

The Newsletter of the SMR Software Users Group

View from the Chair

Glenn Foard, Northamptonshire Heritage

The next twelve months will be a critical time for the future of SMRs and it is essential that SMR Officers have the opportunity to play an active part in the debate that is going on about the nature and function of SMRs in the 21st century. Both the new Association of Local Government Archaeologists (ALGAO) and RCHME take their responsibilities in this regard very seriously.

ALGAO will now be circulating SMR Officers with minutes of its SMR Sub-Committee meetings and will explore ways in which links can be forged between the Sub-Committee and the regional SMR Working Parties. The RCHME will continue to facilitate the SMR Software Users Group meetings as a national forum for SMR Officers and to publish this newsletter both on paper and on the Internet. If you have ideas as to what more should be done to improve communication then please let us know.

There are many initiatives at present which have implications for the future of SMRs. Standards for GIS are being developed at national and European level; a new database for churches is proposed (to be developed in partnership with SMRs), and an Archaeological Data Service is now established at York. Perhaps the most important initiative is the report on SMRs being prepared for the Department of National Heritage (DNH) by RCHME and English Heritage, with input from ALGAO and representatives of the SMR User community. The report to DNH is given particular significance by the recommendation in

the recent Green Paper 'Protecting Our Heritage' that the maintenance of SMRs should be made a statutory responsibility and the possibility of a bid for funding SMR development. In this context our ultimate aim must of course be to ensure that SMRs fulfill a central role in the integrated information system which is so clearly needed in British archaeology.

These events will set SMRs on a new course for the coming decade. This is why now is the right time for a fundamental review of the nature of SMRs. Only in this way can we ensure that the resources which are invested are wisely used, enabling our record systems to exploit the full potential of the new information technology.

We need to ask how our record systems could best be structured and what information they should contain. The scope of our records and whether they should be purely archaeological or, as I would argue, encompass the full range of information about the historic environment, is an issue for future discussion.

On the matter of structure a consensus does seem to be developing, based on the shared experiences of the NMR, a few SMRs, English Heritage and Urban Archaeological Databases. In the future SMRs must contain three main classes of data: Site/Event, Monument and Management data.

However, it is apparent from most discussions, including that at the last SMR Software Users Group meeting, that there is not a common understanding as to what the three terms mean. Many things flow directly from this tripartite classification.

This issue of *SMR News* includes a look at the definition of terms, aiming to make a contribution to the debate about the structure of our record systems.

CALENDAR

GIS in Cultural Resource Management AGI & RCHME
12th November 10.30 - 5.00 pm
Swindon. Bookings: 0171 334 3746

Virtual Heritage '96, 12-13/12/96,
London. Details: 0181 292 1498

Problems of identification and protection of industrial sites in urban areas Association of Industrial Archaeologists, Leicester
15-17/12/96 £92 0114 276484

Cultural resource management
12/2/96, Oxford University Dept. for Continuing Education:
01865 270360

SMR Software Users Group
5th March, 1997 at Sheffield Museum 10.30 - 4.00 pm

The next meeting of the group is being co-hosted by South Yorkshire Archaeology Service and Derbyshire Planning Department.

Computer Applications and quantitative methods in Archaeology CAA97 Birmingham
12-13/4/97 0121 414 5513

REGIONAL SMR WORKING PARTIES

14/11/1996 North West SMR working party, Kendal

6/12/1996 East Anglian SMR working party, Cambridge

13/12/96 East Midlands SMR working party

21/3/97 Yorkshire & Humberside SMR Working Party, York

Urban Archaeological Databases

Roger Thomas, English Heritage

UADs are an element in a programme of Urban Archaeology Strategies launched by English Heritage in 1992 to assist in making PPG16 work in urban areas. The programme includes 35 major urban centres and has 3 phases:

Database: The creation of a text and GIS based record.

Assessment: An academic study leading to a published report outlining current knowledge and understanding of the urban centre.

Strategy: The development of a local authority strategy to manage the resource. This should see the resource as an amenity and underline the need for preservation.

English Heritage is grant-aiding the local authorities to do these projects, they either do the work in-house or contract it out to independent units or the county councils. The completed UADs are intended as a planning tool and are held either by the local planning authority or on their behalf by the County Council in the SMR.

Rather than developing a stand alone system English Heritage has encouraged the use of the software and hardware systems already available in local authorities.

The intellectual basis for all UADs is provided by a data model which

addresses the complexity and density of archaeology in urban cores. This data model was developed initially for Cirencester by the Cotswold Archaeological Trust for EH & the RCHME.

UADs make a distinction between records of *Sites* or *Recognition Events* and those of *Monuments*. Their dual structure accommodates the problem that a single event can recognise several monuments and a monument can become recognised over time through a series of events. For example, the Roman amphitheatre in London was recognised after analysing the results of a series of excavations.

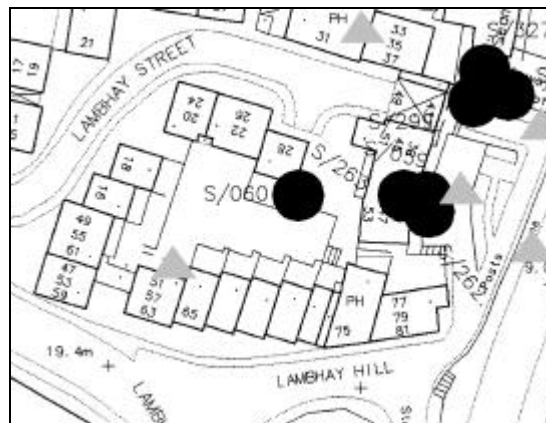
This distinction is proving very helpful. Knowing that work has been done in the past is essential in making a decision in a planning context.

An urban archaeology database for Plymouth

Keith Ray and Sarah Noble,
Plymouth City Council

Based in the Planning Department of Plymouth City Council, the project to construct a UAD began in 1995. The study area is approximately 4km square, centred on the historic core of the city. The structure of the database is based on the *Data Standards and Compilers Manual* (English Heritage & RCHME, 1993), and is used in tandem with a GIS. The relational database package being used is Paradox for Windows and the GIS is GGP, a basic digitised map base package being run by a number of local authorities.

Until 1988, only three large scale rescue excavations and a number of individual small scale observations had been carried out within the historic core of the City. This has inevitably affected the quantity and quality of the data available for input into the database, despite the



enormous upturn in the amount of excavation undertaken as a consequence of planning conditions since the advent of PPG16 in 1992.

As a result of this, a wide ranging approach to available archaeological sources has been adopted, incorporating for example both historic photographic material and the substantial amount of historic map evidence available for the town. To date, database records have been created for almost 500 recognition events, and for an initial draft of nearly 150 monuments, all of which are also plotted on the GIS.

As the medieval and later town was focused around the sheltered natural harbour of Sutton Pool, much of the

City's archaeological resource inevitably results from activities associated with this harbour. The largest volume of surviving archaeological deposit here derives from the sequence of waterfront reclamation activity dating from circa 1250. These deposits and the associated waterfronts will be mapped on the GIS as the final phase of the UAD.

The basis of this predictive model is a map of the likely surface of bedrock, using data from archaeological observations and investigative engineering groundworks. For certain locations archaeological and engineering observations overlap, enabling a comparison of results. Using archaeological, documentary and cartographic sources a sequence of period overlays reconstructing the waterfronts will also be constructed. Mapping the height of bedrock allows the likely overall volumes of material present in any location to be calculated. In combination with the period overlays, more sophisticated predictions can be made about the nature of the resource. As the results of ensuing archaeological projects are incorporated, the model can be further refined.

What is a Site Event?

Glenn Foard, Northamptonshire Heritage

The division of archaeological data into the two categories of *Site Event* and *Monument* have been discussed in detail elsewhere, though the actual terms applied vary (Foard, 1978; Darvill & Gerrard, 1992; Addison, forthcoming).

A *Site Event*, in the Northamptonshire SMR, is a single data collection event over a discrete area of the historic landscape using one investigative technique. The word *Site* conveys a specific association to an area of landscape. The word *Event* conveys a fixed period of time within which a specific body of evidence was collected.

The *Site Event* produces a fixed and archivable resource. This archive may be in the form of artefacts or of information on paper, magnetic data or other media.

The *Site Event* is not a project, such as a single evaluation or recording action, as these encompass various techniques. Each technique employed (excavation, geophysical survey, etc) has its own constraints and parameters and must be separately identified as a *Site Event*. There is the potential for many separate

Site Events to be conducted on the same monument, for example a series of aerial photographs taken of earthworks at different dates.

Even if the data collection exercise was negative it is still a *Site Event*, eg. failure to recover artefacts during fieldwalking. This is because the absence of evidence, if the constraints of the collection exercise are understood, can aid the process of interpretation of the historic landscape.

Site Events can range from chance collection of a single artefact to a large scale excavation. They include activities producing evidence about the past not conducted for that purpose, eg. a specific mapping survey by the Ordnance Survey. *Site Events* may also encompass documentary sources which represent a single data collection exercise, such as a court roll or a terrier.

The determining factor is that the event produced a fixed body of data which is definable and can be qualified and given a value. Qualification may define the expertise of the collector or constraints such as, in the case of fieldwalking the soil or light conditions.

A *Site Event* takes evidence out of the landscape, but reinterpretation of evidence does not constitute a new site event. Hence the examination of historic documents will not be

considered a *Site Event*. This is essential because it is the removal exercise that determines the information potential of the archive and its limits

Hence, each *Site Event* will be open to re-interpretation. Each re-interpretation will be recorded against the *Site Event* and contribute to the definition of the *Monument*. This remains true even if, in the case of a scientific analysis of artefacts, this re-examination enables more of the potential existing within the collection to be realised.

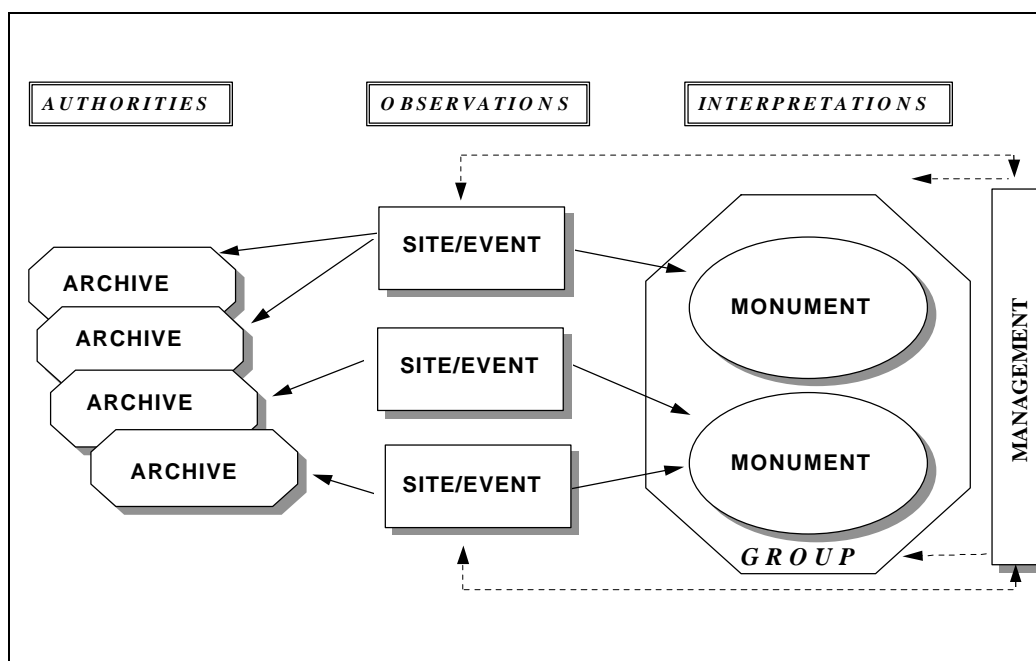
The *Site Event* aspect of the SMR can be seen as the 'fixed archive' or the 'filing system' if you like. The *Monument* is the dynamic part of the system where a model of the past is built up from the components of the *Site Events*.

For this purpose *Site Events* are broken down to the smallest realistic 'building blocks' from which a model of the whole historic landscape is constructed. These will be meaningful components such as rooms, enclosures etc.

Addison, C., forthcoming, CAA 1995, Leiden

Darvill, T, & Gerrard, C., 1992, *Cirencester and its Environs: an archaeological assessment*.

Foard, G., 1978, *The Northamptonshire Sites and Monuments Record*.



A data model for SMRs

Neil Lang, RCHME

The data model suggests that 'sites' or 'events' are broadly objective observations of cultural material. One or more 'site/event' may be interpreted as a monument. Monuments may in turn be grouped as elements of higher level entities. The results of 'site/events' are fed into the monument management process and may alter the perceived importance of the monument and subsequent planning recommendations.

An Essential Tool for SMR Work?

The British Archaeological Bibliography (BAB)

Jeremy Oetgen, British Archaeological Bibliography

What is BAB?

The central service that collects, analyses and disseminates information on new publications covering archaeology and the historic environment in the whole of Great Britain and Ireland. Our funding comes partly from grants provided by each of the main national archaeological organisations and partly from subscription income.

What do we produce?

We systematically record and summarise the contents of published material relating to archaeology. In practice, this means that we regularly search the pages of all the most relevant journals (British and foreign) to identify items of interest and prepare a consolidated, easily consulted guide to their contents. Each relevant article is given a separate bibliographic entry with its own abstract. We also seek out books and serial monographs, conference proceedings, postgraduate theses, newsletters, and a variety of 'grey literature'. To assist the researcher,

items are classified according to their main period and broad topic, while indexes allow searches by author or by specific subject. We also list the addresses of publishers, include selected information on British Parliamentary proceedings, and indicate sources that may be consulted for information on related topics that are beyond our own remit.

What else do we do?

We are establishing the most comprehensive database on information on archaeological publications for UK and Ireland. Following the completion of an RCHME funded project to computerise the CBA's bibliographies (*BAA* and the *Archaeological Bibliography for Great Britain and Ireland*), our dataset includes details of thousands of items published from 1940 onwards. Data from earlier sources (e.g. the Gommès' *Index of Archaeological Papers* series) is also being added: these bibliographies were issued between 1892 and 1910 and refer to work published from the 17th century onwards. We are

now drawing up detailed specifications for the database, and we are also considering how best to tackle the problem of indexing 300 years of archaeological publications. Our initial aim is to release a CD-ROM containing all the bibliographic data we hold, along with suitable retrieval software. Other means of dissemination will be considered as technology and users' demands develop.

To subscribe to *BAB*, contact: BAB subscriptions, c/o Council for British Archaeology, Bowes Morrell House, 111 Walmgate, York, YO1 2UA. (Phone: 01904 671 417; fax 01904 671384; e-mail 100271.456@compuserve.com). Subscriptions for 1996 (BAB 5(1-2) & AIP Gazetteers) cost: £99 (institutions), £45 (Individuals)

For other information, or to let us have review copies of new publications, contact Isabel Holroyd or Jeremy Oetgen at BAB, Room 101, Institute of Archaeology, 31-34 Gordon Square, London, WC1H 0PY (Phone: 0171 380 7532)

Sample extracts from BAB 5(1-2)

BA: ARTEFACTS, BOATS

4E

96/315

The overland way. From Porlock to Portland in the Bronze Age? An investigation

Eardley-Wilmot, Hazel. Tiverton: Westcountry Books, 1995, 32pp, refs, maps. Price £2.95 (pb: 1 898 386 137)

A study based on a variety of archaeological evidence which suggests that there was a Middle Bronze Age trade-route from Porlock to Weymouth Bay. LRA.

ROM: MILITARY STUDIES, PROVINCIAL, ADMINISTRATION

6K

96/434

The date of Pevensey and the defence of an 'Imperium Britannicum'

Fulford, Michael & Tyers, Ian *Antiquity*, 69(266), 1995, 1009-14, pl, fig, refs.

Recent work at the late Roman fort recovered oak foundation piles. The precision of a tree-ring date for them occasions consideration of the pattern of coastal forts of which Pevensey is a part. Au(adp).

MEM: FIELDWORK, RECORDING, ANALYSIS, ENVIRONMENTAL, PHYSICAL ANTHROPOLOGY, EXPERIMENTAL

7D

96/455

Early and Middle Saxon Essex

Challis, K Unpublished M Phil thesis, University of Nottingham, 1992

This thesis reviews the evidence for the archaeology and history of the East Saxon kingdoms, roughly the area of Essex before the 1974 boundary changes, during the period from c AD 400 to 850. Au(adp)

IFA'96:

SMRs in Action

Sarah Jane Farr, Merseyside

The 1996 IFA Conference half day session 'SMRs in Action' was stimulating and well attended. The session was born from frustration, particularly over the past few years, at listening to much lively debate centred around the concerns of curatorial and contract archaeology. Little real attention was being paid to SMRs as the keys to archaeological management and research.

The aim of the session was to prompt discussion on data content and data structures and the suitability for research of local and national SMRs. Speakers from England, Scotland and Wales presented both national and local perspectives on SMRs related to theory and practice and with views on users and compilers.

SMR Data Audits

Kate Fernie, RCHME

As part of the Commission's lead role for SMRs, Data Audits will be offered to all county records over the next three years.

Initially designed to support migration to Monarch for SMRs, the Data Audit has been revised to assist local authorities in strategic planning for their records. A Data Audit provides the local authority and the RCHME with an accurate picture of its Sites and Monuments Record.

Undertaking a Data Audit involves examining three operational areas of a Sites and Monuments Record. Firstly, a review of the current management framework helps to identify future priorities for resourcing the SMR. Detailed analysis of the information and archives which the Record holds enables future record enhancement to be planned. Finally, an examination of computer systems and support

To air the views of SMR users and compilers my paper 'Somebody's Made-up Rubbish' presented the results of questionnaires sent to SMR staff and contracting archaeologists. Questions related to the general condition of SMRs; the perceived change in role and demand; compilation and access and their suitability for research. The response rate was admirable: SMRs returned 86% and Archaeologists 65%.

SMR staff were concerned about development control work overriding SMR enhancement and the lack of pro-active maintenance and research. Archaeologists appeared aware of the resource problems facing SMRs and were concerned about the quality of data whilst expressing satisfaction at the valuable local knowledge of SMR staff.

Papers from 'SMRs in Action' have been submitted as a proposal for publication in *Antiquity* in 1997.

arrangements helps in making decisions about migrating to new information systems, whichever system is chosen.

The information generated in the Data Audit will help to identify strategies for the future development of the SMR. Immediate priorities may include tackling backlogs, bringing data up to current Data Standards, or planning to replace Superfile. In the longer term a Data Audit will help the SMR to put forward its business case to its sponsors for the resources to manage and develop the Record.

The current talk of new SMR software, improved Data Standards and Geographic Information Systems may seem an impossible dream to an under-resourced SMR. Undertaking a Data Audit will help you to plan for the future developments of your SMR.

For more information about SMR Data Audits, contact Kate Fernie on 01793 414728

PEOPLE

Ian George is the new Lincoln City Archaeological Officer

Simon Walton has left the RCHME to join Portsmouth University's Computer Services Department.

Mike Hornby is now responsible for the development of Monarch software at the RCHME.

PUBLICATIONS

Archaeology Alive No. 4. A review of the work of the Cornwall Archaeological Unit. 1995-6

EAA 76 'Orton Hall Farm: A Roman and Early-Anglo-Saxon Farmstead' by D.F. Mackreth, East Anglian Archaeology, Nene Valley Archaeological Trust 1996

Essex Aerial Survey. 1995 Annual Report. Essex County Council, Planning

Fourth report of the Merseyside Archaeological Sites and Monuments Record Officer. Liverpool Museum. 1994

RCHME Annual report 1995/6, RCHME 1996

Suffolk Archaeological Service Annual Report, 1995-96. Suffolk County Council

WORLD WIDE WEB

New web site dedicated to protection of the world's cultural heritage:
<http://home/earthlink.net/~elamerica/>