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Archaeology in Wales

Archaeology in Wales, the theme of this TA, is a lively scene, with field projects of many kinds being undertaken by a variety of organisations in the public and private sphere. Just as the last TA (74, *Archaeology in Scotland*) filled quickly with topical events in Scotland's archaeological calendar, the contributions solicited for Wales yielded an unexpected haul – leading to a largest-ever edition of TA in order to do it justice. Impressive aspects of these stories include the ways individual sites are slotted into wider pictures, whilst the wider picture studied in regional surveys is concerned too with individual sites. The results have enviable coherence with regard to the archaeological narrative and illustrate too the effectiveness of interleaving organisational structures.

Wales, like Scotland but unlike England, still has two national governmental bodies, Cadw, roughly the equivalent of English Heritage, and the Royal Commission on the Ancient and Historical Monuments of Wales (abbreviated to RCAHMW throughout). We plan to explore the different roles of the organisations more fully in next TA, but here we are able to look at case histories that illustrate a little of the work that they do day after day. Wales has also been successful in keeping a strong role for its regional archaeological trusts, all four of which support HERs and planning functions alongside developer-funded projects and grant-aided surveys, excavations, monument management and plentiful outreach activity. Many commercial archaeological organisations too are involved in Welsh fieldwork, including IfA's Registered Organisations SLR Consulting and Cotswold Archaeology, which feature here (all the Welsh Trusts are also Registered Organisations).

We include some good news on the latest successful candidates for National Vocational Qualifications (NVQs) (p5) who, in this case are amateur archaeologists. High standards of work and ethics are now expected from amateurs as well as professional archaeologists, and IfA is leading the way in recognising this. There is also at last some better news on issues around excavation and retention of human remains (p5), although it looks as if there will not be fully clear guidance until this summer.

Coming up soon is IfA's Annual Conference, for which Kathryn Whittington has prepared a special feature (p6). A full report on papers and sessions of this conference will be covered in TA 77 (this summer), but for the proper impact of course, you need to be there.



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The enigmatic tower at Portskewett, Monmouthshire
© Cotswold Archaeology

Notes to contributors

Themes and deadlines

- Summer: The structures of British archaeology today
deadline: 15 April 2010
- Autumn: IfA Conference 2010
deadline: 15 June 2010
- Winter: Management of rural sites
deadline: 1 October 2010
- Spring: Archaeology on the islands
deadline: 1 January 2011

Contributions and letter/emails are always welcome. TA is made digitally available through our website one year after publication and if this raises copyright issues with any authors, artists or photographers, please notify the editor. Accessed digitally, web links are especially useful in articles, so do include these where relevant. Short articles (max. 1000 words) are preferred. They should be sent as an email attachment, which must include captions and credits for illustrations. The editor will edit and shorten if necessary. Illustrations are very important. These can be supplied as originals, on CD or as email attachments, at a minimum resolution of 500 kb. More detailed *Notes for contributors* for each issue are available from the editor. Opinions expressed in *The Archaeologist* are those of the authors, and are not necessarily those of IfA.

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IfA and planning policy in England

Peter Hinton



IfA has been hard at work on the draft Planning Policy Statement for England, **PPS 15: planning for the historic environment**, and its accompanying practice guide since the last report in TA 70 (see also Roger Thomas, TA 73).

These are documents of critical importance for archaeologists, and IfA has been proactively involved in advocating reform to their precursors, PPGs 15 and 16, for many years. Since 2002, when TA 46 heralded a new PPS (a false dawn), IfA has consistently lobbied the Department of Communities and Local Government (CLG) and its predecessors, the Department of Culture, Media and Sport (DCMS) and English Heritage for revised or new planning guidance that integrates different aspects of the historic environment, closes loopholes, and makes clearer, stronger provisions for public benefit by emphasising the need to ensure public participation, publication, accessible archives and – above all – quality through the use of professionally accredited historic environment experts working to recognised professional standards. Clear and measured requests rapidly won understanding and a degree of sympathy from government departments: it has been a longer struggle to persuade government's advisors to have the confidence to promote professionalism and to refer to IfA Standards and guidance, Registered Organisations and Members. We still need to explain better the role of professional institutes in ensuring public benefit and consumer/client protection, but that's another story (and strategic plan and 2010 conference). Interestingly, the efforts of archaeologists *before* drafting and *before* consultation were noted by CLG, which therefore anticipated a much more critical response to the consultation to the emergent draft from our discipline than from others in the historic environment sector...

The draft PPS issued last year was therefore not a huge surprise. Having run a conference session in 2009 and having consulted widely with the membership through the website, meetings and the 2009 AGM, IfA Council could be confident that its

formal response to the consultation on the draft reflected the views of IfA members. We gave it a cautious welcome but noted crucial omissions. In particular, we note the need for clarity about the shift from the preservation of fabric to preservation of significance – a sensible change, but we need to get the wording bulletproof, and close up any gaps between the phrasing and concepts of the PPS and legislation. We have offered detailed constructive suggestions on revisions to wording, and we know that many of our suggestions have been incorporated.

In contrast to some organisations in the sector, IfA has remained positive about the process and eventual product. Our reservations have been significant, and there have been moments of despondency as well as relief. This consistent and constructive approach does not lend itself to grandstanding statements, and collegiate working with other archaeological bodies through the Archaeology Forum denies us the opportunity to use the consultation as a vehicle for self-promotion. I hope that IfA members will agree that getting planning policy and guidance right is more important than telling the world how important the Institute is. Acting as critical friends to government we win trust and understanding, and in doing so can build on shared sympathies in the two relevant government departments (archaeology graduates and excavators in one and an encyclopaedic knowledge of Roman Britain in the other, since you ask). Using the good offices of the All-Party Parliamentary Archaeology Group IfA and ALGAO have been able to give a direct briefing to the government's Chief Planner, and we're confident that our views have weight.

For the full IfA response to the consultation, see <http://www.archaeologists.net/modules/iContent/index.php?page=217>.

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FROM THE FINDS TRAY

Wessex Culture? 'Evolution' or 'Revolution'; defining changes in the early 2nd millennium BC

School of Conservation Sciences, Bournemouth University, Bournemouth, Dorset

16-18 April 2010 £55

The Prehistoric Society and Bournemouth University Centre for Archaeology, Anthropology and Heritage

What happened to Beaker burial practice in Southern Britain between the late 3rd and early 2nd millennium BC? In cemeteries across Wessex burial practices changed from inhumation to cremation burial in a relatively short time, accompanied by changes in barrow form, agricultural patterns, ceremonial monuments and artefacts – many similar to artefacts on the Continent. This conference will pool knowledge from archaeologists working with early 2nd millennium artefacts, burials and other evidence from Britain and the Continent to better understand the dynamics of the change termed the 'Wessex Culture'. Speakers will include John Hunter, Ann Woodward, Mike Allen, Alison Sheridan, Anthony Harding and John Barrett.

For details and registration see

www.bournemouth.ac.uk/conservation/conferences/wessexculture or email csconferences@bournemouth.ac.uk



Gold covered jet ball and cone from Bush Barrow. © Wiltshire Heritage Museum



Consultants beware

When a building contract is entered into it is between the employer and the contractor. There may also be consultants, and it had been thought that the consultant could not become liable for negligent statements made directly to the contractor. However the recent case of *J Jarvis & Sons Ltd v (1) Castle Wharf Developments Ltd (2) Gleeds Management Services Ltd and (3) Franklin Architects Ltd* suggests otherwise. Jarvis is a contractor who, during a tendering process, relied on incorrect statements by Gleeds (that a development had planning permission). Jarvis claimed that they had been induced into tendering as a result of Gleeds' misrepresentations. Initially the Court agreed with Jarvis, but on appeal the decision was overturned, owing mainly to the Court's perception that Jarvis were aware of the actual planning position and, as an experienced contractor, should have been aware of the situation and could have obtained the planning drawings themselves. The case highlights the need for all parties to be careful about what they say, when they say it and to whom, as someone acting in good faith relying on statements made to them may have a right of recourse, even if there is no contractual link.

Other cases featured in *Construction Industry Update February 2010* show that archaeological managers should also be aware that contractors are entitled to suspend work if they believe that they have not been paid, and also that contractors must tell their employers if key personnel change before or during a contract.
Mike Heaton

Oxford MSc in Professional Archaeology to end

It is sad to report that Oxford University Department for Continuing Education has decided to discontinue this popular course from 2010/11. The course started off as the 'In-Service Training Scheme' in the mid-1970s, and many of its students had successful careers in professional archaeology. However, with a change in the way Government is funding continuing education, and the retirement of Gary Lock, the course will end. The Department will continue to offer Undergraduate, Postgraduate and Professional courses in archaeology, including the MSc in Applied Landscape Archaeology and the Professional Training in the Historic Environment short course programme.

Perth Museum & Art Gallery exhibition

January 2010 saw the formal opening, by Scotland's Minister of Culture Fiona Hyslop, of the archaeological exhibition, *Skin & Bone: Life & Death in Medieval Perth*, charting the archaeology and history of the town from the 11th to the 16th century. The gallery includes the history of excavation in the town, including archive footage of Perth High Street excavation 1975-77. Most exhibits were recovered from excavations in the town over the past forty years. The *Death* gallery has a display of skeletal materials of people and fighting, working and pet dogs.

The exhibition runs until 29 December 2010, admission free.

Excavation and reburial of human remains

Changes to licences for excavation of human remains has been a worry for field archaeologists and osteoarchaeologists in England for two years now, since the old Home Office procedure was rescinded. English Heritage, IfA and other archaeological bodies and interested parties have been working hard with the Ministry of Justice to agree a clear framework for practising archaeologists and the museum profession. At last we seem to be moving towards some resolution. The Ministry of Justice is not able to make a formal announcement yet but reports that

'Following the article about burial law reform in the summer 2009 edition of *The Archaeologist*, the Government has been developing proposals to address archaeologists' concerns about restrictions on the retention of old human remains for study and display. In the interim, the Ministry of Justice is considering how best to facilitate extensions to the reburial time limits in licences granted since April 2008 in cases where the remains need to be retained for a further period. At the time of going to press, further details were due to be announced as soon as possible - please check www.justice.gov.uk/burials for additional information'.

They emphasise that in the meantime there is no general legal requirement for reburial of ancient remains, providing correct procedures are followed.

This February also saw the reconstruction of the Advisory Panel on the Archaeology of Christian Burials in England (APACBE) as the Advisory Panel on the Archaeology of Burials in England (APABE), under the continued chairmanship of Joseph Elders. The significance of this is that now informed advice can be given where problems or controversies arise that relate to excavation, exhumation, scientific testing or reburial of ancient human remains (a term that is yet to be defined, but probably relating to those over 200 years old). There is optimism too that English Heritage's Avebury consultation will demonstrate public support for the best archaeological practices with regard to excavation and reburial. A press release is expected shortly.

Andy Coutts and Steven Milne with NVQ certificates



Mellor volunteers

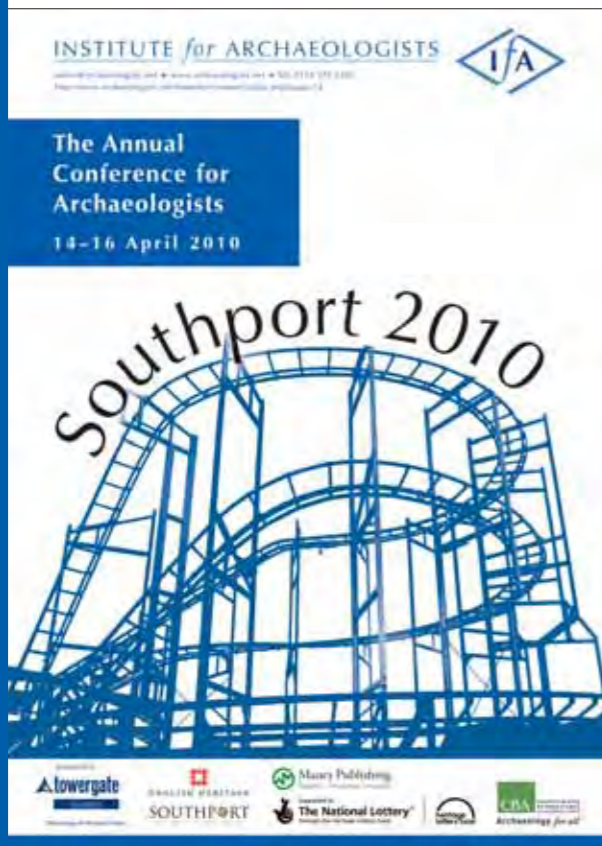
gain NVQs in Archaeological Practice

In January 2010, **Andy Coutts** and **Steven Milne** **AlfA 5616** became the first amateurs to be awarded the NVQ Level 3 in Archaeological Practice. They have both had a long involvement with the Mellor Heritage Project, and when the Mellor Archaeological Trust hosted a conference at Stockport Town Hall in honour of ten years of excavation at the Old Vicarage Site in Mellor (in Greater Manchester) they received their awards as part of the celebrations

Working with their assessor, Kate Geary of IfA, and with support from professional archaeologists at the University of Manchester Archaeological Unit (latterly the Centre for Applied Archaeology, University of Salford) Andy and Steve have put together impressive portfolios of evidence to gain their NVQs. The fact that their involvement in archaeology is purely voluntary and has to be fitted around work and other commitments makes this a tremendous achievement. As well as being the first amateurs to get the award, they are among the first ten archaeologists to be awarded an NVQ. Four more volunteers from the Mellor project also hope to gain their NVQ awards shortly.

The NVQ is available to anyone who is working in archaeology (whether on a paid or a voluntary basis) and who can gather the appropriate evidence. Because it is a modular, and therefore flexible, qualification, the NVQ is also ideal for accrediting on-the-job learning and can be adapted to accredit professional training within archaeological organisations.

For more information about the Qualification and the IfA's workplace learning programme see www.archaeologists.net.
Kate Geary



Southport Theatre and Convention centre will host the IfA 2010 Conference for Archaeologists from 14 to 16 April. Located on Southport's promenade the centre has the facilities of a modern conference venue. Its floral hall will form the backdrop for exhibitions, the wine reception and conference dinner. We have an exciting timetable of sessions, excursions and events planned, and hope to see many of you there.

Wednesday Morning 11.30 – 12.45

Theatre: Opening address

Peter Hinton and Gerry Wait start the conference with an address on 'an ethical endeavour: the moral imperative for developing our profession in the next ten years'.

Floral Hall

Tea, coffee and exhibitions

Wednesday Afternoon 14.00 – 17.30: Lecture Theatre 1

The archaeology of love

David Jennings hosts this session which asks whether we can find love in our archaeology and suggests that in the process we might develop new ways of talking about and understanding the past.

Wednesday Afternoon 14.00 – 17.30: Lecture Theatre 2

In Situ preservation of underwater cultural heritage

IfA Maritime Affairs Group looks at different approaches and strategies in order to initiate debate on best practice and to disseminate research results of projects that focused on *in-situ* preservation.

Wednesday Afternoon 14.00 – 17.30:

Lecture Theatre 3

Commercial archaeological practice in the UK

Andrew Townsend and David Lock chair a session which gives the construction industry a chance to air its views on how archaeology is carried out and what improvements can be made.

Wednesday Afternoon 14.00 – 17.30: Floral Hall

Tea, coffee and exhibitions

15.30 – 16.00

Wednesday Evening 18.30 onwards: Floral Hall

Wine reception 18.30 – 19.45

Conference dinner 20.00

Thursday morning 9.30 – 12.45: Lecture Theatre 1

Mortuary archaeology and popular culture

Howard Williams' session aims to critically appraise what mortuary archaeology does for understanding modern British society and conversely how modern practices surrounding British death today influence archaeological theory and practice.

Thursday morning 9.30 – 12.45: Lecture Theatre 2

Fairgrounds for debate

Jason Wood explores the history and heritage of amusement parks, focusing on the sense of identity and of place which amusement parks convey; the importance of such places as repositories for, and conduits of, public memory; and their potency to create new interest in history and heritage, and to generate new tourist destinations.

Thursday morning 9.30 – 12.45: Lecture Theatre 3

Generation next: community archaeology and the future

Dan Hull and Suzie Thomas present CBA research on recent trends in community archaeology, and other speakers discuss their experiences.

Thursday morning 9.30 – 12.45: Breakout

Where's IT going?: IMSIG BarCamp

IfA's Information Management SIG invite people to drop in and present their latest work in this area.

Thursday morning 9.30 – 12.45: Floral Hall

Tea, coffee and exhibitions

Thursday Afternoon 14.00 – 17.30: Lecture Theatre 1

Heritage crime

Pete Wilson's session seeks to set out issues relating to heritage crime across the sector, to explore approaches that are in place or proposed and to identify additional or alternative strategies to deal with the issue.

Thursday Afternoon 14.00 – 17.30: Lecture Theatre 2

Through a glass lens darkly

Kathryn Whittington and Dan Hull chair a session which looks at the relationship between archaeology and the media. They explore what makes archaeology so popular and whether the relationship between archaeology and the media has impacted on the credibility of the process

Thursday Afternoon 14.00 – 17.30: Breakout

Celebrating innovation

Andrea Bradley hosts a celebration of innovation, of new and inspiring ways of seeing and doing archaeology, including why and how we should employ, identify, support and promote innovation in archaeology, and why we don't look forwards and outwards enough.

Thursday Afternoon 14.00 – 17.30: Excursions

Southport 13.45 – 17.30

Churchtown 13.45 – 17.30

Thursday Afternoon 14.00 – 17.30: Floral Hall

Tea, coffee and exhibitions

15.30 – 16.00

Thursday Evening 18.30 onwards: Floral Hall

Buffet & bar 19.00

Party 20.30

Friday Morning 11.30 – 12.45 and Friday Afternoon 14.00 – 16.00: Lecture Theatre 1

Palaeolithic/Mesolithic coastal and marine archaeology; new discoveries and techniques

Discoveries in the coastal zone are transforming our understanding of the hunter-gatherer archaeology of the Palaeolithic and Mesolithic, creating new challenges for heritage management and investigation. Martin Bell hosts a session arguing that as recognition of the archaeological richness of the coastal zone grows so the challenges increase, particularly in response to new green agenda.

Friday Morning 11.30 – 12.45: Lecture Theatre 2

PPS implementation

Peter Hinton and Adrian Olivier chair a session which looks at how the PPS reflects current good practice and should be familiar to archaeologists.

Delegates should leave this session with a clearer understanding of the implications of the PPS, and ideas about how to improve their contribution to the study and care of the historic environment – regardless of the final wording of the PPS and its timetable for manifestation.

Friday Morning 11.30 – 12.45 and Friday Afternoon 14.00 – 16.00: Lecture Theatre 3

Making learning work

Kate Geary, Natasha Kingham and Andrea Bradley chair a session which looks back at four years of HLF-funded Workplace Learning and evaluates its impact.

Friday Morning 11.30 – 12.45: Floral Hall

Tea, coffee and exhibitions

10.45 – 11.15

Friday Afternoon 14.00 – 16.00: Floral Hall

Tea and coffee

16.00 – 16.30

If you have not yet booked your place, forms can be downloaded from the IfA website and sent to the office with a cheque, or you can book online using a credit or debit card through paypal. All booking information can be found on the booking page of IfA's website www.archaeologists.net/modules/icontent/index.php?page=216

Please note that accommodation needs to be booked separately, further information about this is also available on the booking page.

Sponsored by



CONSERVATION PRINCIPLES: policies and guidance for the sustainable management of the historic environment in Wales

Kate Geary In July 2009, Cadw published for consultation its *Conservation Principles*. These were based on principles published by English Heritage in 2008, but adapted for Welsh needs. There are six of these principles which, with associated policies and guidance, will inform Cadw's management of the historic environment and will guide other organisations and individuals.

Many organisations, including IfA, commented on this document. Most welcomed it and its aim to provide a coherent and transparent framework for decision making. Particularly welcome was the holistic approach to the historic environment, encompassing built and below ground heritage, rural and urban, designated and undesignated. The Principles emphasise the importance of specialist craft and professional knowledge and the need for advice when making significant decisions. The requirement for 'analysis, followed by archiving and dissemination of the results, all at a level that reflects its significance' is also important.

Of the 42 responses received, 11 gave unqualified support, 18 suggested qualifications and 4 rejected it outright. Many worried about lack of clarity and especially use of terms such as 'place', 'significance' and 'fabric' which they thought needed more explanation in this context. A few respondents noted omissions such as awareness of owners' rights, the need to retain the economic viability of historic buildings, and direct reference to the effects of climate change and associated issues of energy efficiency. More references to the marine environment, to Historical Environment Records and to traditional craft skills were requested. Significantly, 11 respondents felt that the Principles should be incorporated into planning and other guidance.

IfA has a number of issues with the document as it currently stands. To start, there is no reference to the need for work to be undertaken in accordance with professional standards or by recognised or accredited experts. There is a need too for greater clarity and further explanation in the document. For instance, using the new language of heritage protection, it refers to the 'significance' of places or landscapes

without discussion of the relationship between 'significance' and the established concept of national importance. It recognises the importance of community involvement in decision making, acknowledging the values that different communities may ascribe to the historic environment, but says nothing about how this might be implemented or how conflicting views might be managed.

Following the consultation exercise Cadw will develop case studies to support the document. This would be beneficial, as would a programme of testing, through practitioner workshops or seminars, in order to consider how the principles, policies and guidance might be applied in practice in a range of situations.

The consultation period closed on 30 October 2009 and responses will be published on www.cadw.wales.gov.uk. Cadw hopes to publish the final document in July this year. For the full IfA response to the consultation, see <http://www.archaeologists.net/modules/icontent/index.php?page=217>.

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Even in well known landscapes like the Brecon Beacons, new field monuments can be found close to the beaten track. RCAHMW (Crown Copyright)

The Welsh Uplands Initiative

The Uplands Archaeology Initiative, co-ordinated by RCAHMW since the early 1990s, is an ambitious programme which aims to survey all land above 244m in Wales (some 40% of the Welsh landscape). These uplands include evocative areas such as the dramatic crags of Snowdonia, the Cambrian Mountains and Brecon Beacons National Park. Detailed surveys have been undertaken by a variety of archaeological organisations, and for many survey areas the number of archaeological sites recorded in the National Monuments Record for Wales has been increased by several thousand per cent, proving the value of detailed ground survey.

After a preliminary desktop survey and interpretation of aerial photographs by RCAHMW staff, with details supplied in database and map form, there is intensive ground survey, walking 30m or 50m transects where appropriate. A rapid record is made of all sites encountered, with photographs taken and sketch plans made as required. The locations of sites are plotted with a hand-held GPS. Information gathered is added to a standardised project database in a format compatible with the main NMRW database. A project report and site gazetteer is then submitted for each area, along with a digital and paper archive. Results are reported back to the Uplands Initiative Steering Committee through an annual forum which,

in recent years, has been open to the public. Public outreach is an important consideration. Each project is required to undertake an element of public interaction, such as an illustrated talk, exhibition or guided walk, to ensure that everyone can learn about work being carried out in their area. Data are made publicly available via RCAHMW's Coflein website and through the Historic Wales portal.

The whole process ensures that the archaeology of the Welsh uplands can be fully recorded and that information is properly archived and made accessible. It is anticipated that full coverage will be achieved within the next five to ten years. As fieldwork draws to a close, RCAHMW is preparing a series of regional syntheses for publication, intended to reflect the wealth and diversity of upland archaeology across Wales.

For more on the Upland's Initiative see www.rcahmw.gov.uk and www.coflein.gov.uk.

Paul Sambrook and Jenny Hall
Trysor
www.trysor.net

Paul Sambrook
and Jenny Hall

Extractive industries
have left their mark
on the Welsh
uplands. Cafartha
lead mine, Powys.
© Trysor



Deserted medieval and post-medieval settlements sites are commonly found, even in remote locations. RCAHMW (Crown Copyright)

The rolling hills of Radnorshire are rich in upland archaeology. © Trysor 2007

Aerial reconnaissance in Wales

Toby Driver

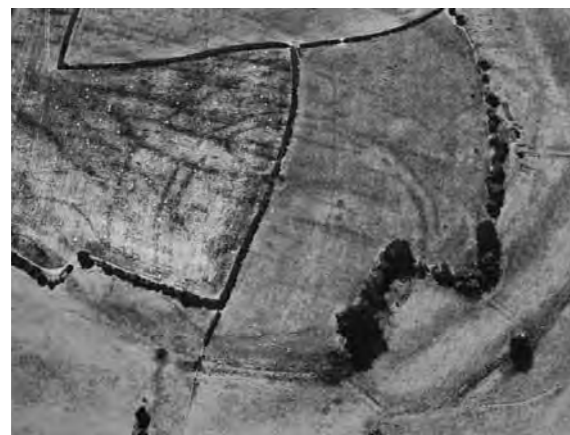
Key archaeological survey is undertaken by RCAHMW through aerial reconnaissance. With over 50 hours flown annually, the programme delivers quite extraordinary discoveries each year as well as providing up to date management information on Cadw's estate of scheduled monuments, adding too to the rich image archive of the National Monuments Record of Wales (NMRW).

■ Damage and documentation

Welsh aerial archaeologists pioneered routine photography of scheduled monuments as part of management programmes, the initiative beginning with funding from Cadw to the Welsh Archaeological Trusts in the 1980s, thereafter co-ordinated by RCAHMW. Potential damage, seen in the air, is rapidly communicated to Cadw staff, and flying visits are requested to document progress on new management schemes. The programme also responds to requests to document town centres, to record



Remains of the Upper Bank copperworks, Swansea (est. 1755), briefly exposed following excavation by Oxford Archaeology and recorded in the days before demolition



Wales's sixth probable Neolithic causewayed enclosure, discovered at Flemingston, St Athan in the Vale of Glamorgan in 2006. Five of the six causewayed enclosures known from Wales have been discovered by aerial reconnaissance over the last 15 years. RCAHMW (Crown Copyright) AP_2006_3144



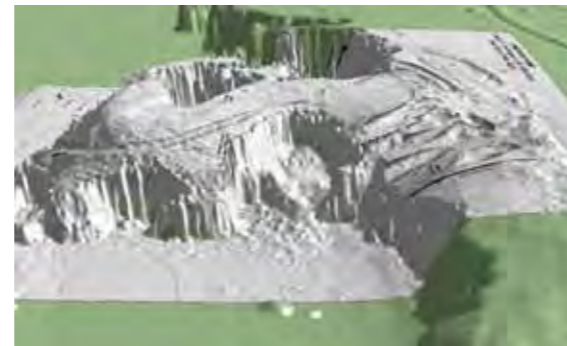
major redevelopments or demolitions and even to gather directional views for guidebooks and interpretation panels. This broadens the scope of sites targeted and ensures key events in the modern landscape of Wales are recorded for posterity.

■ Revelatory results

But the lifeblood of our reconnaissance programme is its power to discover archaeological sites and to document those we know in a variety of lights and seasons. Arable cultivation is less extensive than in much of England, limiting the potential for archaeological cropmarks, but plough-levelled sites are discovered as parchmarks in grassland and, in particularly dry summers, in vegetation patterns in stubble, revealing sites quite revelatory to regional histories. Such results were witnessed in west Wales in 1984 and were repeated on a national scale in 2006, a summer that marked a turning point in our understanding of plough-levelled archaeology.

■ Rare discoveries

In mid, south-west and north-west Wales, scores of unrecorded later prehistoric defended enclosures were recorded. A buried medieval church was discovered in the Vale of Conwy, the most north-westerly Roman villa in Wales in fields near



New airborne datasets: Flimston Bay Camp, Pembrokeshire. RCAHMW ground survey by Louise Barker wrapped over 2m LiDAR data, showing the differential terrain of coastal slopes enclosed by promontory defences. Environment Agency copyright. D0032801. All rights reserved. Survey: RCAHMW (Crown Copyright)

Aberystwyth, and the known Roman road network was extended. Wales acquired two further Neolithic causewayed enclosures, at Womaston in Radnorshire (since excavated by Clwyd-Powys Archaeological Trust) and at Flemingston in the Vale of Glamorgan (see *British Archaeology* No.91, 6); this brings the total to six, five discovered by aerial reconnaissance since 1995. Recent rare and exciting discoveries have included four sets of early medieval square barrows, one just outside the Roman fort of Segontium (Caernarfon), Gwynedd, since investigated by Gwynedd Archaeological Trust in response to a planning application.

■ A cursus, henge, marching camp and fish traps

It is a surprise even to seasoned archaeologists how repeated flights continue to yield significant results. Minor fluctuations in season, crop growth, snow melt and light reveal detail which eludes country-wide programmes of vertical aerial reconnaissance (although *GoogleEarth* can be usefully trawled). The ability to get airborne at short notice in a light aircraft is the key to discovery. Reflecting on a quiet summer for cropmarks during 2009, the year still saw discoveries that included a new cursus in Montgomeryshire, a probable henge in the lower Usk valley, the first Roman marching camp recorded in Gwent, and the largest concentration of fish traps around Welsh shores at Swansea.

■ Sharing data

It is vital that this information becomes widely available. Time and again local history is re-written by aerial discovery, while deeper understanding of a landscape can build up over decades; yet, how does this knowledge reach the world? Our database, www.coflein.gov.uk, makes site records immediately available and the new Welsh Assembly Government Internet initiative *Casgliad y Bobl/The People's Collection* also draws on aerial archives. Close working with the WATs, particularly in Dyfed and Gwynedd, has seen discoveries promptly surveyed and excavated. Projects with RCAHMW's field survey team and other bodies in Wales, along with LiDAR and marine datasets, have assisted research into coastal erosion at promontory forts in Pembrokeshire, and will aid documentation of the coastal and intertidal zone for the new *Arfordir* project.

Traditional publication has a strong role too. Books of scenic aerial photographs often lack interpretation, but linked to landscape history they become an essential tool for sharing data with the public. *Pembrokeshire: Historic Landscapes from the Air* (RCAHMW 2009) was designed to share historic and modern views, imparting regional awareness of landscape palimpsests one can see so well from the

air, as well as providing enough illustrations (nearly 400) to allow air photographs to be quarried by local historians for years to come.

In its 1925 *Pembrokeshire Inventory*, the Royal Commission claimed the first use of aerial photographs in Welsh archaeology (with four views). In 2011, we will mark 25 years of our own aerial reconnaissance programme, with many thousands of contributions to the archaeological record along the way. With acquisition of the Aerofilms archive, and the largely untapped potential of new airborne remote sensing datasets like LiDAR, the future holds tremendous promise.

Toby Driver

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Intertidal discoveries. Perhaps the largest fish trap on the west coast of Wales, discovered during low tide reconnaissance in 2007 near Cardigan. It is no longer fully exposed even at the lowest tides, and is thought to be medieval. RCAHMW (Crown Copyright) AP_2007_2418



Putting archaeology back in the landscape: the landowner stands at the centre of the dramatic 44m diameter Dollwen barrow, discovered near Aberystwyth in 2006 and visited shortly afterwards. RCAHMW (Crown Copyright) DS2006_212_008

SCHEDULING ANCIENT MONUMENTS IN WALES

Jon Berry

One of Cadw's most important statutory tasks is the assessment of historic features for protection through scheduling. This function dates back to the Ancient Monuments Protection Act of 1882, and last year Cadw celebrated the 125th anniversary of the first protected monument in Wales (Pentre Ifan), designated in 1884. Subsequent Acts expanded and consolidated powers of protection. The Ancient Monuments Consolidation and Amendment Act 1913 broadened the schedule to include Roman and medieval monuments, and created the Ancient Monuments Board for Wales.

CAVE SITES TO THE COLD WAR

A Cardiff-based Inspectorate was created during the early 1960s, and scheduling powers were devolved to Wales in 1978. Since creation of the National Assembly for Wales in 1999, Cadw has undertaken scheduling on behalf of Welsh Ministers, guided by the Assembly's non-statutory scheduling criteria. Today 4127 monuments are legally protected, with sites ranging from prominent ruins such as Castell Dinas Bran, Denbighshire and Tintern Abbey, Monmouthshire, to below-ground remains, and from Palaeolithic cave sites such as Paviland, Gower to Cold War sites abandoned in the 1980s.

Scheduling is not undertaken lightly. It can place constraints on owners and occupiers, so there must be research and consideration before the long walk up the path to meet the owner and request permission to assess the site. The number of scheduled monuments in Wales is increasing as part of an on-going planned policy of enhancement to examine all known archaeological sites and to protect the best. Since the 1980s this programme has doubled the number of scheduled monuments, mainly thanks to a proactive approach since 1993.

PAN-WALES INITIATIVES

During the early stages of the Gwynedd Hut Groups project, which examined numerous well-preserved examples of early settlement from prehistoric and Romano-British periods, the Inspectorate began to develop a new model using the four Welsh Archaeological Trusts (WATs) to undertake site visits, identify owners and provide basic site descriptions (p14-15). Cadw grant-aided the Trusts to undertake this thematic assessment and to recommend sites for scheduling, thus enabling Inspectors to schedule

more effectively and efficiently. Some programmes were operated as pan-Wales initiatives, for example those looking at prehistoric defended enclosures, Roman roads or deserted rural settlements. The WATs undertook annual project work, often on a countywide scale, in different parts of Wales over a number of years. The biggest initiative was the prehistoric ritual and funerary site programme, which comprised 24 individual trust-based projects. The result was 1169 assessments leading to designation of 668 monuments. Elsewhere, the Trusts undertook regional studies, for example fish weirs in Gwynedd and churchyard crosses in Monmouthshire.

ACCELERATED PROGRAMME

The Minister for Heritage's Historic Environment Strategic Statement of 2009 committed Cadw to assess the remaining prehistoric and Romano-British monuments, so Cadw has embarked on an ambitious and accelerated programme with the WATs to evaluate all these for scheduling the end of 2010, with formal recommendations by the end of 2012. In parallel, Cadw will undertake other thematic scheduling enhancement projects, such as 20th-century military and industrial sites. Monuments are also identified for consideration via other routes, such as the RCAHMW Uplands Survey (p9) and the scheduled monument aerial monitoring programme (p10), and by local authority and national park archaeologists. Individuals often also draw Cadw's attention to possible sites.

Maintaining this momentum is of paramount importance, as it is delivering real benefits for the historic environment. In many ways, scheduling is the bedrock for Cadw's archaeological activities, for example grant-aid and management agreement programmes, and publications, including the Inspectorate's own *Caring for...* series of conservation booklets.

Assessment of all known prehistoric and Romano-British monuments in Wales by the end of 2012 will be a magnificent achievement. It will be a 'first' within Britain and we are confident that it will not be equalled for some time to come. That we are so close is a testament to the hard work put in by Inspectorate staff and the Welsh Archaeological Trusts over the decades.

Jon Berry

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Pentre Ifan burial chamber, Pembrokeshire, Wales' first scheduled ancient monument. © Cadw, Welsh Assembly Government (Crown Copyright)



Abercanaid haystack boiler, Merthyr Tydfil. The boiler is a rare and early example of steam engine technology. It is believed to have been used at the Gethin Pit and brought down to Abercanaid in the 1930s, where it was used as an air raid shelter during the Second World War. © Cadw, Welsh Assembly Government (Crown Copyright)



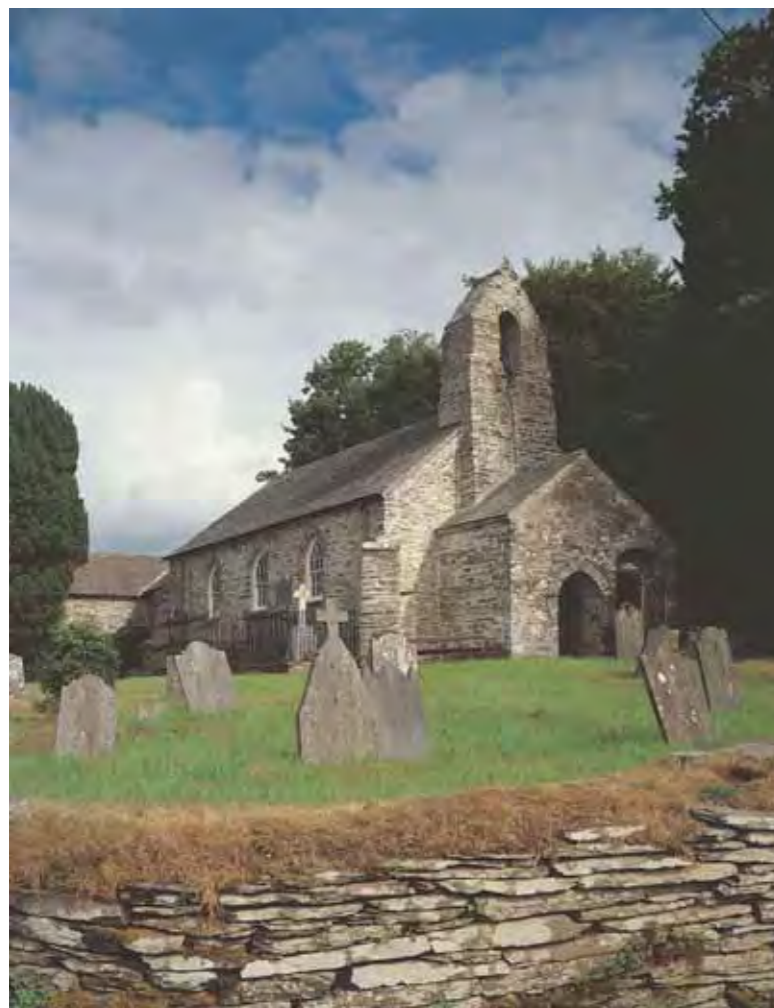
Tintern Abbey, Monmouthshire © Cadw, Welsh Assembly Government (Crown Copyright)



Carew Cross, Pembrokeshire © Cadw, Welsh Assembly Government (Crown Copyright)



Castell Dinas Bran, Denbighshire © Cadw, Welsh Assembly Government (Crown Copyright)



One of the many churches visited is Manordeifi Old Church, Pembrokeshire. Photograph: Cadw, Welsh Assembly Government (Crown Copyright)

Pan-Wales projects: recording the whole archaeological heritage

Assessing and protecting

After the coastal archaeology project, sites were tackled by type. Deserted medieval rural settlements and prehistoric funerary and ritual sites were followed by early medieval ecclesiastical sites, Roman roads, forts and *vici*, early prehistoric non-defensive sites, and hillforts and defended enclosures. Regional projects were run alongside the national ones. Dyfed and Gwynedd Trusts assessed their burnt mounds, Clwyd-Powys worked on short dykes and Glamorgan-Gwent examined ironworking sites. Even modest projects have had an impact. For instance, there were only two stretches of scheduled Roman road in Wales when work started in 2001 but now there are eighteen with a combined length of over 8km.

Outcomes

There are other outcomes. Many thousands of one-to-one meetings between landowners and archaeologists have been of immeasurable importance in raising awareness and may, in the long term, be one of the most important outcomes. The thematic studies have generated a significant level of expertise amongst the field archaeologists who have undertaken them, and numerous papers have been appeared in regional and national journals. Monographs include *The Coastal Archaeology of Wales* edited by Andrew Davidson (CBA Research Report 2002), and *Lost Farmsteads* edited by Kate Roberts of Cadw (CBA Research Report, 2006). A similarly oriented volume on late prehistoric defended enclosures is currently in preparation. Unlike most projects Roman forts and *vici* included detailed fieldwork, in particular geophysical survey, the results of which have encouraged Barry Burnham (University of Wales Lampeter) and Jeff Davies (Aberystwyth) to prepare a new (third) edition of the standard reference work on Roman military activity, *The Roman Frontier in Wales*, which will for the first time carry a section on the Roman road network. Other results are posted on the Trusts' websites. For instance 25 pdf reports on the results of the defended enclosures project are downloadable on Dyfed Archaeological Trust's site and if you Google any church in Powys the chances are that the first website listed will be Clwyd-Powys Archaeological Trust's results of the churches' project.

In 1995 the four Welsh Archaeological Trusts collaborated on two projects, a study of the archaeology of the Welsh coast and an assessment of the country's historic churches. No one then was aware what a large part of the trusts' work these Cadw grant-aided, pan-Wales projects would become, nor that fifteen years later we would be still conducting them with so much success. To date over 26,000 sites have been visited, described and photographed. The regional Historic Environment Records (HERs) have been enhanced and around 1000 sites protected by scheduling. By the end of 2010 every prehistoric and Roman site recorded on the four regional HERs will have been assessed.



Hafod Eidos, Ceredigion, recorded during the Deserted Rural Settlements project. Photograph: Cadw, Welsh Assembly Government (Crown Copyright)



A ring cairn on the Brecon Beacons visited during the Prehistoric Funerary and Ritual project. Photograph: Cadw, Welsh Assembly Government (Crown Copyright)

Satisfyingly successful

Survey work is now complete but this is not the end of pan-Wales studies. Cadw has funded limited excavations and surveys in several of these arenas. Some have been satisfyingly successful. Clwyd-Powys's work on cursus monuments has produced radiocarbon dates for several of these enigmatic monuments, while their work on the short dykes introduced a methodology which provided early medieval dates for five of these monuments, the first dating evidence for their construction (see *Archaeological Journal* 2006). In Dyfed, work on cropmark defended enclosures assessed survival of a group of sites and provided data on chronology and function (p24), the results of which will be published in the near future.

The pan-Wales surveys are moving towards a natural conclusion with the near completion of all known prehistoric and Roman sites; work on the remaining medieval themes should commence in the next financial year. Cadw has allocated considerable financial resources over the last few years. The schedule of statutorily designated sites has benefited enormously, and so we would like to think, has our understanding of Wales' archaeology.

Ken Murphy
Dyfed Archaeological Trust

Bob Silvester
Clwyd-Powys Archaeological Trust



Distribution of all Iron Age hillforts and defended enclosures, compiled following an assessment of these sites across Wales. Dyfed Archaeological Trust

Fields of Conflict: *an historic battlefields register for Wales*

Gwilym Hughes
and Jon Berry

Battles are often iconic events and can invoke strong emotions and passions even today. The reputations of political and military leaders were often based on success on the battlefield, and the sites may contain topographical and archaeological evidence, including war graves, which can increase our understanding of momentous events. These issues have led to calls for a register of Welsh historic battlefields.

A Welsh warrior princess

Battlefields of Wales are not as well-known or researched as in other parts of the UK. The battles tended to be smaller and less formal than many in England or Scotland. There is often little or nothing visible to identify their locations, and there may be few documentary sources, especially for medieval battles. For example, in 1136 Gwenllïan, a native Welsh princess, led an army against the Anglo-Normans based at Kidwelly castle. The defeat and subsequent execution (by decapitation) of this Welsh 'Joan of Arc' has passed into local folklore, yet the battle is commemorated in just a few lines by Gerald of Wales, writing in the late 12th century, and by a farm bearing the name Maes Gwenllïan (Gwenllïan's Field).

Lost battle locations

More is known of later medieval battles, including an important group associated with the campaigns of Owain Glyndŵr, 1400 to 1405. However, despite better documentary sources, their sites are often notoriously difficult to locate. One early victory over the English at Hyddgen in 1401 was fought in the Cambrian Mountains in mid-Wales, but looking for the precise site is like finding a needle in a haystack. Glyndŵr followed this victory with a similar success at Pilleth in Powys, 1402. There are several near-contemporary accounts of this battle, in which Glyndŵr defeated a sizeable English force under Edmund Mortimer, most of which was killed or captured. However, once again the precise location is uncertain – it has been variously located in the water meadows of the River Lugg or on the nearby hill of Bryn Glas.

Better evidence is available for the 1648 Civil War battle at St Fagan's, near Cardiff, an important engagement of the Second Civil War (1642-48) and the last set-piece defeat for Royalist forces in this phase of the conflict. About 8000 men had intended to march on Cardiff, led by Gen Laugharne and other former senior Parliamentary figures who had defected to the Royalist cause, but they were roundly defeated by a much smaller Parliamentary army. We hope that further field investigation might provide more information on key engagements of this battle.

Last invasion of Britain

A more unusual conflict occurred near Fishguard in 1797. A force of Frenchmen, led by an ageing American colonel, William Tate, landed at Carregwastad Point on Strumble Head, the last military invasion of Britain by a foreign power. In reality there was no battle; rather a failed expedition that lasted no more than two days. It was meant to be a diversion from a French invasion of Ireland, but when this larger invasion failed to take place, the landing in Wales was doomed. Tate surrendered to the local militia without a shot being fired.

What is a Welsh battle?

These few examples highlight some of the difficulties facing the establishment of a register of historic battlefields in Wales. The first issue is to define what is meant by a battle in a Welsh context. Many key conflicts were in reality little more than skirmishes, while castle sieges represent many of the more significant engagements. In more recent times, Wales was the setting for key events involving social unrest, notably the Chartist march on Newport in 1839 and the Merthyr riots of 1836. Both uprisings were put down by military action and resulted in the deaths of individuals who became local folk heroes, so should they be included on a register of conflicts? The second consideration is criteria for assessing candidate sites. Essential elements will be precise locations and extent of battle sites (which for a majority will be far from easy), the historical significance of the battle, and survival of archaeological evidence.

We must also consider the reasons for establishment of a register. Clearly we want to provide better protection for key monuments, including use of the planning process, but raising public awareness of these important sites is perhaps equally important.

All these issues will be included in a public consultation to be launched this year, as announced by the Minister for Heritage in the Welsh Assembly Government, part of his recent Welsh Historic Environment Strategic Statement. Work is now being undertaken to inform this consultation. To date, RCAHMW have reviewed 165 known battles and provided advice to the Ordnance Survey of battles that could be depicted on its maps. Cadw has commissioned Border Archaeology to undertake historical research of fourteen key conflicts, examining primary and secondary documentary sources and collating information on the battles and their historic terrain. Work will now begin on a pilot programme of detailed investigative fieldwork at two or three key candidate sites.

This work will bring greater clarity to these hidden and significant components of Wales' heritage.

Gwilym Hughes

Chief Inspector of Ancient Monuments and Historic Buildings, Cadw

Jon Berry

Assistant Inspector of Ancient Monuments, Cadw

The site of the 1402 battle of Pilleth in Powys. It has been suggested that the battle took place in the meadows adjacent to the River Lugg running top to bottom on the left of the photograph. However, it is perhaps more likely that the main engagement was on the hill of Bryn Glas, indicated by the small square clump of fir trees, reputed to mark the location of human remains. RCAHMW (Crown Copyright)

The upland landscape of Ceredigion, site of Glyndŵr's victory at Hyddgen in 1401. This photograph illustrates some of the difficulties in precisely locating some key Welsh battlefields. RCAHMW (Crown Copyright)



URBAN CHARACTERISATION IN WALES

Judith Alfrey



The form of the medieval borough of Flint is clearly apparent within the modern town.
© Cadw, Welsh Assembly Government (Crown Copyright)



An early pattern of plots and boundaries was tenacious in structuring the growth of Dolgellau
© Cadw, Welsh Assembly Government (Crown Copyright)

Every town has its own story and distinctive character. Understanding that character and how it was formed are cornerstones for planning, design and management, enabling us to reinforce a sense of place. Cadw has been developing a scheme of characterisation that provides consistent, structured analysis of what gives a town its unique identity, plus a base-line statement of its character and value. This work is a foundation for planning and regeneration strategies.

HISTORIC LANDSCAPE CHARACTER

Characterisation in Wales began in order to support use of the Register of Historic Landscapes established by Cadw, the Countryside Council for Wales and ICOMOS UK, which identifies 58 landscapes of historic interest. It was published in two parts in 1998 and 2001 (landscapes of outstanding and special historic interest respectively). It is non-statutory, but its data are a material consideration in the planning process, and guidance on its use has been published. Characterisation provided fine-grained information for each landscape, detailing the components of historic landscape character in areas with common characteristics. Its findings are used when assessing the impact of development.

UNIQUE IDENTITY

Unlike the typological approach adopted elsewhere, characterisation in Wales assigns a unique identity to every area, setting out the particular combination of historical elements which makes them distinctive. These elements may be identified in desk-based study but are always confirmed by fieldwork. Historical elements are ascribed to themes – agriculture, settlement, industry etc – which together describe the historical processes which have shaped the landscape. These processes are discussed in some detail at the whole landscape level, as well as for each character area. This discussion shows how each area and element has a place in the larger story of the landscape.

FORM AND FABRIC

The emphasis is now shifting to the urban environment, where investment in regeneration brings opportunities to reinforce distinctiveness and historic character. In response to this opportunity, Cadw is working on a new programme of urban characterisation: a series of twelve pilot studies is being used to refine a methodology and promote the value of a character-based approach for a range of



Individual residential areas in Aberdare are distinguished by the use of different house plans
© Cadw, Welsh Assembly Government (Crown Copyright)

planning contexts. This will enable us to define local distinctiveness, on the premise that the unique historical trajectory of each area – manifest in its form and fabric – is responsible for its character and identity. It is applicable in any town regardless of its perceived heritage merit. Studies have been completed for Aberdare, Dolgellau, Flint, and Caernarfon Waterfront, and are under way in Denbigh, Blaenau Ffestiniog and Pontypool. Completed studies are available on www.cadw.wales.gov.uk.

The methodology is similar to historic landscape characterisation. Like HLC, it distinguishes individual areas and describes their unique identity with reference to historical components that in turn demonstrate key themes in the shaping of the town. A framework for understanding this physical character as a whole is set by identification of key components.

ELUSIVE ORIGINS

Tangible elements of character may relate to historical topography and layout (the pattern of spaces, streets and plots) or to building stock (the chronology of building and its patterns of development, types and styles of building, materials and finishes). They may also relate to the archaeological resource. In Dolgellau the curious plot structure of the town holds a key to its elusive origins as well as to its character: buildings are literally shaped to a series of curving boundaries, and straight lines more often than not denote 19th-century interventions. In Aberdare, near-contemporary residential areas are distinguished by subtle differences in the character of the building stock.

ORIGINS AND CHRONOLOGY

Each component plays a role in the story of the place. Origins and chronology of growth and change

may be revealed in spatial structure, the phasing of building, or in archaeological traces. Links with the rural hinterland, and types of building within the town, point to the economy that supported its existence. The profile and character of the building stock provides clues to the kind of society the town sustained. For example, the grid plan laid down for Flint in the late 13th century is still a strong component of the townscape, and evidence of the medieval town and its defences are likely to be preserved below ground. But the building stock spotlights later chapters, as the town embraced modernity in the 19th and 20th centuries. In Blaenau Ffestiniog, the linear structure of the town is shaped by transport routes developed to link slate quarries to ports. The town's character was laid down in a few decades in the mid to late 19th century, but small variations in a superficially uniform building stock reveal the intricate structure of this working community.

Urban characterisation provides a framework for planning, design and development based on understanding spatial structure and the character of its building stock. The result can inform decisions about what to keep and how to accommodate change. Like historic landscape characterisation, it is about defining the parameters within which the character of a place has been formed: using these parameters to inform future development will help ensure that local distinctiveness is sustained.

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EXPLORATION TYWI!

Community investigation of an historic landscape

Louise Austin and Alice Pyper



The Tywi valley is a registered historic landscape, recognised for its unique group of planned parks and gardens

The Tywi Valley in Carmarthenshire includes an unrivalled group of historic planned landscapes in addition to monuments such as Garn Goch Iron Age hillfort, the Roman forts at Llandovery, Llandeilo and Carmarthen, Carmarthen Roman town and several medieval castles. The valley was entered on the *Register of Landscapes of Historic Interest in Wales* in 1998, and now a partnership of authorities and funding agents are supporting a major project, *Tywi Afon yr Oesoedd* or *Tywi A River through Time*, in order to improve the conservation of this outstanding landscape through developing local knowledge and skills. Additional benefits will include awareness of the national importance of the area, developing its potential economic significance, increasing biodiversity, improving the local skills base, increasing local employability and developing educational resources for the area.

EXPLORING THE VALLEY

One element of the project is *Exploration Tywi!*, a community project led by Dyfed Archaeological Trust to investigate how and why the Tywi Valley has changed through time. Participants of all ages will be encouraged to explore the valley's past through geological, archaeological and historical discovery, looking at how the growth of towns and villages, agriculture, and communication routes has changed the character of the valley. It will also look at how geology, climate, flora and fauna have influenced this unique and beautiful landscape.

Activities include a churchyard survey, house detective workshops, hedgerow recording, and participation in excavations, field-walking projects and surveys. Up-to-date techniques will be taught, and information discovered will be presented at a variety of events and on a website. Booklets and education packs will be produced for the benefit of future generations.

NEW RECORDS

The project was developed with both archaeological and community objectives. Participants have been learning how to use historic sources and the Historic Environment Records at Dyfed Archaeological Trust, and discovering the variety of sources available at the



A geophysical survey carried out through Exploration Tywi has revealed an enclosure around the Roman villa of Llys Brychan



Recording gravestones in St Teilo's Graveyard



Participants record field boundaries and hedgerow species with the help of the County Council's ecologist

Carmarthenshire Archives, the National Library of Wales and the National Monuments Record. New sites and existing records are being created and updated in the project's own GIS database which will ultimately be fed back into the HER.

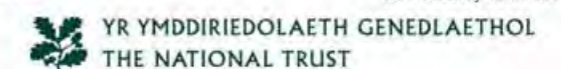
EXCAVATIONS

Recent evaluation excavations have taken place in the valley to investigate a long-house, a deserted farmstead, an Elizabethan mansion and an enclosure around the only Roman villa recorded in Carmarthenshire, discovered through geophysical survey undertaken as part of *Exploration Tywi!* These assessments will enable us to target one specific site for a large-scale excavation at Easter 2010. All sections of the community are encouraged to become involved, and close liaison with schools has helped to identify ways in which Exploration Tywi! can dovetail into the curriculum. A twilight INSET

evening enabled teachers to see what sources and materials were available from local and national archives.

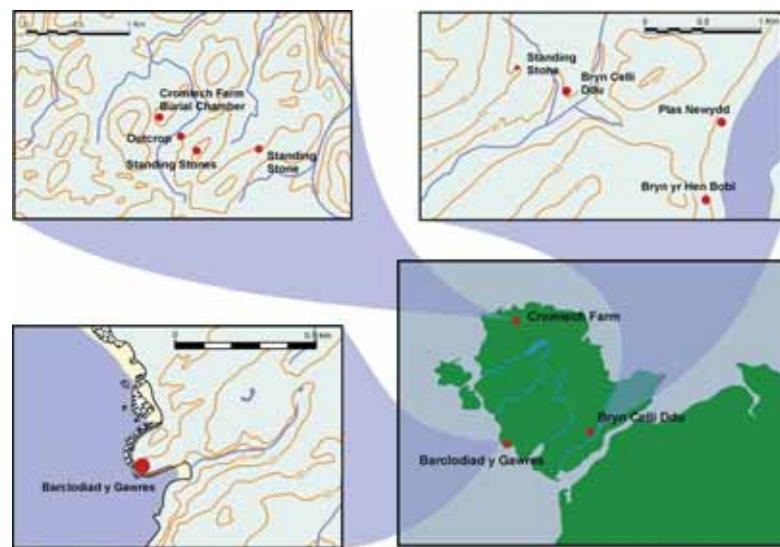
Each of our activities is carefully evaluated and feedback is sought, in order to learn and develop from each experience. Activities lined up for the year ahead include looking at the Tywi valley at war, recording how conflict through the ages has affected community and landscape. We will also be researching and recording communication routes and investigating historic buildings. Whilst each of these activities has serious questions to ask of the archaeology in the Tywi valley, we aim to have fun seeking out the answers!

Louise Austin
Alice Pyper
Dyfed Archaeological Trust



ROCK ART RESEARCH comes to WALES

George Nash



Sites recently investigated by the ARAP Team on Anglesey



Recording Neolithic/Bronze Age cupmarks on rock-outcropping near the passage grave of Bryn Celli Ddu



Prehistoric rock art on a cromlech in north Anglesey



The entrance to the passage grave of Bryn Celli Ddu



Recording new rock art in the passage grave of Barclodiad y Gawres, Anglesey



Pecked zigzag lines from Stone 16 in Barclodiad y Gawres



Lozenge motif on Stone 16 in Barclodiad y Gawres

Prehistoric rock art is now embraced into mainstream archaeology. There are over 8000 sites recorded in England and Scotland, mainly in the uplands of County Durham, Cumbria, Derbyshire, Northumberland, Staffordshire and Yorkshire, and the Central southern counties of Scotland, following pioneering work by AWB Morris and Stan Beckensall and English Heritage's Rock art pilot project. But what of Wales? There is a limited number (around 45) of rock art sites listed on regional Historic Environment Records, CARN (Core Archaeological Record iNdex, managed by RCAHMW) and the Cadw database, most of them located within 15 to 20 miles of the coast and on or close to Neolithic burial and ritual monuments, but as yet there has been no suggestion of replicating the successful English Heritage rock art pilot project.

NEW SURVEY

Then, in 2005, a team lead by the author and Adam Stanford (Archaeology Safaris) conducted field surveys around Neolithic burial and ritual monuments in Anglesey, the Llyn Peninsula and the coastal landscape around Harlech, and the number and our understanding of the sites increased. It is now recognised that there are many stylistic similarities between the rock art assemblages of Wales and Northern Britain, both mainly dating to the Neolithic and Bronze Age and comprising multiple carved abstract motifs such as concentric circles, cupmarks, cup-and-rings, spirals and zigzag lines, but there is a difference in provenance and context. Whilst northern British rock art occurs almost exclusively on open-air rock outcrops, in Wales it is usually associated directly with burial.

Initial reconnaissance in North Wales yielded such positive results that the team inaugurated the Anglesey Rock Art Project (ARAP). Recording methods include tried and tested methods such as high resolution digital photography using controlled lighting conditions, so sites exposed to the elements are photographed during darkness, as well as conventional tracing with marker-pen onto acetate sheets.

MORE MEGALITHIC ART

In five years since we began there have been some spectacular discoveries. At Barclodiad y Gawres more megalithic art was discovered within the chamber area, including additional cupmarks, geometric motifs and spirals on several upright stones, similar to

motifs and symbols on Irish monuments. These motifs were so finely pecked they escaped discovery when the site was excavated during the early 1950s by Glyn Daniel and Terrence Powell. At Bryn Celli Ddu, up to 30 cupmarks were found on a large rock-outcrop some 50m west of the monument. The team deduced that the outcrop, a neighbouring standing stone, and Bryn Celli Ddu passage grave formed part of a ritual landscape. These discoveries prompted fieldwork on other sites in Anglesey and North Wales including the double chambered burial-ritual monument Dyffryn Ardudwy, near Harlech, where faint megalithic art was discovered within the facade of the western chamber.

In the summer of 2009 a large international team assembled at Llwydiarth Esgob Farm in Anglesey. In the garden there stands a large boulder with a unique series of designs which, although moved by a local antiquarian in the early 20th century and discussed by several archaeologists during the 1970s, had never been systematically recorded. The team, comprising students from Bristol and University College Dublin and seasoned specialists, recorded the rock art using a variety of methods.

Following yet more discoveries, the ARAP Team decided to set up a Welsh Rock Art Organisation (WRAO) and to join the International Federation of Rock Art Organisations (IFRAO), gaining access to international funding and officially registering Wales within the global rock-art community.

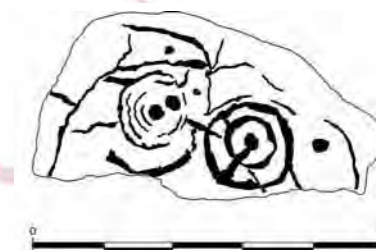
Now WRAO has over 85 members and is planning a fully interactive website this year. As for fieldwork, the hunt goes on.

George Nash

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The 2009 tracing of the Esgob Stone, Anglesey



A controlled light image of the Esgob Stone, central Anglesey (image: Adam Stanford)

Investigating Iron Age defended

Ken Murphy

Defended settlements are a key characteristic of south-west Wales in the Iron Age. Approximately 800 such sites are known, ranging from heavily defended hillforts in excess of 12ha, down to farmsteads with ditches and banks enclosing less than 0.04ha. Earthworks define the larger sites; smaller sites are known largely as cropmarks discovered since the 1970s. It was these cropmarks that revealed sites that began to populate areas previously thought devoid of late prehistoric settlement.

South-west Ceredigion (Cardiganshire) was one of these blank areas. Although about 60 defended settlements are now known, about half are rectangular, in comparison with 10% across the region, which cast doubts over whether all should be

assigned to the Iron Age without more evidence. Therefore, between 2004 and 2007 Dyfed Archaeological Trust obtained Cadw grant aid to investigate a sample in order to characterise them and to inform their future management. Fieldwork was carried out in partnership with the University of York, using RCAHMW photographs.

Roman pottery

The first year's fieldwork comprised geophysical survey on eight rectangular sites. High-resolution survey detected roundhouses of a size compatible with known Iron Age examples, supporting a late prehistoric date. From 2005 to 2007 thirteen further sites were surveyed and three excavated. Paucity of artefacts hinders study of the Iron Age in this area, and therefore the first year's excavation at Troedyrhiw targeted the enclosure's entrance in the hope of recovering finds from ditch terminals. This strategy was successful in that a small collection of Roman pottery was recovered from the upper fills of the silted ditch, the first assemblage of Roman pottery from the county from a non-military site. The

settlements in south west Wales

character of the ditches was surprising; they were steep-sided, cut through hard bedrock and up to 4m wide and 3.5m deep.

Classic Iron Age settlement

At Ffynnonwen the entrance was not accessible but the interior of this circular enclosure, surrounded by an oval annexe, revealed classic Iron Age settlement remains: roundhouses and four-post structures. As at Troedyrhiw, the enclosure ditch was rock cut and deep, except where exceptionally hard rock meant that the builders could only penetrate a few centimetres. The incomplete nature of the enclosure ditch adds fuel to the defensive/display debate. Few artefacts were found, but radiocarbon dating indicates use of the site from the 8th to 4th century BC through to the Romano-British period.

Unfinished site?

An inland promontory fort in north Pembrokeshire, Berry Hill near Newport, was chosen for the third excavation. If any site in west Wales was going to produce imported artefacts this would be it, as it lay on a tidal estuary half a kilometre from a beach. Targeting the entrance proved fruitless as, apart from perforated disks of local shale, no artefacts were found. This dearth of artefacts coupled with the incomplete but substantial enclosure ditch, the simple single-phase entrance and the absence of pits, postholes and occupation debris suggests that the site

was unfinished and unused. The results of radiocarbon dating were another surprise, suggesting construction in the 10th to 8th centuries BC.

The project has demonstrated that important archaeological deposits other than the large ditches visible on aerial photographs survive on these plough-damaged sites, which clearly has management implications. It has also shed light on a little studied area of prehistoric settlement, the results and implications of which will be fully discussed in forthcoming academic paper.

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Ty Hen rectangular enclosure from the air. RCAHMW (Crown Copyright)



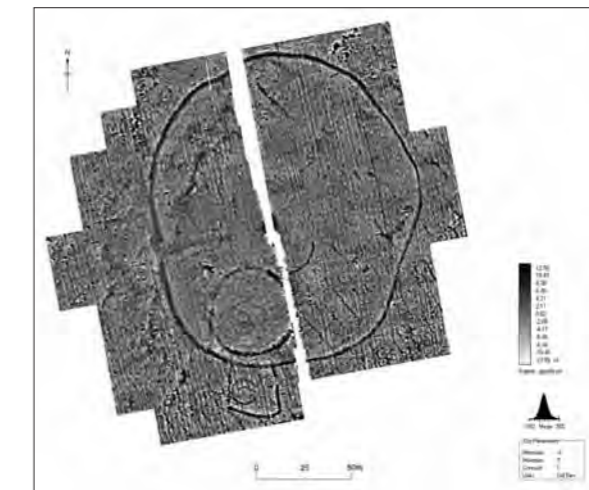
Aerial photograph of Cawrence concentric enclosure. RCAHMW (Crown Copyright)



Panoramic view of the Troedyrhiw excavation showing the large ditch terminals and entrance postholes



Excavation at Ffynnonwen, revealed as a classic Iron Age enclosed settlement



Geophysical Survey of Ffynnonwen



Berry Hill excavation, looking out through entrance to show entrance postholes and ditch terminals

Heather, hillforts and agri-environment

Helen Mrowiec

Agri-environment schemes such as Tir Gofal, Tir Cynnal, ESA and Glastir are important mechanisms which can offer positive management of historic monument sites in the Welsh countryside. These monuments, notably hillforts, are valued features in the landscape and contribute much to its character, so their protection and positive management are important to heritage, conservation, landscape, environment, community and tourism issues. However, funding such management can be challenging, especially for features without statutory protection.

Eight years ago, difficulties in bringing people together to secure agri-environment schemes on common land led to the Heather and Hillforts Partnership, to cover moorland areas of the Clwydian Range and Llantysilio Mountain in north-east Wales. Pressures that made the project necessary included loss of moorland habitat, lack of data on the hillforts and, with 500,000 visitors every year, the usual recreational problems and requirements. The project is funded by the Heritage Lottery Fund and Partnership Board members, but it is agri-environment schemes that are the vehicles that can sustain management in the long-term, although these include constraints in the management of historic monuments that we have encountered.



A damaging fence marks an ownership boundary on Penycloddiâu



Access and enjoyment of the countryside and historic monuments are important in this project. These walkers have a view of Moel Arthur hillfort in the Clwydian hills AONB

Land tenure

Tir Gofal requires agreement from 80% of graziers and 85% of grazing rights before any common land area can enter into the scheme. One problem is that some grazing rights have been unexercised for years and in some cases have not been updated on the common land register following deaths and splitting or sale of land. In the future a further constraint is that land will also need to be held by an individual tenant or owner for the duration of the scheme.

Stocking density

Sheep can cause erosion on ramparts of hillforts as they nestle into banks for shelter, but maintaining historic monuments in their current state is a feature of cross compliance. Restoring historic monuments can be funded under Tir Gofal and possibly under the emerging Glastir scheme, but land managers often prefer to put resources into boundary restoration, fencing woodland and river corridors to control stock grazing. However, within the Clwydian Range landowners and graziers agreed to prioritise a 5-year



Sheep grazing, without causing erosion

moorland management programme, and on Penycloddiâu hillfort the Heather and Hillforts Project funded a dry-stone wall cross to create an alternative shelter for sheep, which they are already obligingly using. Tir Gofal could fund such work, if farmers are willing.

Vegetation Management

Gorse clearance and bracken and scrub management are beneficial for historic monuments, whilst improving grazing qualities. Tir Gofal can fund such management and land managers are usually keen to undertake it.

Fencing

A boundary fence marking land ownership along the ramparts of Penycloddiâu Hillfort fell into disrepair, and the Heather and Hillforts Project was able to purchase a small parcel of land so that a new fence could be constructed outside the scheduled area. Agri-environment schemes can fund fencing to protect historic monuments, but complex issues such as multiple land ownerships are difficult to address through mainstream schemes.



Children taken back in time on a walk up Penycloddiâu Hillfort as part of the Heather and Hillforts Project

Knowledge and understanding

These were catalysts for the whole project. The Historic Environment Report undertaken as part of Tir Gofal was crucial in raising awareness of landowners and managers about historic features on their land.

Priorities

The scoring priority of historic features within agri-environmental schemes is unfortunately rather low, and it is likely that this will remain so in Glastir as it has been indicated that carbon capture, water retention and quality will be the key issues addressed by the new scheme.

Interpretation and educational visits

Our research has shown that most people would value more information on the historic sites they visit in the countryside. Educational visits are also a key part of the project, especially bringing children out of the classroom to experience heritage first hand. So far, 724 children have been involved in field trips, volunteering work and study projects. Tir Gofal has the ability to fund such work, but the option is rarely taken up due to practical difficulties and the budget cap.

Agri-environment schemes have always made an important contribution to the management of historic monuments and will continue to do so. However, increased flexibility to react to individual issues would raise our potential to undertake the most effective schemes on a limited budget.

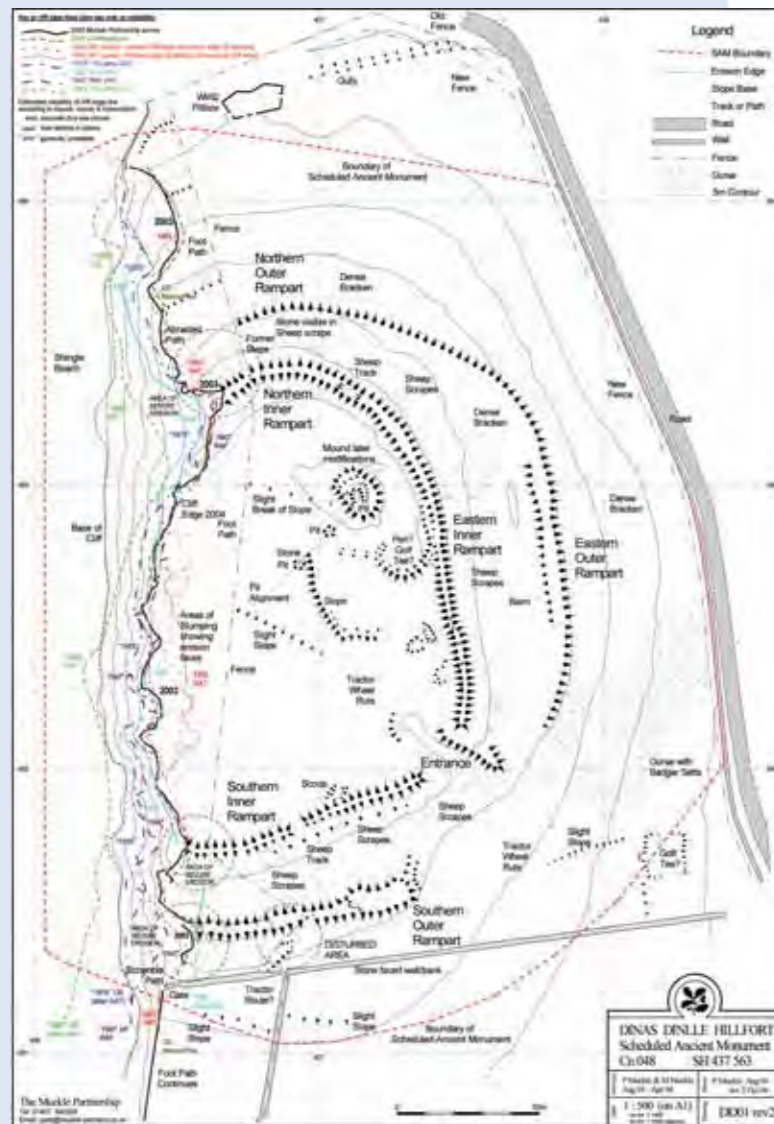
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John Latham

Dinas Dinlle: erosion and conservation

Dinas Dinlle is a natural hill on the Caernarfonshire coast that was adapted and reinforced as a typical Iron Age hillfort. Today, fortifications survive on three sides only, the west side being eroded away by the sea, although when constructed the fort may have stood well inland. A second threat to preservation is that the fort, being an excellent vantage point with a popular beach below and a large car-park adjacent, attracts the passage of numerous feet on a narrow strip of land, which has led to deep grooves and whole areas of bare soil, some of them exposing archaeological features. The fort has attracted attention since at least the mid-18th century and features in *Archaeologia Cambrensis* 1846. It is also an important coastal exposure for interpreting Late Pleistocene glaciation in North Wales and is a SSSI for that reason.



Survey of the site showing the progress of the erosion edge over 125 years



Dinas Dinlle illustrated in *Archaeologia Cambrensis* 1846

Erosion rates

The National Trust, which acquired the site in 2000, began work by repairing boundaries and removing the internal fences of grazing blocks. This opened up access, and the hope was that the public would no longer use the old worn path, but unfortunately they still did. Natural erosion has been plotted from records going back to the 1880s and was surveyed in 2004, so a rough approximation of the erosion rate can be determined. The local authority created a stone groyne to reduce wave action at the base of the cliff and to slow natural erosion (see www.nationaltrust.org.uk/main/shifting_shores_brochure_final-2.pdf).

Features and finds

A fortuitous by-product of the erosion is that archaeological features are now revealed, mostly in section. Bangor University have devised a programme to take advantage of this to record features, and will test-pit the centre of the site. A fragment of Black Burnished ware found on the beach below and a 19th-century find of a hoard of 3rd-century coins point at least to use during the Roman period. Gwynedd Archaeological Trust has carried out geophysical investigations, revealing hut sites and related features and demonstrating that the whole site was at some time buried by sand up to one metre deep.



North side erosion with remains of previous (unsuccessful) repair work

Boardwalks and websites

Footpath erosion remained a problem, as the public continued to use the heavily eroded areas despite having access to easier routes to the summit. NT Warden, Dave Smith, came up with the idea of creating a boardwalk to by-pass all these unstable access routes and divert people to a safer alternative. In collaboration with Cadw and the local authority this new walkway is now complete and has been a great success. The next steps are to infill and grass over eroded areas in 2010 and provide simple on-site interpretation. An animated website, created through the Welsh Assembly Government initiative *The People's Collection*, explains how Dinas Dinlle developed geologically, its Iron Age history and how the Trust has managed it in recent years. This fine attempt at making archaeology work for the public will be augmented by a web-link that should be up and running during 2010.

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The centre of the site before removal of the fence (2003)



Same view after removal of fence and after the pasture had recovered



Shifting shores: the site from the air in 2004. RCAHMW (Crown Copyright)



Internal construction details in part of a rampart eroded by the footpath



On site meeting with Cadw, NT warden and local authority to discuss the Boardwalk Plan. A deep eroded groove on the northern inner rampart is visible



The site from the north in 2009. The old erosion groove is grassed over but is still unfilled. Work on this planned for 2010

A Roman fortress *and* the Ryder Cup

Andrew Marvell



In September 2010 Celtic Manor Resort near Newport will be hosting the Ryder Cup, on a course which runs along the flood plain of the Usk and loops around a Roman settlement close to the legionary fortress at Caerleon. Construction of a top class golf course and management of top-class archaeology somehow had to work together.

Rich Roman remains

Great Bulmore Roman settlement was first recognised in 1815 when a large masonry building incorporating reused tombstones was discovered. In 1975 excavations uncovered a substantial multi-phase masonry building, and further work in the 1980s identified at least fifteen masonry buildings as well as

inhumations and some medieval features. Much of the area was subsequently scheduled. Extensive evaluation works in connection with a (subsequently aborted) Welsh Rugby Union Centre of Excellence revealed further Roman buildings and cemeteries. The topographical relationship of this settlement to Caerleon fortress and adjacent *canabae* implies that it may have been deliberately sited on the edge of the *territorium* of the II Augusta Legion, close enough to the fortress to exploit the economic benefits under military control. The existence of two separate settlements, one adjacent to the fortress with a second under civil authority within 1.5-2.5km, has been demonstrated at Chester and in mainland Europe. The Archaeological Research Agenda for Wales recognises three particular areas of study for the Roman period, including 'Interaction between Roman occupiers and the indigenous population – Relationships should be assessed by investigating high-status settlements such as hillforts, small towns, villas and *vici*, the civilian settlements that grew up adjacent to military ones'. For south-east Wales the Caerleon Environs is a particular focus area for such engagement.

'Design out' principles

Development of the Celtic Manor Resort started in 1991, with Glamorgan-Gwent Archaeological Trust involved from the outset. In this time there have been five desk-based assessments, six field evaluations,

two geophysical surveys, three excavations and three watching briefs, as well as post-excavation, survey, consultancy and other works. 'Design out' principles have been engaged where feasible, leading to preservation of structures ranging from Roman remains to an anti-aircraft battery. Even when a Roman pottery kiln was found during construction of a green, the course designer was flown in and the hole re-shaped to avoid the structure.

Pottery industry

Whilst the main areas of Roman settlement had been avoided by the Twenty-Ten course design, there was always the possibility of discovering other structures, so a watching brief with in-built intervention facilities was maintained. This led to excavation of a well-preserved pottery kiln, a probable workshop building and a drying kiln, part of an extensive industry producing 'Caerleon Ware', pottery first identified during excavation of Caerleon Amphitheatre by the Wheelers and for which the production site has long been sought.

Stone watch tower and military remains

There were also some pinch points. It was necessary to cross the monument at two locations and permission was given in respect of tailor-made engineering designs. Water management also required new drainage arrangements in the flood plain and across the monument, which were recorded, leading to evidence for inundations towards the end of the Roman occupation. Conditions elsewhere on the course included a programme of archaeological investigation which resulted in discovery of a high-status domestic building close to the road line and a single cist

burial. Outside the protected area, parts of a cremation cemetery were revealed during soil stripping, leading to re-shaping of both the hole and the scheduled area in order to protect areas of proven remains alongside the Caerleon-Usk Road and the newly-found cemetery. Most recently, excavations have revealed the remains of a stone watch tower (c3m square), a rare discovery. The tower has been found in association with military items including parts of a *dolabra*, and fragments of an inscription.

One reflection of the weight given by the Celtic Manor Resort to protection of environment principles was inclusion of the principal archaeologist on the project team. This has ensured that all parties were aware of archaeological interests from the outset and these were factored into the works of other consultants. Conversely, the archaeologists had first-hand understanding of the developers' concepts. It was this synergy that ensured smooth passage.

Collectively the works have allowed detailed knowledge about the landscape around one of the best-preserved fortresses in the Roman Empire to be built up, whilst ensuring that the core body of information has been protected in a managed environment. The presence of these remains and the high profile of the Ryder Cup will provide an opportunity for promotion of the local historic environment and related practice to an international audience.

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One of the pottery kilns excavated during construction of the Championship course. The production site for Caerleon Ware had long been sought



Foundations of the Roman stone watch tower, found in the coachpark. Associated finds included military items and fragments of an inscription

Looking for King Harold (but finding something else)

Mark Brett and Mark Collard



The enigmatic tower at Portskewett, Monmouthshire © Cotswold Archaeology

The archaeology of Wales has an unfailing capacity to surprise. Rarely do sites prove to be quite what they seem at the outset. Cotswold Archaeology has been excavating in Wales for almost twenty years, and in that time has worked on some fantastic sites in great locations (although excavating an Iron Age farm inside an active RAF base during a period of heightened security had its challenges). Recent work near Chepstow typifies the intriguing problems in interpretation and understanding that we have frequently encountered.

Royal court of Gwent

The village of Portskewett in Monmouthshire lies 7km from Chepstow close to the Welsh bank of the Severn Estuary. Its appearance is deceptive as a now totally silted-up tidal inlet of the Severn was still navigable into the medieval period. Portskewett is often referred to as a port in medieval documents, but its history can be traced back before the Norman Conquest, as there is a documentary reference that this was a royal court of the kings of Gwent. The most famous mention of Portskewett is in the Anglo-Saxon Chronicle which records that Earl Harold Godwinson (later King Harold II of England) started to build a hunting lodge here but it was destroyed by Caradog ap Gruffydd on the 24 August 1065. Although the importance of Portskewett declined during the medieval period, it remained the site of a medieval manor, first recorded in 1270.

There are prominent earthworks next to the church in the centre of the village, and as this field is known locally as Harold's House this was presumed to be the site of the medieval manor and earlier hunting lodge. This is just the kind of story which fascinates the public, and led to a visit by *Time Team* in 2007 who confirmed the medieval date of the earthworks, but frustratingly from a television perspective found no evidence for Harold's lodge.

Dating problems

When a site on the opposite side of a lane from Harold's House was proposed for housing, archaeological potential was obvious, and we evaluated and excavated the site for Barratt Homes in 2009. Initial discoveries were Roman, with a substantial banked and ditched enclosure on the crest of a slope leading down to the former creek. Ditches were an impressive 4m wide, but no evidence of structures was found inside the banks. Roman finds have been recovered previously from Portskewett, and it is conceivable that there may have been a villa here, but some doubt attaches to the date of the enclosure. It could be late Roman or early medieval (pre-Norman). Radiocarbon dating animal bone from the ditches may sort this out. Activity certainly continued after the Norman Conquest, as further banks and ditches which produced 12th- or 13th-century pottery testify.

Stone tower

The most surprising discovery was a substantial stone-built structure on the edge of the excavation area. It appeared to be some kind of tower made from un-mortared crudely dressed stone. It was clearly of two phases with a later addition built on to one side. It measured 8m long by 4.5m wide with walls up to 1.8m across, surviving six courses high. A narrow passage with evidence of burning led inside the tower, which had a flagged floor and was separated from the passage by two pitched stones.

What is this structure and when was it built? Neither question is easy to answer. Later 13th- or 14th-century pottery was recovered from rubble derived from demolition of the tower, but this doesn't help date construction. The thickness of the walls suggests

a structure of some height and it is possible that the flagged interior could have accommodated a ladder (there was little room for much else). A tower would have had afforded commanding views up the creek to the estuary and dominated an approach up the slope from a beaching point. It might even have formed one side of a gateway, perhaps associated with other banks and ditches on the site.

Kings' court, Harold's hunting lodge, or medieval manor?

At the moment it remains uncertain whether the structure belongs to the court of the kings of Gwent, Harold Godwinson's hunting lodge, or the 13th-century manor. Further detailed

research may sift the possibilities, although one suspects that the enigma will remain. Fortunately Barratt Homes quickly realised the significance of the find, and by working in valuable partnership with Glamorgan Gwent Archaeological Trust, which advises Monmouthshire Council on archaeological matters, agreed to amend its design to allow for preservation of the tower within the development.

The marriage of tantalising historical references and top-quality field evidence demonstrate just what an interesting place Portskewett is for archaeologists, and what a challenge it has been to unravel its complexities.

Mark Brett and Mark Collard
Cotswold Archaeology

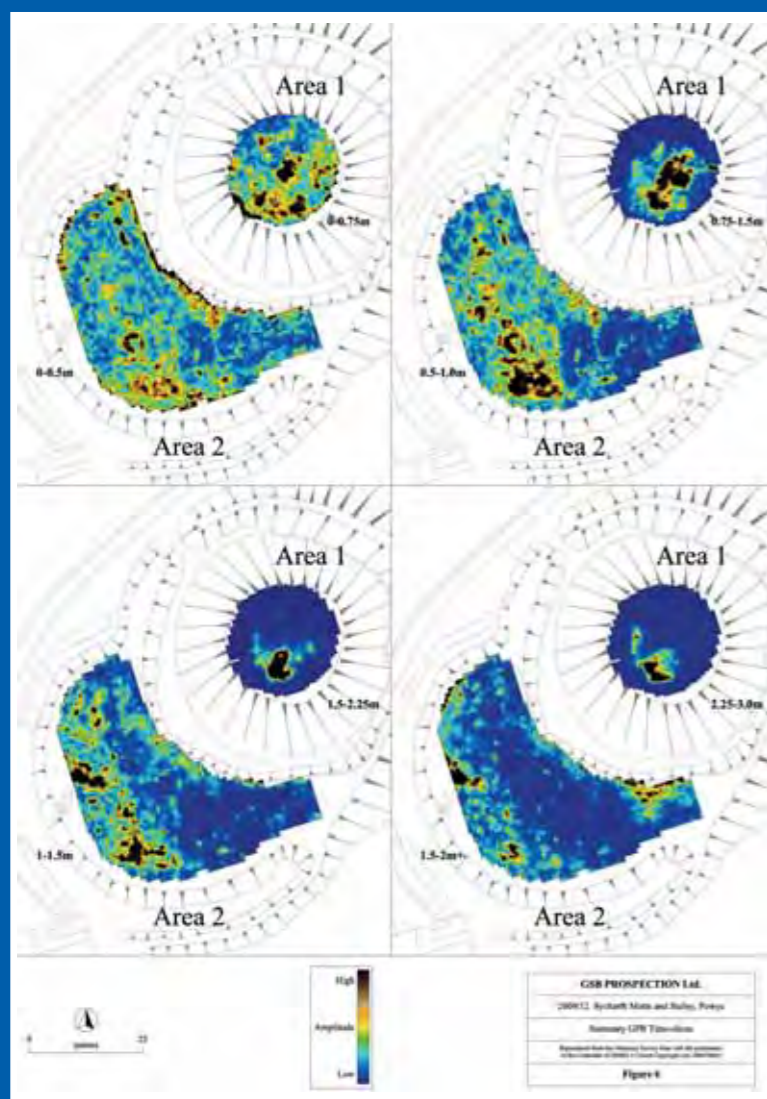
The marriage of tantalising historical references and top-quality field evidence demonstrate just what an interesting place Portskewett is for archaeologists, and what a challenge it has been to unravel its complexities.

Caring for the castles of Wales' native princes

Gwilym Hughes



An aerial view of Sycharth. RCAHMW (Crown Copyright)



Results of the GPR 'time-slice' survey at Sycharth. © GSB Prospection

Wales is home to some of the most magnificent medieval monuments in western Europe. The imposing ring of castles built by Edward I in north Wales is rightly recognised as one of the great military and architectural masterpieces of the medieval period. The global importance of the castles and town walls at Caernarfon and Conwy and the fortresses at Harlech and Beaumaris has been recognised by their inscription as one of Wales' three World Heritage Sites. No less impressive are the castles associated with the Marcher Lords – at Pembroke, Kidwelly, Caerphilly, Chepstow and elsewhere. However, the attitude of some Welsh communities towards these sites can be ambiguous. Yes, they are economically important and bring in much-needed tourist spend. Yet they can also be seen as symbols of oppression. As devolution develops perhaps we in Wales will become more at ease with our troubled medieval history – the Welsh dragon now flies from the towers of Caernarfon castle – yet there is still a perception that Cadw has focused more on the conquerors' castles than those of native Welsh princes.

Welsh nationhood

In reality this is unfair. Over the last twenty years, Cadw has transformed public access and understanding at key sites associated with Welsh nationhood. Access and conservation work has been undertaken at Dinefwr and Dryslwyn Castles associated with the princes of Deheubarth, there has been critical work at Dolforwyn Castle in Powys and support for Denbighshire County Council who manage the hilltop castle at Dinas Bran. These add to the magnificent castles in the care of Cadw and associated with the Princes of Gwynedd at Dolweddellan, Dolbadarn, Castell y Bere and Criccieth.

Castles and royal courts

There remain iconic medieval monuments associated with Welsh princes that are in private and third sector ownership. Cadw works closely with the owners of these sites to encourage better management and public access, but progress is limited without significant investment. In January 2009 the Minister for Heritage announced that £2 million would be available for ten sites from the Welsh Assembly Government's Strategic Capital Investment Fund. This programme, the Welsh Cultural Heritage Initiative (WCHI), includes three castles and royal courts associated with the Princes of Gwynedd (Llys Rhosyr on Anglesey and at Abergwyngregyn and Deganwy on the north Wales coast). In mid-Wales the programme is supporting four sites associated with the rebellion of Owain Glyndŵr, Sycharth, Glyndyfrdwy, Machynlleth parliament building and Cefn caer, Pennal. Further south, work is being

undertaken at two Cistercian abbeys, Strata Florida and Cwmhir, and at Nevern Castle.

Conservation and repair

In 2009, our first phase focused on archaeological investigation and engineering surveys, building up knowledge to support conservation and interpretation programmes. There was geophysical survey at two homes of Owain Glyndŵr – by GSB Prospection at Sycharth in Montgomeryshire and by Stratascan at Glyndyfrdwy near Corwen. At Sycharth, a motte and bailey castle that became the main residence of Glyndŵr, a combination of techniques, including ground-penetrating radar, provided significant new evidence on the position and construction of the keep and the buildings within the bailey. It was at Glyndyfrdwy that Glyndŵr proclaimed himself prince of Wales in 1400. Here, geophysical survey has revealed the complex arrangement of defensive and water management features associated with another of Glyndŵr's moated residences. Work will soon begin on major programmes of earthwork conservation and repair at both sites.

Round tower at Nevern

Another highlight has been at Nevern Castle in Pembrokeshire, where the WCHI has been supporting investigation, conservation and public access, led by Pembrokeshire Coast National Park and the local Community Council. Work has included the first phase of a major excavation led by Chris Caple from Durham University. Wooden and stone buildings have been revealed, dating to early 12th-century Anglo-Norman occupation of the site and to later 12th-century activity possibly associated with the Welsh prince of Deheubarth, the Lord Rhys. The most dramatic find has been the base of a large round tower, constructed of slate and bedded in clay, on top of the motte. Further excavation and conservation will be undertaken in 2010.

Pan-Wales interpretation plan

An important component at all sites is to improve access and interpretation. The sites do not sit in isolation but form key parts of broader stories about Welsh life, society and politics. With this in mind, Cadw is preparing a pan-Wales interpretation plan, including thematic plans for the Princes of Gwynedd, of Deheubarth and Owain Glyndŵr. These plans will inform the next stages of the WCHI and also aspects of a pan-Wales Heritage Tourism Project. Over the next four years, this complementary programme, led by Cadw and supported by the European Union, will see major projects at key heritage sites in west and north Wales. It will also deliver broader packages, maximising economic opportunities provided by heritage tourism.

WCHI and the Heritage Tourism Projects will bring medieval sites and stories associated with Welsh nationhood into sharp focus. The programmes will dispel the impression that our historic environment is about the rich and powerful. Telling the story of history's ordinary people, including the underdog, will feature prominently. These stories, and the stories of the native Welsh princes, will take their rightful place alongside those associated with the great monuments of the Anglo-Norman kings and lords.

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the Welsh dragon now flies from the towers of Caernarfon castle ...



Excavating a stone building at Nevern Castle, possibly built by the Lord Rhys. © Pembrokeshire Coast National Park

... yet there is still a perception that Cadw has focused more on the conquerors' castles than those of native Welsh princes.



Excavating and surveying at Abergwyngregyn, royal castle associated with the princes of Gwynedd. © Snowdonia National Authority

CLOSE TO THE EDGE: COASTAL EROSION AND EARLY MEDIEVAL CEMETERIES IN PEMBROKESHIRE

Duncan Schlee



West Angle Bay, the oval stone-faced enclosure bank, with cist graves



In addition to an early medieval cemetery, St Brides has evidence of the lime and herring industries

Dyfed Archaeological Trust has recently undertaken two small Cadw-funded excavations at early medieval cemetery sites within the Pembrokeshire Coast National Park. Intended to inform future management, the projects have also fuelled research into the origins of the early church in Wales.

The two cemeteries belong to a notable group of chapel sites around the Pembrokeshire coast which are associated with the earliest post-Roman Christianity in Wales. At West Angle Bay, cist graves have for many years been noticed eroding into the sea. Geophysical survey revealed an egg-shaped cemetery enclosure of 340 square metres, containing a rectangular building. Excavation across the enclosure (avoiding the building) revealed a stone-faced bank and ditch and nine poorly preserved infant and adult burials. This cemetery and cist graves eroding from the cliff are contained within a much larger rectangular enclosure dated between AD 540 and 650. At St Brides, more eroding cist graves prompted a small excavation revealing a probable rectangular ditched enclosure, again containing discrete clusters of cist burials overlain by a later building.

These projects, coupled with excavations of early medieval cemeteries at Brownslade and Porthclew, will add immensely to excavated evidence of the period, which until now has been largely based on antiquarian descriptions and sparse documentary evidence. Community involvement has been crucial to the success of these projects – most of the fieldwork has been by enthusiastic local volunteers and students.

Hopefully, future stewardship of these sites will recognise that coastal erosion will increase in the face of climate change and predicted sea-level rises, and that concerted action is needed to recover valuable evidence from threatened sites before it is lost. Public engagement is an important factor in raising awareness of Pembrokeshire's archaeology and its conservation. Dyfed Archaeological Trust therefore is currently developing *Arfordir* – a project encouraging local communities to identify, record and monitor the effects of erosion on the region's coastal archaeology.

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Bricks and mortar: post-medieval buildings archaeology in Wales

Martin Locock

Considering how much time archaeologists spend interpreting excavated evidence of past buildings it is surprising how little attention we pay to the physical components of their walls. There are few published typologies, still the best being LS Harley's 'A typology of brick' in the *Journal of the British Archaeological Association*, 3rd series, Vol. 37, 1974. In the absence of an established sequence for Wales, a pragmatic approach based on site observations has begun to yield a coherent pattern of the use of ceramic building materials and mortar types.

Medieval use of brick in Wales was limited. Abundant building stone meant that it was only used by deliberate choice, for ecclesiastical and secular floors of decorated floor tiles (see J Lewis 1999 *Medieval Tiles of Wales*), and in hearths and chimneys where stone would be damaged by heat. In the post-medieval period, brick became a standard material for structural and garden walls, outbuildings and drains, but urban domestic landscapes in Wales are dominated by local stone rather than brick. In contrast, new industries used brick for canals, railways, bridges, collieries, factories and warehouses. This did not mean that the materials were not local: evidence from stamped bricks attests an astonishing proliferation of small brickworks exploiting the combination of clay, coal and rail links. It has been estimated that in 1870 there were 1700 brickworks in England, and perhaps 300 in Wales, often associated with collieries. Brickmaking in Wales remains largely undocumented: apart from Ordnance Survey maps, the best evidence is the bricks themselves (Dave Sallery includes photographs of more than a hundred of these on www.penmorfa.com).

Development of mortars has also not been precisely described or dated. In the early post-medieval period, mixes comprising mainly lime were adopted, presumably because it had become cheap and widely

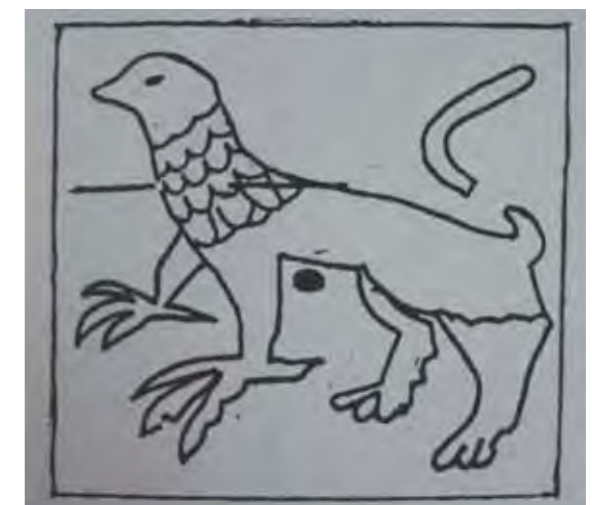


Cwmgors Brick Company was active from c 1890 to 1930 in Llangwig, Neath Port Talbot, supplying brick to the adjoining colliery and local builders

available. Howard Thomas of RCAHMW proposed a date for the changeover in the late 16th century for coastal Glamorgan, but elsewhere 1700 seems more typical. In the late 18th century, coal and charcoal start to be used as additives. Detailed chronologies of mortars from single sites have been developed for Swansea, Pembroke and Monmouth, but the results cannot be applied widely as the proportion of binder and the nature of the aggregate were not closely specified. Measuring percentages of lime may therefore not help in phasing.

Although we cannot yet spot-date bricks or mortars, we can encourage more widespread sampling and analysis as part of work towards a more integrated archaeological approach to the recording of historic buildings, including fabric analysis as well as descriptions of feature.

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Line impressed floor tile, Griffin *en passant* (Lewis design 725), from Dudley Priory, c 1340. The wooden stamp used to mark the tile gradually deteriorated, allowing the sequence of floors to be tracked. Strata Florida and Valle Crucis abbeys feature less damaged examples. Photograph: Martin Locock



Tram tracks finishing at the limestone quarry face at Morlais north of Merthyr Tydfil. The impressions of tie bars can be made out in the grass



Quaker's Yard tramroad bridge



The line of the tramroad preserved along a back road of terraces in Merthyr Tydfil



A Merthyr Type A sleeper block



Type B sleeper block showing the impression of the feet of the iron chair. The hole in the middle indicates it may be reused from a type A block that has been turned over



Tramplate and 'Type B' chair, showing the L-shaped section

Merthyr: surveying Wales' most historic tramroad

Andy Boucher

Merthyr Tramroad, where steam power was used on a dedicated track for the first time, is part of the folk memory of South Wales. In 2004 an archaeological survey of the route was organised by Groundwork Merthyr and Rhondda Cynon Taff, the aim being to identify and interpret the tramroad in a variety of landscape settings – disused quarries, town centres, railway sidings and open countryside.

Studying this industrial landscape involved documentary research and specialist industrial knowledge (provided through John Van Laun Associates), recording bridges and other structures, landscape survey and monument identification, excavation and topographic survey. Overall, a 14km length of Merthyr Valley was studied and surveyed, covering the route taken by Trevithick's steam engine in 1804 and the branch running up to the Morlais limestone quarries north of Merthyr.

500 guinea bet

Merthyr Tydfil was the largest of the South Wales iron towns. It spawned a number of ironmasters who came to dominate other works at the Heads of the Valleys. The background to the Merthyr Tramroad lies in the conflict between Richard Crawshay of Cyfarthfa and three other Merthyr ironworks. The latter were forced to combine forces and build a tramroad avoiding the heavily locked, congested section of the canal from Merthyr to Abercynon which was under Crawshay's control, and breaking Crawshay's monopoly in limestone supply by establishing a link to the Morlais limestone quarries. On the 21 February 1804 Merthyr tramroad was the scene for an historic rail journey by an engine built by Richard Trevithick, the result of a bet between Samuel Homfray (Penydarren ironworks) and Richard Crawshay for 500 guineas. Unfortunately one of the bolts attaching the boiler came undone on the return journey and it lost all its water.

Sleeper blocks

The line of the tramroad is in many places well preserved, which enabled us to see a range of variations in construction detail. These included contemporaneous variations and also chronological changes that reflected later adaption for mineral railway use. It was clear that the line overall had been laid out and built to achieve a highly consistent degree of incline. A key feature of construction was the use of sleeper blocks, stones set in a compact gravel matrix; archaeologically the gauge was generally recorded at 4ft 2ins. Two of the three known types of sleeper block were identified. Type A was where the tram plates were held to the blocks using a single 4 1/2 inch wrought iron peg driven into an oak plug; Type B was where a cast iron chair was attached to the block by two spikes set diagonally. The tram plates themselves were L-shaped in section measuring 3ft long and 4 1/2 inches wide. Another system, this time using tie bars, was evident at the northern end of the tramroad in the Morlais quarries.

Abutments and alignments

The survey found previously unrecorded structures, including remains of abutments for a small tramroad bridge. Within the urban sections, whilst there was no above-ground evidence, the layout of urban features still respected the line of the tram road, which could be identified in extra road widths or tracks behind houses. Only one section in the middle of the route had been completely lost, through coal extraction near the Penydarren works.

The results from the project raise an interesting issue, one of urban morphology. How far should we go to preserve alignments through gaps in the urban landscape created by the juxtaposition of later structures to industrial features such as these? How might they be presented?

Andy Boucher
Headland Archaeology (UK) Ltd

Heritage and defence: the MoD at St Athan

Ken
Whittaker

The military estate at St Athan in the Vale of Glamorgan dominates the local historic landscape, with a legacy that includes a nationally significant system of Second World War airfield ground defences and many archaeological sites. A proposed £12bn UK Defence Technical College will transform specialist training for the UK Armed Forces, with construction of the largest vocational training operation in the country.

Environmental Impact Assessment

Entec UK was engaged to advise on the initial PFI bid on behalf of Metrix and, working with the MoD and Welsh Assembly Government's consultancy team, to undertake a major environmental impact assessment. Gaining understanding of the nature and character of the historic environment was crucial and challenging, especially for the archaeological dimension. Research excavations by Amgueddfa Cymru-National Museum of Wales at Llanmaes highlighted the potential for exceptional late prehistoric remains in this area, and sites such as Caer Mead Roman villa and St Illtud's early medieval monastery at Llantwit Major have long

demonstrated the historic and cultural importance of this lowland limestone plateau, sandwiched between the southern scarp of the upland massif of south and central Wales and the Bristol Channel.

Key archaeological discoveries during the EIA include

- cremations and associated cairns which may be part of a Middle Bronze Age ritual landscape close to the confluence of Llanmaes and Boverton Brooks. There is also a Late Bronze Age and Early Iron Age midden at Llanmaes
- Late Iron Age/Romano-British settlements and fields reveal an intensively settled, mixed economy, agricultural landscape comprising medium-sized farmsteads operated by small groups, probably part of the Caer Mead villa estate. Aerial images of undated enclosures along the scarp edge of the nearby Thaw valley imply this was a landmark boundary to a major estate, which subsequently divided two of the three early medieval kingdoms of the Vale of Glamorgan and was yet later adopted as the 11/12th century boundary for the cantrefi of Gorfynydd and Penychen
- medieval remains associated with the manorial estate at Bedford Castle and medieval and post-

medieval settlement associated with St Brise Church. Whilst these relate to the established medieval settlement pattern, evidence for 12th-century activities alongside Llanmaes Brook is of particular interest, as archaeological remains associated with pottery of this period are rare in rural Wales. Further remains may provide an insight into the early feudal history of the Vale of Glamorgan.

The EIA also has to acknowledge institutional arrangements for the historic environment in Wales, implications of PFI schemes for risk management, and the significance of the historic environment to the identity of the people of Wales.

Historic environment infrastructure

The Historic Environment Group, an inter-agency forum that advises the Welsh Assembly Government is proving to be a catalyst for wider collaboration. Glamorgan-Gwent Archaeological Trust and Cadw represented regulatory interests, as advisors to the Vale of Glamorgan Council and the Welsh Assembly Government respectively, and RCAHMW and Amgueddfa Cymru-National Museum Wales provided advice and support, especially on recording and community engagement. Since devolution the Welsh Assembly Government has progressed toward an integrated historic environment infrastructure that delivers conservation, knowledge and education services through the co-ordinated action of heritage agencies. Experience at St Athan suggests multi-agency engagement with commercial historic environment activities could be an important factor in delivering national strategic objectives as set out in the *Research Framework for Wales* and the new *Strategic Direction Statement for the Historic Environment of Wales*. This engagement also provides a more secure basis for commercial investment.

Managing risk

Proper management of risk on behalf of partner interests is at the heart of the PFI process. In this case, a comprehensive, research-driven and iterative approach to historic environment baseline data established confidence that significant features could be identified and rigorously assessed. Perceived archaeological distributions were tested to reduce methodological/sampling bias or limitations, with extensive 'blank' areas trial-trenched. This approach was supported by the regulatory interests, reducing potential planning and construction risk.

Identity and place

It is apparent that some former communities of the Vale existed in a wider cultural milieu which did not necessarily relate to modern definitions of national

identity or geographic/political boundaries. Conversely insular traditions are apparent which are typical of common perceptions of the historic dimension of Welsh cultural identity.

The presence of archaeological and historic features that reflect both outlooks is characteristic of the Vale, making it culturally atypical of the rest. In contrast with adjoining areas, activities from the Neolithic through to the medieval period at times reflect connections with Wessex, the south-west peninsula, Ireland, Brittany and the Mediterranean. The Vale was also one of the Anglo-Norman 'Englishries', colonised in the 12th century under a strict feudal system.

Romantic notions

Paradoxically many of the conventional views of a pan-Welsh, celtic-derived identity that emerged in the 18th and 19th centuries originated in or around the Vale. The romantic notions of personalities such as Iolo Morganwg and William Price drew on a loose interpretation of bardic traditions, to re-define a distinct sense of nationhood, reflecting a popular desire for a specifically Welsh political and cultural franchise. Claims of authenticity have not survived the passage of time, but the image of their invention, the Gorsedd, presiding at the annual National Eisteddfod demonstrates the continuing potency of heritage in defining identity. There can be no doubting it has had a massive influence on Welsh language, literature and music.

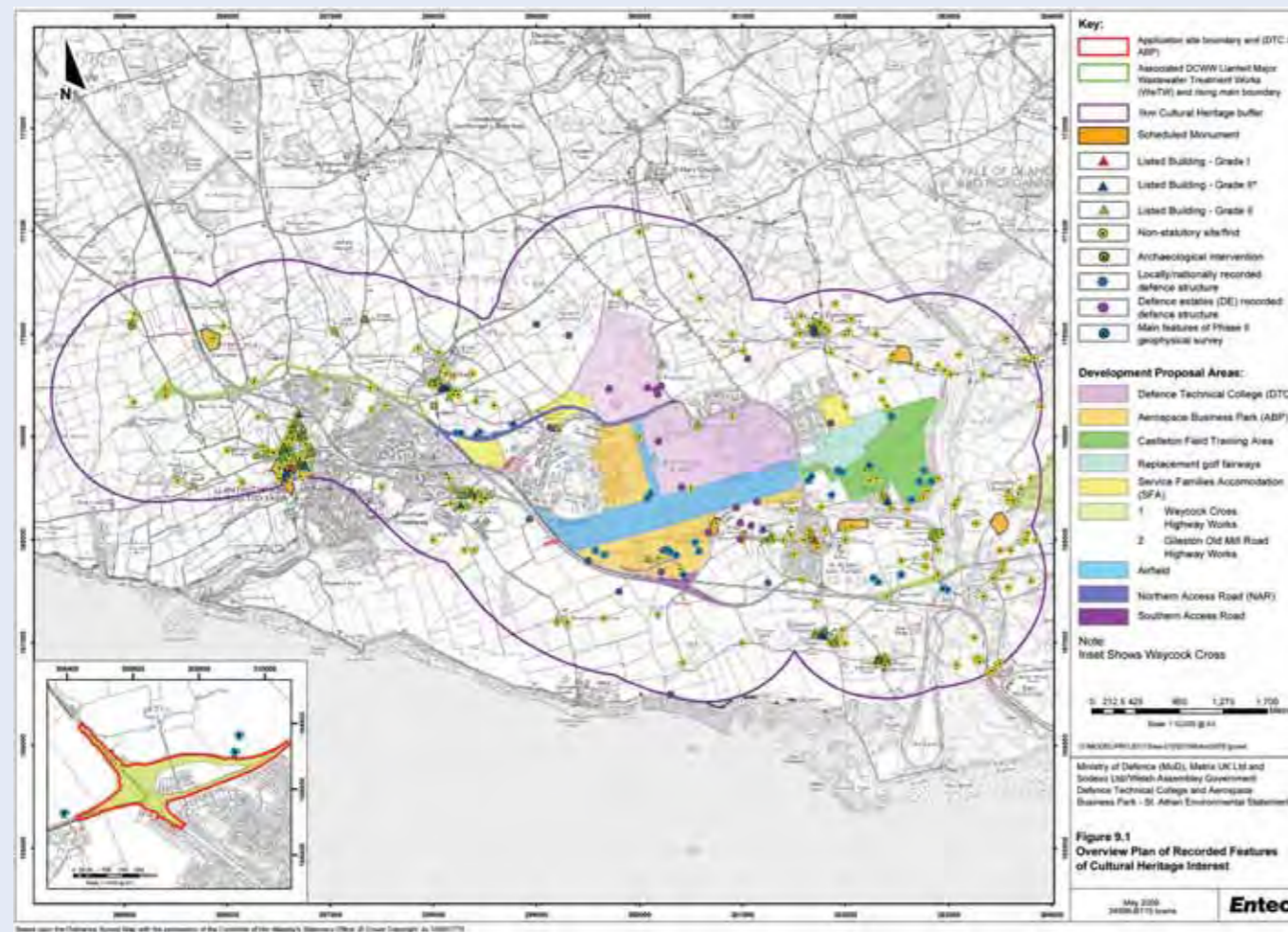
Wales now operates within a new political settlement and is eagerly setting policy that reflects ambitions for new appreciation of the historic environment. Commercial development, by initiating fresh examination of the historic environment locally, can make an important contribution to popular awareness of identity and place, thereby delivering more than simple economic investment in a successful, distinctive and culturally outward-looking Wales.

Experience at St Athan has highlighted an emerging 'Welsh-method' where the wider engagement of national and regional heritage agencies with the private sector can achieve strategic objectives and assist in the management of risk. This is proving a mutually rewarding experience for those responsible for delivering economic investment and those protecting and promoting the fragile and vulnerable heritage.

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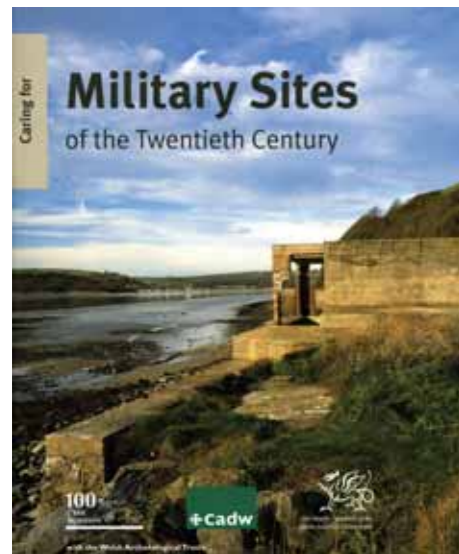
Location plan and
EIA study area



KHAKI DRAGONS!

TWENTIETH-CENTURY MILITARY SITES IN WALES

Jon Berry



Caring for military sites of the twentieth century. © Cadw, Welsh Assembly Government (Crown Copyright). It can also be seen at www.cadw.wales.gov.uk/upload/resourcepool/Caring_for_Military_Sites_ENG2921.pdf

Much of the Welsh archaeological resource is concerned with conflict. Iron Age promontory forts, Roman marching camps and spectacular medieval castles are obvious examples, but interest in remains of the 20th century's wars and the tense global stand-off of the Cold War are subjects of growing research and popular interest across the UK, and Wales is no exception. Following work by Cadw and its partners, many of these sites are now understood to be of national or even international importance and are being statutorily protected.

Understanding and appreciation of our recent military heritage is essential if this important inheritance is to be preserved for future generations.

War memorial in Aberystwyth. The Italian sculptor Mario Rutelli incorporated bronze figures depicting victory and humanity emerging from the chaos of war. © Medwyn Parry Collection

The distance of Wales from the Continent made it an ideal location for training, maintenance and the manufacture of military matériel. Although Wales has often been depicted as a quiet military backwater, our understanding of the range of military activities and their collective impact on the landscape is evolving rapidly, changing our comprehension of the role, function and significance of these sites. It possessed important west-facing defences against possible German invasion from Ireland and was in the front-line for the Battle of the Atlantic. There were numerous research, development and weapon testing facilities, which continued throughout the Cold War,

and an enormous range of sites and structures were created, some of them extensive and complex.

MILITARY INFRASTRUCTURE AND TECHNOLOGICAL ADVANCE

The Second World War embraced everybody, profoundly affecting Welsh families and communities. Military works had a dramatic effect on the urban and rural environment and left an indelible mark on the landscape. The sheer range of structures and activities has created a complex and nuanced military infrastructure and, collectively, these sites tell the story of the century's great changes in warfare, its radical and rapid technological advancements and the adoption of changing defence strategies. There is more to it than the study of guns, armies and fighting; archaeologists are well equipped to illuminate this subject, with its focus on people, structures, sites, landscapes and the meaning of spaces.

PUBLIC INTEREST

During the 1980s and early 1990s, around two dozen 20th-century military sites and structures in Wales received statutory protection as the result of *ad hoc* requests or threats. The first survey of Second World War structures in Wales was undertaken by Cadw in 1992. It noted the increasing frequency of public requests for remains to receive protection and paralleled this increasing interest to that of embryonic industrial archaeology 25 years earlier. In 1994, Cadw part-funded Roger Thomas's pioneering study of 19th- and 20th-century military buildings in Pembrokeshire, the first comprehensive regional research project to focus on Second World War structures in Wales. Progress was further advanced by CBA's *Defence of Britain* project between 1995 and 2002. In 1997 and in parallel to Colin Dobinson's archive-based work in England, Cadw co-commissioned research on the date, location and



Second World War pillbox at Nant Ffranon, Gwynedd. © Cadw, Welsh Assembly Government (Crown Copyright)

First World War practice trenches at Penally, Pembrokeshire. RCAHMW (Crown Copyright)

character of Second World War sites from documentary records in the Public Records Office. The Welsh report was narrower in scope and shallower in detail than the English version, but it revealed that the density of sites, particularly 1940 anti-invasion defences, approached those built in eastern England, a considerable surprise.

SYSTEMATIC REVIEW

Since 2003, Cadw has been engaged in a systematic review of the subject and a thematic programme of statutory protection. The current initiative originated from the Ancient Monuments Board for Wales's annual report of 2003, which recommended that Cadw should identify the most important 20th-century military sites likely to be candidates for statutory protection. The Board also advised that Cadw establish a small working group to provide support and advice. The Twentieth Century Military Sites Working Group is chaired by Cadw, with representatives from RCAHMW, Welsh Archaeological Trusts, national parks, MoD and a variety of subject experts. The group has proven a great asset, assisting designation work and raising awareness through extensive outreach work. Our experience is that this subject presents practical and philosophical difficulties, and one unforeseen benefit of the group is that members have access to specialist advice – our thematic meetings often double as training sessions.

Cadw has now designated well over one hundred sites and has invited the Trusts to bid for relevant projects that will increase scheduling (p12) and enhance regional HERs.

PUBLISHING AND PRESERVING

The working group has produced two publications. *Introducing Twentieth-Century Military Sites* is a leaflet that raises awareness of these sites, with



recommendations for steps for their protection and interpretation. *Caring for Military Sites of the Twentieth Century* is aimed at owners, occupiers and land managers responsible for the stewardship of these monuments and offers advice as to how they can best be preserved, often through simple interventions

Care and conservation of these sites protects a valuable and often fragile resource, contributes to the diversity of our landscape and safeguards important elements of history which are often the focus of community pride. Understanding and appreciation of our recent military heritage is essential if this important inheritance is to be preserved for future generations.

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A tour party learns about the scheduled Cold War Sea Slug missile static firing bay during last year's Festival of British Archaeology at the former Royal Naval Propellant Factory at Caerwent, Monmouthshire. © Cadw, Welsh Assembly Government. (Crown Copyright)

Living with the River: the Teifi Estuary Survey



Poppit Sands fishtrap partly exposed at very low tide, September 2009. © Landsker Archaeology Ltd

The Teifi estuary, known as a harbour and anchorage for yachting, is surrounded by archaeological features related both to land and the sea. Historic wrecks and quays and warehouses in Cardigan and St Dogmaels illustrate the maritime past of the estuary. The estuary is also an SSSI for the salt marshes and sand dunes, with a geological SSSI for its raised beach deposits.

Lidar sortie

When the Fairways Committee wished to improve navigation of the river, a project was formed in 2005 to consider aspects of management of the estuary. The work is partly supported by the Conservation Council for Wales (CCW), but in the main is volunteer based. Members of the group include engineers, naval architects, geologists and teachers, so a wide range of skills can be called on. This has resulted in many home-produced sets of equipment and techniques, including an echo depth recorder which collects data on a specialised suite of software. In 2006, the Environment Agency was commissioned to fly a Lidar sortie along the estuary, which has been used as a basis for tracing subsequent channel changes using survey grade GPS. Work on archaeological evidence is connected with the Cadw-



Teifi estuary Lidar survey plot, with topographic survey targets ringed. Lidar data supplied by the Environment Agency

funded Arfordir Project that uses volunteers to identify coastal archaeological sites affected by erosion.

Shifting channel

The project maintains a GIS showing results of the various surveys and also rectified historic aerial photographs, maps and charts. This has shown a substantial change in river and sand bar morphology since the earliest mapping. Recent changes mean that the main channel is returning to the route it took before 1880, and in so doing has largely destroyed the salt marshes that formed over the past sixty years. We thought that the channel surveys would have exposed historical material, but this was not so. The sandbanks appear to contain re-worked modern material, so attention is now moving towards the river margins and further inland.

Fish traps

With survey grade GPS it is possible to survey earthwork sites around the estuary, which will be compared with Lidar data for those areas. It is already apparent that in most cases, the Lidar pattern is confused by individual trees or shrub cover. A second aim for this winter is to probe or augur for remains of stone and timber features known to lie under the beach at Poppit Sands. These are probably fish traps of possible medieval date that were last exposed during periods of sand loss on the beach in the winter of 1980. They are similar to the fish trap visible on Google Earth to the west of the main beach.

Sailing ship graffiti

The project has also been given a new direction as recent commercial archaeological work reveals maritime graffiti scratched into lime-washed walls of warehouses in Cardigan dating to the mid-19th century. These show a series of sailing ships among other related graffiti. This has provided an opportunity to record warehouses, limekilns, quays and trackways that supported the growth of the maritime trade through the estuary.

Geological experts of the group are interested in a study of the raised beaches and the other peri-glacial and post-glacial features around the estuary. This is yet another aspect of the eventual objective of the project: to document the environmental and cultural history of the entire estuary.

More information can be obtained from www.landskerarchaeology.co.uk

David Maynard
Landsker Archaeology Limited



Mid-19th century sailing ship drawn on limewash in a warehouse in Cardigan. © Landsker Archaeology Ltd



Palimpsest of ship images drawn on different layers of limewash. © Landsker Archaeology Ltd



The 'Elizabeth of Bristol' is the only named ship (any other evidence of this ship would be very welcome). © Landsker Archaeology Ltd



Ship images and personal names, Davies Jones of Bridgend is known from documentary sources in the 1840s. © Landsker Archaeology Ltd

Elenydd: a Welsh wilderness

Elenydd, at the time in the possession of the Cistercian abbey of Strata Florida, Ceredigion, was described in the 16th century as ‘*wilde pastures and breeding ground*’ by John Leland. Little has changed in 500 years, it seems. Still today described as the ‘last great wilderness of Wales’ it is a dissected plateau, characterised by flat-topped ridges, rounded hills and bog-filled valleys, with expanses of grassy moorland. It is remote and difficult to access. During 2009, supported by RCAHMW’s Uplands Initiative project (p9), Trysor surveyed some 63 square kilometres at the heart of the Elenydd hills in the Cambrian Mountains, most of it within the Elan Valley Estate, which was created in the late 19th century by Birmingham Corporation in advance of reservoirs which provide water to the English Midlands and South Wales valleys to the present day.



A classic view of Elenydd; truly a Welsh wilderness, looking towards Bodtalog farm in the distance. © Trysor 2009

Cairns, summer-houses and shepherds huts

Bronze Age cairns are the only prehistoric monuments found here, although stone circles and standing stones are known in adjacent areas. Evidence of early prehistoric activity is not commonly encountered in the uplands of mid-Wales, apart from flint artefacts, which are occasionally found in fairly large assemblages. Roman and early medieval evidence is also scant in the field, although a fine Roman marching camp survives just to the east of the survey area. Later periods are better represented in the archaeological record. A number of long huts, representing the *hafodau* or summer-houses associated with medieval transhumance, were identified. Post-medieval shepherding huts (*llestau*) and farmsteads, often now abandoned, are found in sheltered positions across the area. Five post-medieval hill farms account for the entire modern population; all tenant farms of the Elan Estate.



The remote dwelling of Llest y Gadair was occupied by a shepherd until the end of the 19th century. RCAHMW (Crown Copyright)



A previously unrecorded Bronze Age cairn at Cerrig y Gadair, with the Claerwen reservoir in the distance. RCAHMW (Crown Copyright)

Paul Sambrook and Jenny Hall

Trackways and turbaries

The survey area is crossed by the ‘Monks’ Trod’, a trackway which crosses these remote hills, connecting Ceredigion with the Wye Valley in Powys. This route has been described by Andrew Fleming as the ‘finest engineered medieval road in Britain’, and it is postulated that it was built in the late 12th century and connected Strata Florida with its daughter-house at Abbey Cwmhir, Powys. Upland survey work, however, suggests that more debate is required, as there is an equally convincing argument that this is a post-medieval droving route. Despite the extensive Cwmystwyth mining sett to the west, which includes Bronze Age copper mines at Copa Hill, and the Cwm Elan lead mine to the east, the only extractive industry to affect the survey area was peat cutting: peat was still in use as a domestic fuel in some homes into the 20th century. There were many large post-medieval turbaries on high ground, but extensive areas of living bog are still present.

The Elenydd survey area is atypical when it comes to the density of archaeological sites. In other blocks of the Cambrian Mountains it would be expected that an average of 20 sites or more per square kilometre would be recorded in a typical upland survey. In Elenydd, the average was well below 10. This low total can only be attributed to the virtual absence of industry and settlement.

Reservoirs and windfarms

Threats to the historic and natural environment of the area are perhaps more subtle than first appear. Reservoir builders made a significant impact on the



A large cairn on Maen Hir, measuring 18m in diameter, looking down the Ystywth valley where further Bronze Age funerary monuments and the mining site at Copa Hill are to be found. RCAHMW (Crown Copyright)

landscape, with dams, lakes and their associated infrastructure in the valleys surrounding the survey area. Extensive forest plantations are present around the margins, whilst Cefn Croes windfarm is visible a few kilometres to the west. At various times, each of these additions to the landscape has been perceived as threats to the archaeological resource, although in reality each will itself become part of that resource.

Root damage

A less obvious threat is the spread of invasive species such as purple moor-grass, gorse and bracken, each of which are presenting problems. They can quickly obscure archaeological features, and with time can also inflict considerable root damage. Further damage is possible if action is taken to control vegetation through burning or mechanical clearance. Purple moor-grass was found to be a particular problem within the survey area, across most of which it now forms a thick mat of vegetation, hampering fieldwork to a surprising degree.

More consideration is now being given to the use of peat bogs as carbon sinks to help tackle climate change. Elenydd would undoubtedly be one area in the Welsh uplands which would be identified for this purpose. Implications for archaeological site management of such programmes, across the country, must not be overlooked.

Paul Sambrook & Jenny Hall

Trysor
www.trysor.net



The Monks’ Trod: a medieval road or a later droving route? It is one of very few trails crossing the Elenydd hills. © Trysor 2009

Elenydd: a Welsh wilderness

Reviving Cardigan

Gary Cooper and David Maynard

Cardigan, one of the oldest towns in Wales, received a charter in 1110 and so is celebrating its 900th anniversary in 2010. Two projects described below have helped to prepare the ground for this celebration.

Townscape Heritage Initiative (THI)

Cardigan (or Aberteifi), former county town of Cardiganshire (Ceredigion), has an economy based on farming and tourism with important defence and service industries. In the mid 1990s several large manufacturing companies moved away and the defence establishment at Aberporth reduced its operations. In response, the County Council and Welsh Assembly Government formed a South Ceredigion Regeneration Plan, to include restoration of physical assets such as Cardigan's historic buildings. This regeneration of business and retail buildings has helped to reinstate Cardigan's importance as an economic, historic and cultural centre in West Wales. The THI scheme began in 1999 and was extended in 2004. It was supported by Ceredigion County Council, the Heritage Lottery Fund, the EU Objective 1 programme, the Welsh Assembly Government, Cadw and Menter Aberteifi. The project has involved £6 million of expenditure and improved more than 70 properties.

All the buildings were renovated in accordance with conservation practices. Each property was researched thoroughly using historical photographs to create an authentic restored property frontage, with modern disfigurements removed or concealed. Coloured lime washes were used in many instances, often using evidence from flecks of coloured lime found on the outside of buildings. Historic designs of signs and shop names were also installed, including appropriate window designs and fittings.

Cardigan Castle

The site of the castle dominates Cardigan town centre. It has origins in the 12th century, was rebuilt in stone by the Welsh prince Rhys ap Gruffudd, and was the site of the first recorded Eisteddfod in 1176. Many historic features are hidden behind 17th- and 18th-century landscaping and house building. Castle Green House is the centre of the property completed

by 1830. It was the home of local merchants whose warehouses, quays and ironworks lay on the opposite side of the River Teifi. The Castle became overgrown and fell into disrepair after the Second World War. In 2003 it was purchased by Ceredigion County Council, was made safe and a programme of popular open days was organised. An HLF and EU Objective 1 Project, *Unlocking the Potential*, began in 2005, to include an Audience Development Plan, a Business Plan and a Conservation Management Plan.

Excavations in 1984 had established the broad limits of survival of the Castle, and in 2003 Dyfed Archaeological Trust revealed a defensive ditch and possible gateway. Measured surveys, study of historic documents and GIS investigation on the site were followed by study of the rest of historic Cardigan. Results were released as a booklet: *Cardigan – 900 years of History at the Home of the Eisteddfod*.

Regeneration

An Archaeological Management Plan that assigned objectives for an archaeological programme to accompany future restoration works formed part of the Conservation Management Plan accepted by HLF in 2009, itself part of a bid by Cadwgan Preservation Trust, who will act as the main focus of the regeneration project in future years. A volunteer group, Friends of Cardigan Castle, will assist with work and interpretation in the grounds of the Castle.

More information can be obtained from www.cardigan-heritage.co.uk.

Gary Cooper
Ceredigion Conservation Officer

David Maynard
Ceredigion Project Manager,
Unlocking the Potential, 2005 – 2009



Removing vegetation on Cardigan Castle, before building recording. © Ceredigion County Council



Cardigan Castle from the River Teifi. © Ceredigion County Council



Restoring the Mariner's House. © Ceredigion County Council



7 St Mary's Street, late 18th or early 19th-century gentry house, now offices. © Ceredigion County Council



Cardigan Music, St Mary's Street. © Ceredigion County Council

Mynydd Margam as it might have looked had the turbines been built (the right hand turbine lies within an Iron Age enclosure, with a second located just beyond the one on the left)



Wild and windy: Mynydd Margam windfarm

Andy Boucher

As climate change continues to drive attention towards balancing our energy demands so historic landscapes come under pressure to deliver needs such windfarms. Inevitably this will at times create conflict with protection of the historic environment.

Registered landscapes

A system of registered parks, gardens and other historic landscapes now recognises these places and their value and vulnerability. Whilst protection of the landscapes on the register is not statutory in Wales, the associated process of assessing the impacts of various developments on them has become commonplace in the planning system. This seems an appropriate juncture to consider a Welsh response to threatened landscapes by looking back on the first case to be tested under the current system, the proposed windfarm on Mynydd Margam, and to consider lessons that can be learned.

As an archaeological landscape Mynydd Margam is nationally recognised. It possesses four Iron Age hill-slope enclosures and two barrows, one of which housed the Bodvoc Stone. The hill itself is a landscape of 'Special' Historic Interest in Wales (second only to 'Outstanding' historic landscapes). On its south side lies Margam Park, a Grade I registered park containing the ruins of Margam Abbey.

ASIDOHL

It does not matter how good your initial study of a registered area is, there is now a requirement to follow ASIDOHL guidelines. The *Assessment of the Significance of Impacts of Development on Historic Landscape* (ASIDOHL) is a detailed process for assessing, as objectively as possible, what change a proposed development might bring to the fabric and appearance of the surrounding historic landscape. It was prepared by Cadw, Welsh Historic Monuments and the Countryside Council for Wales with the assistance of the four Welsh Archaeological Trusts

The Orangery within the Grade I listed Margam Park. Although the turbines would not be visible from here the feature adds to the historic character of the area



Caer Blaen Y Cwm, an Iron Age hill slope enclosure



A view towards Caer Cwn Philip shows a sequence of hollow ways in the foreground

(WATs). Originally published in 2003, the revised guidance (ASIDOHL2) came out in 2007.

Standard scoring

The system was developed as an assessment tool for larger-scale developments affecting sixty sites that form the Register of Landscapes of Historic Interest in Wales, but increasingly ASIDOHL2 is being requested outside these areas. The process is a more formalised version of Environmental Impact Assessment which involves scoring direct and indirect impacts against the significance of historic or archaeological features. The main benefit is that the scores can be compared to standard tables to provide a reproducible and objective assessment of the impact of the development. One potential flaw is that there is no formal way of adjusting the score through 'planning gain'. Another important step is to ensure, as far as is possible, that statutory consultees (Cadw, Countryside Council for Wales, local planning authority and developer) agree the ASIDOHL. This should mitigate the need for lengthy cross-examinations at public inquiries. In most cases areas of historic importance have already been allocated significance or sensitivity through a programme of landscape characterisation undertaken by the WATs. However, Mynydd Margam had not been completed at the time of the planning application and so characterisation in this case had to be undertaken before the ASIDOHL.

Considering setting

The historic landscape at Mynydd Margam demonstrates the value of 'stepping outside the landscape' and looking outside the developer's 'red-line' boundary – which is where walkover and reconnaissance surveys have previously tended to stop. Between undertaking the assessment on Mynydd Margam and it going to inquiry there was a significant change in recognised procedure and, as a result, views into the registered landscape needed to be assessed for impact value. Now it would be standard practice to take into account the registers and to integrate these into the view-sheds to and from sites during on-site assessment. As elsewhere, setting is an important consideration.

Practical lessons learned were that archaeological input needed to be as early as possible in the process, that consideration of the setting of the landscape in question was essential from the outset, and that there should be active consultation aimed at agreeing ASIDOHL by all parties. In this instance the planning inspector concluded "the development would have serious and highly significant, adverse environmental impacts, in terms of the effects on the character of Margam Park and its setting and its effects on the Mynydd Margam landscape of special historic interest" and it was his view that these effects were unacceptable.

Mynydd Margam offered us a good first trial of the ASIDOHL system. This is clearly one way forward and it is good to see the system promoted by Cadw, Welsh Historic Monuments and the Countryside Council for Wales, lending weight to discussions of the major issue of 'setting' in archaeology.

Details of ASIDOHL can be seen on www.cadw.wales.gov.uk/upload/resourcepool/Guide_to_Good_Practice_ENG7930.pdf.

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A replica of the 6th-century inscribed Bodvoc Stone

Development, the Wentloog Levels and ancient climate change

Tim Malim and George Nash

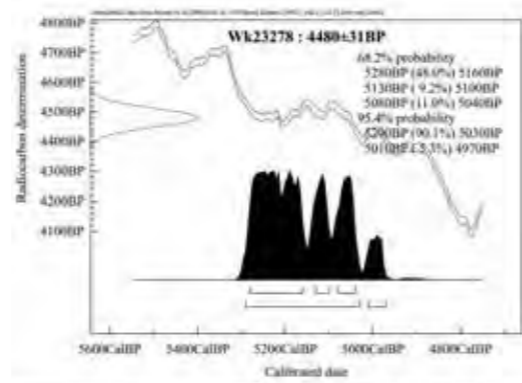
The Wentloog Levels contain a buried prehistoric landscape along the Severn Estuary, from Cardiff to Newport, and form an important backdrop to decoding ancient and historic climates.

The Levels are preserved because they are buried beneath metres of alluvium, and they contain a particularly important peat horizon at approximately mean sea level. The Lower Wentloog level is coincident with the beginning of the Flandrian Transgression, and burial conditions mean that organic remains as well as palaeoenvironmental evidence from Mesolithic times (such as human footprints at Uskmoth) have been preserved beneath silts and clays deposited as mudflats. Between the upper and lower parts of the formation, peat growth marks a period when sea level change was stagnant, possibly following the Climatic Optimum, c. 6500 cal. BC when mean summer temperatures within north-western Europe were between 1 and 2 degrees higher than today. Above the peat formation evidence for Roman reclamation is abundant, with examples

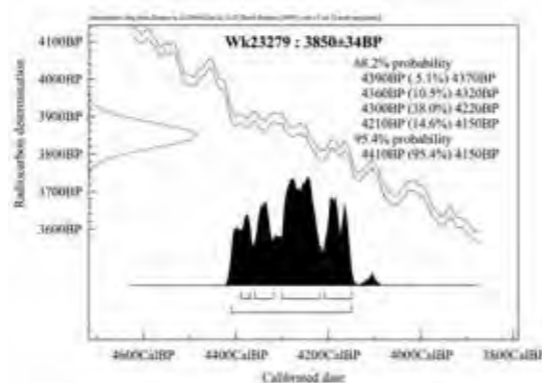
such as the boat at Wilcrick, Magor, and a military boundary stone for sea-wall embankment at Goldcliff. Whole landscapes from various periods clearly separated one from another by inundations are preserved, with the potential for intensive study.

• Engineering problems

However, these Levels fall within modern urban landscapes, the built-up coastal areas around Cardiff and Newport, and developers are frequently surprised to find that there could be significant archaeological deposits within areas that have up to 4m of made ground, and recent use for heavy industry. Because of the variable nature of up to 20m of alluvial deposit, and the alternating patterns of wet sediments and more desiccated surface deposits, the engineering problems often require deep and close interval piling, or large scale excavation to establish a firm foundation. The depth of overburden precludes archaeological trial trenching, so standard evaluation



Radiocarbon dating result from the sample taken from the lower section of the peat layer



Radiocarbon dating result from the sample taken from the upper section of the peat layer



The location of the peat layer, approximately 2.90m below the present ground level

is not an option. Two case studies illustrate this conflict of conservation and economic development.

• Dating ancient climate change

At Wentloog Industrial Estate, east of Cardiff, SLR was commissioned by a large waste company to excavate a series of geotechnical trial pits. In order to comply with the Glamorgan-Gwent Archaeological Trust (GGAT) requirements, the geotechnical team included an archaeologist who recorded a continuous thin peat layer from six trial pits at 2.9m below ground level. The pits were 3.5m deep, allowing top and base peat samples to be taken. Previous research suggested that a peat horizon extends across much of the upper intertidal zone of the Severn Estuary including the Wentloog Levels. This significant horizon has been postulated to date to 9000 cal. BC (Allen & Rae 1987), however, this *circa* date was not established through use of scientific dating. Working within Welsh Circular 60/96 and with the goodwill of the client, top and base dates were securely obtained. The two samples ranged between 4480+31 (Lower) and 3850+34 (upper) cal. BP suggesting that this deposit developed during the Late Neolithic/Early Bronze Age when the climate was changing, from a warm and temperate climate to mild and wetter. In addition to the dates, macrofossils were also identified that included reed (*Phragmites australis*) and dwarf birch (*Betula nana*).

• Beneath Cardiff Docks

At Cardiff Docks an *Energy from Waste* (EfW) plant had been proposed, designed with the most efficient modern technology and with an aesthetically stimulating exterior design, in keeping with the new



The elegance of Cardiff Bay today. Photograph Jon Mullis

Cardiff Bay regeneration. Cardiff Docks were constructed from the 19th century on reclaimed land, so that some 4m of made ground now exist. There had been a century of use as a steel works, now demolished, and the EfW would have been constructed as brownfield development of formerly industrial land. Elements of the design, including a large bunker, however, involved excavation into the Wentloog formation, with implications that were only realised at a very late stage, once GGAT had raised awareness of the issue with the planning officer. A supplementary chapter for the ES detailing the context and significance of the Wentloog Levels buried beneath the docks, together with a mitigation strategy, had to be rapidly commissioned from SLR.

These two case studies illustrate present day misconceptions in understanding what is of archaeological importance. This invisible ancient world can only be fully appreciated if we, as archaeologists, can explain the interest and potential of resources such as the Wentloog Levels to planners, developers, politicians and the public. Development, conservation and investigation can proceed together with critically important gains for archaeological knowledge, provided we articulate our case as archaeologists clearly and pragmatically.

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Allen, JRL & Rae, JE 1987. Late Flandrian Shoreline Oscillations in the Severn Estuary: a Geomorphological and Stratigraphical Reconnaissance. *Philosophical Trans Royal Society of London. Series B, Biological Sciences*, Vol. 315, No. 1171, pp. 185-200



Waterlogged reed environment of the Wentloog Levels, east of Cardiff



Development of the Wentloog Levels



Publishing the past

Diane Williams

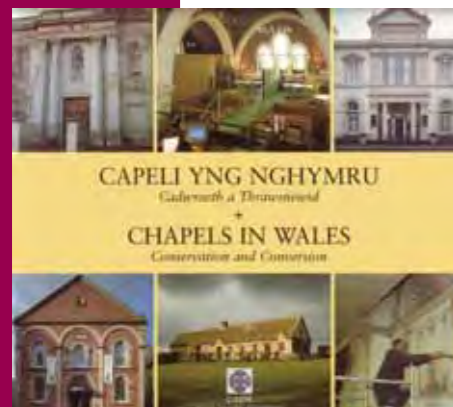
Cadw's vision is focused on creating an accessible and well-protected historic environment in Wales. This aspiration underpins our publishing programme as it does all aspects of our work.

We produce a range of publications in house, ranging from the *Caring for* series and conservation advice titles, which provide guides to good practice for owners, tenants and managers of ancient monuments and historic buildings, to planning tools such as the registers of historic parks, gardens and landscapes in Wales. There is also a burgeoning urban characterisation series, which engages with a broader community audience and help residents in Wales to identify places of local significance and meaning (p18).

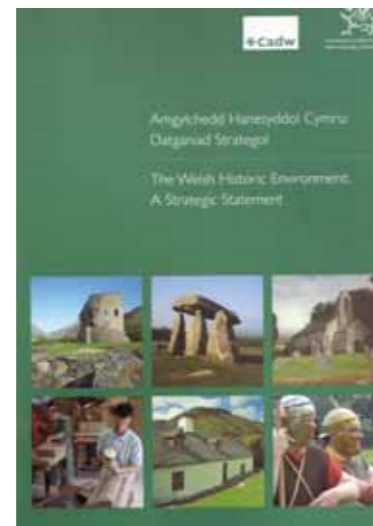
Our guidebooks provide information for visitors to Cadw sites who want to understand their history and architecture, and thematic publications, such as *The Making of Wales*, *Builders & Decorators – Medieval Craftsmen in Wales*, put places, people and processes into a broader context. Cadw also grant aids publication of academic papers and monographs linked with archaeological work that we have supported financially, as well as the publishing programmes of the Welsh Archaeological Trusts.

All our free publications are available in English and Welsh, as are many of our priced ones. Eventually we hope that all will be bi-lingual. For more information and free downloads of many of our publications, including all the free ones, please visit www.cadw.wales.gov.uk .

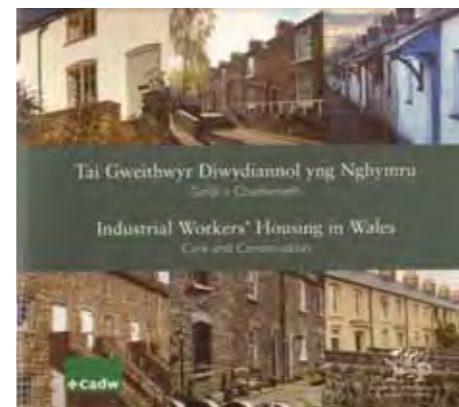
Diane Williams
Publications Manager
Cadw
Diane.Williams@Wales.GSI.Gov.UK



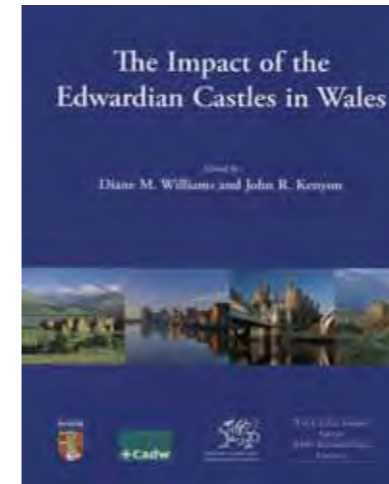
Combining general information on topics such as the numerous chapels of Wales with conservation advice, and tackling specific issues, in this case conversion for private housing and other functions, is an effective way of serving the public whilst improving standards of care for the historic environment



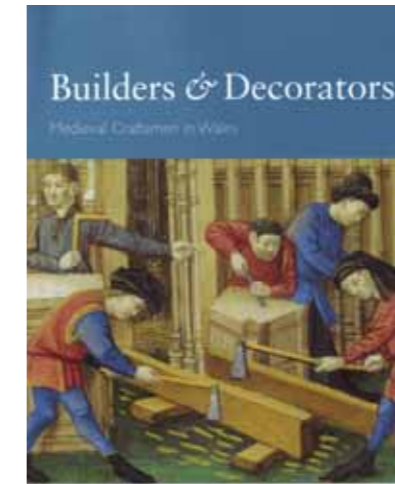
Wherever possible, official documents are published in attractive and accessible formats to encourage wide readership. This Strategic Statement contains illustrated papers by Alun Ffred Jones AM, Minister for Heritage, on his *Ambition for the Welsh historic environment*, *A celebration of what this offers to society and the economy*, as well as his *Headline action plan*



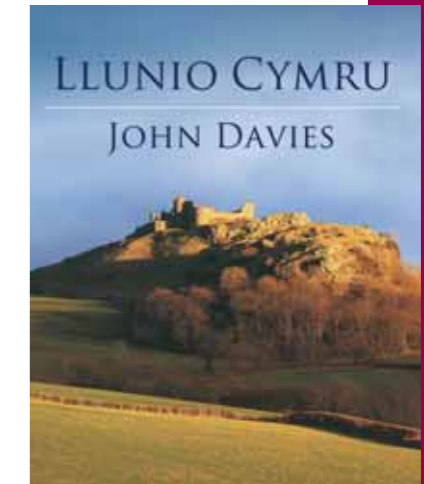
As in *Chapels in Wales*, this celebration of workers' housing, a rare tribute to the terraced housing which is maligned in much of Britain, sets out conservation values alongside academic data. The result is informative for the general reader, and emphasises identity through humbler elements of the historic environment



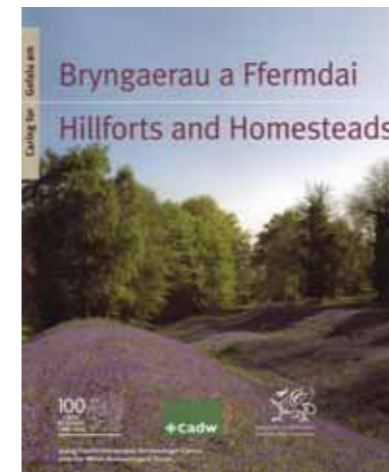
Members of Cadw staff are involved in academic publications that contribute to greater understanding as well as appreciation of Wales' most important monuments



Builders and decorators is a tribute to the forgotten craftsmen who created the fine monuments that we see today, many of them now in Cadw's care. One aim of such publications is to explain why some un-aesthetic, even invisible, elements of a building may hold great significance and need careful conservation, alongside public access



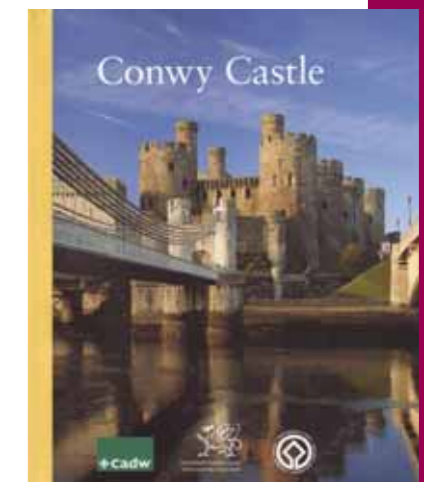
The Making of Wales is one book which puts places, people and processes into a broader context. All our publications are available in English and Welsh. Usually these are combined in the same publication, but sometimes separate volumes are more practical



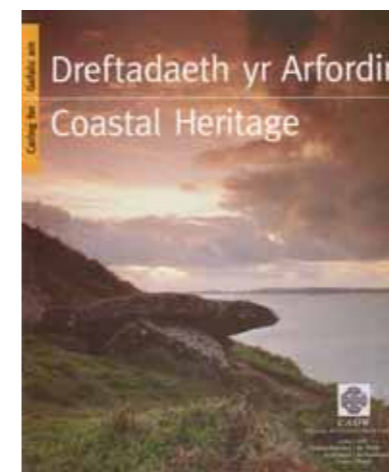
Caring for hillforts and homesteads, another popular publication that resulted from survey work by the Welsh Archaeological Trusts, this time on Iron Age hillforts



Cadw's membership magazine provides valuable opportunities to engage the committed public with all aspects of the heritage, from archaeological excavations to re-living a medieval Christmas in Caerphilly Castle



Traditional guidebooks to the principal monuments in Cadw's guardianship are essential for our visitors, and are designed to satisfy a range of interest levels



Part of the *Caring for...* series, *Coastal heritage* examines Wales' spectacular coast and the monuments that are at risk, following survey work by the four Welsh Archaeological Trusts. Natural and human factors are assessed, and the archaeological riches described, with the aim that at least some destruction can be averted



THE RESEARCH FRAMEWORK FOR WALES

Jenny Hall

In 2001 the archaeological community in Wales embarked on the challenge of producing an archaeological research framework for the nation, covering all periods and some specialised themes. This framework has involved collaboration between every sector of the archaeological community.

IfA Wales/Cymru began the process with a two-day conference in September 2001, at which knowledgeable speakers for each archaeological period gave an introduction to what we knew or didn't know. The papers were published as BAR 343 *Towards a Research Agenda for Welsh Archaeology*. To provide a sound base from which to develop things further, four regional audits to identify existing knowledge, grant aided by Cadw, were undertaken by the regional archaeological Trusts. The audits identified recent and current research and key sites for each period, and were made available online. Regional working groups defined by period or themes were then established to assess gaps in current knowledge, and the findings were discussed at well-attended regional seminars in Carmarthen, Welshpool, Bangor and Cardiff. The resulting documents were then reassessed on a national basis, discussed at a seminar and reworked by the groups, with further discussion led by the research framework steering group. The framework was finally launched at IfA's annual conference in Swansea in 2008, with a new website, www.archaeolog.org.uk, carrying the document, and a booklet produced and circulated widely within Wales.

Throughout the process we have used milestones big and small to give us a focus. The Heritage Minister of the Welsh Assembly Government announced last autumn that there would be a review and clarification of priorities by the end of 2010, and to achieve this the working groups are reviving themselves and reviewing the last five years of work. Their results will be available on the website in late spring and presented for discussion at a conference in Bangor in September. Final revisions will then be made, and should be available on the website by late December.

It is an ambitious target, most of the work being done voluntarily or supported by employing organisations, but the archaeological community in Wales is still proving enthusiastic about keeping the process going.

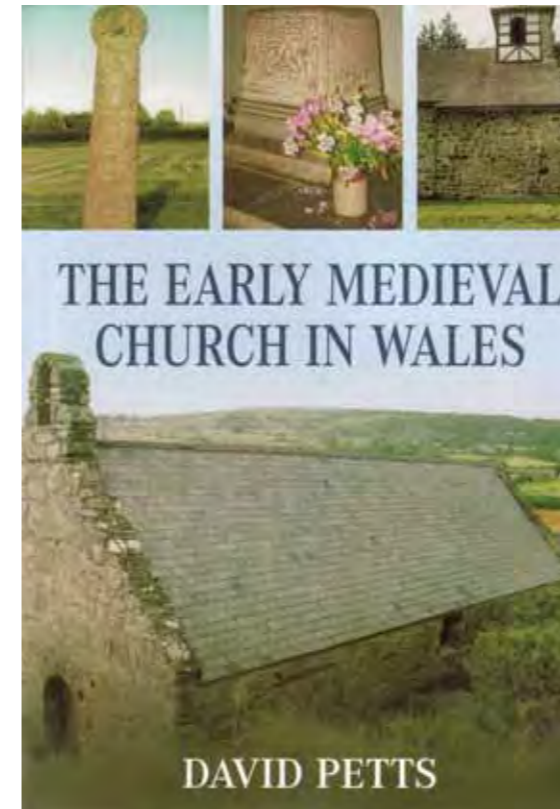
Jenny Hall
Chair, IfA Wales/Cymru



Welsh heritage: excavated remains of Llys Rhosyr, Isle of Anglesey. RCAHMMW (Crown Copyright)



Welsh heritage: Stack Square cottages, adjacent to the ironworks that form part of Blaenavon World Heritage site. © Cadw, Welsh Assembly Government (Crown Copyright)



The Early Medieval Church in Wales

David Petts
The History Press 2009 224pp £18.99

David Petts has made his name in the contentious field of early Christianity in Britain, approaching this as an archaeologist and therefore concentrating on the physical remains, backed by critical use of texts. One theme of his latest book is its challenge to myths surrounding a distinctive Celtic church, unified, separate from Roman traditions and more sensitive to female and ecological concerns. The topic is described in categories covering texts, architecture, artefacts, burial and the landscape.

The conversion period was a time of literacy, at least for clergy, which means there is textual evidence to provide a framework. This adds colour, through saints' lives, charters, law codes and poetry but, dating only from the 9th century, its historicity has to be treated with much care. Details of available texts and their limitations are usefully included here. Church architecture is another problem. There are no standing structures earlier than the mid-11th century, although there is now a little excavated evidence for early wooden predecessors. In the late 11th and 12th centuries stone churches become common. Textual evidence for the life of Gruffudd ap Cynan (1054/5 to 1137), who 'made great stone churches for himself in his chief places...he also made Gwynedd glitter then with limewashed

churches like the firmament of stars' illumines the effects of royal stimulus in this period and this is indeed the time when secular establishment of churches recognisably begins. It is suggested that many *Llan* names mark these patrons.

Another source is liturgical artefacts. A turbulent later church history and acid soils limit the survival of these, but there are hints of metalwork arriving from the eastern Mediterranean between the 5th and 7th centuries, and of manufacture of the hanging bowls which turn up in Anglo-Saxon graves. Burial practices in Wales are notable for stone-lined cists, continuing their long Iron Age tradition, and the use of stone memorials with inscriptions in Latin and Irish (illustrating mixed church traditions). As in England deductions from cemetery organisation are that early cemeteries were not enclosed, and that they preceded the churches they surround. A break in burial tradition, from cemeteries based on family groups to ones where the church oversees funerary behaviour, is recognised, again parallel with developments in Anglo-Saxon England, as is burial within churches for the elite. Saints, often recognisable as pre-Christian cult figures thinly disguised, are found throughout the landscape, in wells and natural features, pilgrim routes, hermitages and holy islands.

The author argues for a network of late Roman dioceses along the Welsh border whose influence continued, and also some limited documentary evidence for Christianity continuing from Roman times. However, the archaeological evidence for Roman Christianity is so minimal it is hard to believe that the 4th century was really a foundation for what followed. Certainly from the 8th to the 11th century growth in church bureaucracy, monasticism and the parochial system followed the pattern seen in England, and the conclusion that the Welsh early medieval church was not isolated or unique, despite elements that developed from an earlier stratum, is surely right. Active interaction with the Anglo-Saxon church from the 8th century, as well as links with Ireland and further afield clearly prevented Christianity in Wales developing as a backwater.

The book suffers from the usual History Press problems of poor proof-reading and quality of reproduction for illustrations, and in this case there are no colour images. More importantly however, it is a fascinating and important story for all who deal with this topic in Britain, and David Petts has brought it together with his accustomed skill and knowledge.

Alison Taylor
Alison.taylor@archaeologists.net

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Members news

Nicky Powell MifA 1475

Recently upgraded to MifA, Cardiff-born Nicky Powell studied archaeology at the University of Reading and spent many happy seasons with Richard Bradley and Aaron Watson digging and surveying around Balnuaran of Clava. After an MA in Field Archaeology, her first job as a professional archaeologist was as digger and then Finds Officer and specialist with Thames Valley Archaeological Services. A move to become the Finds Liaison Officer for Devon provided the best ever opportunity for seeing a variety of artefacts and meeting people. She then joined the Museum of London Archaeology Service (now MOLA) as the Registered Finds Specialist and was appointed Post Excavation Manager in 2007. She enjoys the science of project management and the project life cycle and is keen to promote best practice in project management throughout all stages of the archaeological process. She retains her interest in finds and served for some



Nicky Powell

Headland UK

Headland Archaeology Ltd has just completed acquisition of Archaeological Investigations Ltd (Hereford). This is an exciting step for both companies which secures jobs and expands Headland's geographical reach. Headland can now provide an enhanced service that combines local expertise with a more comprehensive range of capabilities. We are particularly pleased that Andy

years as secretary of the IfA Finds Group. She now sits on Validation and Professional Training Committees.



Joanna Wylie

Joanna Wylie MifA 6148

In 2008 Joanna, who became a MifA in November 2009, started work at the London Archaeological Archive and Research Centre (LAARC) as the Archaeological Records (Digital) Officer, working closely with LAARC Archivist Cath Maloney and with particular responsibility for preservation and dissemination of all digital archives deposited at LAARC, responding to enquiries and supervising researchers. Her qualifications include an MA in Anthropology (specialising in Archaeology) from the University of Otago in Dunedin, New Zealand. Before moving to the UK she worked as an archaeologist for the New Zealand Historic Places Trust Head Office in Wellington, and participated in archaeological fieldwork projects throughout New Zealand.

Boucher (p30 and 50) and his staff (formerly AI) will continue to bring extensive regional and professional knowledge to all existing and future projects. Teamed up with Headland's Project Manager Mike Kimber we look forward to providing a stronger and more competitive service.

Tim Holden, Headland Archaeology (UK) Ltd

New members

ELECTED

Member (MIFA)

Luke Bonwick
Matthew Bristow
Kirsten Collins
Peter Dorling
Richard Hoggett
Rebecca Lane
Andrew Mayes
Guillermo Molina
Clive Waddington
Cressida Whitton
Joanna Wylie

Associate (AIFA)

Paolo Ciuchini
Richard Coe
Patrick Daniel
Elinor Graham
Robin Latour
Debora Moretti
Chaz Morse
Thomas Sparrow
John Tate
Jürgen van Wessel

Practitioner (PIFA)

Stuart Churchley
Jodie Dubber
Claudia Fantino
Therese Kearns
Sophie Laidler
Matthew Nicholas
Elena Valtorta
Hannah Waugh

Affiliate

Catherine Godsiffe
Edward Higgins
Adele Horton
Rachel Kitcherside
Kealey Manvell
Thomas O'Mahoney
Sophie Rowe
Jonathan Talbot
Patrick Taylor
Hazel Tocock
Samantha Tuft
David Walsh
William White

Student

Kat Ashley
Nicola Bennett
Susan Bolster
Rachel Brown
Deborah Davis
Liam Delaney
Charlie Enright
Grace Flood
Emma Freeborn
Aelfwynn Freer
Felicia Fricke
Rene Friedrichs
Derwin Gregory
Jeremy Hallatt
Elizabeth Harris
April Hills-Horrop
Michael Hooper
Heather Lakey
Kate Langley
Harriet Mahood
Kate Mees
Adela Murray-Brown
Philip Riris
Amy Roberts
Alice Rose

TRANSFERS

Member (MIFA)

Mark Anderson
Helen Dawson
David Gilbert
Nicola Powell
Josh Williams

Associate (AIFA)

Daniel Carter
Matthew Fenn
James Lawton
Richard McConnell
Eloise Metson

Practitioner (PIFA)

Oliver Good
Rosemary Hooker
Kevin Paton
Jon Tanner

Affiliate

Laura Belton
Joanne Benjamin
Justine Biddle
Vivienne Blandford
Victoria Brocksopp
Suzanne Brown
Matthew Burke
Michael Coe
Tracy Connolly
Tom Connolly
Ross Cook
David Cranham
Johnny Crawford
Tim Denton
Carlos Miguel Dias
Sarah Doherty
Nisha Doshi

Jonathan Dye
Helen Foster
Chris Gibbs
Avril Gibson
Keith Griffin
Paolo Guadagno
Rochelle Hart
Eileen Hoey
Neil Holbrook
Nigel Jones
Marie Kelleher
Nadia Khalaf
Matthew Lees
Marsali MacGregor
Aaron Macleod
Kenneth Macrae
Adrian Messenger

Rachel Michalek
David Millum
Hayley Nicholls
Anthony Platts
Michael Puntorno
Jesse Ransley
Anya Rardin
Jennie Reynolds
Julie Robinson
Imogen Sambrook
Andrew Scott
Michael Shaw
Lawrence Shaw
Kathryn Smith
Charlene Steele
Helen Stokes
Jacob Streatfeild-James

Student

Annie Hamilton-Gibney
Matthew Smith

S Obituary

**Sarah Jennings MfA 468
1947–2009**

Born in Scotland, Sarah was educated in Abingdon but left school in 1963 to work on the Winchester excavations, first as a volunteer – did she abscond from school to go there? – then as finds assistant (1964), finds supervisor (1965) and pottery researcher (1968-69) whilst doing A-levels at Windsor College of FE. She never went to university but excavated in Siraf in Iran with David Whitehouse in the winter of 1967-8 and became his permanent finds assistant from 1969 to 1974. She then held posts as pottery and finds researcher in Peterborough, Norwich, Lincoln, the Passmore Edwards Museum and York Archaeological Trust where she became acting head of department in 1991. In 1992 she moved as ‘Archaeologist’ to English Heritage where she remained until her sudden death.

Although holding permanent positions in England she continued her interests in archaeology further afield. Apart from Siraf she worked for periods in Lezoux (France), Benghazi (Libya), Kandahar (Afghanistan), Ras al-Khaimah (United Arab Emirates), Albania (Butrint) and, most recently, in Beirut (Lebanon).

Her interest in medieval pottery and glass begun in Winchester and Siraf continued throughout her life. She made substantial contributions to both subjects. Her first major publication in 1981 of *Eighteen Centuries of Pottery from Norwich* in East Anglian Archaeology was the first of over forty books and papers devoted to these subjects. It provided a clear,

systematic and even-handed account of all the wares that occur in Norwich from Middle Saxon to Wheildon and was a pioneering work. For many of us it is still the first port of call when writing post-Roman pottery reports. An attention to detail and quality shines through all her work, including the many pottery reports, especially the long series from sites in Norwich, and the monograph on *Medieval pottery in the Yorkshire Museum*. She was also interested in continental imports and published her first paper on Weser slipware in 1981.

Her most recent work has been dominated by the study of late Hellenistic, Roman and early Byzantine glass from the Near East. In particular the series of papers and monographs on the glass from the Souk Excavations in Beirut in *Bulletin d’Archéologie et d’Architecture Libanaise, Berytus* and the *Journal of Glass Studies* has made a major contribution. Within English Heritage she championed research into ceramics and glass, promoted the MPRG bibliography and spearheaded work at Whitby Abbey.

She was Secretary of the Medieval Pottery Research Group (1989-1994), council member of the Society for Post Medieval Archaeology (1982-1993) and a Member of IfA since 1986, being joint chair of the Yorkshire and Humberside Regional Group (1990-2) and on the committee of the Finds Group (1994-6). She was co-ordinator and secretary of ‘Medieval Europe 1992’, a landmark international conference, and was on the Council of the Society of Antiquaries of London at the time of her death.

As a person Sarah was fun to be with; she was witty, loved food and wine and was a splendid cook herself. She was generous to colleagues, especially the young. As both as a fine archaeologist and a unique personality she is greatly missed.

Peter Davey
University of Liverpool
Centre of Manx Studies



Sarah Jennings. Photograph: Marta Carascio

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