

Historic Environment Record News

The Newsletter of the Historic Environment Records Forum

A free publication from English Heritage, Editor Martin Newman

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Government Consultation on HERs Launched

Martin Newman, HER News
Editor

The long-awaited consultation on Historic Environment Records first mentioned in *A Force for Our Future* was launched on the DCMS website on 17th July and

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can be found at www.culture.gov.uk/global/consultations/2003+current+consultation/s/her_consultation.htm. The document seeks views on the ways in which we manage access for everyone to information about our heritage, and the results of this consultation will feed into the wider review on historic environment legislation. The consultation period will end on 31st October. It has been circulated with *Benchmarks for Good Practice*. Please advertise the consultation as widely as possible, including those making enquiries of HERs and as links from websites.

A consultation on designations, *Protecting our historic environment: making the system work better*, was also launched by the DCMS on the 17th.

View from the Chair

Neil Lockett, HER Forum
Chair

It is with great pleasure that I contribute my first article to HER News as the new chair of our group. As many of you will be aware, Emma Jones, our

previous chair, announced that she wished to stand down from the then SMR Users Group at a meeting in Edinburgh earlier this year. I would like to take this opportunity to thank Emma for her tremendous contribution and excellent guidance over the time she has served the group.

We now face an interesting time ahead as Sites and Monuments Records adjust to their new role as holistic Historic Environment Records and I hope that the HER Forum will provide a venue to debate issues surrounding this process.



Neil introduces the days
proceedings in Manchester

My first formal meeting of the HER Forum was held in Manchester on 3rd July. The programme of speakers fell broadly into three main themes for the day. In the morning session we looked at creating and transforming HER data, with

papers presented on subjects as diverse as the OASIS Project (Catherine Hardman), Virtual Reality (Richard Haig) and Historical Map Data: (Rick Crowhurst).

The second session saw presentations from ALGE (Annie Cooper) and a view of HER data from a Historic buildings conservationist view (John Preston), with a discussion following these two papers.

The final part of the programme focussed on the dissemination of HER data and, in particular ensuring that our record is valid to as wide a rang of users as possible. Two papers were presented, one from myself and my colleague, Victoria Bryant, on a model for transforming a SMR to a Historic Environment Record; the other from Ben Robinson who has conducted research on Higher-Education and Further-Education users of HERs.

Overall the papers showed how diverse our records have become, and highlighted the need for rapid integration of new data in order to disseminate the best quality information to a wide range of user groups.

Historic Environment Records

– An IHBC View

John Preston, Education Secretary, Institute of Historic Building Conservation

The IHBC represents conservation professionals in the UK and Ireland, in the public and private sectors. It has over 1,000

full members, many dual qualified: 45% are also planners, 30% architects, 10% surveyors, 3% engineers, and 3% archaeologists.



John Preston speaking in Manchester

This paper is a personal view from an IHBC officer who is closely involved with archaeological matters at both local and national level. Conservation and Archaeology are closely linked Historic-Environment professions, with some overlaps, but there are also distinct agendas (see my paper to the 2002 Oxford Conference, at www.ihbc.org.uk/Papers/PATHE2002/intro.html).

My view is that we have to recognise distinctions between aims to increase the sum of knowledge (archaeology) and informed management of change (conservation). We would like to be able to match our archaeological colleagues' work on recording and synthesis (as well as informing the project in hand), but have neither the resources nor the powers to do so. Since PPGs 15 and 16, best practice has moved on, with recording and synthesis being promoted as part of a more integrated approach by building owners through Conservation Plans, British Standard BS7913:1998, "Informed Conservation", and COBRA, but without formal support to implement it.

The Local Authority Conservation Provision Survey (LACPS) 2003, a joint English Heritage and IHBC initiative, showed that conservation officers do "complex and wide-ranging jobs often with very limited resources and often in very difficult circumstances, and without many of the essential building blocks". These building blocks include Historic-Environment Databases, Buildings at Risk Registers, and Conservation-Area Appraisals. Conservation-Area Designation, Appraisal, and Enhancement is the only Statutory Duty for Conservation, but *only 25% of Conservation-Area Appraisals (the key policy building block)* have been done.

We have inadequate resources for *current* tasks, but the review of the Planning System will impose more tasks, and the current and uncoordinated Protection of the Historic-Environment Review, Unification of Consents Review, and the Review of the General Permitted Development Order could radically affect key aspects of the work. Behind all these is the Government's Regional Agenda. None of them properly recognises the local linkages with other regulators which are fundamental to successful conservation. Formal designations such as listing are vital in getting special consideration from other regulators; local knowledge and personal contacts, as well as generic skills, are essential in resolving conflicting requirements and finding solutions sympathetic to historic buildings.

Successful conservation depends on gaining the interest and enthusiasm of private owners, whose freedom of action is restricted in a wider public interest. To help them,

conservation officers need to be able to explain what is special about their buildings, and provide advice on how to maintain and alter them – and who has the skills to do it. In brief, our information systems have to include the “HOW” and the “WHO CAN?” as well as the “WHAT” and the “WHEN”. This is why I find it so frustrating that “Power of Place” promoted both Architecture Centres and Historic Environment Record Centres, without any sense that they can be linked arms of a holistic approach. Such an approach is hardly possible if, as in Cambridge, there are unrelated initiatives for a “Built-Environment Centre” and a “Historical-Resource and Cultural Centre” – and the scope of the Cambridge UAD is restricted to pre-1700 buildings and 2 sq.km of the city centre! In contrast, the (Hackney) Building Exploratory www.buildingexploratory.org.uk and its related site www.brickfields.org.uk provide a vivid example of a Historic-Environment Resource Centre which is rooted in place, but dynamic, with an interactive exhibition exploring buildings and the built environment. Records of the past are at the core of its activities, but it offers so much more.

With all due apologies to ALGAO colleagues, I’m very worried that at the same time as the wider Historic Environment is being subjected to a radical review, the concurrent “Historic Environment Records – Benchmarks for Good Practice” consultation is so narrowly focused and ignores this wider context and potential. The high hopes for Statutory Status for SMRs have to be seen in the context of the need to put Historic-Environment services, and records, on a proper footing –

and I’m not sure that the situation has been helped by changing the name from SMRs to HERs without the fundamental reappraisal of the scope of such records which the change implies. We need to consider the range of data which could form a true Historic Environment Record; my view is that in many if not all cases, this may, involve linked rather than single-centre holdings.



Willow House, Cambridge, a case where documentation was vital

Moving on to the records themselves, we need consistent recording requirements to replace the differences in PPGs15 and 16. There are issues relating to quality of information, best practice versus generality, and what is *reasonable* (for example, in relation to a modest alteration to a listed building). Where should conservation records be deposited? What about data standards (as far as I am aware, the SMR / HER Forum discussions have proceeded without any significant conservation input, and we’re way behind our archaeological colleagues!)? Most conservation records are in hard copy, and we have concerns about the permanence of digital media and the technology needed to access outdated electronic systems. How do we ensure the storage and conservation of hard copy records, for example the Building Plan and Notice drawings which are invaluable documents of late

C19 and C20 listed buildings, and often vital in informing proposals to alter them. How do we ensure easy access to the information – at the vital *local* level? Who manages and updates the records?

There are major resource management issues which have barely begun to be addressed. What happens to records generated through the planning system, including the drawings and photos which get discarded when the files are microfiched? What about the Building Plan and Notice drawings held by Building Control? Some years back I had to enlist the help of the RIBA drawings librarian to prevent the Chief Building Control Officer selling off some of the most attractive of the Cambridge drawings, and so breaking up the archive. The archive remains intact, but there is no money for conservation, and pressure on space at the Guildhall...

To end on a more optimistic note, there is scope for a more holistic approach if UADs, Extended Urban Surveys and SMRs inform Conservation Area Appraisals and Local Development Frameworks, and, more broadly, if we can work together to bring the Historic Environment up the pecking order in Cultural and Community Strategies. The Local Authority Historic Environment Performance Indicators project (LAPIS - consultation imminent) highlights 6 key areas of activity: vision, understanding, resourcing, communicating, advising and enhancing, and controlling and enabling change. I hope we can all agree that true Historic Environment Records should reflect and inform all of these, as a starting point for considering the LAPIS consultation, responses to the HER consultation, and follow-

up to the APPAG report which may provide the best cue for promoting a holistic approach.

A History of Mapping

Rick Crowhurst, Landmark

Mapping since the 1840s

The earliest large-scale maps for Great Britain were produced by Ordnance Survey (OS) in the mid 19th Century. In September 1841 the OS began surveying using the six-inch mapping scale (1:10 560), starting with the county of Lancashire. This large-scale mapping shows contours, latitude and longitude, parish boundaries, railways, roads, waterways and woods.

In July 1854 rural 1:2500 scale maps were commissioned and in 1880 this was accelerated to cover all areas of the country. Each county was subsequently revised three to five times prior to 1945.



Durham 1:500 Town Plan 1861 showing detail not available on the corresponding 1:2,500 mapping.



Durham 1:2500 Map 1895

Towns with a population of over 4,000 were also mapped at much larger scales – 1:500, 1:528 or 1:1056. These Town Plans were introduced in the 1840s and by 1895 most towns were covered, mainly at 1:500 although the largest scale at which London was mapped was 1:1056. These large scale maps showed a level of detail, such as the interior ground floor layout of buildings and the functions of different rooms in factories and workshops, which was not available at the larger scales (see example below).

All of this mapping is known as the County Series because individual counties were surveyed separately, often on different origins in the Cassini projection system, which meant they did not match the neighbouring county.

Finally in 1944-5 a new map projection was adopted by the OS and the National Grid, which we still use today, was introduced. Counties were no longer surveyed on different origins: instead the country was mapped as a whole with the standard scales being 1:10 000, 1:2500 and 1:1250.

Digitising the Historical Maps

Historical Maps are sometimes the only reliable evidence of successive changes to a particular site. However, where there has been extensive development or changes in county boundaries, and with the introduction of the National Grid and the metric scale, it is not always easy to relate maps made at one date with earlier or later ones of the same area. Digital mapping has, however, made it possible to transpose data from maps of one era to those of another.

Landmark Information Group, in a joint venture with the OS, set about digitising the maps in 1995 and can now produce seamless digital historical maps for any area in Great Britain. The digitising process began by firstly collecting the OS archive of paper maps, which was approximately 93% complete, and then endeavouring to complete the picture by visiting the Royal Geographical Society in London and Trinity College in Dublin to locate the missing maps.

During this collection process the scanning began. Using the original 'working edition' maps over 560,000 maps at 1:2500, 1:1250, and 1:10 000/10 560 were scanned, at a resolution of 300 dpi, with special industrial roller scanners.

In order to create a mosaic of Historical Maps covering the whole country each scanned image then had to be processed, removing all information outside the boundary of the mapping, and skewed so that the image was straight - to align the maps north and south.

Finally a way of producing an accurate overlay of current OS data onto the historical mapping had to be achieved. To achieve this a grid for every county was created, providing the Eastings and Northings of each County Series sheet. Subsequently each map (tile) is uniquely identified and the National Grid co-ordinates that define the corners of the map sheet can be provided.

Landmark and OS are constantly working to expand this digital archive and the most recent addition has been the Town Plans which were digitised during 2001.

For further information about Landmark's Historical Map Data please call 01392 441738, email

government@landmarkinfo.co.uk or visit www.landmarkinfo.co.uk.

Virtual Heritage - Making Virtual Reality Work

Richard Haig, Virtual Reality Consultant

A Definition

Virtual Reality (VR) is a widely used but poorly understood term. Perhaps an acceptable definition is that in the Encyclopaedia Britannica: "the use of computer modelling and simulation to enable a person to interact with an artificial three-dimensional visual or other sensory environment."

What this means to the lay person is that looking at their computer screen (or through a headset or other display) they should be able to see something that looks real, and then to be able to move around this virtual environment passing from one part to another, but the direction of movement and the focus of attention should be determined by the user not the author.

So what can it be used for?

For many years VR was known as a technology without an application. Primarily I believe this was because the experience simply was not sophisticated enough, or, to provide the level of graphical detail required to make it so, the cost of the hardware was prohibitive.

With the advent of faster computers, and recently the

massive advances in graphic cards, the possibilities for VR have become wider and more affordable.

Interpretation: At the recent HER Forum meeting in Manchester I showed the audience two applications that were relevant to the heritage sector. The first was an interpretation commissioned from me by Cadw, to develop a model of Tintern Abbey.



The Abbey in its setting

This project was a massive challenge, to show what the Abbey Church looked like in 1320 needed the construction of both the inside and outside of a "cathedral". It was also required that to fulfil the interpretation role, the model should be fully interchangeable with a virtual replica of the abbey ruins. Thus the user can "walk" around a totally realistic model of the ruins then at the click of a button replace the ruins with a model of the original church.



South West Aisle showing tile details

In addition this should be suitable to run on the internet!



Looking west from the presbytery

The work took some 11 months but finally I delivered a project that even amongst seasoned computer game developers raised eyebrows. The interior of the church shows details down to 30,000 individual floor tiles and highly detailed stained glass windows.

Disabled Access: The second application was a disabled access facility.

The duties of service on providers imposed by the 1995 Disability Discrimination Act have been described in the Code of Practice prepared by the Disability Rights Commission and can be summarised thus:

- Since December 1996 it has been unlawful for service providers to treat disabled people less favourably for a reason related to their disability.
- Since 1st October 1999 service providers have had to make "reasonable adjustments" for disabled people, such as providing extra help or making changes to the way they provide their service.
- From 1st October 2004 may have to make other "reasonable adjustments" in relation to the physical

features of their premises to overcome physical barriers to access.

As a part of the last project I completed, I undertook a study of disabled peoples' preferences in terms of these "changes to the way they provide their service" when applied to heritage sites. (Appendix 1). Findings from this study indicate that 90% of people with impaired mobility visit heritage sites. If the site is not fully accessible all of our respondents stated they would use an alternative provided. Nearly 70% specified that their preferred choice would be a virtual reality replica of the site they were visiting.

All the respondents to the questionnaire said they would use an alternative means of access if it was available.

In view of this, the Shakespeare Birthplace Trust commissioned me to produce a virtual replica of Anne Hathaway's Cottage.



The Kitchen

Using the most up to date techniques of photo-real virtual reality a I prepared replica of Anne Hathaway's Cottage. The application was designed to run on an "off the shelf" computer located outside the cottage in Shottery; which is situated in a specially prepared building.. Visitors to the cottage who are disabled can "take a look inside" using the computer. They choose

between a ten minute guided tour around the virtual replica or exploring on their own.



The Parlour

There are over 90 "clickable" objects that interact with the user, by giving a voiceover or text explanation of their relevance to the cottage. Many of these objects are animated so they either show how they might have been used or allow the user to examine them in detail.



Manipulating an object

For further information contact richard.haig@btopenworld.com

What do you want to do with your data?

Edmund Lee, English Heritage

The need for communication of data between HERs underpins a new initiative from FISH, to be launched at its October 2003 meeting.

This communication must be efficient for it to be sustainable. One-off migration of data from one system to another has been done many times. However, it is not sustainable to provide data in many different formats for use by different HERs. Instead, a 'neutral' intermediate format, based on the FISH standards, is needed to support many exchanges of information between many different organisations. XML (extensible mark-up language) offers us the toolkit to do this.



Benefits expected from the development of a FISH protocol for data exchange include:

- A standard that will promote the exchange, sharing and migration of historic environment records, facilitating access to information and the development of new cultural-heritage services;
- A standard format for the preparation of data for internet portals
- A method of archiving Historic Environment Records that is not dependent on a particular configuration of software and hardware, assisting with the preservation of digital information in the long term;
- A technical standard to assist HER managers in the

procurement of historic-environment recording systems, providing a benchmark by which systems can be judged;

- A standard that will facilitate the sharing of data between different systems within a HER, maximising efficiency;
- A standard that will facilitate remote data capture, e.g. the use of handheld computers, for subsequent loading into a central database;
- An open standard that will support the development of compatible historic-environment recording systems by different software suppliers, broadening the market for such systems.

If these are ideas that interest you, then you have the opportunity now to shape their development. FISH, are drawing up a functional specification for the FISH profile now. Let us know what you want to be able to do with your data. Contact edmund.lee@english-heritage.org.uk for further information.

MIDAS: Watercraft and Aircraft

Annexe

Steven Asplin, English Heritage

In order to enhance the recording diversity of the Monument Inventory DATA Standard (MIDAS) a Watercraft and Aircraft Annexe has been developed. In many cases watercraft and aircraft, through abandonment, accidental or deliberate destruction, become features of the archaeological landscape. This means they will be subject to inclusion in

archaeological inventories, primarily HER's, providing an invaluable source of technological, social and historical information.

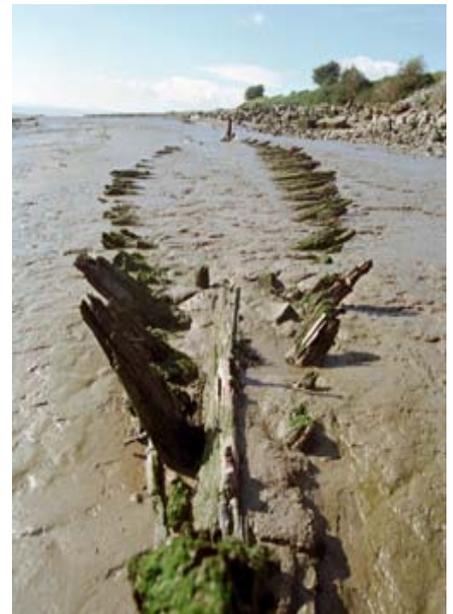


Wooden hulk, Higham Creek, north Kent

Although many current units of information within MIDAS more than adequately cover the recording of watercraft and aircraft, particularly in relation to a site's location, period, condition etc., and the recording of bibliographic sources, associated people and so on, there are areas that have had to be specially developed. Mainly, those units of information comprising the Monument Character information scheme. Through these units of information we build up a picture of the craft, its function, its origins, its last journey and its fate. Therefore it is necessary to create classifications such as Watercraft and Aircraft Type, supported by appropriate thesauri that can describe a craft by function as well as form and, in the case of aircraft, even by manufacturer. Classification schemes relating to locations – Departure, Destination and Registration Place – tell us about the last voyage of a lost vessel and which port it was registered at. Manner of Loss allows us to record the precise reason for the vessel or aircraft being wrecked.

There is an increasing awareness and interest in the subject of

watercraft and aircraft, highlighted by events such as the Ministry of Defence designating key wreck sites for the first time under the provisions of the Protection of Military Remains Act, 1986. Initiatives like the Defence of Britain project have brought military and modern archaeology in to vogue, which means that now is an entirely appropriate time to establish standards and guidance for the recording of watercraft and aircraft sites.



Keel and spars of ship in the intertidal zone

A completed draft of the MIDAS Watercraft and Aircraft Annexe has recently been issued for peer review. In order to exploit the rich vein of expertise and experience prevalent within the subject sphere, review packs have been sent to individuals and organisations within English Heritage and abroad. The initial peer review stage will run until the 19th September 2003.

If you would like to participate in this peer review please contact Kieran Byrne by email at kieran.byrne@english-heritage.org.uk or telephone on 01793 414870.

NMR Review Underway

Claire Attridge, English Heritage

A major review of the National Monuments Record is currently in its early stages. The review will consist of a public consultation, generation of options papers, and a report with recommendations on business models, priorities and organisational structure. The consultation period is due to commence in September 2003, for 3 months.

The review is being overseen by a Steering Group with strong external membership, advised by an External Assessor. For further details contact the Project Manager, Claire Attridge at, claire.attridge@english-heritage.org.uk

Old Data - New Ideas: A Model for the Use and Development of Heritage Data

Victoria Bryant and Neil Lockett, Worcestershire CC

Recent work by Worcestershire Historic Environment and Archaeology Service has focussed on the development of a model for the incorporation, management and dissemination of Historic Environment Record (HER) data to create a sophisticated management, research and education resource served electronically.

The data from Worcestershire has been collected over more than 25 years, with little thought to

database structure, or standards for data presentation. What is now the HER started as a card index in 1974 and, in common with most other English Sites and Monuments Records (SMRs), developed as a planning control, not a research tool. Because of this it focused on site-specific data with no acknowledgement of landscape and little or no interpretative elements.

Throughout the design and development phase of our system we began to realise that any new system must:

1. enable us to more effectively promote and protect the Historic Environment
2. provide a wide range of users with easy access to high quality data
3. promote partnership projects.

These three factors facilitate the creation of a framework which will interact with other County, and Regional information resources. These include information held centrally on the natural environment, library resources, details of collections and archives held by museums; and documentary resources held within the County Record Office.

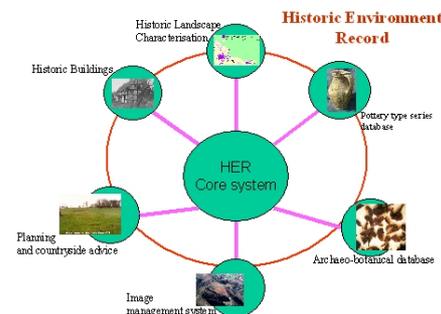


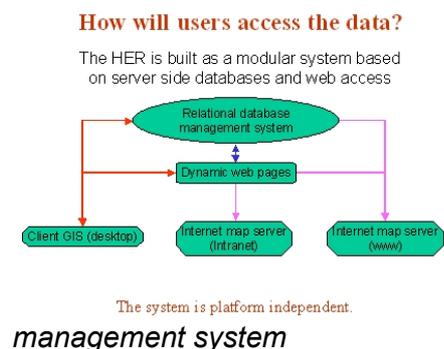
Fig. 1, The HER Modular Concept

The HER system will be based on a modular concept (Figure 1), further enhanced by the creation of additional specialist databases. This fundamentally alters our perception of large-scale record

management systems and enables resources to be developed which specifically match criteria imposed by the datasets.

The core of the HER is a relational database management system (Figure 2). We have chosen Microsoft SQL Server 2000, though others are available, dependent on your preference, your corporate policy, or size of your datasets.

Fig. 2, relational database



management system

Linking to this are dynamic web pages. These facilitate data entry and browsing, and are one of the media through which searches can be performed. Linking to both is the client GIS – in this case ArcView GIS. This provides general and detailed searches of spatial and textual data. Records added to the Historic Environment Record trigger updates to dynamic web pages for additional information. In addition, ArcView feeds information about the Parishes covered by the new shape and grid references.

Facility for searching the record has been provided through ArcView. Searches using controlled terminology for Monument types, evidence, activities and building, components and materials have been provided with the ability to combine individual search results into a composite query, using a combination of primary reference

number and multiple controlled terminology thesauri. This provides advanced record searching in addition to the usual geographic search tools provided by GIS.

In addition to the client application used in-house, facility to search the system will be provided by an internet map server offering access to the data through a corporate intranet and the internet.

This system is designed to be platform independent and interoperable.

All of this is very well, but what data will it hold?

The model of the core GIS involves the creation of four interrelated groups of themes.

1. Data themes, including heritage AND non-heritage information

Heritage data includes all of the traditional archaeological data sets, with the facility to manage them more effectively. This process will involve the conversion of existing single layered data into multi-layered GIS makes cleaning, enhancement and the creation of metadata much easier.

Non-Heritage datasets are curated by external organisations. Their integration enables us to understand and manage the Historic Environment in a more sophisticated way.

Historic map data is another important resource. This is particularly true where this data can be interrogated through GIS (Figure 3). We are presently transforming late 18th century and early 19th century maps and

associated data into a GIS theme and associated database.

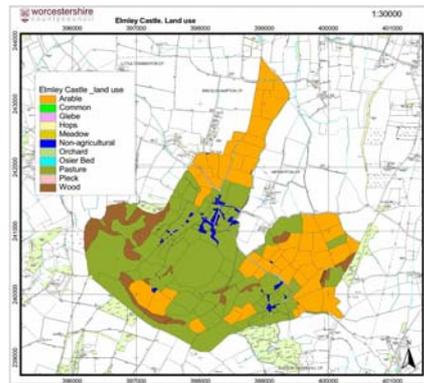


Fig. 3, Historic map data interrogated through GIS

The transformation of existing data into a spatially referenced format facilitates rapid analysis of the data. Furthermore, sources such as these can be used to effectively visualise and understand historic landscape and they are an important resource in their own right. In conjunction with other datasets they provide an insight into earlier landscapes (Figure 4).



Fig. 4, earlier landscape analysis

Other historic data accessed via the Historic Environment Record GIS includes resources such as documents, images and very importantly, analysis of primary material by period specialists. For example, we are at the beginning of a joint project with Dr Della Hooke to digitise her analysis of Anglo-Saxon charter boundaries onto a web-enabled GIS.

2. Interpretative themes

The interactive use of a wide range of data sources will help us to produce the second group of themes. These are flexible spatial models of the landscape through time.

- They are, by their nature; subjective and are based on a point-of-time interpretation.
- The models are not didactic and a number of interpretations can exist at the same time.
- Coverages can be created where there is little or no data through predictive modelling.

The purpose of these themes is to provide a model which can be tested and changed as fieldwork and synthesis is instigated and completed.

The concept of interpretative layers is based on work undertaken on 64 small towns in the region in the 1990's. The HER will extend this work on urban landscapes to create a complete coverage of Landscape Components for each period.

These elements can be large or small depending on their nature and our current understanding. They group monument types into a larger functional entity. At present no controlled terminology exists for these landscape features, though they form an important part of this system and other national initiatives. Compilation of such a thesaurus will be undertaken in consultation with national and regional bodies, and the concept will be strengthened by joint projects with period specialists.

3. Research questions

The third group of themes represents a spatial presentation of those research questions,

which can be answered by fieldwork or synthesis of field data. We aim to integrate information from published research frameworks (local, regional and national) into the GIS where they can be linked to the first and second theme groups.

Research questions which apply to a particular period or area can be defined as coverages; those which are pertinent to particular monument or material types can be accessed via the associated database.

4. Management frameworks.

The fourth group of themes covers management issues. Areas of statutory or regional status can be identified. In addition, deposits of particular archaeological significance or vulnerability can be mapped and information such as the appropriate field techniques for certain landscapes, periods, sites or material types can be accessed via the GIS.

Conclusion

The intention of the model outlined above is to create an information cycle. This serves a dynamic and cyclic process of data collection, interpretation, research and management. The creation of a Historic Environment Record based on this model and served through the Internet will provide those involved in management, fieldwork, research and education with easy access to baseline and synthesised data. We suggest that this resource has great potential and we feel that it could act as a model of good practice in managing historic data.

Our philosophy and project specification, as well as our progress to date, can be found in

our on-line newsletter www.worcestershire.gov.uk/archaeology/her-news



biab online – the British & Irish Archaeological Bibliography on the Web

Isabel Holroyd, BIAB Editor

biab online is the culmination of over ten years work to create a computerised bibliography for British and Irish archaeology. The result is a database of digital records, from seven different sources, some of which date back to 1695. The service provides access to c. 200,000 bibliographic references – many with abstracts – which together constitute a unique archive of information on the literature and practice of archaeology in these islands, with updates twice a year.

How biab online was built

The data

The project had to undertake not only the design and creation of the database structure but also the digitisation and import of all hard-copy records. As a result of biab online, instead of trawling through over 100 hard-copy volumes to find information, the entire dataset can be searched online through a single interface.

The current dataset includes records from:

biab (1997 to the present day and ongoing)

British Archaeological Bibliography (BAB) (1992—1997)

British Archaeological Abstracts (BAA) (1968—1991)

Archaeological Bibliography for Great Britain & Ireland (ABGBI) (1940—1980)

Reports of the Committee on Ancient Earthworks and Fortified Enclosures [of the Congress of Archaeological Societies] (published 1906—1939).

A Guide to the Historical and Archaeological Publications of Societies in England and Wales 1901—1933 by E L C Mullins (published 1901—1933)

Index of Archaeological Papers produced by the Gomme family (published 1892—1910)

The online service will also provide access to records from *The Gazetteer of Archaeological Investigations in England* which provides information on desk-based assessments, field evaluations, estate management surveys, building recording, and environmental assessments. Additional bibliographic data to augment the current dataset will be sought (see below).

The seven different datasets all had their own slightly different formats and levels of content. Only biab records from 2001 onwards were created in our in-house database. All pre-1992 records had first to be digitised. Then all records from 1892 to 2000 had to be 'tagged' and imported in stages into the database structure. This was completed in 2003.

The database

The database structure now in use was based on the data standard published as part of *Recording England's past: a data standard for the extended National Archaeological Record* (RCHME & ACAO, 1993, pp 52-70) and devised by Mike Heyworth in the early years of the BAB project. It identifies the basic data components of bibliographic records in the format used by *BAA*, *BAB* and *BIAB*. The standard was developed into a detailed *Functional specification*, by Steve Stead, which sets out the relational model now used for the biab bibliographic database. This model was implemented by Azuli Ltd., in conjunction with biab staff to create an Access database for in-house use in compiling the bibliography. This data structure also underpins the online service. Microsoft SQL Server software forms the basis of the biab online web application. The service makes extensive use of SQL Server's powerful, in-built, free-text search capacities to search the bibliographic records.



How the biab search builder appears online

The database has now been populated with the digitised records and made available – along with the most recent volume of biab – to subscribers. Users are provided with author and keyword searches, plus retrieval by publication date, biab classification category and document type. There is also

scope for the development of further precision search and retrieval tools for a dataset in this format. Searches via placename and by index term are both potential options for sections of the dataset.

biab online – forward work plan

The dataset has been made available to subscribers at the earliest possible opportunity – in fact we went online as soon as the final digitised records were imported. The next stage will be a rolling programme of data-cleaning to ensure that variations in recording standards over the hundred-year period the records were made are brought into line to allow for optimum retrieval of data. Any import glitches will also be ironed-out. The website will keep people up-to-date with progress on this front.

The addition of further data is also being investigated. Other antiquarian bibliographies will be considered for inclusion where they would make a significant contribution to the dataset and where resources allow for the work to be undertaken. 'Gaps' in information will also be isolated and filled. Links to related datasets, full-text sites, library-holding information and current research are also possible.

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ASSOCIATION OF

Local Government Ecologists

Biological Recording in Local Authorities – Comparing Ecological Data to HERs Data

Annie Cooper, Chair
Association of Local Government Ecologists

In 2001 the Local Government Association produced a Position statement on Biodiversity. This recognised that "*Biodiversity is a crucial component of quality of life for communities that local government serves*". It stated that it is '*crucial to the fulfillment of LAs biodiversity responsibilities and strategic planning obligations that they have access to good quality information on biodiversity and continue to support LRCs or to take an active part in their development*'.

This paper provides an overview of biodiversity data holding and uses by local authorities. It outlines activities of a number of organisations all of which are seeking to influence developments in this area, including Biological Records Centres (BRCs), the National Biodiversity Network (NBN), its Local Records Centres (LRC) project and liaison with the Heritage Lottery Fund, (HLF), and the government's adviser English Nature (EN). Drawing on recent work by the National Federation of Biological Recording, it sets out

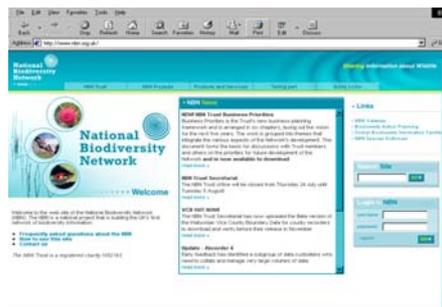
the current status of LRCs and a summary of their activity in relation to data supply, type of data and management. Finally it looks at challenges for the future and new studies and projects including the Association of Local Government Ecologists LRC project.

'Biological Records Centres', which now equate with and in some cases are called LRCs, were, historically, often museum based in town or county museums, these also held carefully stored voucher specimens to aid identification. The role of these BRCs was primarily to identify what is in the area e.g. county (e.g. by 'collecting'/collating and compiling atlases), to record how the area changes over time and to provide a system for checking veracity.

Early uses of natural history records included the recording of expansion and extinction of species. An excellent example is 'Little Bustard *Otis tetrax* a female was shot at Etwall in Derbyshire in 1797 and another female was killed by a farmer at Middleton Top, on 14th May 1901. A rare vagrant.

There has always been an interest in the effects of climate change, e.g. the changes in biodiversity through expansion and reduction in species' range, and this will continue to be monitored from an historic viewpoint by museums' services. Museums have also been interested in species lost to development and urban expansion as a means of monitoring changes in local landscape. It is only more recently that biological records have been used to identify potential impacts through the Planning and agri-environment systems.

As a response to the UK Biodiversity Action Plan which recognised the importance of monitoring biodiversity and making information available, the National Biodiversity Network (www.nbn.org.uk) was established in the late 1990s with the aim of 'Sharing information about wildlife by making it accessible to everyone through the Internet.' Partners in the NBN include: Joint Nature Conservancy Council, EN, Scottish Natural Heritage, CCW, National Environment Research Council, RSPB, The Wildlife Trusts, Natural History Museum and the National Federation of Biological Recording – the later also representing ALGE.



The NBN website

Local Record Centres are identified by the NBN as an essential node in the NBN concept. The NBN has identified a fuller remit for LRCs than BRCs - providing a full service for ALL potential partners including museums, local authorities and community groups. An NBN LRC Project was funded for three years through the Esme Fairburn Trust (now finished) and the NBN LRC Project continues, chaired by ALGE, though currently without finance.

The NBN LRC project, led by The Wildlife Trusts produced two publications - *Developing a Local Records Centre* and *Running a Local Records Centre*. These publications identified potential

partners, needs of partners, how to establish partnership, products and outputs of potential LRCs – emphasising the needs of local authorities and the Town and Country Planning process and best practice. The project also enabled the establishment of three LRCs, one each in England, Scotland and Wales, and dealing with different organisational issues.

For several years, NBN and HLF have considered the question of funding LRC. The Interim HLF Guidance on funding LRCs (Spring 2003) indicates that HLF will not fund core activities required by SLAs e.g. GIS or enquiry services. The HLF will fund data custodian projects - make data more accessible to more people, volunteering and learning opportunities, manage data to support delivery of LBAP targets - Volunteering projects and Learning projects

English Nature has indicated that its area teams can fund 'capacity building' work in LRCs. They can also enter into SLAs with LRCs for managing some EN data. In some cases EN has specific requirements which may be onerous for the LRC. At the national level there have been talks with English Nature about funding project officer for NBN LRC project.



Lavender, Wiltshire

In 2002 the National Federation of Biological Recording undertook a

survey to ascertain the Status of LRCs in the UK. There are about 40 LRCs in England, Wales, Scotland plus 13 partnerships working towards establishing an LRC. There are some large geographical gaps. Most of the recently established LRCs are sub-regional, which perhaps reflects a particular problem for LRCs of where to draw boundaries e.g. administrative, Natural Areas, vice-counties, or other zone of influence.



Potentilla, Wiltshire

The LRCs have very varied structure and organisation. Some are independent entities e.g. trusts, this seems to be the favoured approach at present, others are based in wildlife trusts or in various departments of local authorities - museums, planning and environment, leisure. Wherever the LRC is based local authorities (LAs) provide very varying degrees of resources.

The great majority of data submitted to LRCs comes from volunteers. A major advantage of using volunteers is that it enables a huge work force to be mobilised. An excellent example is the effort put in to the BSBI: *New Atlas of the British and Irish Flora* – an enormous amount of work by volunteers, with comprehensive coverage, undertaken to mark the Millennium. However some volunteers do have their foibles – they survey areas they do not live in but do not submit records, don't

submit records which might be used commercially, don't like submitting records of rarities or protected species and sometimes don't manage their records well.

Some commercially collected data is available to LRCs but there is no national agreement for desktop survey and field survey data for ES to be lodged with LRCs.

The majority of data handled by LRCs is species records, either as point data to a 6 fig grid. reference, tetrad data, used for floristic and ornithological atlases, or te data 'in this wood there is/.....'with a list of species. In the last 25 years there has been more mapping of semi-natural habitats, related to policy protection for non-statutory Sites of Importance for Nature Conservation (SINCs), these are mapped and recorded as habitat types with subsidiary lists of species. Collecting and organising records larger areas e.g. Biodiversity 'hot spots', is now a growing area. The regional dimension is a new issue to consider, including LRCs relationship with regional observatories.

Data management is the main issue for LRCs, with numbers of records increasing rapidly. The average number of sites per LRC is seven thousand, the average number of species records is approaching half a million. Some data is still managed using manual methods, but increasingly Recorder software (now in its third phase of development and linked to GIS) is used. This can handle species, sites and sub compartments. Many SINC records are linked to Microsoft Access data bases or similar. There are many off the peg software packages available for

recorders to use at home. There are some issues of compatibility, merging, and importing this data into LRC systems. The NBN Species Dictionary <http://nbn.nhm.ac.uk/nhm/> is the new standard reference for names of organisms found in UK, hosted by The Natural History Museum.



The NBN Species Directory on the web

For local authorities there are a number of major challenges related to biological recording, data management and its availability. For local authority ecologists, convincing LA managers of the need to support LRCs is the major issue. For the LRCs themselves balancing the books is vital. Most existing LRCs and local authorities involved with LRCs are considering the need for financial contributions from DEFRA, EA *et al* (organisations which use LRC records but have a reluctance to make a contribution). Other issues include regional recording and monitoring and the relationship with regional observatories, the potential transfer to local authorities of European Protected Species licensing and the increased needs of LAs for good base data as a result, and BAP monitoring for national & local needs. The question remains of regionally important geological sites (RIGS) data and its potential incorporation and how close should we bring heritage and biodiversity data bases &

products? Are there resource savings to be gained from an holistic approach?

A number of new studies will be looking at these issues. In the South West a new NBN pilot project will develop & test draft products relevant to LAs and develop a business case for LA investment in LRCs. A larger project 'Biodiversity Good Practice in LAs' is a partnership between ALGE, EN, CCW, the LGA and DEFRA. One of its targets is *'to support and promote data & information developments to help LAs'* and an ALGE LRC project is being set up to take this forward. This project will evaluate biodiversity and information requirements of LAs, linking these to statutory duties and discretionary powers to protect and enhance biodiversity as drivers for an LRC business plan. It will also scope data products & delivery mechanisms for meeting LA biodiversity information needs, and identify data products including those to assist landscape characterisation work, AONB Review, indicative forestry strategies, quality of life issues and community involvement. Lastly it will scope SLA components. Following this piece of work ALGE will finalise a position statement on LRCs and seek the LGA's endorsement to this.

In concluding this little review of the state of LRC development and local authority involvement with biological record management, it is obvious that there are many similarities to the HER systems and issues. In LAs we are all under resource pressures and are all dealing with continuing technical & policy developments. I would suggest that we could usefully make common cause in the areas

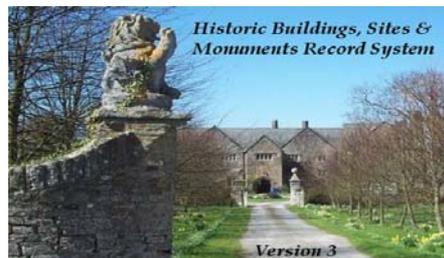
where lobbying is required. To this end liaison is essential. The continuing development of the town and country planning system and the relationship of ALGE, AGEO and our partners with government, especially the Office of the Deputy Prime Minister and DEFRA, is probably critical.

Finally – though we might all be striving towards best practice locally in our local authorities – remember that each LA will do it its own way - they always do!

more information about ALGE can be found on the website at www.alge.org.uk.

New Release of HBSMR

Crispin Flower, exeGesIS SDM



Version 3 of HBSMR will be released in the Autumn, representing a significant upgrade in functionality. The release will include:

- over 100 improvements and 3 major new modules.
- MORPH module for AP interpretation; will load existing NMP data.
- Designations module, including automatic upload from English Heritage's LBS-online.
- Integration with new 'Landscape Surveyor' hand-held field survey system.
- Historic Landscape Character module, integrating landscape interpretation into the HER for

powerful analysis and decision-support.

For more information see the exeGesIS web site at www.esdm.co.uk

Delivery of NMR Information to SMRs – Progress

David Graty, English Heritage

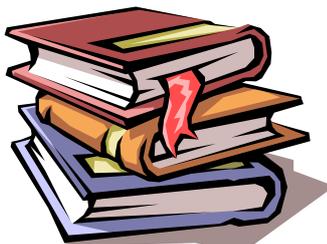
In November 2000 SMRs in England, including those maintained by local authorities, National Parks and the National Trust, were offered NMR information under licence. The agreement was to licence use and dissemination by SMRs of certain EH copyright material (originating from the NMR), and so far 60 SMRs have signed up to the agreement. The original intention was to supply information in digital form, but unfortunately there have been problems with doing this and as a result there has been a delay in sending data to SMRs. I hope, however, that we are now in a position to get things moving, and data is now beginning to be supplied. Information has been sent to 30 SMRs and the remainder should receive theirs soon. Feedback about the supply and nature of the data will be gratefully received, as we are keen to make this arrangement as useful to SMRs as possible.

Duncan Brown (duncan.brown@english-heritage.org.uk) maintains responsibility for an overview of the exercise, but my team in Heritage Data is managing the supply of data. If anyone who has not yet signed a licence would like to take advantage of this

arrangement please contact Duncan Brown in the first instance. Those who have queries about the supply of data or who require something urgently please contact david.graty@english-heritage.org.uk.

News in Brief

Publications



The Planning and Conservation Casework Survey 1997-1999, and Archaeological Services in Local Government Survey Report, were launched at the ALGAO AGM on the 4th June,

Twentieth Century Military Sites: Current approaches to their recording and conservation, This leaflet summarises English Heritage's work on 20th-century military sites. It defines the most significant phases of development and sets out the current approach to the recording, selection and conservation of what are considered to be the most important sites and structures. It is available free from EH Customer Services, phone 0870 333 1181 or email customers@english-heritage.org.uk

Ripping Up History, an English Heritage leaflet to accompany the campaign to encourage farmers to Protect, not Plough, Archaeological Sites at Risk, available on line at www.english-heritage.org.uk/default.asp?WCI=WebItem&WCE=3605



People



Northumberland County Council: Chris Burgess has succeeded Caroline Hardie as Conservation Team Manager and County Archaeologist, and Karen Derham Has succeeded Mike Collins as the Assistant County Archaeologist.

Canterbury Archaeological Trust: Diana Holmes has been appointed to complete the Canterbury UAD.

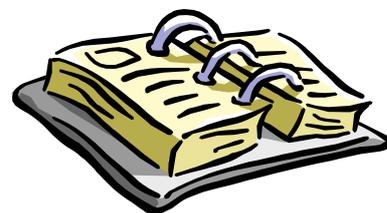
NMR: Phil Carlisle has left EH on a 13 month secondment to UCL to work on a thesaurus of UK Archives. Steven Asplin has also left the DSU, to pursue a new career in teaching. Marion Page is joining the DSU on a temporary contract and Emma Turner will be joining on a part time permanent basis from the NMR's signposting team.

Fife Council: Alastair Rees has taken over from Thomas Rees as Professional Assistant (Archaeology) and will be maintaining the SMR. Tom has started his own consultancy and contracting company called

Rathmell Archaeology Ltd. based in Kilwinning Ayrshire.

Portable Antiquities Scheme: Angie Bolton is now the Senior Finds Liaison Officer for Worcestershire and Warwickshire and based at The Commandery in Worcester. Jane Stewart is the new Finds Liaison Officer for Staffordshire and the West Midlands based at the Birmingham Museum and Art Gallery.

Diary



18th August Launch of Interchange Format Discussion on FISH Technical list.

September - November NMR consultation.

8th September, AHDS Metadata Workshop, York.

16th October FISH Meeting, National Trust offices, York.

31st October, end of consultation period on HERs and designations.

19th November HBSMR Users Group meeting Aylesbury.

November, MIDAS GIS Annex peer review.

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