles has seen an explosion of projects initiated by community groups, funded primarily by the Heritage Lottery Fund. English Heritage is keen to engage with and support these initiatives, which can channel the energy and knowledge of local people towards achieving outstanding contributions to local research and conservation. Some community groups have found they receive conflicting initial advice from heritage professionals and are persuaded to reach prematurely for their spades and trowels. While the usefulness of 'geophys' is well established in the public perception of archaeology (and is sometimes thought of as an infallible panacea) the potential for understanding the historic environment through its most accessible and tangible elements – buildings, earthworks, vegetation – is still widely overlooked.

An archbishop's garden
The approach taken by the Cawood Castle Garth Group, in North Yorkshire, represents an example of best practice, not just in archaeological methodology but in breadth of vision. A stone gatehouse, now owned by the Landmark Trust, is all that remains above ground of the buildings of the rural palace of the archbishops of York at Cawood. Fragments of the residence's magnificent late medieval gardens, on the other hand, survive as earthworks on Castle Garth, an expanse of pasture in the heart of the village. With a grant from the Heritage Lottery Fund, the Group planned and began archaeological

research and conservation measures designed to care holistically for all the Garth's resources, both ecological and historical. They are also improving physical access to the site and explaining its significance through various media, enhancing its use as a local amenity and broadening its appeal to visitors.

Newts and flowers

More than 30 members took part in a weekend training course, gradually deciphering the surface remains under expert guidance. The most striking aspect of the garden's design, first recognised in 1989 (Blood and Taylor 1992), is a rectangular plot in which a symmetrical arrangement of ornamental ponds and former orchards are surrounded by a moat, now dry. From this layout, aspects of the lost buildings of the palace can be understood. Only one of the ponds still holds water and this is now home to great crested newts rather than edible fish. One direct descendent of the medieval garden may be a tiny white flower known as 'Star of Bethlehem', discovered in long grass during a subsequent ecological survey of the Garth. York University Department of Archaeology has assisted with a 'molehill survey' for local schoolchildren, and the quantities of tile recovered may relate to visible clay extraction pits and documented kilns.

A low tech approach

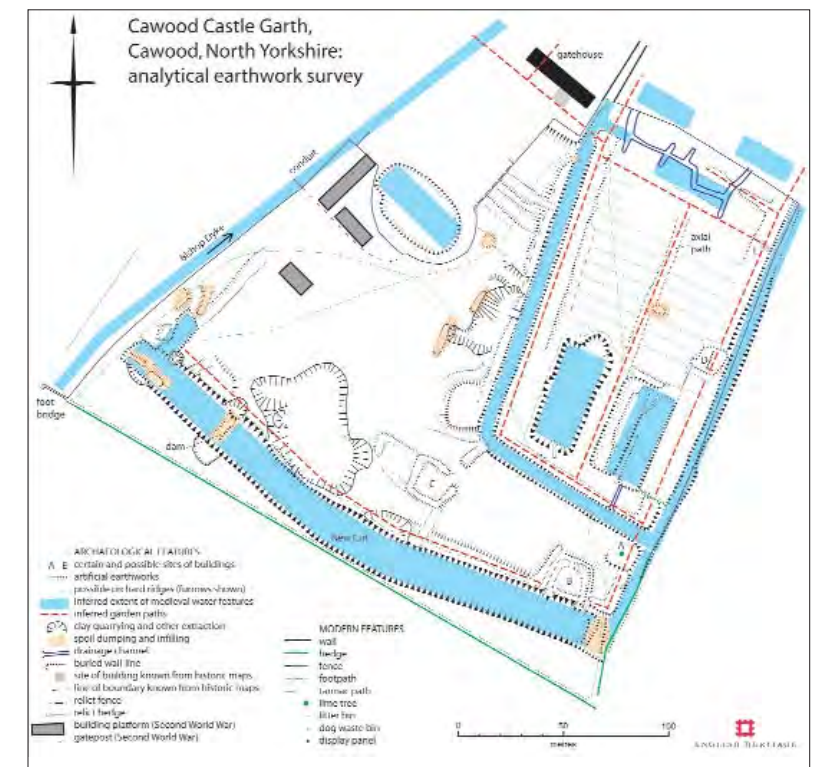
Survey techniques employed in the training weekend were deliberately 'low tech' to allow the whole group to participate and to illustrate how much can be achieved using cheap basic equipment coupled with an investigative mind-set. Beyond practical training, the weekend was designed to engender understanding of the value of a 'landscape' approach. A tour of the village with EH field investigators examined the role of the Garth in the context of the village's evolution. The tour itself became 'interactive', encouraging residents to recall oral history which opened up new possibilities for future research.

Margaret Brearley, co-ordinator of the Group's archaeological research, confirms that everyone is now inspired to go on and do more. To prove the point, they are extending investigations to the village's standing buildings, again with expert guidance from EH, and will be carrying out survey and dendro-dating of timbers exposed in the banks of the River Ouse, potentially relating to medieval wharfrage constructed by the archbishops.

The full report on the archaeological survey and investigation is available the National Monuments Record, ref: AI/16/2005

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York

Blood NK and Taylor CC 1992 'Cawood: an Archbishopal Landscape' *Yorkshire Archaeological Journal* 64, 83-102



The eventual plan © English Heritage



As part of the HLF-funded project the Group produced a video: an 'interactive guided tour' led by a member of the English Heritage Archaeological Survey and Investigation Team. This emphasises the role of the Castle Garth in the wider development of the village.
© English Heritage

English Heritage encouraged the Community Group to approach the historic environment holistically, using historic maps and combining earthwork evidence with the story revealed by surrounding upstanding buildings before progressing to geophysical survey or excavation; an architectural study of the village is their next goal. © English Heritage



NATURE TAKES ITS COURSE: UNDERSTANDING A THREATENED LEAD-MINING LANDSCAPE

Abby Hunt and Stewart Ainsworth

At Scordale in Cumbria, the AS&I Team is working in partnership with the MoD on an analytical survey of the once thriving lead-mining industry which occupied this valley and which is now being destroyed by the forces of nature.

UNNATURAL BEAUTY

Scordale is a remote valley on the fringe of the North Pennines escarpment. Flowing through the valley is Scordale Beck, a tributary of Hilton Beck within the catchment of the River Eden. With its steep slopes, dramatic streams and stark limestone buttresses, it appears to be a striking natural landscape, its location within the North Pennines AONB reinforcing this image. However, overlying Scordale's natural beauty is an artificial landscape primarily resulting from at least 200 years of lead and minerals mining, which finally ceased in 1919, and including pockets of

agricultural and settlement activity dating to the Bronze Age. At one time, the waters of the Scordale Beck provided the lifeblood for the lead-mining industry, but today they threaten survival of archaeological remains and are having a detrimental effect on the wider landscape, undermining roads, tracks and field walls.

The role of historic human land-use as a factor in the dynamics of the river system was hitherto unclear due to the absence of a systematic study of the nature and scale of the industrial activity in its landscape context. The current project is a multidisciplinary one, integrating archaeological analysis with scientific research into hydrological modelling and climate change undertaken by the Geography Department of Durham University as part of a study of the fluvial mechanics of Hilton Beck, commissioned by the Eden Rivers Trust in collaboration with MoD. The results will inform both short and long-term management and conservation as well as forming the basis of

methodological models for research into similar archaeological and hydrological interfaces elsewhere in the North Pennines.

DESTRUCTIVE NATURE

Scordale contains a number of scheduled monuments, two of which – the area associated with lead-mining and a Bronze Age field system – are directly adjacent to Hilton Beck. Torrents of water which cascade down the beck have resulted in partial destruction of the standing remains of mills, processing buildings, washing floors and spoil heaps. With each episode of heavy precipitation, further destruction is inevitable. In the absence of previous detailed survey or understanding (of the lead-mining remains in particular), it was impossible to quantify the true extent and impact of destruction of the archaeological resource. Detailed recording is therefore providing 'preservation by record' as well as allowing in-depth analysis of evidence, which can be very complex in industrial landscapes.

SURVEY AND CONSTRAINTS

Evidence for processing methods, location of specific activities and change over time can only be gleaned by detailed examination of the surface remains. Experience has demonstrated that this level of detail and analysis cannot be gained and recorded by remote methods, such as aerial photography, but need ground-based analysis and survey. However, Scordale lies within the MoD Warcop Training Area, where access is severely

limited, with only one single week and a handful of weekends guaranteed each year. In order to maximise the limited time on the ground, the detailed recording, at scales varying from 1:20 to 1:1000, is being restricted to the most complex and threatened remains. Specially acquired digital aerial photography provides an orthophotograph of the valley, a basis for photogrammetric recording of the broader area. A rapid ground survey will subsequently be conducted to enhance the area covered by the transcription and integrate the results into the analysis.

PEOPLING THE LANDSCAPE

Although the focus of recording is post-medieval lead and barytes extraction, the purpose of the project is to research and record all Scordale's archaeological remains. This will allow us to understand and more fully assess the impact of the industrial activity on early exploitation of this landscape and identify the threat from river erosion. To provide a complete picture, documentary research will include consultation of the records of mining companies which exploited resources here. We will also be collating the stories and personal archives of local residents whose forebears once worked there, allowing us to people the landscape which we are endeavouring to understand.

Abby Hunt (Investigator)

Stewart Ainsworth (Senior Investigator)

EH Archaeological Survey & Investigation Team, York



Hilton Beck meandering through Scordale with the Bronze Age field system on the far side of the river. The lead mining remains are situated further up the valley, in the far distance. © English Heritage



An example of the scale of erosion occurring in the core lead processing area. © English Heritage



The crushing mill in the valley floor. In the foreground are remains of a timber chute which would have brought ore from the mines to the mill. © English Heritage



The situation of the scheduled monuments on an active firing range means that access is heavily restricted. © English Heritage

Tracing an *Oppidum* in a wooded landscape

David McOmish and Sarah Newsome



The War Dyke at Whiteways Plantation.
© English Heritage



Archaeological field survey in wooded landscapes always presents challenges but can provide remarkable rewards. The rolling chalklands of the South Downs are one such area. Recent reconnaissance work at Goblestubb's Copse within an area of managed woodland, Rewell Wood, west of Arundel, West Sussex, has highlighted a complex of well-preserved earthworks which may have implications for our understanding of the area around the time of the Roman Conquest.

These earthworks were thought to be medieval and relate to stock or deer management, but fieldwork by Worthing Archaeological Society and English Heritage, which linked the Goblestubb's complex to a wider series of enclosures and IA/RB sites, suggested these too belonged to this earlier period, despite their relatively fresh appearance. This interpretation was supported by the Society's discovery of notes in Worthing Museum relating to a forgotten excavation of an early Roman site in the copse undertaken in 1971.

Last summer the Society excavated an adjoining enclosure, confirming that it was an extension of the main Goblestubb's complex and part of a concentration of Late Iron Age or Early Roman enclosures within Rewell Wood. There was also

detailed reconnaissance and landscape analysis elsewhere in the wood, especially on War Dyke, a major linear boundary defining the concentration of enclosure earthworks. Here, a bank and ditch parallel to War Dyke may in fact be part of an unrecognised large hillfort-type enclosure. The stratigraphic relationship between these two features complements existing evidence for a Late Iron Age date for War Dyke.

Analytical landscape survey within Arundel Park has also led to the reinterpretation and recognition of elements of a later prehistoric and Roman landscape, their date supported by excavations and finds evidence indicating early Roman villas and settlements in the area. Taken in combination this archaeological evidence north and west of Arundel is striking and suggests a focus for both pre- and post-conquest activity. One suggested interpretation is that the enclosure complexes, surrounded and divided by large linear earthworks, represent an *oppidum*, a large pre-Roman trading centre which was the focus for many different types of activity.

Traditionally War Dyke and associated earthworks have been seen as a western extension of the Chichester Dykes, with Selsey and early activity at Fishbourne the focus of the 'missing' *oppidum* identified in classical texts on the coastal plain within the kingdom of the Atrebates. This recent landscape analysis around Arundel raises the possibility that the 'missing' *oppidum* lies much further west, bounded by War Dyke and the navigable River Arun, known to the Romans as *Trisantonā*.

David McOmish (Senior Investigator) and Sarah Newsome (Investigator)
EH Archaeological Survey and Investigation Team,
Cambridge

Drying loft, the only surviving building of the oak-bark tannery at Tanyard Farm, Kingston St Mary. Photograph: Hazel Riley



NEW INTERPRETATIONS in the QUANTOCK HILLS

Hazel Riley

The Quantock Hills are a compact but diverse block of upland in Somerset, bordered by the Bristol Channel, Somerset Levels and Moors, the Vale of Taunton and the foothills of Exmoor. They were designated an AONB in 1956 but have seen much change since then, in farming practice, management, nature conservation, vehicle access, the visitor experience and in how we perceive and record the historic environment. A project to record this historic environment was requested by the Quantock Hills AONB Service and Somerset's county archaeologist, to complement work carried out there on the natural environment and to provide baseline data to aid management, conservation and interpretation.

Leslie Grinsell's *The Archaeology of Exmoor* (1970) included accounts of the principal field monuments of the Quantocks, from standing stones to motte and bailey castles, but it was not until Richard McDonnell published his aerial photographic transcription of the AONB that a fuller picture of the depth of time contained within the landscape began to emerge (McDonnell 1990).

ARCHAEOLOGY in HEATHS, WOODS and FIELDS
Our survey needed to be flexible enough to employ different recording strategies as themes and issues arose. Aerial photographs were mapped as part of EH's National Mapping Programme, and aspects of historic buildings were considered by our Architectural Investigation Team. Unenclosed heath was a target area for intensive ground reconnaissance by the AS&I Team. The oak woodlands seemed to be unknown in terms of historical importance. Agricultural landscapes of the southern Quantocks, rich in cropmarks, were already being tackled by geophysical surveys and targeted excavation – the Southern Quantock Archaeological Survey by the University of

Winchester, who were keen to explore the prehistory of this area.

DATING by RELICT FIELDS

Heathland provided us with some of our most challenging fieldwork experiences. The location of the hills, close to the Bristol Channel coast, and their relatively low elevation (less than 400m) result in a lush vegetative cover of heather and gorse. However, it contains a valuable tool for broad dating of landscape features. A common practice in the historic period was periodic cultivation of waste, which was usually common land. On the Quantock Hills, aerial survey shows that large parts of the heath were covered in relict field systems left by this practice. It broadly dates from the 16th and 17th centuries and so gives a chronological indicator across the heathland. For example, a relict field system overlies an unfinished hilltop enclosure, supporting its probable prehistoric date, and also several ponds, pushing their date back to the medieval period when the common was used for pasturing cattle. On the other hand, a supposed prehistoric settlement on top of a relict field system



Withyman's Pool on the Quantock heath, dug in the medieval period to provide a reliable water supply for cattle pastured on the commons. Photograph: Hazel Riley

was, in fact, the remains of a searchlight battery dating from the Second World War.

CHARCOAL, TANNERIES and GLASS

Oak woodlands contained some of the densest concentrations of archaeological remains on the hills and a strategy for dealing with them had to be developed. Two combs and their tributaries were examined in detail on the ground and research related the archaeological remains to their historical context. Blocks of outgrown coppice stools and hundreds of charcoal burning platforms were the link to oak-bark tanneries in the villages at the foot of the hills and early glass manufacture in Bridgwater. These discoveries began to challenge the notion of the tranquil Quantock landscape which inspired the Romantic poets Coleridge and Wordsworth at the end of the 18th century. The Southern Quantocks Archaeological Survey revealed a rich Romano-British landscape around the south side of the hills, discovered a Roman villa built over an Iron Age enclosure, and excavated a 7th-century cemetery overlying prehistoric enclosures (King 2004; Webster and Brunning 2004).

One outcome of the survey work is publication in an accessible form, drawing on all the diverse material but emphasising above all a strong sense of discovery, a strong sense of history and a strong sense of place. The work is published by English Heritage as *The Historic Landscape of the Quantock Hills* (H Riley 2006).

Hazel Riley (Investigator)
English Heritage Survey and Investigation Team, Exeter

King T 2004 *Yarford Interim Report*, University of Winchester website

McDonnell RRJ 1990 *The Quantock Hills Area of Outstanding Natural Beauty*. Summary Report of an Archaeological Survey. Somerset County Council

Webster CJ and Brunning RA 2004 A seventh-century AD cemetery at Stoneage Barton Farm, Bishop's Lydeard, Somerset and square-ditched burials in post-Roman Britain. *Archaeol J* 161, 54-81



Surveying the unfinished enclosure on Bicknoller Hill with differential GPS. The relict field system can be seen running over the bank in the foreground. Photograph: Hazel Riley

Investigating modern landscapes

Wayne Cocroft

The techniques and inquisitiveness of landscape investigation described elsewhere in this issue are equally applicable to the study of landscapes created in the last century. During this period a fundamental change took place in the way the countryside was exploited as the state mobilised land for war, and in peacetime created new settlements, road systems, and in places industry. It was also a landscape that rapidly devoured itself as successive generations eradicated the evidence of earlier periods of activity, as industry was replaced by the ubiquitous shopping centre, or government-funded reclamation scheme.

Military remains

Military sites cover hundreds of hectares and comprise many hundreds of buildings, or their remains, and are so extensive that they might be regarded as landscapes. A landscape investigation approach is able to reveal their phasing, spatial relationships, and functional areas, in addition to acknowledging the significance of planting schemes, individual structures, as well as relic plant and equipment. In many instances detailed plans are available that may be used as the basis for historical documentation; elsewhere activities were transitory and even if a record plan was drawn it has often been destroyed or lost. In these circumstances analytical field survey is one of the most effective means of recovering lost places where perhaps thousands of people worked, or trained for war.

SPADEADAM ROCKET ESTABLISHMENT

During the late 1950s, Spadeadam Waste, Cumbria, 3000ha of upland which was already being transformed by the Forestry Commission from rough grazing to coniferous plantations, was acquired to develop Britain's intermediate range ballistic missile *Blue Streak*. Here, in a couple of years, one of the world's most advanced rocket test facilities was created. A generation later they lie in ruins, monuments to Cold War fears and Britain's part in the space race.

Missing features

Today the range is managed by the RAF and Defence Estates through an Integrated Rural Management Plan. Understanding is the key to future management of the range's historic resources here as elsewhere. An archaeological survey of the key test areas has provided estate managers with precise identifications of all the rocket establishment's buildings and ancillary features. Although original site drawings survive their coverage is patchy and for some areas non-existent. They also often represent the engineers' original intentions but omit later modifications. Important aspects of the site's construction and social history were also absent from the plans, including a large concrete mixer, temporary navy camp and building workers' huts. Also absent from the drawings were features associated with the site's use in the 1960s by the European Launcher Development Organisation and later by the RAF.

Underground launcher?

Even on a site as well-documented as Spadeadam aspects of the site's history remained poorly understood and archaeological remains are the only independent confirmation of their existence. One persistent rumour was that work had started on an experimental underground launcher facility, or silo. Contemporary air photographs revealed disturbed ground in an area where it was suggested that the silo excavation might lie. Earthworks in the area revealed a roughly circular hole with traces of a concrete lining around its lip and a by-pass channel with sluices to divert water around the excavations.

Social history

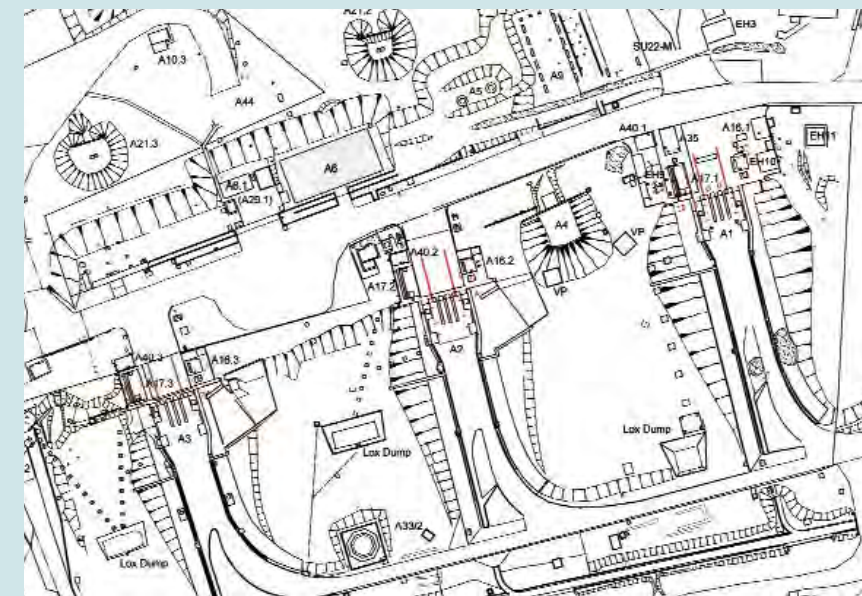
The Rocket Establishment is a landscape that has been created and ruined in living memory. Many of the people who worked on the *Blue Streak* project live in the Carlisle area, and Tullie House Art Gallery and Museum recorded their recollections during an oral history project. This made a significant contribution to understanding the establishment's social history, and clarified many

aspects of the site's operation. Anecdotes shed light on the transient navy community, but traces of its hut bases revealed by archaeological survey are its most tangible remains. Another perspective on the range was provided by the artist Louise K Wilson, who was also becoming interested in the human technological presence in the landscape. In her film *Spadeadam* she recorded interviews with the rocket men and today's pilots, who snatch fleeting glances

of the practice range flattened by altitude and speed. A further transitory technological presence in this landscape was added by the archaeologists traversing the ground with theodolites and GPS equipment.

Wayne Cocroft (Senior Investigator)
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RAF Spadeadam, Cumbria, extract of the survey diagram showing the late 1950s engine test stands at Priorlancy Rigg. © English Heritage



RAF Spadeadam, Cumbria, Greymare Hill. The remains of the Blue Streak missile stands are some of the country's most imposing Cold War monuments. Crown copyright. NMR



RAF Spadeadam Cumbria, Priorlancy Rigg remains of one of the engine test stands with a 1950s T33 a Shooting Star used as a range target. Crown copyright. NMR



RAF Spadeadam, Cumbria, Priorlancy Rigg. © English Heritage

Getting a better VIEW

Derek Ashman



View from Elgin Cathedral © Higher View Aerial Photography Ltd

Getting up high is invaluable for the archaeologist, whether to get a good clear view of sites in their landscape, to help with recording, or just (just! *Ed*) to give a dramatic shot for publication. As a photographer for over thirty years, most of this time working in aerial photography, I of course think that photography is the best way to accurately record detail and that aerial photography is best of all for giving an overall picture. Today, there are several options for elevated or aerial photography.

- 1 Normal hand-held photography is fine, until you need images of larger areas or an elevated perspective. A nearby building may be convenient, but it usually isn't.
- 2 Scaffold platforms can be hired. These now need permits and have onerous health and safety issues.
- 3 A system of interlocking poles mounted on three legs can go up to about 15m, basically a very high tripod. Smaller systems are fine for small areas, are easily transported and are

comparatively cheap (£4-£6,000). Height is restricted, they usually need guy lines and can only be used in very low winds.

- 4 Small vehicle or trailer-mounted systems are similar, but because they have a large stable mount greater heights can be achieved (up to about 20m). Advantages of this system are the stable platform and the fact that the operator can be directed in real time. Height is limited to 20m, they usually need guys attached, the payload at masthead is quite small and they are expensive to buy. Sites have to be accessible by vehicle.
- 5 Larger vehicle or trailer-mounted systems usually go up to 25m, though they can be built to go higher. These are very stable systems that can take payloads up to 20kg for 25m systems. If they are any higher the payload goes down because the pole gets thinner. They can be driven to the site and some are mounted on off-road vehicles. The coverage is almost as good as true low level aerial photography with the advantage of getting closer shots straight away. The operator can be directed in real time. They are very expensive to buy, and sites have to be accessible by vehicle.
- 6 Model aircraft and balloon mounted systems are available. With these, greater heights can be achieved without hiring a helicopter and the operator can be directed in real time. There are some problems with these systems, as they have



All these methods have merits, depending on needs and budget. My company's main area is use of a vehicle-mounted 25m pole system, and the results have been excellent. There is one more advantage which was much appreciated when I was recently photographing the Bury St Edmunds Cattle Market project on a very cold January morning: once erected all camera operations were controlled from inside a warm van.

Derek Ashman
Managing Director
Higher View Aerial Photography Ltd

Excavations in Bury St Edmunds Cattle Market. Photograph: Higher View Aerial Photography Ltd © Suffolk County Council

to be operated by specialists, they are not the most stable of platforms, weather is a major limiting factor and the range of the transmitters is limited.

- 7 Aircraft systems, with cameras either mounted in the body or hand held. This is the traditional method of obtaining aerial photography either off the shelf from mapping and aerial photographic companies or bespoke using helicopters and light aircraft. This is the best way to get an overall shot of large sites and can often be purchased at a reasonable cost; some of this imagery is also available on the internet. The main problem with hiring aircraft is the cost, and similar results can be obtained from the high poles at a fraction of the cost. Most off-the-shelf vertical imagery is flown at 1:10,000 scale, good for large areas but not so good for detail, and of course there is no choice about timing.



Vertical shot flown in 1999 at 10,000 ft © Geoperspectives.com



Ridge and furrow in farmland © Higher View Aerial Photography Ltd



Van with mast affixed

Understanding plough damage: RESEARCH in FIELD and LAB

Steve Trow, Vince Holyoak and Fachtna McAvoy

Arable cultivation has long been recognised as a major source of damage to archaeological sites, including many scheduled monuments. It may not be the case, however, that all monuments under cultivation are being actively degraded, that all are at equal risk, or that removing them from cultivation is the only effective way of protecting them. Decision making has been hampered by a lack of systematic research addressing these factors. So two new research projects – jointly sponsored by English Heritage and Defra – are getting to grips with the processes and risks associated with cultivation.

COSMIC POWER

The first project, COSMIC (Conservation of Scheduled Monuments in Cultivation) developed and tested approaches to the large-scale and cost-effective determination of risk for more than a hundred sites in the East Midlands. Building on the results of earlier Defra-funded research work and the English Heritage Monuments at Risk initiative, COSMIC used desk-based assessment, field observations and interviews with farmers to evaluate risk, based on parameters including cultivation processes, crop types, site location and slope, soil type, earthwork survival and presence of 'buffer' deposits.

MOST VULNERABLE

The project revealed that 42% of scheduled monuments evaluated were at serious risk from their current cultivation regime, with others at lower levels of risk. Based on these findings, recommendations were made on future options for site management – ranging across total removal



Monitored cultivation of experimental earthworks in progress. © Oxford Archaeology



Simulated archaeological features prepared for cultivation trials. © Oxford Archaeology

from cultivation, reduction of ploughing depths, direct drilling and non-inversion tillage – and a series of priority site-types were identified. These included monuments with particularly vulnerable remains (such as earthworks, burials or mosaics); under root and tuber crops; or in fields particularly vulnerable to soil movement (such as those on moderate or steep slopes or with light soils).

Limited resources available for management initiatives and the practicalities of many farm operations mean that the majority of archaeological sites in arable landscapes are likely to continue to be cultivated. Identifying approaches to minimising the impact of cultivation operations is, therefore, an important priority for heritage managers, and the first step in this process must be to gain an improved understanding of the resulting processes of attrition. Surprisingly, despite archaeologist's concerns about plough damage for many years, comparatively little detailed research has been undertaken on its detailed mechanics and current understanding is limited.

TESTING IN BINS

English Heritage and Defra have, therefore, commissioned Oxford Archaeology and Cranfield University's Soil Science department to undertake an innovative five-year research programme to identify how cultivation techniques can be adapted to minimise impact on archaeological sites. The project will specifically review the effectiveness of minimal and shallow cultivation techniques and soil

management practices and will develop cost-effective methods for monitoring implementation and effectiveness of new approaches. The work is being carried out in Cranfield's laboratories, farmland and soil bin – a test rig that allows sub-surface observations to be made during repeated passes of farm machinery. The project includes carefully monitored agricultural operations carried out on a series of specially constructed earthworks and sub-surface archaeological 'sites'. The facilities and field installations will effectively allow the equivalent of many years' worth of field operations to be undertaken in a short time.

This work and other research projects into the risks and mechanics of plough damage will be considered in a session of the 2007 IFA Annual Conference. It will be a particularly timely opportunity to examine the issues, as the imminent Heritage White Paper is expected to make important recommendations on the challenge of conserving scheduled monuments in cultivated landscapes.

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... two new research projects are getting to grips with the processes and risks associated with cultivation.



Newly constructed "round barrow" for field cultivation trials at Cranfield University. © Oxford Archaeology



Simulated cultivation in the Cranfield 'soil bin'. © Oxford Archaeology



Training in EDM traversing benefits from the conditions presented by Deddington Castle during the 2005 Oxford Archaeology Survey Week. Photograph: Mark Bowden

Professional training in analytical earthwork survey and landscape investigation

Mark Bowden and Marcus Jecock

Earthwork survey is one of the oldest archaeological techniques, tracing its origins to the 17th century, but it has always been a minority activity. Through much of the 20th century it was undertaken by the Ordnance Survey's Archaeology Division, by the three national Royal Commissions on (Ancient and Historical Monuments and by a small handful of others. The growth in rescue archaeology and in university departments in the 1960s and 70s did nothing to promote the study of earthwork sites, concentrating as they did on excavation as *the* investigative technique of choice. Expansion of commercial archaeology in the wake of PPG 16 seems to have reinforced this position, with earthwork survey – and the concomitant skills of landscape analysis – apparently not on the horizon for most curators. Contractors have not routinely been asked to undertake such tasks, it therefore has no commercial value and there is little point in training or retaining staff to do it. Meanwhile, valuable information is being missed.

Losing skills

While some of the larger commercial organisations employ survey staff, few people are undertaking earthwork survey as part of landscape analysis to an acceptable standard. The work falls largely on small teams within EH and the Scottish and Welsh Royal Commissions. Those teams therefore believe that training others is an essential part of their role

if such skills are not to be lost. Elsewhere in this issue Alastair Oswald (p20) describes the process of taking this skill to the independent sector through community archaeology initiatives, but for many years EH's AS&I team has been addressing the training of professional peers and independent practitioners by 'work-shadowing' schemes and through the annual Oxford Archaeological Survey Week and other bespoke training courses. More in-depth training of the next generation of 'landscape detectives' has been addressed through student placements, and latterly through the EPPIC scheme (see Kate Geary, *TA* 61).

The Oxford course has been in many senses very successful, and feedback indicates a consistently high level of satisfaction. However, there are causes for concern over the degree to which this and other initiatives are really 'skilling the sector' and building capacity. First, numbers of participants are necessarily restricted in order to give opportunities for small group activities and one-to-one tuition. Worse, it seems that no matter how enthusiastic participants may be to practise the skills they have learned, there will be limited opportunities because analytical earthwork survey as a tool for understanding and placing archaeological sites in their landscapes does not figure highly in commercial archaeology and, where it does, the standards implicit in RCHME/EH 'levels of survey'

(RCHME 1999; EH in press) are not always achieved. If analytical earthwork survey is not routinely specified (where appropriate) by curatorial archaeologists, contractors have no incentive to employ staff with the skills to undertake it. People with the necessary skills do exist, and more are being trained every year, but lack of opportunities means that the skills wither and all-important experience is never built.

Gaining experience

This is where another EH initiative hopefully has a role. Recently a number of work-shadowing arrangements have been agreed, particularly with National Park Authorities, whereby a curator from the Authority's archaeological staff gains first-hand experience of the observational and analytical skills required to carry out landscape survey – plus training in surveying techniques – by working alongside EH's AS&I team. The most recent example has been in the Yorkshire Dales, where the Park's Countryside Archaeological Advisor has just completed three weeks working one-to-one with an experienced EH field investigator to plan, interpret and phase a prehistoric settlement overlain by lead mining activity. Such schemes increase the trainee's understanding of the processes, and the ability of the organisation for which they work to apply appropriate standards when vetting tenders and project designs.

Earthworks contribute a great part of the beauty of landscape – 'dappled things' to borrow Gerard Manley Hopkins' phrase – but they are also a store of archaeological understanding. The loss of any earthwork site is an aesthetic tragedy but the loss to knowledge can at least be mitigated by intelligent survey and analysis, which invariably adds to the understanding gained from narrow evaluation trenches.

The opinions expressed in this piece are those of the authors and do not necessarily reflect those of English Heritage.

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 Marcus Jecock (Investigator)
 EH Archaeological Survey and Investigation Team

RCHME 1999 *Recording Archaeological Field Monuments. A descriptive specification* (Swindon: RCHME)

EH in press, *Understanding the Archaeology of Landscape: principles of good recording practice*



'How do we show the wall-line amongst this lot, then?' Training in analytical earthwork survey at Deepdale in the Yorkshire Dales. Photograph: Yvonne Luke, YDNPA)



TECHNICAL DEVELOPMENTS in archaeological investigation

Trevor Pearson

Among the functions of English Heritage's AS&I team is Technical Survey, the principal aim of which is to ensure field teams have the hardware and software appropriate to the type of site and level of survey being undertaken.

At its most basic, field survey involves a scaled pencil plot in the field by hand-taping and drawing and is unrivalled as a technique where earthworks are subtle and need intense analysis to understand form and chronological relationships. Where earthworks are simpler to record or the requirement is for a rapid, extensive survey of a large area of landscape then survey grade dual frequency GPS is used. This provides accuracy to less than 0.01m and is supplemented by an electronic theodolite in areas with poor satellite reception. All these technologies can be used on a single site. Whatever the sophistication of the technology, the underpinning requirement is always for skilled observation and analysis.

Another role is to keep abreast of developing techniques and technologies and to deploy them within the field team. Most recently this has involved investing in mapping grade hand-held GPS equipment. This allows detail to be recorded within an OS grid to within 0.5m, which is acceptable for scales of 1:2500 and above and for reconnaissance work. Allied to this investment is the developing use of GIS within the AS&I team on wide-area landscape projects where much of the field data will potentially be recorded on hand-held GPS. In the past surveys were stored as AutoCad files but now ways are being explored to transfer groups of surveys into GIS to allow more sophisticated computer-based analysis of distributions and to facilitate transfer of survey information to partner organisations such as the Ordnance Survey.

A great body of technical expertise has built up in the AS&I team as a result of the range of sites and landscapes investigated. One way of disseminating this experience to the wider profession is through technical papers. Two have been published so far. *With Alidade and Tape* is on the graphical and plane table survey of archaeological earthworks (English Heritage 2002) while *Where on Earth are We?* explains the use of GPS in archaeological field survey (English Heritage 2003). Due for publication in 2007 is *Understanding the Archaeology of Landscape: a guide to good recording practice* which will be an expanded version of the RCHME 1999 publication *Recording Field Monuments: a descriptive specification*.

Trevor Pearson
EH Head of Technical Survey and Graphics
(Archaeology)

[Surveying with GPS in the Cheviots at Ring Chesters hillfort.](#) © English Heritage



Maritime records for the FUTURE

Gary Green

As discussed in the following article by Jesse Ransley, research is the key to any successful archaeological investigation and, as a small move in the right direction, the Nautical Archaeology Society North-East has just been awarded a substantial grant by English Heritage through its Regional Capacity Building scheme to establish the North-East England Maritime Archaeology Research Archive. This exciting new service will provide a valuable and practical maritime archaeological resource covering the north of England from the Tweed to the Humber.

With the support of local authority archaeologists from Northumberland, Tyne & Wear, Durham, Cleveland, North Yorkshire and North East Lincolnshire, the project will draw together existing maritime archaeological reports and other key reference material and be held within the offices of Tees Archaeology in Hartlepool. It will be available, by appointment, to maritime archaeologists, researchers, historians, and interested members of the public. It is also intended to act as a repository for 'grey' literature, provide valuable HER enhancement data, stimulate research and further raise public awareness of the importance of maritime archaeology.



An initial core of material has already been established, primarily by generous donations from Hartlepool Borough Council's Museums and Library Services, Tees Archaeology, Nautical Archaeology Society, the Teesside Branch of the World Ship Society, and others. However, long-term success depends on support from those who actually carry out maritime archaeological investigations.

As Project Co-ordinator, I would be extremely grateful for donations of maritime-related material, particularly archaeological reports, but also reference works on wood and iron/steel shipbuilding, and Shipping Company Histories (an excellent source of photographs/illustrations of vessels prior to their loss). Most welcome of all would be Lloyd's Registers, one of the most important research tools for maritime archaeologists, providing crucial constructional and machinery details essential in the recognition and identification of remains of shipwrecks. If any organisation or institution has any Lloyd's Registers that could not be formally donated, the Archive already operates a 'long-term loan' arrangement.

I would be happy to discuss the project further either by email or phone or you are welcome to view the Archive as it stands here at Sir William Gray House, Hartlepool.

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Helping to identify maritime artefacts such as this section of a wooden vessel's stem, washed up at Hartlepool in November 2006, is one of the Archive's key functions

Parts of the archive of HMS Colossus are with the local museum on St Mary's in the Scillies, the British Museum, NMR, EH, and a range of private individuals. The stern carving will be housed in the Valhalla figurehead collection on Tresco.

Photograph: Kevin Camidge



Slipping through the net: maritime archaeological archives in policy and practice

Jesse Ransley

At the beginning of December last year members of archaeological, curatorial, heritage, archive and museums professions met at the Society of Antiquaries of London for a seminar on the crisis facing maritime archaeological archives.

Archaeological archives are crucial to our understandings of the past. Artefacts, drawings, samples, photographs and digital data *together* form a vital connection to the original archaeological site and offer a route to further research and publication, and development of shared knowledge about the past. They are the sources for public interpretation and museum displays, teaching collections and popular representations in the media and public imagination. They offer means to re-access and reinterpret our past, and as a result to re-define and re-articulate our own identity.

Archives abandoned

Yet whilst this is acknowledged for 'terrestrial' sites, maritime archaeological archives are falling through a gap in policy and practice. Currently, there is no system for preparation, deposition and curation of maritime archives and a lack of clarity over the roles and responsibilities of museum, archive and government bodies. There is a lack of appropriate receiving museums and archive centres capable or willing to address them. They are being dispersed, are deteriorating, remain uninterpreted and uncurated, often in private hands, are sold or even simply abandoned. All this is the legacy of past heritage legislation and structures, which have left us with a culture of ad hoc solutions. Archives are curated, split or sold on the basis of luck or the tenacity of individuals. As more sites are discovered the problem will become more acute.

There is a pressing need for a coherent, long-term strategy to address these problems, and December's seminar was the first step. Maritime archaeologists from academic and commercial sectors, conservators, curators and local authority archaeologists presented case studies and problems they have encountered. Disparate experiences around the UK illustrated all aspects of the current situation.

Spanish merchantman

Problems facing development-led archaeology were outlined, for the majority of project archives are simply stored indefinitely with the contractor. Difficulties facing local groups investigating wreck sites were illustrated. They have little or no access to local museum facilities or support for project archives, and many site archives become dispersed among private individuals. The chequered history of the Studland Bay wreck, a Spanish merchantman dated around 1520-1530 wrecked off Poole in Dorset, ably illustrated the precarious position of maritime archives. The site was excavated by Poole Museums and a team of volunteers in the 1980s, funding ceased in 1998, and the collection was left in limbo until further funding was secured from English Heritage in 2003, for assessment and publication.

Current policy and archives initiatives were reviewed, in particular development of *Archaeological Archives: creation, preparation, transfer, curation* Guidance published by the Archaeological Archives Forum (AAF), and appropriate models for archive management were discussed. The afternoon's discussion panel, which included representatives of UKMCS (the maritime museum body) and DCMS, enabled debate over more strategic policy and systemic issues.

The seminar went a long way in raising awareness of issues across archaeological, archive and museums sectors, and stimulated debate and communication. It highlighted the urgent need to develop approaches to maritime archaeological archives at all levels, from policy to repositories. There was consensus over the vital importance of such initiatives and that the momentum should not be lost.

Consultation now

Research by IFA MAG and the discussion and debate throughout the day contributed to IFA MAG's *Slipping Through the Net – Maritime Archaeological Archives in Policy and Practice*



discussion document. This document is currently out for consultation until 20 April 2007. It can be downloaded from the IFA website home page and responses should go to Tim Howard at the IFA office (tim.howard@archaeologists.net).

Responses will be used to generate recommendations as part of an integrated strategy for our maritime archaeological archives. In partnership with AAF, we will develop initiatives and projects to implement such a strategy: then we can begin to resolve the precarious situation of maritime archaeological archives.

Grateful thanks to IFA, who sponsored the event, have been sent by Julie Satchell, chair of the Maritime Archaeology Group.

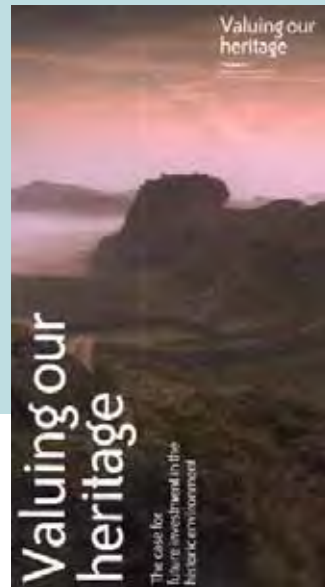
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Part of the bow of the Princes Channel Elizabethan wreck excavated in the Thames Estuary during 2005. Discussion is still ongoing over the long-term future of the archive.
Photograph: Wessex Archaeology



Artefacts excavated from the Studland Bay wreck in the 1980s.
Photographs: Poole Museums





When the All-Party Parliamentary Archaeology Group was set up in 2001 (see *TA* 62), one aim was to politicise the archaeological community, to make more people aware of parliamentary and governmental procedures, so that we can have greater impact on policy and funding decisions that affect our work. Six years on, it is heartening to look back on how far we have come: a sector that was not on the political radar in 2001 is now an effective advocate and lobbyist.

It is worth remembering that when I set up Heritage Link in 2002, Tessa Blackstone, then the Heritage Minister, told me that 'I don't know what the heritage sector wants me to do: I am constantly lobbied by advocates for the film, theatre, museums and sports sectors, but I rarely hear from archaeologists or conservationists'. That is certainly no longer the case, and the point was made by two events in January 2007.

First Heritage Link published a mini-manifesto, intended to give DCMS arguments to use with the Treasury in justifying an increase in Government funding for heritage in the forthcoming Public Spending Review. *Valuing our Heritage* (see the English Heritage website at <www.english-heritage.org.uk/server/show/ConWebDoc.9948>) reminds us that the UK is a long way behind other European member states in per capita spending on the historic environment. What also comes across is how much the Government relies on the voluntary sector to do its work – for example, through CBA, SPAB and other amenity societies, Government gains an expert and active service to support the designation system.

The second sign of the sector's steady maturing as a political force was the parliamentary debate held in Westminster Hall on 25 January (p41). MPs there sounded particularly well informed on issues core to our concerns, it is thanks to the constructive dialogue that has been established in the last five years between such heritage bodies

as The Archaeology Forum and the many parliamentarians who are happy to act as heritage advocates. What we haven't yet achieved is influence on the decisions of the Treasury on any material issue. Culture Minister David Lammy's short contribution in the Westminster Hall debate was sympathetic, but contained no new policy or funding commitments.

His speech came just after he had informed Robert Yorke, convenor of the Joint Nautical Archaeology Policy Committee, that the UK Government would not sign up to the UNESCO Convention for the Protection of the Underwater Cultural Heritage, because of the Government's belief that it is 'neither desirable nor practical' to protect all underwater heritage. This snub to the combined opinion of marine heritage experts in the UK and beyond shows that we still have a mountain to climb in persuading senior politicians to give heritage parity of esteem with sports (or gambling).

Our opportunity to do so begins very soon: when the next *TA* is published, we should have a White Paper to debate on Heritage Protection, and quite possibly a new Prime Minister, new Chancellor, new Secretary of State and new Culture Minister – none of whom should be left in any doubt about what we stand for.

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Alison Taylor

A debate on the Government's disappointing response to the recent Select Committee on *Preserving and Protecting our Heritage* was held in Westminster Hall on 25 January. The wide-ranging debate demonstrated how many core national issues await resolution by Government – from the future of Stonehenge to the parlous state of the nation's stock of historic places of worship, and from funding for English Heritage so that it is capable of performing the proper functions of state heritage agency to the threats facing the historic environment from uninformed planning decisions.

John Whittingdale MP (Con), who had chaired the original Select Committee, opened by remarking on the large attendance which was thanks to the great interest the debate had generated, and how this reflected how heritage is perhaps one of our greatest assets, admired across the world and an important focus for regeneration and redevelopment. In contrast, since 2000-01, the grant in aid given to English Heritage has fallen way so far behind inflation the Select Committee calculated that there was a cumulative shortfall of £18 million, compared with massive increases in budgets for other parts of DCMS, most notably sport (98% increase). 'It is now desperately important, if we are to achieve half of the protection of heritage necessary, that we restore the finances of English Heritage and its ability to undertake its responsibilities' he concluded. At the same time, HLF's ability to help was undermined because its funds were being diverted for the Olympics, and local authorities, the ones at the sharp end in delivering heritage protection, were, in many cases, not now giving priority to the heritage.

Regeneration and sustainable development

Robert Key MP (Con) picked up some problems with PPG 16, which, although working well, needed reinforcement for the future. For a start, there is the major problem of storage of material generated at excavation, and the need for principles enshrined in PPG 16 to be properly applied to estuarine, coastal and underwater works. He commented on the lack of joined-up government in general which, for example, meant that the importance of heritage in regeneration and sustainable development projects has not yet been recognised and championed in Government.

Archaeological pay and conditions

Tim Loughton MP (Con) also criticised the lack of attention paid to heritage by DCMS, even though heritage, 'and particularly archaeology, presses so many of the right buttons, particularly those that the Government are rightly trying to promote'. It contributes enormously to education for adults and children alike, was an environmental learning tool, and has a great role in regeneration and in re-establishing local identity. Nor should we forget its contribution to tourism and to social inclusion (apparently we can even claim that 'Visiting heritage sites is also good for one's health'). Referring back to APPAG recommendations (see *TA* 62) he complained of the lack of progress in Government circles on matters that were assessed then but remain as relevant today, for example adopting a high-level objective of defining, protecting and sustaining the historic environment, establishing an inter-departmental committee on archaeology at ministerial level, not to mention 'an urgent need to improve pay and conditions for employment in field

archaeology ... and Sites and Monuments Records... should be made statutory with additional funding from central Government to ensure that they meet a minimum standard of content and service delivery.' He also put in a heart-felt plea for continued support for the Portable Antiquities Scheme.

A devastating indictment

Roberta Blackman-Woods MP (Lab) emphasised how Government should 'give a stronger signal to local authorities that the historic environment matters' and described the Report as 'a devastating indictment of the Department's failure to understand heritage, to value its full potential or to make the case for it to other Departments such as the Treasury, the DCLG, and the Department for Transport in respect of Stonehenge.' She noted that the set-up costs of the Heritage Protection Review would be significant and sought assurance that English Heritage and local planning offices will be given the additional funding to cover the extra costs and duties that will be required under the new regime.

Revising planning guidance

Paul Holmes MP (Lib Dem) finished with three points from the report: revision of planning policy guidance on the historic environment and archaeology should be undertaken without delay after the publication of the Heritage Protection White Paper, with consideration to issues such as a requirement that archaeological work must be undertaken by an accredited professional and that the definition of archaeological assets could include artefact scatters and palaeo-environmental deposits, and that class consents could be looked at again, to stop incremental damage every time a scheduled site is ploughed.

Justifying cuts

David Lammy (Parliamentary Under-Secretary of State for Culture, Media and Sport) answered the debate with warm words of thanks for support in strengthening his elbow in dealing with the Treasury, and to the many Members from all parties who have said that heritage is important. 'It is absolutely clear that our history, social cohesion, sense of community and sense of civic pride is absolutely underpinned by our heritage and culture'. He also thought it 'absolutely central to the very helpful debate that my right hon friend the Chancellor has started on Britishness'. He paid tribute to the work that had already been done on the public value of heritage and the need for a system of protection that is prepared, when necessary, to make unpopular decisions that go

against current fashion or commercial pressures. Unfortunately he went on to defend the spending position by lumping English Heritage in with grant in aid to sponsored museums and the British Library (whereupon he was promptly corrected by Sir Patrick Cormack). The next justification given for not supporting English Heritage in the last spending round was that it had at that time been bureaucratic and in need of serious modernisation, but now, thanks to 'efficiency savings' it will be able to plough about £28 million back into its work in the next spending period (the reality is yet another cut to EH's capacity to grant-aid archaeological work). He accepted that using national lottery funding for the Olympics represents a loss of income for the non-Olympic good causes, but was convinced of the huge benefits that these Games will somehow accrue to the heritage sector.

After describing enthusiastic support for cathedrals and churches, he discussed the need for adequate resources for heritage at a local authority level. 'My Department and English Heritage have made a full assessment of the costs of implementing the new reforms, which will be considered as part of the spending review. It is, of course, the case that we would expect those new burdens to be funded and for the capacity to be there.' He also undertook to publish the Heritage Protection White Paper before the Easter recess.

He concluded with discussion of World Heritage Sites and the importance Government attached to their management. This inevitably took him onto Stonehenge. 'I put it on record that I agree that, notwithstanding the important issues of affordability, it is a national disgrace that successive Governments have been unable to sort out that problem'. Upon which he was cut short by the clock, and there was no time for questions.

The whole of the debate, which included much discussion of cathedrals, churches and VAT regimes on repairs, can be read on the Hansard record at www.publications.parliament.uk/pa/cm200607/cm_hansrd/cm070125/halltext/70125h0001.htm#070125109000376.

Is your MP a member of APPAG? If you don't know, ask them or check www.appag.org.uk. It doesn't matter which party they belong to, all well-informed voices are needed.

Alison Taylor
Alison.taylor@archaeologists.net

New members

ELECTED	Member (MIFA)	Associate (AIFA)	Practitioner (PIFA)	Affiliate	Student
	John Atkinson	Alastair Becket	Mark Gibson	Lynsay Adams	Vivienne Blandford
	Alistair Barclay	Michael Court	Amanda Gow	William Adams	David Brown
	Sarah Bates	Julie Curl	Emma Houghton	Katy Bell	Tom Burt
	David Bescoby	Lynne Fouracre	Stephen Morgan	Martin Brook	David Cemlyn
	Nick Card	Charlotte Francoz	Jeffrey Morris	Andrew Burn	Graeme Collie
	Ann Clarke	Joanna Higgins	Sally Radford	Geraldine Crann	Deidre Doherty
	Stuart Eve	Vix Hughes	Christine Rennie	Grzegorz Kalwak	Rebecca Dyde
	David Gibson	Kelly Hunter	Mary Saunders	Aimee Kleinman	Edward Fitzgerald-Clark
	Lorna Innes	Stephen Lancaster	Jane Smallridge	Nicholas Moignard	Aaron Glover
	Hugo Lamdin-Whymark	Kirsteen McLellan	Matthew Smith	Autumn Palmer	Lee Gregory
	Michael Napthan	Kate Nicholson	Sharron Stolarczyk	Thomas Smith	Arwen James
	Robert Smith	Owen Raybould	Ian Travers	Cass Soilleux-Till	Rebecca Jones
	Peter Topping	Gemma Riley	Katie Watkins	Daniel Tassell	Emma Knight
	David Whitmore	Claire Shaw			Richard Madgwick
	Robert Will	Rebecca Shaw			Maria Magill
		Ingrid Shearer			Eloise Markwick
		David Swan			Victoria Nash
		Peter Watkins			Darren Parr
					Jennifer Petrie
					Anthony Platts
					Steven Price
					Michael Russell
					Jane Scott
					Meg Sims
					Thomas Thear
					Diarmid Walshe
					Jane Wilson
					Charis Woodbridge
TRANSFERS	Member (MIFA)	Associate (AIFA)	Practitioner (PIFA)	Affiliate	
	Philippa Bradley	Kim Biddulph	Alexander Beeby	Martyn Allen	
	Kayt Brown	Peter Crawley	Louise Bush	Melanie Bell	
	Martin Cook	James Gerrard	Ronald Gurney	Paul Bevan	
	Virginia Dellino-Musgrave	Mark Littlewood		Bill Cassidy	
	Jonathan Goodwin	Andrew Mundin		Isabella Cook	
	Neville Hall			Ross Dawson	
	Eleanor Kingston			Cathy Dean	
	Stephen Macaulay			Foxy Demeanour	
	Nigel Thomas			Markus Dylewski	
	Diane Walls			Yvonne Edwards	
				Claire Feldkamp	
				Gareth Griffiths	
				Stephanie Haithwaite	
				Daniel Heale	
				Timothy Howard	
				Daniel Howells	
				Maria LeRoi	
				Anne Locke	
				Rebecca Mann	
				Kevin Matthews	Affiliate (cont)
				Duncan McAndrew	Adam Spring
				Sheona McCaig	David Stewart
				Richard McGregor	Paul Stojanovic
				Christine Phillips	Guy Thompson
				Sanne Roberts	Justine Tracey
				Rachel Soron	Deon Whittaker

Members news

Andy Buckley AIFA 2515

Andy Buckley has recently joined Scott Wilson as a Senior Archaeological Consultant. He specialises in providing Archaeological and Cultural Heritage Resource Management for the development industry, giving advice on the archaeological implications of multiple road, land, river and sea based development schemes. In his new role Andy will be responsible for desk-based assessments, impact assessments, transport schemes and those involving the design, costing and management of archaeological works. He has moved from Halcrow, where he formed an archaeological service providing technical support. For further information contact andy.buckley@scottwilson.com.



Andy Buckley

Frank Green MIFA 46

Frank Green has recently moved from Test Valley Borough Council after 9 years as their Heritage Officer. His association with the Test Valley began in 1980 as the unit director of the Test Valley Archaeological Committee/Trust. Frank helped establish the Association of District Archaeological Officers that amalgamated with the County Association to form ALGAO, since which time he has served on their Buildings and Planning groups. Within IFA he assisted with the production of *Standards and guidance for archaeological investigation and recording of standing buildings* and has served on

Frank Green



the Buildings Special Interest Group. At Test Valley he increasingly undertook buildings conservation work and now regularly teaches archaeological conservation for Diploma and Masters courses. His interests in churches led to his involvement in the creation of the Society for Church Archaeology in 1996. He is also involved in publishing past archaeobotanical research; most recently co-authoring with Wendy Smith a contribution on the plant remains from the wreck of the Mary Rose in *Before the Mast*. His role within the recently formed New Forest National Park Authority, as their archaeological officer, promises new research partnerships and funding opportunities for archaeology in the New Forest; from a greater understanding of the earlier prehistoric periods, through medieval industries associated with the forest, as well as coastal resources and the impact of 20th century military installations and wartime activities.

David Wilson obit

Over-editing of Derek Edwards' obituary of David Wilson created unwarranted conflation, and David should have been credited as founder member and subsequent Hon Secretary and Chair of the National Association of Aerial Photographic Libraries, not of AARG. Editor's apologies to Derek for this.

Disciplinary investigation results in expulsion of a PIFA member of the Institute

Following an investigation into two allegations of misconduct against Karl-James Langford PIFA (4549) the Executive committee of the IFA agreed with the findings of the Disciplinary Panel that Karl-James had been in breach of a number of clauses of the IFA Code of conduct. These included Principle 5, in particular rules 5.1 and 5.7 that

5.1 An archaeologist shall give due regard to the requirements of employment legislation relating to employees, colleagues or helpers.

5.7.1 An archaeologist shall have due regard to the rights of individuals who wish to join or belong to a trade union, professional or trade association.

and Principle 1, in particular rules 1.1 and 1.12

1.1 An archaeologist shall conduct himself or herself in a manner which will not bring archaeology or the Institute into disrepute.

1.12 An archaeologist has a duty to ensure that this Code is observed throughout the membership of the Institute, and also to encourage its adoption by others (see note on Rule 1.12).

As a result the Disciplinary Panel recommended that Karl-James Langford be expelled from the Institute, and this sanction was again agreed by the Executive committee. Following notification of the sanction, Karl-James Langford put forward an appeal to the Council of the Institute (clause 27 of the Disciplinary regulations) and this was considered at the last meeting on 11 December 2006. Council found the appeal to be frivolous and/or vexatious and therefore upheld the sanction agreed by the Executive committee. Karl-James Langford has therefore been expelled from the Institute with immediate effect.