

The Newsletter of the SMR Software Users Group

View from the Chair

Glenn Foard, Northamptonshire Heritage.

It has long been recognised that, whatever their limitations, the local Sites and Monuments Records represent an important research resource. However it is equally true that this potential has not been realised.

Over the last year or two we have started to come to terms with the implications and opportunities for the management of data on sites and monuments provided by developing information technology. Whether through the application of new software such as GIS packages and the new exeGesIS SMR software or through digital data exchange and the networking of record systems.

One clearly recognised limitation is the under-resourcing of most SMRs leading in many places to massive backlogs and inadequate content of records. While a lottery bid might begin to address the new technology and the backlog issues, it is not just a matter of the resources thrown at a problem. Exactly what data is recorded and how it is structured, will also be critical in determining the usefulness of our record systems.

What a few voices, such as Keith Ray at Plymouth, have been arguing for over a long time is research into SMR practice. The sort of thing that none of us really have much time to think seriously about in our professional work. This is however an ideal area for collaboration between ourselves and academics.

The opportunity has just arisen which should enable the exploration of some

of these issues - a PhD scholarship into the research uses of SMRs is being initiated at York University in 1998 with joint funding from the academic and the professional side.

Watch this space!

SMR Software Users Group meeting

Kate Fernie, RCHME

My apologies to all readers of *SMR News* for the long pause between the last meeting of the group at Cressing Temple and this issue of the newsletter. The last few months have proved particularly busy for all contributors.

The next meeting of the Users Group will be hosted by Dr Roger Bland at the Department for Culture, Media and Sport in London on the 29th April, 1998. This will be an opportunity to learn more about the pilot schemes on recording portable antiquities and to follow on from the IFA finds group meeting in Leicester (see Dinah Saich, this issue).

All suggestions for agenda items are welcomed.



CALENDAR

'The development of medieval towns in the eastern counties', Conference series on the urban archaeological resource and the development of later medieval towns. Details: Ann Davison, Cambridge Archaeological Field Unit tel 01223 881614, fax 01223 880946.

'Medieval London recent archaeological work and research', 14.2.98 & 28.2.98 CBA One-day conference (repeated), Museum of London. Price £24, Details from Derek Hills, 34 Kingfisher Close, Wheathampstead, Herts AL4 8JJ

'Computer applications in archaeology', 21.2.98-22.2.98, UK meeting at Southampton University. Details from CAA UK Organising Committee, Department of Archaeology, University of Southampton SO17 1BJ, tel 01703 594779.

'Computer applications in archaeology', 24.3.98-28.3.98, CAA98, International meeting in Barcelona. Details from Juan A Barcelo, Quantitative Archaeology Laboratory, Dept of Prehistory, Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain.

'Theoretical Roman archaeology conference, TRAC 1998', 16.4.98-17.4.98, Annual meeting at Leicester University. Details from TRAC 98, c/o School of Archaeological Studies, Leicester University, University Road, Leicester LE1 7RU, tel 0116 2522603.

Historical Metallurgy Society, 11.9.98-13.9.98, Annual conference at Plas Tan y Bwlch. Details: Susan Mossman, HMS Membership Secretary, The Science Museum, Exhibition Road, London SW7 2DD.

exeGesIS software development project

by Kate Fernie, RCHME

Since the last issue of *SMR News* the project to develop new software for SMRs has made considerable progress. Development work on the core SMR database and GIS module is now complete and the software is available for commercial release from exeGesIS SDM. The first installation of the software as a working SMR system will take place this month.

Looking back over the last six to nine months the pace of the project has, at times, been hectic. Four rounds of user consultation were built into the development cycle beginning with the series of technical seminars in June and continuing with alpha and beta system testing. Our aim throughout has been to involve SMR officers fully in discussing their requirements from the software.

Throughout the project, exeGesIS have worked hard to build successively more refined prototypes for the live system. The consultation and testing process providing excellent opportunities to feed ideas directly into the development work being undertaken by exeGesIS. Altogether there have been three rounds of software testing; the alpha phase confirming the system design against user requirements and the beta phase testing for bugs and assessing performance. The pilot sites have looked at sample data sets of some 3,500 records with volume tests on up to 30,000 records and also multi user trials.

Thanks to everyone's hard work, SMR officers will now have the option of purchasing a system which both delivers an application compliant with the MIDAS data standard and offers a user friendly working environment. The new software enables SMR data to be managed in a way that few of us have previously

enjoyed, particularly through its link to GIS and in its exploitation of the Windows environment. This system should give SMR officers and cultural resource managers the ability to create what Glenn Foard and Steve Catney have termed 'a model of the past'.

Over the coming months discussions about recording practice in SMRs should come to the fore as more SMR officers begin working with the exeGesIS software and ALGAO considers the development of a generic data standard for SMRs (see Paul Gilman, this issue). The SMR Software Users group will, of course be providing a forum for these discussions.

Pricing details for the software are available directly from exeGesIS SDM on 01874 711145.

Demonstrations of the software and the GIS module can be arranged through Kate Fernie on 01793 414728 or through exeGesIS.

An imaging module will be available shortly and the management and consultations module will be developed during Summer 1998 (see Rob Bourne, below).

Site Management and SMRs

by Rob Bourne, Babtie Group.

Archaeological site management is a slightly shadowy but increasingly important aspect of the curation of a local authority's archaeological heritage. Although not many authorities have direct experience of site management, the rise of concepts such as sustainability, and the increasing political pressure for environmental enhancement, means that it is only a matter of time before pro-active site management becomes a common feature of local authority archaeological work.

The inclusion of a management history module in the new RCHME/exeGesIS SMR software is a reflection of this concern.

What is site management?

In the context of the SMR software management history was specified as:

"...the management of the landscape including the heritage therein. This might be a note about past land use or the text of a management agreement. It can cover past, present and future management."

This definition appears to be more about countryside/land management and monument condition than the management of specific sites/monuments. I would suggest that a wider approach be taken to site management and that a strict definition is actually inappropriate.

However, if a definition is required something along the lines of 'an event or process during which the management, condition or presentation of a monument/site is improved or noted' is more appropriate in my opinion.

The main elements of site management are:

- Direct management/repair by a local authority
- Management agreements with landowners
- Countryside management schemes such as Countryside Stewardship
- Record of known management problems (eg. metal detecting, vandalism, etc.)
- Record of monument condition through time (if known)

Although the details of implementation differ, the main elements of site management can be characterised in a similar way. Each one is a staged process consisting of a series of 'events' which encompass a range of activities including the negotiation and agreement of a management plan, to the repair of a damaged monument.

This process may encompass 'standard' archaeological events such as geophysical survey or small-scale excavation, but most are unique to site management projects, e.g. tree felling, re-vegetation trials, fencing, repair of erosion scars, seeding, and

production of interpretative material. This throws up some interesting problems regarding how and why data relating to site management are stored and utilised in SMRs.

In Berkshire, Babbie Group have been running an innovative rolling programme of archaeological site management on behalf of Berkshire County Council for the last few years. This programme was set up by the Council with English Heritage in 1989. Since then 17 monuments ranging from barrow cemeteries and Iron Age hillforts to moated sites and a nunnery have been repaired, consolidated and presented to the public.

Each project has generated a large body of data: management plans; details of repair and consolidation techniques; costs and suitable contractors; earthwork surveys; documentary research; excavation. The majority of this data does not fit very comfortably within the current Berkshire SMR and stays in paper files.

The reason for this is that site management data relates to practical day to day processes and 'events' that, unlike more standard archaeological interventions (e.g. evaluations, excavations, etc.), do not actually inform us about the past.

SMRs should be both data management systems and also dynamic planning and management tools. If they are not, why do we bother to maintain and enhance them? With SMR maintenance likely to become a statutory duty for local authorities, now is the time to widen their use to be able to contribute to the management and presentation of the archaeological resource.

MIDAS: A New Data Standard

Paul Gilman, Essex County Council

MIDAS (A Manual and Data Standard for Monument Inventories) will be published shortly. MIDAS has been prepared by the Data Standards Working Party (DSWP), with representatives from the
Editor's note: If anyone has any views on this issue, we would welcome contributions for future editions of SMR News.

RCHME Data Standards Unit, English Heritage, ALGAO, British And Irish Archaeological Bibliography, and the National Trust.

In 1996, to help to prepare MIDAS, the DSWP circulated a questionnaire about the 1993 Data Standard, *Recording England's Past* (1993). This revealed that a much more user-friendly document was needed, that was broader in scope and not aimed so much at computer systems.

The MIDAS Vision:

The vision behind MIDAS is about *Sharing the knowledge of England's Past*.

MIDAS aims to:

- enhance retrieval of information.
- provide a common format for monument related inventories, ensuring that important information is recorded.
- promote consistency.
- facilitate the exchange of information between inventories.
- assist migration from old information systems to new.
- ensure survival and relevance of inventories as technologies change.

MIDAS has been written for professional heritage managers who develop and maintain inventories. It also caters for the needs of amateur groups and societies who collect and record information about the monuments of England.

What does MIDAS include?

MIDAS is arranged in three sections:

- 1) The MIDAS Manual explains why Data Standards are necessary, defines the areas of information (*information schemes*) that should be included in heritage inventories, and gives advice on establishing and reviewing inventories.
- 2) The MIDAS Data Standard discusses the information schemes in more detail, and defines the information blocks or *units of information* from which an inventory is constructed.
- 3) Appendices provide additional help and advice, including: indexing tools for control of inventory entries, sources of further advice and information; the MIDAS inventory registration scheme.

MIDAS is designed to be as flexible as possible and does not provide a specific *data model* or *data structure*. Detailed terminology for use in inventories is not included. Also excluded is specific guidance on Information technology and Geographic Information Systems, or on the recasting of existing data to meet the MIDAS standard

The information schemes:

- names and references.
- monument character.
- bibliography, documentary, archives and objects.
- events.
- monument management activities.
- people, organisations and roles.
- location.

Each information scheme contains:

- a discussion of the key questions and issues in the recording of this type of information.
- a specific recommendation based on the experience of the DSWP.
- the Recommended units of information that should be recorded.
- additional units of information that may be considered.
- a cross-reference to related information schemes.

For example, MIDAS includes the following information on Monument Type:

- The term or terms that classify the monument principally with reference to function or use.
- Generally one Monument Type should be recorded against each entry in the inventory. Where multiple Monument Types appear to be appropriate, it should be considered whether separate entries in the inventory should be created to record the different components of the monument.
- Use of the RCHME/English Heritage *Thesaurus of Monument Types* is recommended. The most specific appropriate terms from the thesaurus should be used in indexing.
- Occurs in Monument Character.
- Examples of General terms: Barrow, Building, Cemetery.
- Examples of Specific terms: Bell Barrow, Brass Foundry, Enclosed Cremation Cemetery.

The Future?

After the publication of MIDAS, the Forum on Information Standards for England (FISHEN) will carry on the work of the DSWP and look at other standards-related issues, such as revision to the Thesaurus of Monument Types, preparation of word lists for MIDAS units of information, and the creation of a MIDAS Registration Scheme.

Consideration is also being given to how best to prepare a Data Standard for SMRs following on the development of the new exeGesIS software.

Modelling the Resource: Monuments, Events, Archaeological elements and GIS.

Keith Ray, Plymouth City Council.

Background

In recent years a problem has arisen with the lack of distinction made

between 'site' type records and 'monument' type records in SMRs. This issue has become prominent due to a requirement to quantify the nature and extent of the archaeological resource, for national profiling and management. There is now a wide recognition that, whether or not SMRs are made a statutory requirement for local authorities, the way their record represents the archaeological resource needs clarification.

Urban Archaeological Databases

In urban archaeological databases (UAD) a distinction is made between 'event' records as observations representing a point of recognition of archaeological significance and 'monument' records as a synthesised interpretation. UAD guidance for the definition of such 'events' suggests that an excavation, a survey, a reported casual identification or find, a map or other depiction, and even a photograph can be classed as a separate record.

Each event record is designed to specify what it is that has been observed or the constituent archaeological elements: walls, pits, middens and so on. It is these various elements, often drawn from several different events, that enable the definition of 'monument' records, e.g. the identification of the Roman amphitheatre in London.

Although the archaeological elements are interpretative, as the observational content of events they are accorded no autonomy within the data structure. While this creates no problem where they can be defined as the unambiguous components of monuments, unattributable data can lead to large 'residual' categories of ignored or unclassified information.

It seems worthwhile to enter into a debate about how SMR data can be used for representing the nature and extent of the archaeological resource. In the UAD model the elements noted provide a link between event records and monument records. It is possible to 'call up' elements and so quantify the resource as totals of elements of

different kinds. The question therefore arises as to how to accommodate this information.

Deposit modelling is used in UAD's to characterise the presence of contextual information which cannot be spatially distinguished as, for example, a pit. It is essentially the predictive mapping of the disposition of the resource in the ground from a variety of archaeological and other sources. So far this has been a crude exercise, and has been targeted at areas where evidence is dense or reliable enough to support it. In Plymouth, this has been in the areas of harbourside reclamation.

In order to progress resource modelling we need to consider the full potential of Geographical Information Systems (GIS). One of their particular strengths is that they enable information to be layered and presented visually, simultaneously. This achieves an immediate spatial synthesis. Using this framework, it ought to be possible to specify our interpretative records as anything that is defined spatially and can be represented using a GIS. Even where the record is spatially vague, it can be represented at alternative levels of resolution, for instance as a 'find polygon'. As such the power of the SMR as a tool for representation of the resource can be extended to the consideration of record deficient areas and the creation of a 'probability surface of potential archaeological sites'.

*This is a summary of a longer paper **Archaeological Elements, Site Events and Monument Records: Means of Interrelation.** Available from Keith Ray, Civic Centre, Plymouth, Devon, PL1 2EW.*

Metadata for the masses

See an article Paul Miller published on the Internet in *Ariadne* Issue 5.

Metadata. The word is increasingly to be found bandied about among the Web *cognoscenti*, but what exactly is it, and is it something that can be of value to you and your work? This article aims to explore some of the issues involved in metadata and then, concentrating specifically upon the Dublin core, move on to show in a non-technical fashion how metadata may be used by anyone to make their material more accessible. A collection of references at the end of the article provides pointers to some of the current work in this field.

What is metadata?

Metadata is data *about* data, and therefore provides basic information such as the author of a work, the date of creation, links to any related works, etc. One recognisable form of metadata is the card index catalogue in a library; the information on that card is metadata about a book. Metadata exists for almost every conceivable object or group of objects,

whether stored in electronic form or not. A paper map from the Ordnance Survey of Great Britain, for example has associated metadata such as its scale, the date of survey and date of publication. With products such as maps, the metadata is often clearly visible on the map itself, and is expressed using standard conventions that are easily interpretable by the experienced user.

In the unfathomable maze that is the Internet, things are not always as easy. These generalised standards do not yet exist, and it can be surprisingly difficult to actually find the information for which you are searching. The current generation of search engines are undoubtedly powerful, and capable of returning a large number of suggestions in response to any search, but it is almost impossible to cut through the irrelevant suggestions to find the ones that you are actually interested in. A search for *Ariadne* on Alta Vista, for example, found 5468 references...

This simple example illustrates some of the problems of finding information on the Web. It is perhaps analagous (or perhaps not!) to a paper-based list of contacts which,

rather than being sorted conventionally by surname, is sorted simultaneously by the contents of every field (surname, company, street, etc). Of course, when you attempt to look up an address in this contact list, you have no way of knowing which field the result is coming from. Assuming that you wish to contact our esteemed web editor to offer an article for *Ariadne* and search for his surname (Kirriemuir), you don't really know whether the result you have found is really him, or part of the address of some long forgotten relative from a small Scottish town just west of Forfar.

To make your contact list useful, you need some metadata to describe what each string of text relates to (ie Kirriemuir is a SURNAME or Kirremuir is a TOWN).

Most applications are, of course more complex than this. How, then are the 'experts' currently approaching the description of metadata?

For the full article see:

<http://www.ariadne.ac.uk/issue5/metadata-masses/>

Ancient Landscapes of the Yorkshire Wolds

by Catherine Stoertz

The RCHME published the *Ancient Landscapes of the Yorkshire Wolds* on 6 October 1997. The book draws together the evidence shown on over 35,000 aerial photographs, revealing the way in which the landscape was organised at many different periods from 4,000 BC, and transforms our understanding of the prehistoric and Roman periods in the area.

The results of this study are of considerable importance in the understanding of the history of the Yorkshire Wolds. It is also a major contribution to the development of methods used in the analysis and understanding of any archaeological landscape.

SMR Software Users Group

The SMR Software Users Group has now been meeting for over two years. We have organised a varied programme of meetings covering topics relating to software developments, GIS, Urban Archaeological Databases, the MARs project and many other issues of interest to SMR officers.

In the future we are proposing to divide the twice yearly meetings into two halves. Morning sessions will be set aside for users of the new exeGesIS software and all who are interested in the system. During these sessions issues relating to the recording of monuments, events, sources, consultations and monument management in the software will be discussion. There will also be opportunities for users of the software to share hints and tips and discuss future developments.

The afternoon session will aim to be of general interest and enable discussion of new initiatives (e.g. the Portable Antiquities recording schemes) and other issues (e.g. SMR assessments).

Suggestions and comments from members of the group are welcomed.

Contact: Kate Fernie on 01793 414728

Finds and the SMR

by Dinah Saich, Surrey SMR

The IFA Finds Group recently held a day conference entitled "Putting the Record Straight: Finds on the SMR and its kin", with the aim of answering questions such as 'What finds are recorded on the SMR?', 'How are finds recorded on the SMR?' and even 'Should finds be recorded on the SMR?'. As with many things, the conference raised more questions than it answered, but the questions raised are ones the SMR community would do well to discuss.

It became clear, as the day wore on, that finds' specialists don't see SMRs quite how we do. Their main interest is what has been found and not necessarily where it has been found, so having to check umpteen geographical areas (all with their own recording system) seems a chore and they would prefer a one-stop-shop.

Dr. Roger Bland, a coin specialist, is running the pilot projects for recording archaeological finds for the Department for Culture, Media and Sport (DCMS). All the information from these, and future projects, will be held by the DCMS on a database. At the conference, Dr. Bland said his understanding was that SMRs wouldn't be interested in holding all of the data recovered by the pilot. Having created a *de facto* finds database, Dr. Bland is considering establishing it, by adding other finds information.

Are all finds of archaeological interest? Most SMRs get more and more selective about the finds they record, the younger those finds are. Some SMRs have a stated policy on which finds they record, others don't, but all tend towards selective recording from the Medieval period onwards. Is this policy one we are happy with? Are SMR Officers only recording some finds because of pressure on resources rather than for good archaeological reasons?

The same issue, resources, applies to the question "How are finds recorded on the SMR?" Many SMRs record individual stray finds, but not finds recovered during a programme of field work. My own SMR is full of entries as terse as "Excavation of a Romano-British settlement site", with no indication of what features were recorded, let alone what finds were recovered. I am sure that I'm not alone. And how well do we record those finds that make it onto the SMR? The good news is that the Museums Documentation Association has been working on an Archaeological Objects Thesaurus, with the RCHME amongst others. This was published in December 1997 and forms a companion for the RCHME's Monument Type Thesaurus.

From the find specialist's point of view, it is easy to see why SMRs can seem more of a hindrance than a help. I think the SMR community needs to take the initiative with finds and come up with clear criteria for which finds we record and how. And a clear commitment for making all SMRs concurrent. Then we will have a sound base from which to respond to criticism about SMRs and to negotiate with the DCMS over what information we want to receive from their pilot projects.

PEOPLE

Louise King, formerly SMR officer for Gloucestershire, started work with the RCHME on the 1st September as a team leader in the NMR Inventory Section.

Tim Grubb is the new SMR officer for Gloucestershire County Council.

South Yorkshire have recently confirmed their SMR staff in permanent posts; Sarah Whitely is SMR officer, Jim McNeil is Assistant Archaeologist and Roy Sykes is the new SMR assistant.

Melanie Harris, formerly with South Yorkshire, is now working for CADW in their Records Office.

Chris Jones left the RCHME at the end of October; RCHME SMR liaison for the north will now be through Kate Fernie in Swindon.

CHANGE OF ADDRESS

East Sussex. Andrew Woodcock and Martin Brown can now be contacted at: Transport and Environment Department, East Sussex County Council, Sackville House, Brooks Close, Lewes, East Sussex, BN7 1UE. Phone: 01273 481608 / 482257 Fax: 01273 479

NEW SMRs

Leicester. Richard Clark of Leicester City Museum Service at Jewry Wall Museum in Leicester is now responsible for the city SMR. The county SMR (excluding the city) is being managed by Peter Liddle of the County Museums, Art Galleries & Record Service at County Hall, Glenfield, Leicestershire.

Luton. Stewart Cuff of Luton Borough Council, Department of Planning and Development is now responsible for the Luton SMR with archaeological support from Robin Holgate of Luton Museum Service.