Conservation Bulletin, Issue 39, December 2000

(NB: page numbers are those of the original publication)

David Miles

Investigation & Research

Chief Archaeologist, David Miles, reports on the development of surveying techniques and the wealth of information arising from their application

The systematic study of the historic environment began with survey. Only in the 19th century did the general public come to identify archaeology with the excavation of valuable artefacts. In popular culture today – whether it is the pursuit by a virtual Lara Croft or a real Mick Aston on the Time Team television programme – the ultimate archaeological experience is presented as digging through and breaking open to discover the prize and solve the mystery.

Reality, of course, is more complicated. The discovery of Tutankhamun or the Sutton Hoo treasure is no longer the primary aim. The understanding of the historic environment is again increasingly dependent on the survey and observation techniques that have evolved from 18th century roots. The merger in 1999 of the Royal Commission on the Historical Monuments of England (RCHME) and English Heritage has provided an opportunity to combine different skills and traditions in survey and observation. Working with partners in local authorities, national parks, the National Trust, English Nature and other national agencies enables us both to address national strategic agendas and also to appreciate local and regional character.

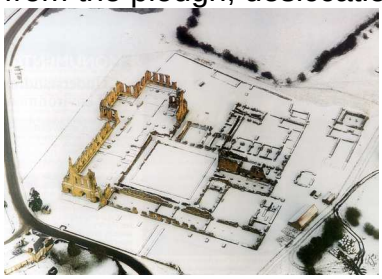
Alastair Oswald, archaeological surveyor, working on a former-RCHME flint mining project at Harrow Hill, Sussex

Archaeology and Survey Department

At the time of the merger with RCHME, English Heritage also established its nine regional operations. Survey teams from the two former organisations now share regional offices in York and Cambridge, and the team at Exeter works within the South West Region. Swindon and London remain the principal bases for the others. Archaeological science and field archaeology teams now form the Centre for Archaeology at Fort Cumberland, Portsmouth.

The new Archaeology and Survey Department can call on the skills of aerial archaeologists, buildings, monuments and landscape surveyors, metric surveyors, urban historians, photographers, industrial archaeologists, forensic scientists and IT specialists. Working together, these teams can deliver a powerful battery of techniques and approaches. In addition, they are part of English Heritage's Department of Conservation which also includes specialists in countryside policy, the built environment and building conservation.

The challenge is to direct this energy and expertise at new areas. In the late 1960s and 1970s, archaeology's dominant image was that of the rescue bulldozer carrying threatened ancient monuments supposedly to safety. The standard solution then was to dig in advance of the new motorway or gravel pit. In the Penguin paperback, *Rescue Archaeology*, Professor Philip Rahtz rhetorically predicted the extinction of the heritage beneath a tide of development. What a difference 25 years makes. Following ground survey in the Yorkshire Dales, Dartmoor, Exmoor and the Malverns, as well as aerial survey beyond the Wessex/Thames Valley into Lincolnshire, Cornwall and the Yorkshire Wolds, we now know that England's historic landscape is far richer and more complex than the heroic rescue archaeologists of the 1970s imagined. But it is still under threat: from the plough, desiccation of wetlands, coastal erosion and urban expansion.



Aerial photograph of Byland Abbey, North Yorkshire, 1994, highlighted by snow

Survey projects

The proper study of the historic environment continues to grow, encompassing the ancient and recent past. Hillforts, barrows and abbeys were the staple of Scheduled Ancient Monuments; the Monuments Protection Programme has widened its scope to include industries such as textiles, steelworking, coal mining, boot and shoe making, and the manufacture of gunpowder and military explosives. The Birmingham Jewellery Quarter project, discussed in the last issue of Conservation Bulletin, is a model of this new approach: an area of international importance within a major city, a complex historic mix of industrial, commercial and domestic space, an uneasy balance between the problems of

decline and the need for regeneration and development that is typical of our towns and cities.
In the Birmingham Jewellery Quarter, we are able to contribute to the urban agenda. Adding the historic environment to the debate in Birmingham, Sheffield, Liverpool, Nelson or Truro gives local communities an opportunity to consider their history as a matter of identity and debate.
Some survey projects explore national themes, such as shops, textile mills, prisons and courthouses. Others focus on specific areas, such as the town of Nelson that expanded rapidly in the 19th century and declined as quickly in the 20th century. Countryside projects include well known but less understood areas: Exmoor, remarkably well preserved; Dartmoor, arguably the finest extant historic landscape in Europe; and Lincolnshire, Norfolk and Essex, eroded by agriculture, the sea and quarrying.
Survey is not about recording for its own sake, but about understanding, appreciating and managing townscapes and landscapes. We now know, for example, that the military ranges of Salisbury Plain contain probably the finest collection of upstanding Romano-British villages in the country and that the elongated cursus monument, first observed at Stonehenge and considered to be rare, is now recognised as a feature of Neolithic ceremonial sites across the country. Such information is routinely obtained by professional researchers from local Sites and Monuments Records and the National Monuments Record. The aim now should be to improve access and involvement for everyone. Our historic environment has a thousand and one stories waiting to be told.

David Miles

Chief Archaeologist

THE MUNDANE & MONUMENTAL

Understanding the built environment

Historic buildings are a living expression of our complex past and a major contribution to daily life. Paul Barnwell and Colum Giles describe how English Heritage's Architectural Investigation teams seek to increase our awareness of the significance of the buildings that help to define the historic environment

Three- or four-room houses were built widely in east and south London through the long 18th century to accommodate artisans or labourers. This drawing shows a cutaway view of a typical example

You may not always notice the small farmstead or old-fashioned gentlemen's outfitters you regularly pass, but when it is demolished you realise that something has gone. Sometimes, the sense may be one of relief that a run-down and perhaps dangerous eyesore has been removed, but even then there may be a sense of the loss of something familiar. Buildings of all kinds and ages help to create a distinctive local character, but they also form a vast archive of information concerning local history and can help answer questions about the kinds of people who lived and worked there, the variety of trade or industry, and the way of life of former generations.

Local character

The definition of local character, particularly in urban and industrial contexts, is one of the major concerns of the Architectural Investigation section of English Heritage. It requires

not only the ability to see what may be overlooked but also to analyse its visual and aesthetic importance and understand its historical significance. These elements provide conservationists, planners and developers with a powerful tool for redeveloping or improving an area, just as understanding historic monuments, such as places of worship, contributes to sensitive development and conservation. Investigation of the built environment and its history also increases public awareness and leads to greater enjoyment of buildings and places.

Local projects

One way of approaching these issues is to investigate a type of building in a defined area. A particularly good example is our study of the smaller houses of London. Though much has been written on 18th-century houses in the capital, the emphasis has usually been on the character of town houses of the upper classes and aristocracy. Tucked away between the better known examples, however, are a surprising number of smaller dwellings of the artisan class. Semi-vernacular in character, these buildings lack fine architectural qualities and have been subject to greater attrition than town houses of Bloomsbury or the West End. Poor construction often led to their early collapse, but they survive in surprising numbers in areas such as Bethnal Green, Hackney, Bermondsey and Deptford. Not only do they give a particular character to these areas but they also provide valuable evidence of a way of life of generations of artisans upon whom the economy of the capital depended.

A different approach, exemplified by current work in Manchester, is to investigate all buildings in an area, tracing shifts in the social and economic mix. In what became the commercial quarter of Manchester, immediately to the north of the present city centre, a few 18th-century houses survive, some with loomshops added as additional stories. These houses provide valuable evidence for the continuation of domestic working alongside factory production in the great textile mills of neighbouring areas such as Ancoats. The houses are, however, almost obscured by the great warehouses that came to dominate the area in the following century as Manchester increasingly became a commercial as well as an industrial city. Further changes to the economy in the last fifty years have rendered even the warehouses largely redundant, and it is important that decisions about the future of a nationally important and highly distinctive urban environment are based upon an understanding of its significance.

Occasionally, the area chosen for investigation may be even larger, as in the case of Nelson where, following a rapid survey of textile mills in the Borough of Pendle, Investigation teams are now researching the workers' housing of an entire town both to inform regeneration decisions and to understand the peculiar phenomenon of mushrooming urban expansion. First a small hamlet, Nelson expanded to become a major centre of cotton weaving in the second half of the 19th century. Projects of this kind, concentrating on terraced houses and corner shops, are important not only for conservation and academic purposes but also for raising the community's awareness of distinctive local character. The mundane, as much as the monumental, contains evidence of interest to all sections of society.

Textile mills have long attracted the attention of English Heritage (and the former RCHME, which carried out large-scale surveys of mills in West Yorkshire, Manchester and Cheshire). There is still much to learn, particularly in areas outside the largest concentrations of the industry, as shown in our work in Pendle, the south west of England, and the Derwent Valley (a potential World Heritage Site discussed in Issue 37 of *Conservation Bulletin*). Gradually, elements of the national picture have emerged, encompassing both powered mills (such as Darley Abbey in Derbyshire) and the small loomshops, both of which formed vital elements of an internationally important group of industries.

Three of the most striking recent projects, however, have concentrated on industrial processes which were carried out not in factories but instead mainly in small workshops. The Birmingham Jewellery Quarter project was featured in Issue 38 of *Conservation Bulletin*. Another project has identified, recorded and interpreted buildings of the world-famous Sheffield metal trades. Most are small workshops, some in the urban area of the city, others in the rural hinterland, in each of which a few men and women worked in often dangerous conditions to produce a wide range of tools, cutlery and silver-plated goods. Those trades are now in severe decline and the buildings dilapidating, but they still lend character to the area and are the object of local pride, as well as the source of evidence for the mechanics of the industry and for a former way of life. A similar story is told by our continuing work on the buildings of the boot and shoe industry in Northamptonshire, where changes in production have rendered redundant many small factories and small-scale backyard workshops where part of the shoe-making process was conducted by men and women.

The partially domestic organisation of the processes meant not only that the workshops were intimately connected with the houses but also that the factories were in close proximity, giving a highly distinctive urban texture of mixed, almost integrated, housing and industrial premises.

This melting shop was used for the production of high-grade crucible steel Crucibles packed with blister steel were lowered into the furnace holes in the floor and raised to a temperature of 1600 degrees Centigrade. Sheffield has virtually all the known examples of crucible furnaces in the country, and drew its international reputation from the quality of steel produced by this process

National projects

Although many of the projects discussed above are local or regional in scope, they are concerned with phenomena of national importance: Northamptonshire was one of the three or four main centres of shoe-making in England, and Sheffield was the centre of the metal trades for the Empire. Some building types, however, are widespread and can be investigated on a national scale, either comprehensively or by sampling across the whole country.

An example of the former approach is our current investigation of law courts. Although present in every town of any size, they are sufficiently few in number for all to be visited during the course of a three-year programme of work: about 800 courts are currently in use, and a further 200 are now redundant.

*Nelson is the epitome of a northern textile town. This aerial view shows the typical association of church, school, mill, canal and workers' housing. Nelson was a hamlet in 1850, yet forty years later it was a municipal borough with a population of over 22,*000

There is a wide range of types of court, including magistrates' courts, high courts and family division courts. Most are held in purpose-built structures with often highly distinctive layout and furnishing. Recent changes in the administration of the legal system have led to many, often architecturally significant, courtrooms being replaced by modern buildings,

sometimes accommodating more than one type of court under a single roof. Through investigation, the most significant and best-preserved of the old courts can be identified and protected, while new structures can be recorded to provide valuable physical evidence both of continuity and change in the legal system.

A typical three-storey factory, built in 1891 in Bozeat, Northamptonshire, one of several centres of shoe-making in England which supplied markets in England and the former British Empire

The Crown Court in the Moot Hall, Newcastle, recorded during the national project on Law Courts. Following the construction of many new courts, numerous historic courts are now empty and redundant, but they are a hugely important building type, many designed by leading architects

More ubiquitous than court buildings, and equally under threat from change, are shops. The high streets – being abandoned in favour of out-of-town retail parks and shopping malls – are themselves the products of a centuries-long process of change from local markets to the rise and decline of the great department stores. This story of constant evolution in the high street continues today with the advent of ‘niche’ shops, including those serving new immigrant communities, which lend particular character to some towns. The investigation of a systematic sample of retail buildings across England will lead to a better appreciation of how our ancestors shopped and will provide a consistent framework of understanding within which to make decisions concerning the future of individual shops and entire streetscapes.

A national project of a very different kind is the investigation of monuments of the Cold War. Almost all the structures are recent, many are ephemeral and few can be considered aesthetically pleasing. Radar installations and missile launch pads do, nevertheless, provide unique evidence of a defining aspect of the 20th century and of technological developments. The fragile and unappealing nature of many of the structures means that few will survive in redundancy. Recording can not only capture the historical evidence the structures contain but can also help in selecting the few examples that should be preserved. As a result of this project, a fascinating world, previously hidden, but for fifty years vital to the nation, is revealing its secrets.

This outfitters shop in Lincoln illustrates very well the vulnerable nature of shops. Recorded as a working shop used for its original purpose, the shop was stripped of all its fittings soon afterwards and now stands empty. Intact historic shop fronts are increasingly rare in our town centres, but they contribute a great deal to the urban scene

Danson House, Bexley. The Library (top) in 1995, with timber shoring for the sagging floor above and the fireplace from where the chimneypiece had been stolen. The same view (bottom) in 1998 after structural repair of the house, removal of shoring, restoration of the plaster roundel above the fireplace, reinstatement of the William Chambers fireplace and redecoration based on paint analysis. The plaster mundel of a bride being prepared for marriage was removed to a small closet room in the house in the 1860s. Its reinstatement followed careful analysis of the plaster wall face and accumulated layers of paint, which revealed the design of the surrounding ribbons and swags

Major monuments

At the other end of the spectrum are major monuments, such as York Minster. Here, the question is less one of defining what is historically significant as of providing a better understanding of how such buildings were designed, constructed, altered and restored. Though places of worship have long been studied, much remains to be discovered in the great churches. A recent programme of investigation at Beverley Minster, for example, has clarified the extent and nature of restoration work in the 18th century. This project has highlighted the architectural significance of the restoration and will influence future decisions about the maintenance of the structure.

Elsewhere, investigation is initiated more directly by specific conservation requirements. At Danson House in Bexley, for example, a long programme of meticulous recording and analysis by the Historical Analysis and Research Team has informed almost every stage of a major restoration of a monument for which English Heritage is itself responsible. The programme has done much to elucidate not only the structural phasing of the building but also the original scheme of decoration. Similar work has also recently been undertaken at Sutton House, Hackney, on behalf of the National Trust which now opens the property to the public, creating an amenity for the local and tourist communities.

Priorities

In deciding which projects to undertake, Architectural Investigation is influenced by a wide range of internal and external partners. If most of the themes outlined in this article relate to urban centres, that is largely because they are seen as priorities in order to provide information to English Heritage's Regional Teams and Listing Branch or to external agencies – in particular, local authorities. On other occasions, the impetus may corne from external bodies such as the National Trust, the Courts Service or a cathedral Dean and Chapter. In all instances, threat and the need for information are prime considerations. There are times, however, when a more strategic approach to research is appropriate, so that the understanding necessary for good conservation decisions is in place before any specific threat emerges, sometimes leading to a recasting of how the 'heritage' is defined. It is with the provision of new understanding and context – for both the mundane and the monumental – that Architectural Investigation is chiefly involved.

Paul Barnwell

Operations Manager, Architectural Investigation

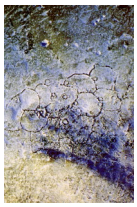
Colum Giles

Head of Architectural Investigation

AERIAL SURVEY

Knowledge, conservation and promoting access

Bob Bewley, Head of Aerial Survey, reports on a range of projects which increase our understanding of sites and buildings, the results of which are available to the public



Penhill,Yorkshire Dales. The dark circular features are the stone walls of a prehistoric settlement enhanced by the snow which has melted off the walls. The whole of the Yorkshire Dales was mapped for NMP and this site was the only one of its kind in this archaeologically rich area. 16 January 1990

Aerial survey provides the opportunity to discover, photograph, interpret and record thousands of sites each year. Analysis of the results provides a greater understanding of the sites and buildings in a landscape context, which in turn provides better information for future conservation decisions generations.

As a result of the merger between English Heritage and the Royal Commission on the Historical Monuments of England (RCHME) in April 1999, a draft strategy for Aerial Survey in English Heritage was produced along with other sections in the Archaeology and Survey Department.

The strategic aim for Aerial Survey is:

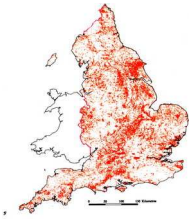
To improve English Heritage's effectiveness, through Aerial Survey, in understanding, conserving and promoting access to the historic environment. There is also the need, as the lead national body, to set and maintain standards in aerial survey as well as to develop skills and train the next generation.

The work of the team falls into two categories, **aerial reconnaissance** (surveying from the air and taking photographs) and the **National Mapping Programme** (NMP) (interpreting and mapping from aerial photographs).

Thematic and national surveys to assist characterisation and designation – for example, on Neolithic Enclosures done in collaboration with Archaeological Survey – as well as individual surveys for management and protection purposes also form an important part of the annual programme. Aerial Survey has projects and staff in Swindon and York, and has external partners in Cornwall, Essex, Norfolk, Suffolk and Northamptonshire County Councils.

The objective for the team is:

To provide a greater understanding of England's historic environment through aerial reconnaissance combined with interpretation, mapping and analysis of information contained on aerial photographs and related sources.



Distribution of specialist aerial photographs held in the National Monuments Record

Yarnbury Hill fort, Wiltshire. Although visible throughout the year, the snow and low light helps to highlight the internal features of inner enclosure (dating from c *600 BC) overlain by a medieval sheep market (the rectangular pattern) surrounded by the more substantial Later Iron Age ditches and ramparts. 8 February 1996*

Aerial Reconnaissance

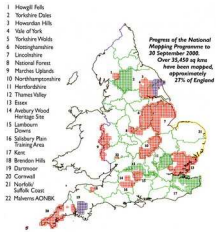
Every year over 300 hours are spent in the air surveying for archaeological sites (looking for sites which are only visible in the crops or bare soils), monitoring the condition of scheduled monuments, and photographing all aspects of the historic environment. This includes buildings, archaeological sites, parks and gardens, villages, towns and urban areas that are under constant pressure from development. Often the stimulus for change is as a result of new economic pressures, such as The Birmingham Jewellery Quarter project; elsewhere, political change has rendered the remains of the Cold War part of the heritage.

Traditionally, aerial reconnaissance has been viewed as a seasonal activity, usually undertaken in the spring or summer. In recent years it has become much more of an all-year-round exercise so that the landscape can be seen in as many different conditions as possible and not just during the summer in drought years. Looking for sites visible as cropmarks or parchmarks produces the greatest return in terms of new sites, as happened in the years from 1989 to 1991 and 1995 and 1996, but the potential for aerial reconnaissance goes beyond discovering new sites.

In the year before merger, English Heritage funded the RCHME to monitor scheduled ancient monuments from the air, following the lead of Cadw and the Royal Commission on the Ancient and Historical Monuments for Wales. This has now become an integral part of the annual flying programme and the photographs are used by Field Monument Wardens and the Inspectors of Ancient Monuments to help the regional casework load.

1 Howgill Fells
2 Yorkshire Dales
3 Howardian Hills
4 Vale of York
5 Yorkshire Wolds
6 Nottinghamshire
7 Lincolnshire
8 National Forest
9 Marches Uplands
10 Northhamptonshire
11 Hertfordshire
12 Thames Valley
13 Essex
14 Avebury Wood Heritage Site
15 Lambourn Downs
16 Salisbury Plain Training Area
17 Kent
18 Brendon Hills
19 Dartmoor
20 Cornwall

21 Norfolk/Suffolk Coast
22 Malverns AONBK



Progress of the National Mapping Programme to 30 September 2000. Over 35,450 sq kms have been mapped, approximately 27% of England

In any year, English Heritage staff cannot cover all areas so partnership projects have continued with the network of locally-based flyers (originally set up in the drought years of 1975 and 1976) which is grant-aided by the Archaeology Commissions Programme with local authority (or private) support. These local archaeologists can often make the best use of local conditions, which may be optimal only for a few hours, leaving our own staff to operate in areas where there is no local flyer. This network of locally-based flyers also helps to provide national coverage for the whole of England when conditions permit.

National Mapping Programme (NMP)

There had always been a close working relationship between the former RCHME and English Heritage, and for Aerial Survey this was particularly true in working with the Monuments Protection Programme (MPP).

Inglebrough Hill fort, North Yorkshire. The outer rampart and stone hut-circles of the highest hill fort in England are highlighted by snow cover; the snow also masks the erosion caused by a combination of walkers and harsh weather conditions. 16 January 1990

The first joint project was established in 1985 with a request for mapping the earthwork and stonework sites on Dartmoor. In 1988 trial projects were initiated to assist MPP in understanding cropmark sites and the potential information contained on aerial photographs. In 1992, these projects led to the creation of the National Mapping Programme which aims to improve our understanding of the historic environment through the examination and study of information contained on all available aerial photographs (verticals and obliques). The products of NMP (1:10,000 scale maps, reports and a computerised record) are available to all concerned with the preservation, protection and presentation of the historic environment. All NMP projects are undertaken in partnership with the local Sites and Monuments Records and the results are fed to back to each SMR within the lifetime of each project. The SMRs monitor the use of NMP data, and on average the maps and records are consulted at least twice a day.

Recently English Heritage's Ancient Monuments Advisory Committee (AMAC) agreed that the threat to coastal archaeology was a major priority. Consequently, the Archaeology Commissions Programme via Suffolk County Council has funded the Norfolk and Suffolk Rapid Coastal Zone Assessment project (with the work being carried out at the National Monuments Record Centre). The results have exceeded expectations in the quantity and quality of the sites being recorded (in particular the scale of the Second World War defences and the remnants of a once-thriving oyster industry).

Standlake, Oxfordshire. A modern village (top) and evidence of a shrunken medieval village with earthwork remains of mooted manor sites (upper middle) with cropmark sites (centre) of multi-period prehistoric complex (some Bronze Age sites but mainly Iron Age and Roman-British in date). Fortunately these have been scheduled as ancient monuments; at the bottom of the picture, gravel extraction has destroyed any further evidence of this buried landscape. 3 July 1990

To accelerate the progress of NMP, funding has been made available for new contract staff in Cornwall and for the Norfolk and Suffolk coastal project. A new project also under active consideration is the mapping to NMP standards of those areas of Norfolk under greatest threat from ploughing. Recently the World Heritage Site of Avebury was mapped as part of NMP and further projects on other World Heritage Sites (Stonehenge, Cornish Mining and Hadrian's Wall) are planned for 2000/01 and 2001/2, to aid the implementation or creation of management plans.

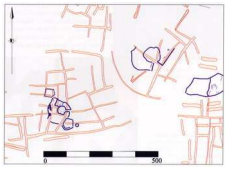
Of the 22 NMP projects, 17 have been completed; reports, publications and digital (raster) maps are available from the NMR. Current projects in Swindon are the Malvern Hills Area of National Beauty (AONB) and Lambourn Downs, the mapping phase of which has just been completed. The Vale of York project is nearing completion, and an exhibition and dayschool are planned for May 2001. The Essex and Northamptonshire projects are due to finish their mapping phases in 2001.

Aerial Survey relies on many other sections for its advice, photographs, and analysis but none more so than the National Monuments Record itself. All new photographs generated by the reconnaissance programme are catalogued and available at the NMR. Each year tens of thousands of photographs are loaned by the NMR to the NMP teams and the results of all our work are available through the NMR.

Bob Bewley

Head of Aerial Survey

For more information about the strategies or work of Aerial Survey, contact Dr Bob Bewley or one of the Senior Investigators (Simon Crutchley in the NMRC office, Damian Grady on reconnaissance in the NMRC, or Pete Horne in the York Office). For information from the NMR and the licence arrangements for photographs and data, write to: Enquiry Research Services, NMRC, Kemble Drive, Swindon SN2 2GZ



NMP Map extract of Letcombe Bowers, in the Lambourn Downs showing Iron Age "banjo" enclosures (in blue), revealed beneath the Romano-British field system (in red). Ploughing has removed layers of soil to expose the earlier remains, which will, in turn, disappear

DEVELOPING ANALYTICAL SKILLS

Training for Conservation Officers

Outreach and Professional Training Officer, Bob Hook reports on new training opportunities for Conservation Officers

Training in rapid survey techniques for historic areas

Staff of Carlisle city Council Conservation section being tutored in analysis and measured survey in the City's 14th-century Guildhall

A new departure for Archaeology and Survey' Department's Outreach and Professional Training section has recently been undertaken in Carlisle, with a team of two English Heritage staff members providing an intensive 5-day course for staff of the City's Conservation Section.

Designed in consultation with Institute of Historic Buildings Conservation members, the course was intended to develop the analytical skills needed by conservation officers in the course of their work in understanding historic areas and buildings.

Topics ranged from field data capture for the definition of historic areas and the analytical rapid survey of historic buildings to the detailed analysis of a single major building supported by measured surveys. Tutoring in photographic techniques for historic building recording was also provided in a separate session.

The building chosen for the intensive survey was the City's Guildhall, a Grade I listed building and scheduled ancient monument. The course allowed a close study of the buildings, which has led to a comprehensive re-interpretation of the structure. It appears that the building was constructed in about 1396–7 as a large town house with small single-bay shop units on the ground floor of its surviving two ranges which front Greenmarket and Fisher Street. Originally, there was another range behind the present two, which probably contained the open hall of the house. This seems to have been demolished in the late-17th or early-18th century, but its position and size are indicated by fabric evidence in the surviving parts. The subdivision of the building into tenements and its use as a Guildhall seem to have come about after the building passed to the City Council in about 1420.

OPT Officer Bob Hook said, 'We were delighted: it proves the point that the approach to fabric analysis that we teach can really extend the understanding of historic buildings.'

Carlisle Conservation Officer Peter Messenger said, 'It was an excellent opportunity for developing our analytical skills. The guidance provided on the details of buildings archaeology will be of immense value when dealing with other historic buildings within the district.'

Further discussions are underway with IHBC Education Committee to develop and extend this type of support to our professional colleagues on the ground in local authorities.

Bob Hook

Metric Survey, Outreach and Professional Training

For further details contact Bob Hook, Outreach and Professional Training, Archaeology and Survey Department, English Heritage, Kemble Drive, Swindon SN2 2GZ
Tel: 01793 414806
bob.hook@rchme.co.uk

A PRACTICAL APPROACH

Learning opportunities for archaeologists

Bob Hook reports on new subsidised courses held in conjunction with the University of Oxford and the University of Leeds

The Archaeology Training Forum has brought together a number of partners to offer training courses for archaeologists at all levels of the profession. The Institute of Field Archaeologists has coordinated and developed the courses in conjunction with the Continuing Education Departments of the University of Oxford and the University of Leeds, and English Heritage has provided a generous subsidy to reduce the course fees to widen access.
The range of subjects has been chosen to reflect the needs of different sectors of the profession. Practical courses in development control reports and desk-based assessment are intended to assist junior staff in developing skills for career prospects. The subsidy allows the cost of these courses to be reduced to £50, and 20 places are available for each course at both the northern and southern venues.

Archaeological desk-based assessments led by Sue Davies, Deputy Director, Wessex Archaeology: 22 January 2001 (Oxford)
Courses for senior staff cover aspects of business management and financial control to help build the profession's business and managerial performance and reputation. These courses are priced at £100 for a two-day session (including meals and overnight accommodation) and provide 20 places per course at each venue:

Financial management and control (part 1) led by Fran Button, Director, FB Consultancy and Consultant, Waloff Associates: 1–2 February 2001 (Oxford); 26–7 February 2001 (Leeds)
Financial management and control (part 2) led by Fran Button, Director, FB Consultancy and Consultant, Waloff Associates: 7 March 2001 (Oxford); 26 March 2001 (Leeds)
These courses provide an unparalleled opportunity for the senior staff of contracting units to gain access to professionally-run business development courses at well below their normal cost.

A course in strategic marketing is available in the same programme at Oxford at the price of £225.40 (including meals and accommodation):

Strategic marketing led by Nicholas Waloff, Director, Waloff Associates Ltd: 20–1 February 2001 (Oxford)
In all, 160 subsidised places have been offered this year, representing a significant investment on the part of the ATF partners involved in developing and financing the scheme. Over time, it is hoped to offer an incremental series of courses that address a spectrum of archaeological skills, contribute to the raising of standards of professional practice and help develop new areas of expertise across the profession.
Further information is available at www.archaeologists.net
Book with Oxford University Department for Continuing Education, 1 Wellington Square, Oxford OX1 2JA
Tel 01865 270380 professional.arch@conted.ox.ac.uk
or with

The Course Secretary, PLL Section, University of Leeds School of Continuing Education, Continuing Education Building, Springfield Mount, Leeds LS2 9NG
s.armitage@leeds.ac.uk

Developing survey techniques at Oxford

Further information on the work of the Archaeology Training Forum is available from: Bob Hook, Secretary, Archaeological Training Forum, English Heritage, Kemble Drive, Swindon SN2 2GZ
Tel: 01793 414806
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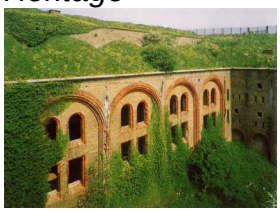
THE WESTERN HEIGHTS

Dover's *other* great fortress

The study of fortifications is a serious business, nowhere more so than the Georgian/ Victorian complex on the Western Heights Dover's other great fortress. Paul Pattison describes the former RCHME fieldwork on the Heights, a project supported by the European Union and Kent County Council, now reaching its conclusion under English Heritage



The Citadel; the largest independent work and the core of the fortress, showing casemated barracks built into the defensive Lines in the 1860s. The quality of build is obvious, as is the progress of nature

On clear days, France is visible from the white cliffs, as it was in 1803 to the nervous and curious who could see the camp of the Grand Armée, waiting for Napoleon Bonaparte's order to cross La Manche. Although the order was never given, the threat resulted in frantic activity in Dover whose strategic importance had been neatly expressed in 1798 by the Secretary of State for War, Viscount Melville:

The possession, to an enemy of Dover Castle, of the opposite Entrenched Height and of the town and port, fortified in the manner that he would soon accomplish and defended by 6 or 7,000 men would establish a sure communication with France and could not easily be wrested from his hands. The conquest of this alone would be to him a sufficient object could he arrive with means of immediately attacking it.
Its preservation to us is most important.

Authorisation was given in 1804 for a fortress on the Western Heights to be established on the high, flat-topped ridge overlooking the town and guarding the vulnerable western flank. Its purpose was twofold; first, to accommodate a field corps of moderate size, capable of engaging an invasion force, and second, to provide an entrenched stronghold which the French 'would need to assault if they were to capture the port and use it as a bridgehead. The new fortress was a substantial one which involved massive expenditure and consequently attracted criticism from several quarters, notably from William Cobbett who commented on the works in 1823: 'a couple of square miles or more were hollowed out like a honeycomb; madness the most humiliating, or profligacy the most scandalous must have been at work here for years.'

By the time war ended in 1815, much had been completed. There were three independent redoubts linked by a series of defensive Lines, together closing off the Heights and dominating the town, port and surrounding country. There followed 35 years of peace between England and France, ended in the 1850s by fear of the territorial ambitions of Napoleon III and the rapid pace of technological development in warfare. Concern over the adequacy of existing defences prompted the setting up of the Royal Commission on the Defence of the United Kingdom in 1859 and there followed a nationwide programme of fortress building, primarily to defend the naval dockyards and anchorages against sea-borne bombardment and assault. For Dover, it resulted in works to complete and enhance the fortress on the Western Heights.

The Drop Redoubt, a pentagonal artillery redoubt at the eastern end of the Western Heights, designed to repulse assault from land or sea. In guardianship but not open to the public, the site receives only basic maintenance. Tree and scrub growth hides an additional battery of the 1890s

Change and addition to the Western Heights continued until the military handed the fortifications over to the civil authorities in 1956. Since that time, there have been significant losses, including infilling parts of the Lines, the demolition of two major barrack complexes and removal of the South Entrance. Nature has taken over and many of the Lines are choked with vegetation.

The present survey aims to understand this extensive series of monuments in order to help shape its future conservation. For the Western Heights, that understanding is a daunting process, with its four miles of entrenched Lines, three major redoubts, five batteries of coast artillery, the sites of three major barrack complexes, underground communications and magazines, all to be seen against 150 years of changing military policy. Moreover, the Heights have been carefully shaped to hinder assault and eliminate dead ground, to such an extent that the monument takes up the whole ridge - some 2km^2. Here is a monument which, together with the defences of Dover as a whole, is of international importance and a place with great symbolic significance for the nation.

A team of six archaeologists, architectural investigators and photographers have been surveying, documenting and researching the Western Heights as part of a major EC-supported programme to understand and promote the fortifications of several towns in Kent, Nord Pas-de-Calais and West Flanders. With fieldwork completed, ten reports are being written to record and explain the fortress and its key elements. Following their completion, the challenge will lie in conservation. A start has already been made, with funding from the South-East England Development Agency (SEEDA), Dover District Council and advice from English Heritage, to improve a derelict area on the site of the Napoleonic barracks. This has resulted in the regeneration of the site for public amenity, a key element being the definition of the historic imprint of the former barracks.

The Drop Redoubt; two of the powerful caponier, added to the redoubt in the 1860s to defend the ditch

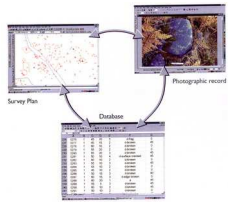
Paul Pattison

Project Leader, Archaeological Survey

PIT-ALIGNMENTS TO PIT-HEADS

Discovery and analysis of forgotten landscapes

The process of conservation and management of archaeological monuments and landscapes is best informed when based on up-to-date investigation, recording and analysis. Stewart Ainsworth, head of an English Heritage field investigation team at York, reports on working with income generating partnerships with other heritage bodies to achieve this aim



Linking the survey plan, photograph and database together on a computer creates a powerful tool for interpreting and managing the site at Wharncliffe Rocks

The archaeological field investigation team at York is actively setting up partnerships with other heritage bodies in the north of England, so that the maximum benefit to the wider heritage community is gained through mutually beneficial programmes of analytical field survey. Our aim is to provide a detailed analysis and understanding of the archaeological earthworks and landscapes we survey so that decisions related to conservation, management and display are solidly founded and current. Requests for the specialist skills and resources which form the basis of the analysis have been received from and partnerships established with the National Trust, the Peak District, North York Moors, Northumberland, Lake District National Parks, Forest Enterprise, and numerous local authorities, as well as internally-generated English Heritage initiatives.

In responding to the conservation needs of others, we can combine specific external requests with the need for public record and dissemination of heritage information. Consequently, all reports and surveys are made available to the general public and educational and academic communities through the National Monuments Record in Swindon.

These requests for landscape survey and analysis on sites where conservation and management issues have provided the spur have led to some remarkable discoveries.

Ebberston Low Moor, North Yorkshire

England's landscape is crossed by many of the prehistoric land boundaries known as 'pit-alignments'. These linear earthworks were constructed to link natural landscape features such as valleys and escarpments and probably functioned as boundaries defining prehistoric territories. Although this type of boundary is generally identified by aerial photography from crop and soil marks, few earthwork examples have been recorded and analysed in detail by surface survey. However, on Ebberston Moor, the high quality of earthwork preservation suggests this group may be of outstanding importance in understanding the evolution of this type of monument during the prehistoric period.

This new survey has revealed two previously unidentified alignments in addition to two that were already known. Also, the survey has shown that individual alignments were constructed in different ways, and that there were probably at least four identifiable episodes of development before the last phase was overlain by a Bronze Age round barrow. This indicates that the embanked pit-alignments are probably Neolithic or at the latest, Bronze Age in date.

The quality of earthwork preservation has allowed the identification of three main pit types, and also substantial banks with differing original characteristics running alongside the lines of pits. These banks clearly contributed significantly to the form and appearance of the boundaries in the prehistoric period and may arguably be regarded as being of equal if not greater importance than the pits themselves.
The survey and analysis was requested and partly funded by the North York Moors National Park as a first step towards the preservation of the monuments, which at the time of the survey had no statutory protection.

One of the pit-alignments on Ebberston Low Moor. The preservation of the earthworks is exceptional: broad banks survive to knee-height on both sides of the line of pits. The boundaries must have been very different in appearance from what was previously believed: the upstanding earthworks may have been a much more important barrier than the pits

Wharncliffe Rocks, South Yorkshire

The scheduled Roman period quern quarries at Wharncliffe Rocks are an outstanding example of this type of early industrial landscape. The manufacturing process has left behind a landscape of working floors and trackways along with large numbers of broken and abandoned querns. A survey of a small part of the scheduled area was requested following an accidental heather-burn which had exposed many of the querns and working floors, leaving them prone to erosion and damage. Although the number of querns had been originally estimated at c 300 for the scheduled area as a whole, survey revealed *c* 2300 just in the burnt area alone, along with well-preserved working floors. As the burnt area represents only one third of the known extent of the quarried area it is probable that up to *c* 8000 Roman period querns may survive.
The analysis is underpinned by an electronic map-based database linked to a digital photograph of each quern, making this a unique management resource for this type of landscape.
This survey was requested by English Heritage and was partly funded by Forest Enterprise and Sheffield Wildlife Action Partnership.

Discovering our hillfort heritage

Some of England's most spectacular Iron Age hillforts lie in the Northumberland Cheviots. There has been little excavation, so the evolution of the monuments and their roles in the surrounding landscapes remain poorly understood. Many lie within complexes of fields and settlements, which can still be seen as earthworks. These too may have originated in the prehistoric period, but have never been properly recorded or analysed. English Heritage is currently undertaking a programme of field survey in partnership with the Northumberland National Park to provide a basis for conservation plans, interpretation schemes and future research.
Five hillforts and their landscapes in the north Cheviots have been surveyed to date: West Hill near Kirknewton, Fawcett Shank, Hethpool Bell, Alnham Castle Hill and Great Hetha. New perceptions about the sequence and development of hillfort enclosures have been made. At West Hill for example, the survey has revealed monuments 2000 years older than the hillfort, as well as tracks, fields and settlements ranging from the Iron Age to the post-medieval period.
The hillfort itself was built on top of an earlier enclosure and was reoccupied and extensively rebuilt in the Roman period. In contrast, the enclosure at Hethpool Bell is an

oddity among the group of hillforts in this area. Sitting in splendid topographic isolation at the entrance to the College Valley, a strong case can be argued for a reinterpretation of this enclosure as a ceremonial monument rather than a hillfort.
This is just a sample of the work that has been undertaken by the team. As well as continuing work on the hillforts, the team will soon be embarking on a survey of a copper mine at Greenburn in Cumbria in partnership with and partly funded by the National Trust. This continues the partnership established by the Force Crag survey, reported in Issue 38 of *Conservation Bulletin*.

Phase diagram illustrating continuity of settlement on West Hill through the Iron Age and Roman period

Stewart Ainsworth

Project Leader, Archaeological Survey

For information, please write to the Enquiry Research Services, NMRC, Kemble Drive, Swindon SN2 2GZ;

LUDGERSHALL CASTLE, WILTSHIRE

Public access to research

Paul Everson, Head of Archaeological Survey, discusses the enthusiastic public response to our taking new archaeological insights to the local community

The ruined tower

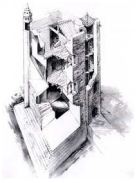
At 2 pm on Sunday 16 July, the Memorial all at Ludgershall in Wiltshire was bursting to the seams with people. Later that afternoon the same enthusiastic crowd brought the traffic on Ludgershall High Street to a standstill as it followed an account of the imagery of medieval market cross at the roadside. The occasion was an outreach event designed to celebrate the publication of an English Heritage backlog excavation report and, most importantly, to take its new discoveries and changing perceptions out to the local community of the place in question.
Ludgershall Castle, Wiltshire: A report on the excavations by Peter Addyman was published in July 2000. Unequivocally a technical archaeological excavation report on a comparatively little-known guardianship monument, the report was sponsored by English Heritage, latterly through the South West Regional office at Bristol, and published as a monograph through the Wiltshire Archaeological and Natural Historical Society. Here was English Heritage carrying out a long established and effective tradition of investigating a monument its care and delivering a specialist report on the results.

New understanding

At Ludgershall, however, the excavations completely transformed our understanding of the site's buildings and occupation. First, they revealed, in foundation, suites of elaborate royal residential apartments, together with the east end of the great hall whose construction in May 1244 was ordered by Henry III. Though the consolidated foundations have been on display since the 1970s, only through the reconstruction drawings in the report do they come to life. The same process of recording, interpretation and reconstruction drawing has similarly made intelligible the ruined tower that comprised the only above-ground masonry as a stack of chambers dating from about 1200 rather than an overtly military structure. Second, there were remarkable and exotic finds, reported on for the first time. And third, there was a study of the castle earthworks and landscape. This included its location, its relationship to and effect on road networks, its two associated parks, and especially the town that developed at its gates. The layout of the town, its growth, development and enforced re-creation of its market square – now occupied in a characteristic way by post-medieval in-filling – all proved capable of analysis from the plan of its streets and property blocks. The medieval cross from the lost market square is itself a second guardianship monument in English Heritage's care. It proved to have a critical place in the story, which by the same token revealed the date and imagery of the cross more securely and more interestingly than has hitherto been the case. In effect, even though Ludgershall has few overtly distinguished buildings, the study showed the age and distinctiveness of its pattern of streets and property blocks as truly the ancient bones of the settlement in which its history is encapsulated.

The Church of St James supplied part of the story. Its south chapel, built in the 16th century for the Brydges family, contains complete architectural features such as a 14th-century doorway taken from the former royal castle. This supports excavation evidence of the systematic dismantling of the residential ranges, as if to allow the re-cycling of recovered materials.

Informing the local community



Reconstruction drawing by Peter Dunn of the ruined tower (left)

With such new insights, and particularly ones involving the whole physical fabric of the town, the publication was launched at an outreach event for the local community on 16 July, through the cooperation of the Archaeological Investigation team from Swindon, South West Regional staff and the Wiltshire Archaeological and Natural History Society. Peter Addyman, former Director of the York Archaeological Trust and a member of English Heritage's Ancient Monuments Advisory Committee (AMAC), gave an introductory talk about the excavations that took place 30 years ago. A set of display panels was created by the Swindon field team, and there was an exhibition of selected finds by Devizes Museum. Over 50 copies of the excavation report were sold. On a walking tour round the castle, market cross, village and church, participants were promised 'a lively debate between the "experts", with everyone becoming involved'. And so there was, as the event conveyed something of the excitement and dialogue at the heart of good archaeology.

David Stocker; Inspector of Ancient Monuments, explaining the iconography of the medieval market cross

Reaching out further

The event was well received by the local community – formally through the attendance and warm thanks of the Chairman of the Parish Council, twice expressed. In order to extend the outreach further, and to a less inherently committed constituency, arrangements have been made for the set of display panels to tour in local libraries and Devizes and Salisbury Museums, until the New Year. The display panels will then pass to the South West Region team for use, if possible, elsewhere. Furthermore, an offer has been sent to local schools to develop follow-up project work, building in a suitable way on new understanding and insight.

Ludgershall is an example of bringing the work of English Heritage specialists into the local community arena. It illustrates effective co-operation between specialist teams at the centre of English Heritage and in the Regions, and it promotes greater understanding, appreciation and care of the historic environment. This is far from being an exceptional case, but perhaps our aspiration should be to make it the rule.

Paul Everson

Head of Archaeological Investigation

Ludgershall Castle, Wiltshire: a report on the excavations by Peter Addyman, 1964–1972, edited by Peter Ellis, is published as Wiltshire Archaeological and Natural History Society, Monograph Series, 2 (ISBN 0 947723 07 02; price £19.95).

To obtain copies, ring, or write to, or visit: Wiltshire Heritage, The Museum, 41 Long Street, Devizes, Wiltshire SN10 1NS (phone 01380 727369).

The two guardianship monuments of Ludgershall Castle and Ludgershall Market Cross are in the care of English Heritage South West Region, 29/30 Queen Square, Bristol BS1 4ND. They are accessible, without charge, at all reasonable times

Power of Place

Report of the Historic Environment Review

Graham Fairclough, coordinator of the review, discusses the report. A selection of case studies from the report is included

Case Study 18 Character assessment, New Forest, Hampshire

A comprehensive character assessment of the whole of the New Forest District and Heritage Area was undertaken as a partnership project jointly funded by New Forest District Council, Hampshire County Council; the Countryside Agency and English Heritage. Community participation included people from local interest groups, amenity societies, local estates and other stakeholders. The results, now given force in Supplementary Planning Guidance, provide the basis for better informed responses to development proposals and the future management of the landscape. This approach has been strongly supported by the Government in Our Countryside: the Future

Shortly before Christmas 2000, English Heritage, working with an extensive range of partners, completed the most comprehensive and inclusive review ever of the country's

policies for the historic environment. As announced in *Conservation Bulletin* **37** (March 2000, 2–5, 24–5), the Government had asked English Heritage to review current policies. The resulting report, Power of Place, was presented to the Government on 11 December and published on 14 December.
Power of Place shows what a new strategy for the historic environment could look like. It suggests practical ways to capitalise on England's cultural diversity and to maximise the historic environment's contribution to social, environmental and economic well-being. Its strength lies in the many partnerships that contributed to the work of the review and the Steering Group. That wide participation gives the report strong credibility and will ensure that it is taken seriously by Government as an effective blueprint for the future.

Understanding and leadership

Two pre-conditions must be met to promote the historic environment – sound understanding and strong government leadership. We need to know more about:

the historic environment in its diversity and richness, from the traces of the earliest hominids to the everyday streetscape, from the long-inundated prehistoric landscapes that survive on the sea bed to the hedgerows of the rural landscape.
how and what people value, including the personal and local elements that current conservation procedures may overlook.
what is happening to the historic environment, from decay, climate change, economic decline or regeneration
The review was prompted by the 1999 Select Committee's view of the limited scale and ambition of government strategy for heritage. During consultation, that view was upheld by the general public, local authorities, heritage sector bodies and land-owning and business interests, all of whom emphasised the need for strong leadership from government. *Power of Place* shows that every government department has an interest in the historic environment and can capitalise on its cultural and economic assets. Inter-departmental policies are needed most of all.

A practical way forward

conservation-led renewal, to ensure the historic environment contributes to economic well-being. Historic places attract investment, create jobs and confer competitive advantage. Their re-use capitalises on past investment of time, effort and resources.
re-investment, so that areas currently in poor condition can contribute to economic and cultural prosperity. Reforming the VAT rules would help, because high (and unequal (VAT on conservation deters re-use: it is shortsighted and counter-productive, and other fiscal measures can create incentives for re-use. Significant re-investment should also include using some tax proceeds from tourism for conservation, if only to preserve those assets that make tourism successful in the first place.
prevention, not cure, so that costly last-minute repairs are replaced by planned, timely and cost-effective maintenance. Owners need encouragement and help; declining craft skills need building up.
people and places, so that a sense of place continues to encourage local participation and the enthusiasm of volunteers, thus affecting the appearance and character of the historic environment.
managing change and enhancing character, ensuring that we know what is valued by different communities, so that conservation will ensure that change capitalises on the historic character of the environment, keeping what is valued and using it to create new environments.

The power behind

Power of Place

The strength of the report arises from the collaborative and inclusive nature of the review process. *Power of Place* offers government the views of all parts of the heritage sector, a major achievement given the fragmentation to which the sector has been prone. Importantly, it also reflects the views of many interests outside the sector itself. The review process included:

seeking advice from 230 organisations and individuals on the scope of the review.
placing the review in the hands of a Steering Group representing both heritage sector organisations and other key bodies on whom the future of the historic environment depends (see panel on page 23).

Case Study 14

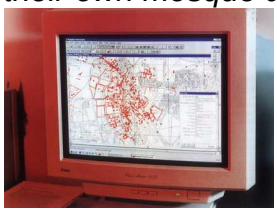
The National Trust's Inner City Project

Volunteers in the National Trust are running a pilot project in Newcastle upon Tyne to increase opportunities for engagement with the historic environment. Disadvantaged inner city residents participate in a range of activities, starting locally and leading to visits to the countryside. Benefits include older people returning to learning and young people learning new skills. A model of information and guidance for youth and community groups, it creates new opportunities for access to the historic environment and strengthens communities

Case Study 12

Whitby Abbey, North Yorkshire

Children from Bradford work on identifying similarities in design between the Abbey and their own mosque and produce 'stained glass window' lightboxes for an exhibition



Case Study 24

Archaeological GIS on screen

Geographical Information Systems (GIS) provide a tremendous resource base for research because of their ability to combine different digital datasets, opening up easy access to vast reserves of information about the historic environment. The ability to overlay information from databases in a graphical form is an important modelling tool for planning purposes, and it allows high quality decision-making and improved access to information. The Cambridge Urban Archaeological Database (UAD) is a comprehensive GIS-based record of past archaeological excavations, monuments and buried archaeological remains. It is one of a series of 35 such records being created for major historic towns and cities throughout England. The databases provide faster and better access to information for planning, conservation and research purposes

commissioning extensive statistical research from MORI into public attitudes towards the heritage: representative interviews with over 3,000 people, focus groups studying the attitudes of ethnic minorities and broader social research.
taking advice from more than 200 experts in all fields. Their Working Groups produced a consultation document, *Viewpoint* – comprising five discussion papers on Understanding, Belonging, Caring, Experiencing and Enriching – that was circulated to over 4,000 organisations and individuals and posted on English Heritage's website.
Viewpoint attracted 630 sets of views that helped the Steering Group to establish the main messages of *Power of Place* after a day-long seminar with the Working Groups.

Case Study 11
Marsden, West Yorkshire
In summer 2000, pupils from two junior schools in the Pennine Rural Development Area studied aspects of their towns, Marsden and Slaithwaite, and possible developments over the next 10 years, and filmed short videos which were shown to parents and planners. Their suggestions are being considered by the regeneration working parties for the towns. An excellent cross-curricular pilot citizenship project, this is a model for such work

The unprecedented scale of consultation and participation – huge steps forward for the sector in terms of partnership, whose momentum deserves to be maintained beyond the term of the review – gives the report an unusual degree of credibility.
Power of Place is now being considered in detail by Alan Howarth, Minister for Arts and Heritage in the Department of Culture, Media and Sport, and Nick Raynsford, Minister of State at the Department of the Environment, Transport and the Regions. It is, however, only the first stage of an ongoing debate about a new national strategy. In the words of Sir Neil Cossons, who chaired the Steering Group, 'We believe that the broad approach we are advocating, and the principles behind it, command general support.' The Government will respond in the spring of 2001 with its own statement on the historic environment, setting out, in the words of the invitation from the Minister, '... the future development of strategy for the historic environment and ... the action ... to take in the light of the review'. That statement – perhaps the first comprehensive government statement on the subject – is keenly awaited.

Graham Fairclough

Head of Monuments and Countryside Protection Programmes, Historic Environment Review Coordinator

For free copies of *Power of Place*, please contact English Heritage Customer Services Department: PO Box 569, Swindon SN2 2YP, Telephone 01793 414910. See also our website: www.english-heritage.org.uk

Membership of Steering Group
Chair:
Sir Neil Cossons
Chairman, English Heritage
Members:
Ms Pam Alexander
Chief Executive, English Heritage
Dr Eric Anderson
Chairman, Heritage Lottery Fund

Sometimes represented by Mrs Anthea Case
Sir Jeremy Beecham
Chairman, Local Government Association
Sometimes represented by Cllr Keith House
Mr Alan Britten
Chairman, English Tourism Council
Mr Ewen Cameron
Chairman, The Countryside Agency
Sometimes represented by Mr Terry Robinson
Mr Anthony Bosanquet
Chairman, Country Landowners Association and
Sir Henry Aubrey Fletcher
Chairman, CLA Environment and Water Committee
Sir David Ford
Chairman, Council for the Protection of Rural England
Dr Susan Gubbay
Council Member, English Nature
Mr Nigel Haigh
Member of Board, Environment Agency
Mr Tony Hawkhead
Chief Executive, Groundwork UK
The Earl of Leicester
President Historic Houses Association
Sir Stuart Lipton
Chairman, Commission for Architecture and the Built Environment
Sometimes represented by Mr Neville Pitman
The Bishop of London
Chairman, Churches Main Committee
Mr Charles Nunneley
Chairman,The National Trust
Dr Francis Pryor
President Council for British Archaeology
Sometimes represented by Mr David Baker
Mr John Sell
Chairman, Joint Committee of the Amenity Societies
Sometimes represented by Mr Matthew Saunders
Mr Will McKee
Director-General, British Property Federation
Sometimes represented by Mr Christopher Morley
Ms Judy Ling Wong
Director, Black Environment Network
Sometimes represented by Mr Henry Adomako
Professor Lola Young
Project Director, National Museum and Archives of Black History and Culture

Case Study 23

Ringborough Battery, Aldbrough, Humberside
World War II artillery has fallen to the foot of the cliff after coastal erosion which is accelerating as a result of sea-level rise. Up to 45,000 hectares of land could be affected by 2050. Global warming also affects species distribution, which is having an impact on historic landscape, parks and gardens. Damaging storms are predicted to become more frequent. These effects need to be monitored and mitigation strategies developed. Rescue recording will require public funding

Graduate Internship

John Fidler, Head of the Building Conservation and Research Team, reports on new opportunities for graduate internships

Lori Aument, graduate intern, working on building conservation at the Wellington Arch, London (see also back cover)

English Heritage and its predecessor organisations[1] have supported professional and technical internships for young architects, planners and conservators for many years, as needs and resources permit. Current members of staff, including John Barnes, Geoff Noble, Chris Sumner, Eleanor McEvedy and Richard Linzey, all gained early conservation experiences as students or recent graduates and have made careers for themselves within our organisation.

Some of the training periods were quite short, involving summer work experience only, but the hard work of past interns remains with us in valuable conservation publications such as *Funds for Historic Buildings in England & Wales: a directory of sources*, now published annually by the Architectural Heritage Fund but originally produced in six weeks in 1986 by a town planning intern.

The largest and longest programme had five student architects (and one student landscape architect) practising within English Heritage in various central and regional teams for their Royal Institute of British Architects Part I or Part II professional practice 'year out experience'. The students had no problems assimilating our conservation ethos and benefited greatly from the special visits, lectures and reviews organised on their behalf. Their tutors, however, had come from the very different 1970s culture of architectural modernism, inner city demolitions and site clearances. The contacts brought us many invitations to lecture in schools of architecture and consequently more applications for internships, hard to justify in times of economic restraint.

Staff continued to seek external funding for internships. For several summers the corridors were filled with American voices as the US-ICOMOS programme[2] helped to deliver additional pairs of hands to help English Heritage with important jobs such as archiving and cataloguing collections.

The next development in student training began when the Historic Preservation Programme of the University of Pennsylvania bought six weeks of practical conservation training at English Heritage's Fort Brockhurst training centre:[3] students wrote to say they had learned more in three weeks than their theoretical course had taught them in two years.

A sponsored internship:

the last act of the American Friends of English Heritage

Connections with the University of Pennsylvania in historic Philadelphia continue today. Out of the blue, one of the distinguished committee members of the now-defunct American

Friends of English Heritage[4] sent a final cheque to English Heritage and asked that the Friends' last donation be spent on funding a once-only internship for a recent graduate of the University of Pennsylvania's preservation course to work with English Heritage's Building Conservation and Research Team (BCRT).

Following negotiations with the University, an internship was first offered in 1998–9. However, after extraordinary delays in acquiring a temporary work permit, the programme's first candidate withdrew after having found permanent conservation employment in America's buoyant economy. The recruiting process started again. This time, Professor Frank Matero, Chair of the Historic Preservation Programme at the University and Director of its Architectural Conservation Laboratory, had no hesitation in recommending Lori Aument for the internship. A university prize winner with specialist studies in the conservation of historic concrete, Ms Aument registered for the University's Certificate in Architectural Conservation, the practical experience qualification linked to and funded by the American Friends' donation.

Having had no problems obtaining a temporary work permit, Ms Aument worked with BCRT from May until early November 2000. Her line manager and personal tutor was Dr David Mason, acting senior architectural conservator and director of BCRT's highly regarded publications programme. To qualify for the Certificate, Ms Aument needed to complete a detailed log book of her practical experience, countersigned by her tutor, and submit copies to Professor Matero of all her work at English Heritage.

Before joining BCRT at English Heritage, Ms Aument had completed the Graduate Programme in Historic Preservation at the University of Pennsylvania in May 1999. She had also worked under the Chief Historic Architect at the US National Park Service, National Capitol Region, in Washington, DC, and with conservation projects in Philadelphia and Norfolk, Connecticut.

Experience with BCRT

The internship provided an opportunity to participate in the varied work undertaken by BCRT to promote sustainable conservation through advisory work, research, publication and training. The work included site visits to provide an advisory role on both English Heritage and grant-aided projects such as graffiti cleaning at Avebury, Wiltshire, environmental monitoring at Dover Castle, Kent, and stone repair at the Wellington Arch, London.

The internship also included participating in ongoing BCRT research projects on stained glass conservation and historic floor monitoring at the Westminster Abbey Chapter House as well as helping to edit *Preserving the Post-war Heritage*, to be published in 2001. Further training in heritage skills was provided through a course in mortar repair at the Masterclass series at West Dean College. There was also an opportunity to participate in the Terra 2000 Conference on earthen architecture, held in Torquay in May.

Future of internships

In the light of this successful internship, BCRT and Professor Matero have been investigating ways to continue the fruitful collaboration. An application for future funding has been made to the World Heritage Fund's European Programme, and other sources of international and transatlantic support are being canvassed.

Unlike the financial aid available from large US charitable trusts such as the Mellon and Ford Foundations, which sponsor museum and art gallery internships for curators and conservators, there are relatively few ways in the UK or the USA to help young architectural conservators find employment and develop judgement through practical experience. The benefits to the hosting institution, student and university of such programmes are clear. Lori Aument's pioneering role will benefit those who follow.

John Fidler

Head of BCRT

Notes

1 The Directorate of Ancient Monuments & Historic Buildings (DAMHB) in the Department of the Environment and the Historic Buildings Division of the Greater London Council (GLC).

2 Funded by resources from US-Aid (US State Department programme), the Kress Foundation and other private sponsors, the USA Committee of the International Council on Monuments and Sites (ICOMOS) arranges student work experience exchanges between America and several European and other countries each summer.

3 The Practical Building Conservation Training Centre at Fort Brockhurst near Gosport ran from 1990–1 to 1995–6 and was originally designed to train English Heritage's then directly-employed labour teams. Subsequently the works programmes for English Heritage sites were out-sourced and the Centre closed, transferring to The Edward James Foundation at West Dean College near Chichester where English Heritage-validated Masterclasses continue.

4 The American Friends of English Heritage grew quickly after the founding of English Heritage in the 1980s with the enthusiastic support from English Heritage's first Chairman, Lord Montagu, and Chief Executive, Jenny Page. Broadly equivalent in its aims and objectives to the American Royal Oak Foundation which supports the UK National Trust, though involving many anglophile patrons and scholars, the new American organisation thrived for several years in New York and Washington DC before losing momentum and deciding to close. Mr Herb Adler, its last treasurer, sits on the University of Pennsylvania's Board of Overseers and made the connection between the USA's best postgraduate conservation course and English Heritage's highly regarded technical service.

Thermal Imaging Survey

The Church of St Mary and St Barlock, Norbury

Jill Charmer, our historic glass advisor, reports on a new type of investigation used in the conservation of medieval stained glass which was carried out by Dave Gullick, Senior Mechanical and Electrical Engineer

The Church of St Mary and St Barlock, Norbury

Chancel window in the south wall

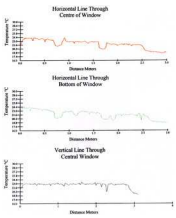
St Mary and St Barlock Church at Norbury, according to *Buildings of England*, is 'one of the most rewarding' churches to visit in Derbyshire 'because of its wooded position, the variety of its parts and the noble grandeur of its chancel'. It is a few miles from Bolsover Castle and well worth a detour. For heraldry experts and stained glass enthusiasts it is an important building because it contains an unusually significant collection of stained glass, the earliest of which is dated, on the basis of shields of arms depicted, to the first decade of the 14th century. These shields are set against an exuberant and sinuous geometric design.

Unfortunately the original medieval glass in the windows was made of poorly durable white glass which has decayed to brown over the last seven hundred years. The parish sought grant aid from English Heritage and the Heritage Lottery Fund to arrest the decay and

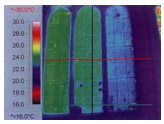
make the windows more legible. One of the problems detected by expert glass conservators is the condensation and damp on the surface of the glass which has led to disfiguring decay and the growth of lichen on both the interior and exterior of the glass, further obscuring the original design.
Together with an investigation of past and present heating systems and circulation of air through the church, Dave Gullick, Senior Mechanical and Electrical Engineer, used thermographic survey techniques to find out exactly what happened to the glass during the course of a day. The results, derived from thermal imaging using a portable camera and tripod, show graphically the wide range of temperature change that takes place across the glass window. This also demonstrates vividly how glass in lead survives such expansion and contraction. Analysis of the survey enabled English Heritage to discover what was happening and to advise the parish on preventive measures.

Jill Channer

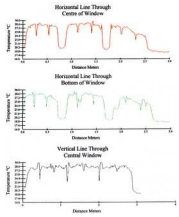
Project Director, Major Projects



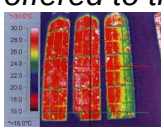
These thermal images illustrate how solar radiation and the moving shadow, produced by the wall buttresses, affect the temperature in the glass. The images also show the lower temperature of the stone mullions.
When analysing the temperature data it should be remembered that the emissivity of each material – glass, fenestration and wall fabric – would all be slightly different. Therefore, while the graphs give a true representation of the temperature gradient across similar materials, the relationship of the wall temperature to that of the glass will not be exact. The analysis is based on using an emissivity of 1.00 whereas glass could be approximately 0.97 and the wall fabric approximately 0.93. A variation of 0.07 in emissivity would cause an error in absolute temperatures of about 2%



Below and left: Thermal image of the window at 11.00 am



A thermal-imaging camera recorded an image every 15 minutes from 10.00 am to 4.15 pm. Temperature profiles were taken of the stone mullions and variations horizontally across the lower section of the window and vertically through the centre line. Surface temperature of the glass rose from 17.7 degrees C to finish at 22.9 degrees C, mullion temperature rose from 17.2 degrees C to finish at 21.2 degrees C, while the wall rose only from 17.5 degrees C to finish at 19 degrees C. In the light of these results, advice could be offered to the parish on ways of improving air circulation and reducing condensation



Below and left: Thermal image of the window at 1.45 pm, as the glass approaches the peak temperature of over 30 degrees C

Notes

Keck Award 2000

Our Painted Past: Wall Paintings of English Heritage *by Caroline Babington, Tracy Manning and Sophie Stewart [Product Code XD20018; ISBN 1 85074 751 2; £8.95] is available from English Heritage Postal Sales, Knights of Old Ltd, Kettering Parkway, Kettering, Northampton NN15 6XU; Tel 01536 533500 (24-hour service); Fax 01536 533501 or may be ordered through www.english-heritage.org.uk*

The results of the Keck Award 2000 have been announced in the IIC Bulletin (December issue). John Fidler's Building Conservation and Research Team has been awarded third place for its programme of events for the Year of the Wall Painting 1999.

This major international award is given to individuals or organisations for promotion of public awareness of conservation. At the October IIC biennial congress in Melbourne, Vice President David Bomford presented the top three projects, which were seen by the committee to stand clearly ahead of other submissions.

The Keck Award for 2000 went to SOS!, the Save Outdoor Sculpture programme sponsored jointly by Heritage Preservation and the Smithsonian American Art Museum, both in Washington DC. Second place was given to Andreas Burmester and the Munich Team responsible for the Munich Dürer Project at the Alte Pinakothek.

English Heritage's 'Year of the Wall Painting' activities included: a national travelling exhibition – Our Painted Past: the wall paintings of England – which was visited by more than 30,000 people and included panels on conservation issues and a short video (with an abbreviated version on the English Heritage website), and a full-colour gazetteer of the wall paintings in the care of English Heritage.

The year culminated in an international conference 'Conserving the Painted Past: developing approaches to wall painting conservation'. Activities also included a series of public lectures and site-based events; a guide for teachers was produced by the Education section. The team was nominated for the award by Gillian Lewis.

Congratulations to Adrian Heritage's Wall Painting team, particularly Robert Gowing, and all involved for their hard work and support.

The Valletta Convention

The Valletta Convention, more properly known as the European Convention on the Protection of the Archaeological Heritage (revised), was ratified by the United Kingdom Government on 21 September. It will come into force on the 21 March 2001.

The Convention is part of the family of Council of Europe treaties for the protection of cultural heritage and was signed in 1992. It contains provisions for the identification and protection of archaeological heritage, its integrated conservation, the control of excavations and the use of metal detectors and the prevention of illicit circulation of archaeological objects.

The full text can be found on the Council of Europe web site at http://conventions.coe.int

2001: A PEST ODYSSEY

From Finials to Footings: Practical solutions for projects large and small 1–3 October 2001, British Library Conference Centre, London

English Heritage, the Science Museum and the National Preservation Office have joined forces to expose the silent creatures who thrive on materials found in museums, libraries, archives and historic houses. Proven solutions for keeping collections safe will be presented by 21 international speakers.

For further information contact: Belinda Sanderson, Information Officer, National Preservation Office, The British Library, 96 Euston Road, London, NW1 2DB; belinda.sanderson@bl.uk

Cultural Heritage Information Exchange

The Cultural Heritage National Training Organisation recently announced the launch of its Management Development Information Exchange to enable museums, galleries and heritage organisations to achieve their objectives by developing the full potential of their governing bodies, staff and those who work for them.

This interactive section of the CHNTO website is intended for individuals and organisations wishing to improve management skills. Guidelines include assessing yourself as a manager, networking for management learning, planning your own development, and using performance review processes to develop people. CNTO receives core funding from RESOURCE, the Council for Museums, Archives and Libraries.

For information, see www.chnto.co.uk/management

National Conservation Conference

From Finials to Footings: Practical solutions for projects large and small

The fourth National Conservation Conference will be held on Thursday 7 June 2001 at One Great George Street, London SW1, home of the Institution of Civil Engineers. The conference is aimed at all who are involved in building conservation, and the keynote speaker will be Sir Neil Cossons, Chairman of English Heritage and former Director of the Science Museum.

From Finials to Footings will focus on the sharing of expertise following the cross-professional impetus of previous National Conservation Conferences, which were regarded as occasions for learning and networking across the building professions. Organised by Conservation Conferences Ltd, From Finials to Footings will run in association with the RIBA South East Region. The conference's Advisory Board includes representatives from COTAC, English Heritage, the Institute of Historic Building Conservation, the Royal Institution of Chartered Surveyors, SPAB and the National Trust.

To find out more about participating in the National Conservation Conference as a delegate or sponsor, telephone 01342 410242 or e-mail conservation@btconnect.com/ends

Building conservation masterclasses

WEST DEAN COLLEGE

Near Chichester,West Sussex

A collaboration in specialist training between West Dean College, English Heritage, and the Weald & Downland Open Air Museum, sponsored by the Radcliffe Trust

Courses for Spring/Summer 2001

Repair and Maintenance of Stone Buildings

BCIDI, 27 January • Non-residential £80

Care and Conservation of Historic Floors

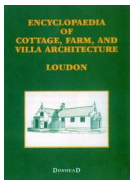
PC4DI, 4–7 February • Residential £480

Conservation and Repair of Masonry Ruins
BC3D23, 20–23 February • Residential £545
Conservation and Repair of Architectural Metalwork
BC3D24, 6–9 March • Residential • £545
Conservation and Repair of Stone Masonry
BC3D25, 20–23 March • Residential £545
Conservation and Repair of Plasters and Renders
BC3D26, 3–6 April • Residential £545
Conservation and Repair of Brick and Terracotta Masonry
BC3D27, 1–4 May • Residential £545
Ecological Management of Historic Buildings and Sites
BC3D28, 22–25 May • Residential £545
Cleaning Masonry Buildings
BC3D29, 5–8 June • Residential £545
Care and Conservation of Wallcoverings
PCFD9, 17–22 June • Residential £595
Conservation and Repair of Timber
BC3D30, 26–29 June • Residential £545
For further information please contact the Building Conservation Masterclasses Co-ordinator: Tel 01243 818294
isabel.thurston@westdean.org.uk

Book Reviews

19th-century best seller

Encylopaedia of Cottage, Farm and Villa Architecture and Furniture
by J C Loudon 1833, the 1846 edition reproduced in facsimile in 2000. 1376 pages in 2 volumes. Donhead £99 [1 873394 42 X]



To students of historical architecture J C Loudon is best known for his remarkable *Encyclopaedia*, a best-selling work which provided an invaluable source of reference and whose purpose was to ‘improve the dwellings of the great mass of society’. Such laudable and practical aims stood at the core of Loudon’s prolific writing career, which begun in 1804 when this former nurseryman moved from Scotland to London. He is best known as the first half of the 19th century’s most influential writer on landscaping and gardening. Much of his work, such as the *Suburban Gardener and Villa Companion* (1838) bore witness to England’s transition from a rural to an urban nation, a period when unprecedented consumer demand for house and garden products boosted the output of both factories and nurseries. He was an extraordinarily hard worker, who as an apprentice had gone without two nights sleep each week in order to study agriculture, botany and chemistry. Disabled by the loss of his right arm and the effects of rheumatism spreading to his left, it was only his remarkable self-discipline and the support of his wife Jane that sustained the continuation of his remarkable career until his death in 1843 at the age of 60.
The 1846 edition ran to more than 1300 pages, with more than 2000 illustrations, and drew on the drawings and descriptions of a number of contributors. Its subject matter is vast, and provides an invaluable insight into not only the stylistic diversity of a wide range of contemporary architects – from Charles Barry to the Rogue Goth of the Anglican Revival,

E B Lamb – but also the contemporary planning requirements for estate cottages, inns, farmsteads, villas and country houses and their fittings and furniture – from potato washers and water filters to card tables. The reader can also gain insights into contemporary building practice, from the use of clay lump in Suffolk to the cast-iron 'Belper window' employed by the Strutts on their Derbyshire mills and estates. Such was the popularity of the *Encylopaedia* that many an architect, speculative builder or owner reached to Loudon for inspiration.

In many respects this book can be seen as a product of the Industrial Revolution. Although Pugin detested the 'resistless torrent of Roman-cement men who buy their ornaments by the yard, and their capitals by the ton', his moral exhortations were no match for the unstoppable force of consumer demand. Fitness for purpose was a central tenet of Loudon's philosophy, but it was matched by a practical acknowledgement of the fact that villa owners, for example, wished to choose from a wide range of styles. As a consequence, villas straight from the pages of Loudon can be identified in many suburbs or spa towns of the period, such as the Pittville development in Cheltenham. His Beau Ideal of an English villa was the Jacobean style, a parsonage house by Barry being chosen for illustration; an illustration of his Anglo-Italian style exhibits the curious fusion of Jacobean and Italianate which characterised a not insignificant number of villas of the period. In the countryside, the rebuilding of farmsteads and estate cottages had since the 18th century been sustained by the uniquely British landlord-tenant relationship. While rejecting the whimsy of Nash's Blaise Hamlet development in Bristol, Loudon's advocation of irregularity and diversity both borrowed from the Georgian Picturesque of Payne Knight and Uvedale Price and anticipated the riotous eclecticism of the High Victorian period. Workers' cottages designed by Joseph Paxton at Edensor on the Chatsworth estate exhibit one of the most celebrated examples of these influences at work. He was – and here lies the paradox at the heart of the world's first industrialised nation – an advocate of both conservation and the use of materials in conformity with the vernacular of each region.

Jeremy Lake

Listing Inspector, Urban Strategies and Listing

Science, politics and conservation

Journal of Cultural Heritage

Vol 1 No 1,January–March 2000, Editions Elsevier www.elsevier.fr [ISSN 1296 2074]

From an international perspective, the subject of conservation is so diffuse and vast that no periodical will ever embrace it or fully capture its myriad readership. As a result, scientific research in conservation has been fragmented across a range of specialist titles, often out of reach of the ordinary practitioner. With each new title one hopes to find the perfect journal: scholarly but applied, focused but not exclusive, open and discursive, offering the cream of current international research and development to a wide audience of practitioners.

This new publication is not an 'architectural conservation' journal, though the first volume is dominated by architectural subject matter. Nor does it lay claim to an international scope, though it is a very European product. Its declared aim is to facilitate communication among research scientists, institutions and private enterprises, thereby (one infers)

improving both the quality and quantity of scientific research applied to cultural heritage, promoting exchange of information, and partnerships.
In the Editorial, however, we are reminded that the journal is really for scientific consumption, an instrument of scientific self-development under the cultural heritage umbrella. We are told that 'there are few probabilities that people belonging to enterprises, public administrations and politics will cast a glance at the pages'.
There is a kernel of truth in the suggestion that mundane realities of private practice and public administration can interfere with participation in research debates. But far from staying out of the picture, practitioners and administrators should be at the centre of it, embracing new initiatives, encouraging feedback, expanding our research commitments and formulating agendas for the future. We should, in other words, be participating fully, as senders and receivers, in the knowledge transfer process.
The first issue provides a miscellany of current, nationally-funded work, essays and notes of new research. Giorgio Croci's summary essay on structural interventions at the Leaning Tower of Pisa and the Basilica of St Francis at Assisi may not entirely do justice to the projects themselves, which are among the more innovative of current undertakings internationally. The work of the CNR 'Nello Carrara' Centre in Florence on fluorescence lidar as a means of monitoring biological growth is informative if not novel. The remaining papers do not live up to expectations: the results of a campaign of pigment analysis of mural decoration in an historic quarter (Granada) using well-known techniques; the results of another major campaign to sample, characterise and document ancient mortars in a medieval city (Rhodes); a description of computer modelling techniques used to digitally map decay patterns on stone facades (an interesting field of study which often – as here – seems too wrapped up in the technology); and an account of new discoveries of bronze implements in Yemen (this paper is actually about the dating of finds).
Time will tell whether the decision to publish only in English was a wise one, whether the format has the necessary gravitas, whether the *Journal of Cultural Heritage* can capture the very best examples of current work (which it must do if it is to achieve its aims), and whether readers from across all disciplines will respond positively to content which, one hopes, will improve as the journal matures.

David Mason

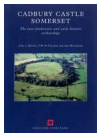
Building Conservation and Research Team

New Publications from English Heritage

Cadbury Castle, Somerset

The later prehistoric and early historic archaeology

John C Barrett, P W M Freeman and Ann Woodward

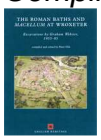


Late in the first century AD, Roman military action took place in the hillfort of Cadbury Castle, Somerset. The evidence for destruction in the south-western gateway includes deposits of fragmentary and partly-burnt human remains, weaponry, and dress fittings. After this destruction, barracks were built on the hilltop. These events effectively brought to an end the history of an indigenous community that, for nearly a millennium before, had settled within and constructed one of the most impressive hillforts in southern Britain. This is a report of the archaeology of that community from its origins in the late Bronze Age to its eclipse in the Roman Iron Age.

The archaeological deposits are extensive. The ramparts and south-western gate structure represent one of the deepest and most complex Iron Age stratigraphic sequences excavated in southern Britain, and the survival of preserved surface deposits within the interior yielded a remarkable range of metalworking debris and animal burials.
This is one of the first of a new generation of archaeological reports which seeks to present the evidence in the form of an integrated analysis of the material, considering the occupants of the hillfort from the perspective of the architecture they inhabited, the ways they clothed and fed themselves, and the labours they undertook.
DATE OF PUBLICATION ***2000*** *PRICE* ***£45*** *ISBN* ***1 85074 716 4*** *PRODUCT CODE* ***XA20004***

The Roman baths and macellum at Wroxeter

A report on the excavations by Graham Webster, 1955–85
Compiled and edited by Peter Ellis



Excavations at Wroxeter (*Viroconium Cornoviorum*) were undertaken on the southern part of the insula containing the baths and a market hall (*macellum*), the latter one of only a few known in the Province. The excavations allow the construction sequence and function of these major public buildings to be unravelled and analysed in detail on an insula untouched by medieval or later buildings. The work revealed that timber-framed buildings, constructed *c* AD 90 and fronting on Watling Street, were swept away to accommodate the public buildings, which were built over several decades between the 120s and 160s. Changes were introduced in the third century when a swimming pool (*natatio*) was filled in and an additional baths suite was built in the exercise yard to one side of the main baths complex. Excavations in the street porticos and on Watling Street revealed a continued use of some of the buildings into the fifth century, after their original functions had ceased. The artefact and environmental finds reports are on material deriving mainly from the initial building campaign but with some third-century groups. The report also includes an edition and compilation of the accounts of the nineteenth-century excavations by Thomas Wright and others.
DATE OF PUBLICATION ***2000*** *PRICE* ***£55*** *ISBN* ***1 85074 606 0*** *PRODUCT CODE* ***XC10849***

Heart of the City

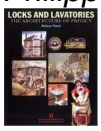
Roman, medieval and modern London revealed by archaeology at I Poultry
Peter Rowsome

This highly illustrated book for the general reader is intended to broadcast English Heritage's message to a wide range of people. Heart of the City tells the story of London, from Roman frontier town to provincial capital, ruin then revival as medieval Europe's largest city, recovery from fire and plague to become the world's richest metropolis, the Blitz, and the famously disputed demolition of 16 Victorian buildings. The past is brought to life for anyone interested in archaeology, history, architecture, or simply London.
Published by the Museum of London Archaeology Service in association with English Heritage
DATE OF PUBLICATION ***July 2000*** *PRICE* ***£5.99*** *ISBN* ***1 901992 14 4*** *PRODUCT CODE* ***XD20026***

Locks and Lavatories

The architecture of privacy

Philippe Planel



A fascinating look at how our homes have developed over time, from prehistoric times until the present day. Our homes are important to us, but all too often we take what we find for granted. How have attitudes to privacy, food, ritual and status altered the nature of our homes? Why has the open hall of medieval times been relegated to the entrance lobby of today? How have our demands for privacy led to greater partitioning of our living space? How have our changing homes altered our relationships with our neighbours and the community?

In this highly illustrated and accessible book, the latest in the highly successful Gatekeeper series, the author, Philippe Planel, investigates how the different rooms of our houses have developed and changed, and how progress in heating, cooking, drainage and labour-saving devices, for example, has stimulated change. Examples are drawn from a wide range of sources, both visual and literary, from throughout the British Isles and from the cottage to the castle.

DATE OF PUBLICATION ***2000*** *PRICE* ***£8.95*** *ISBN* ***1 85074 724 5*** *PRODUCT CODE* ***XD20020***

Informing the Future of the Past

Guidelines for SMRs

Edited by Kate Fernie and Paul Gilman

There are more than one million known ‘monuments’ scattered across the landscape of England and information about them is maintained by as many as a hundred different Sites and Monuments Records (SMRs).

SMRs are the primary source of information on the historic environment in England. They are fundamental to the conservation and management of the historic environment through the statutory planning system. They are also an increasingly valuable resource for education and the public enjoyment and understanding of the nation’s heritage.

The purpose of this ring-bound manual is to provide a set of working guidelines appropriate to all SMRs, large and small, and for all staff, volunteers and students involved in managing, running or supporting an SMR.

This manual offers an overview of the standards, services and systems that are already in place in SMRs and shares ideas about best working practices in the SMRs of today. It includes case studies to illustrate recording practices and model procedures. It is the result of a collaborative partnership between English Heritage, the Association of Local Government Archaeology Officers (ALGAO) and Archaeology Data Service (ADS). It is intended to provide a platform for training and continuous professional development for SMR staff. Regular consultation with SMR professionals was a key feature of the project.

DATE OF PUBLICATION ***2000*** *PRICE* ***£25*** *ISBN* ***1 873592 55 8*** *PRODUCT CODE* ***XB20008***

Greenwich

An architectural history of the Royal Hospital for Seamen and the Queen's House

John Bold

The former Royal Hospital for Seamen, the Queen's House and Greenwich Park – one of the most highly prized ensembles in European architecture and landscape – today comprise the centrepiece of the Maritime Greenwich World Heritage Site. This beautifully illustrated book, based on detailed documentary work and site survey, is the first to present a thorough architectural and art-historical account of the main surviving buildings of the site. New photographs of the buildings complement famous views painted by seventeenth- and eighteenth-century artists, and specially commissioned development drawings illustrate and clarify the often complex evolution of the buildings, which have not until now been well understood. In addition, an archaeological analysis illuminates the discussion of centuries of human alterations to this much-loved landscape.

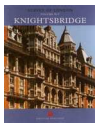
The book details the evolution of the main buildings of the Hospital (later the Royal Naval College and now the University of Greenwich), from the design and building stages overseen by Sir Christopher Wren and Nicholas Hawksmoor, through the later contributions of Thomas Ripley, James Stuart, Benjamin West and Joseph Kay. In a comprehensive discussion of Inigo Jones's Queen's House, the book considers not only the architect, the sources of the design and the sumptuous interior decoration but also the desires of patrons Queen Anne of Denmark and Queen Henrietta Maria. Descriptions of the later history of all the buildings on the site, the founding of the National Maritime Museum and the creation of the buildings in the Park bring the history of this important location up to the present day.

Published for The Paul Mellon Centre for Studies in British Art by Yale University Press in association with English Heritage

DATE OF PUBLICATION ***25 January 2001*** *PRICE* ***£50*** *ISBN* ***0 300 08397 1*** *PRODUCT CODE* ***XE20046***

Knightsbridge

Volume 45 of the Survey of London



For more than 100 years, the Survey of London has been examining the topographical and architectural history of particular areas of London, including accounts of standing and demolished buildings, their genesis and associations.

Knightsbridge – the subject of this forty-fifth volume – became unequivocally part of London during Queen Victoria's reign. Strung out along the road to Kensington and long under the influence of the capital, the hamlet had already acquired something of the character of a residential suburb. As fashionable society spread out beyond the confines of the old West End, Knightsbridge offered an unrivalled location for development.

With Hyde Park and Rotten Row close at hand, it was ideally placed for life *à la mode:* but in the event the old hamlet proved a stubborn breakwater against the ineluctable tide of the West End. Development after development stalled, and even the great Thomas Cubitt came unstuck with his mansions at Albert Gate. Not until the surge of high-class building in neighbouring South Kensington in the years after the Great Exhibition was the future of Knightsbridge as an exclusive address assured.

The streets, squares and buildings resulting from this episodic process of development, and subsequent redevelopment, are the essential subject matter of this book. As well as

the houses, flats, churches, hotels, shops and offices on the ground today, many now vanished structures of historical or architectural importance are described. An almost forgotten ‘alternative’ Knightsbridge is evoked: a world of music-halls and noisy pubs, tenements and dubious boarding-houses; the raffish crowd at Tattersalls’ famous horse-mart on Knightsbridge Green.
Published by The Athlone Press for English Heritage
*PUBLICATION **2000** PRICE **£75** ISBN **0 485 48245 2** PRODUCT CODE **XE20043***

The Albert Memorial

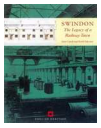
Edited by Chris Brooks

The Albert Memorial is one of the most famous British monuments, the product of a richly creative architectural period (the international Gothic Revival) and the masterpiece of a great architect, George Gilbert Scott. This lavishly illustrated book tells the history, discusses the symbolism and gives an account of the recent restoration of this sumptuous 19th-century monument.
Leading authorities in the field discuss the public life of Prince Albert and how he was depicted; Scott’s conception of the Memorial; its design, construction, sculpture, decoration and symbolism; the Memorial’s setting in South Kensington; its history since first being built and the massive restoration programme of the 1990s.
The Memorial’s design combined structural innovation with a brilliantly inventive handling of Gothic precedents. Its building and decoration brought together architecture, fine art, applied art and craft in a way that exemplified the creative unity the Victorians found in the Gothic tradition. Its sculptural programme, more ambitious than any other monuments of the century, is the culmination of the public statuary in which mid-Victorian British sculptors led Europe.
In commemorating Prince Albert, the Memorial exemplified the age, its material achievements, its cultural inheritance, and its intellectual and spiritual aspirations. Its recent restoration is a remarkable example of modern conservation techniques and practices.
In association with Yale University Press and for the Paul Mellon Centre for Studies in British Art
*DATE OF PUBLICATION **2000** PRICE **£40** ISBN **0300 073119** PRODUCT CODE **XE20032***

Swindon

The legacy of a railway town

John Cattell and Keith Falconer



This book was first published in 1995 by HMSO on behalf of the Royal Commission on the Historical Monuments of England. Strong sales and popular demand have made a reprint necessary and it is now reissued by English Heritage in paperback with a new cover design and a fresh foreword from the Chairman. It is attractively produced with many illustrations in full colour, as well as a selection of historic black-and-white photographs.
In the pioneering days of early Victorian railway engineering the decision of Gooch and Brunel to locate an engine house and works just to the north of Swindon led to the creation

of a sizeable engineering enterprise and a new settlement. The Great Western Railway became by far the largest employer in the region and for more than a century the fortunes of the town were inseparably linked with the development of the railway.
In 1984, however, many of the works buildings were under threat due to rationalisation within British Rail Engineering Ltd. Consequently, many of the buildings were listed and a photographic record was begun. The quality of the buildings and their significance for railway history were such that a more detailed study was justified. The recording exercise was therefore expanded, and this remarkable book is the result of that project.
By looking at the buildings themselves it traces the architectural history of the railway engineering works and of the associated railway village. The former general offices house the National Monuments Record, the public archive of English Heritage and a primary source of information on the architectural and archaeological heritage. This fascinating guide visits one of Britain's finest monuments to the early days of the railway age.
DATE OF PUBLICATION ***2000*** *PRICE* ***£14.99*** *ISBN* ***1 873592 54 X*** *PRODUCT CODE* ***XC20048***

An Atlas of Rural Settlement in England

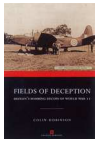
Brian K Roberts and Stuart Wrathmell

Representing the culmination of a decade's research work for the Monuments Protection Programme, this Atlas, for the first time, defines and plots the varied regional character of England's rural settlement. It reveals a countryside which is a quilt of different settlement types, in which each patch represents a different social, economic and political history.
There will be a companion volume, Region and Place: a study of English rural settlement, which makes preliminary explorations of some of the patterns revealed by comparing the maps against the distribution of other types of archaeological sites and buildings.
DATE OF PUBLICATION ***2000*** *ISBN* ***1 85074 770 9*** *PRODUCT CODE* ***XC20040*** *PRICE* ***£25***

Fields of Deception

Britain's bombing decoys of World War II

Colin Dobinson



During World War II a secret department was formed at Britain's Air Ministry to co-ordinate a strategy to defeat German bombing by deception. With the help of leading technicians from the film industry, ingeniously designed decoy airfields, towns and military bases were built throughout the island. This book is the first detailed study of Britain's bombing decoys both at war and now at peace through their fragmentary survival as enigmatic features in today's landscape.
English Heritage has in recent years undertaken a widespread survey of the military monuments that survive from World War II, in order to underpin decisions about their preservation. The result has been a huge descriptive catalogue which will be published in seven volumes over the next few years. This is volume 1.
In association with Methuen
DATE OF PUBLICATION ***2000*** *PRICE* ***£25*** *ISBN* ***041 3745 70*** *PRODUCT CODE* ***XE20041***

Publications may be ordered from: **Knights of Old Ltd, Kettering Parkway, Kettering, Northampton, NNI5 6XU,** Tel 01536 533500, Fax 01536 501, **or www.english-heritage.org.uk**

Obituaries:

Maurice Mendoza

The death of Maurice Mendoza on 11 October has grieved his many friends and former colleagues in conservation. While the history books will probably select for singular notice his part in the creation of English Heritage, many of his contributions to the preservation and management of Britain's heritage – made over many years as a civil servant, elder statesman, enthusiast and amateur – have had an impact across the conservation world. History, the landscape and the heritage were lifelong loves. His working association with conservation began shortly after he joined the Office of Works in 1938, with involvement in the scheme of protection for Hadrian's Wall. After military service in this country and Europe during and after World War II, Maurice returned to the Civil Service and worked in various government departments, many the temporary creation of passing politicians. He was an able and wily bureaucrat, offering independent and careful advice while showing a full understanding of the real drivers of political action. His integrity, gentleness and humour made his voice distinctive.

English Heritage

In 1978 he was delighted to be made head of the Department of Ancient Monuments and Historic Buildings in the Department of the Environment, and in 1979 he made his famous suggestion to Michael Heseltine, a politician devoted to the abolition of quangos, that the creation of a new one was in his and the nation's best interests. The establishment of English Heritage came after his retirement, but he was its true progenitor.

Conservation and public access

In similar fashion, Maurice was an early mover in many areas now taken for granted. His championship of the repair and restoration of Frogmore predated the now regular acceptance of public access to royal properties (a CVO awarded in 1982 recognised his work in respect of the Royal Palaces). His rescue of the Grange preceded such rescues as Brodsworth Hall, the Albert Memorial and other buildings unloved by Whitehall. His role, long after retirement, as the Secretary to the 1988 Review Group on the future of the RIBA Library paved the way for its recent relocation to the Victoria and Albert Museum. His dedication to craftsmanship in building disciplines led to his role in the creation of the Historic Buildings Contractors Group, his participation in COTAC and his commitment to the William Morris Craft Fellowships, for which he was a selector. In all of these, he matched passion for the end object with shrewd tactical sense of the available means. He advised against the amalgamation of RCHME and the proto English Heritage in a pre-election period – not a time, he commented, for irate letters from professors of archaeology and architecture to he hitting politicians' desks.

Maurice brought the same passion and commitment to his interest in London, gardening, photography, music, hooks and the good life. He used his professional skills to serve his greatest hobby, the countryside and walking, acting as Chairman both of the Friends of the Ridgeway and of the Common Land Forum, where in the mid-1980s he got a sadly short-

lived agreement between landowners and ramblers on access. He was active in his synagogue and in Jewish causes. In all he did, wit and intelligence shone through. He was a deservedly popular and valued friend and colleague, and a deeply loving member of his family, of whose roots he was proud. For me, who first met him when I joined the Civil Service in 1968, working for him the following year, he was a mentor, an inspiration, a champion and a great companion. He was a major contributor to life, and a great soldier for the heritage.

Jennie Page

Former Chief Executive, 1989–95 English Heritage

Visit of HM Queen Elizabeth the Queen Mother to the Ancient Monuments Laboratory in November 1973, with Geoffrey Rippon, Secretary of State, Department of the Environment, and John Musty (right). The binocular microscope revealed textile preserved on the dome of a Saxon iron shield boss

John Musty

John Musty, who died on 8 September 2000, was, more than anyone else, responsible for consolidating and developing the Ancient Monuments Laboratory, now part of English Heritage's Centre for Archaeology in Fort Cumberland, Portsmouth. Born in Wiltshire, he left Marlborough Grammar School at 17 to work at the Chemical Defence Experimental Establishment at Porton where he was employed for 26 years. While at Porton he studied at Southampton University, qualifying as an Associate of the Royal Institute of Chemistry, the equivalent of a degree. From 1954 he became actively involved in archaeology as a volunteer for the Salisbury and South Wiltshire Museum. Early work included Stonehenge with Richard Atkinson, the West Kennet Long Barrow with Stuart Piggott and Snail Down Barrow cemetery with Nicholas Thomas. J F S Stone, a colleague at Porton and amateur archaeologist of distinction, also encouraged him to carry out his own excavations.
His first excavation was on the medieval pottery kilns at Laverstock. Established as a leading authority on medieval pottery and pottery kilns, he was awarded an MA by Bristol University. He carried out important excavations in 1960 at Winterbourne Gunner Anglo Saxon cemetery, and in 1961 at Clarendon Palace. His excavation of the Ford Saxon barrow in 1964 recovered, among other things, a fine hanging bowl that was found to contain the remains of onions, an early example of his forensic approach to archaeology (he is said to have coined the term 'archaeological science'). From 1963 to 1968 he led an excavation of the Gomeldon deserted medieval village, the finds from which were to be the training ground for his newly-appointed conservators at the Ancient Monuments Laboratory (AML) in London.

The Ancient Monuments Laboratory

The AML had developed from a Finds Preservation Workshop set up in the 1920s to treat, restore and preserve museum pieces and finds from ancient monuments in the care of the Ministry of Works. After a hiatus during World War II, the workshop was re-established in 1946. The appointment in 1950 of Leo Biek as its first Scientific Officer led to change from a technical and craft approach to one more scientifically based. Concern about backlogs of material led in 1958 to the appointment of a conservator to deal with urgently-needed finds from Dover Buckland.

When Musty was appointed to the newly-created post of Chief Laboratory Officer in 1966 he inherited two separate laboratories, one in Lambeth Bridge House and the other, dealing with conservation, in Sanctuary Buildings. Correspondence from his early years in post was concerned with the ever-growing backlog, the concerns of archaeologists who needed results for their publications and pleas for improved staffing. In 1969 an article in *Nature* critical of the lack of resources resulted in questions being asked in Parliament. He also wrote frequently of the need for a single base for the AMEs activities.

Despite those problems, one of Musty's outstanding achievements was the appointment in 1967 of Tony Clark to develop the new discipline of geophysics and embark on the largest programme of geophysical survey ever undertaken in Britain. Clark also investigated the automation of techniques and processing of data using a computer. The conservation teams were increased, somewhat in the teeth of opposition from the Establishments Branch who would have preferred the appointment of school leavers to 'clean' objects from excavations. Musty responded that trained staff were vital: 'conservation is no longer a craft, but the application of techniques based on sound scientific principles'.

In 1972 Musty's hope of combining his staff on a single site was realised with the move into new laboratories on the 5th floor of 23 Savile Row. Despite pressure to re-locate on the outskirts of London (Hampton Court had been suggested), Musty emphasised the need for a central London location to maintain important links with major museums and universities as well as easy access to libraries.

Once in Savile Row, he appointed Susan Limbrey and Helen Keeley to develop the emerging discipline of environmental sciences and Leo Biek to head a small team dedicated to the study of ancient technology. Tony Clark's team of geophysicists grew and took on the responsibility of the radiocarbon dating programme; John Price led the conservation team.

Musty recognised that his team needed the right tools for the job. A high-powered industrial x-ray unit was installed in the basement of Savile Row as well as one of Professor Teddy Hall's milliprobes, a huge bit of equipment for analysing metal objects without the need to take a sample, the forerunner of the modern x-ray fluorescence instruments. It is chastening to see a photograph of this monster and compare it with the latest XRF that sits comfortably on a bench. A scanning electron microscope arrived that allowed accurate identification of wood-like material adhering to objects. Previously diagnosed as wooden handles, many were found to be bone, horn and ivory.

The AML became a magnet for visitors: professional colleagues, archaeologists with unusual materials and important visitors interested in the quality of work. In 1973 the Queen Mother visited, and in 1974 Queen Margrethe of Denmark and the Prince of Wales.

University contract posts

Despite these successes, a burgeoning urban renewal programme contributed to the growth of the backlog. Musty set up contracts with university departments and others to employ conservators and scientists to process the vast quantities of material being excavated in cities such as Southampton, London, York, Carlisle and Bristol. He also encouraged students to work at the AML during vacations, many of whom became leading figures in museums and universities across the world. Quite a few have remained as AML Contractors and are respected members of their disciplines.

Fundamental restructuring

Musty continued his campaign to place archaeological science more firmly on the national agenda. In particular he persuaded the Committee for Rescue Archaeology of the Ancient Monuments Board for England to set up a working party under the chairmanship of Professor Geoffrey Dimbleby. Recommendations were made for a fundamental restructuring of archaeological science provision, integrating the AML with national and

regional museums and universities. It recommended that common policies be developed to fund conservation and storage of archaeological materials, resulting in the ‘box grant’ scheme and a prioritised listing of the backlog. Recommendations were also made for improved funding of the natural sciences and the establishment of a high level Advisory Committee for Archaeological Science. The Science and Conservation Panel, reporting the Ancient Monuments Board, was created, as well as the Science Based Archaeology Committee of the Science and Engineering Research Council (SERC), the national research funding body for archaeological science in universities.

Retiring in 1981, Musty persuaded Andrew Selkirk, editor of *Current Archaeology*, that archaeological science should be disseminated more widely and offered to provide a regular Science Diary. By 1999, when he was forced to stop writing by Parkinson’s Disease, he had written over 50 diaries.

John Musty left a legacy that survived the vicissitudes of change. As part of English Heritage’s merger with the Royal Commission on the Historical Monuments of England and regionalisation, the AML moved to Fort Cumberland to join the Central Archaeological Service as the new Centre for Archaeology. Strategic programmes are being developed that Musty would surely have approved: archaeological scientists working together on the Monuments at Risk Survey, considering how materials are both preserved in the ground and affected by environmental changes. His chief contribution to archaeology is the body of information held in the Ancient Monuments Laboratory Report Series. Thousands of reports are an invaluable archive for archaeological science as well as being the collective memory of all who worked in the AML, who continue the work and will do so in the future.

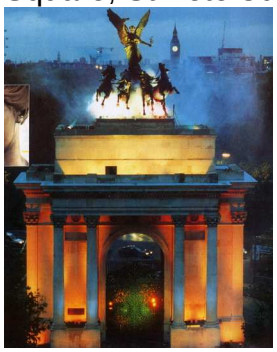
Mike Corfield

Chief Scientist, Former Head of the AML, 1995–99

Wellington Arch

Opens to the public on 4 April

The Wellington Arch was designed by the architect, Decimus Burton, and built in 1826 to commemorate Wellington’s victory over Napoleon. The bronze sculpture, Peace descending on the Chariot of War, the largest in England and designed in 1912 by the sculptor, Adrian Jones, depicts a winged female figure descending with an olive branch and victory laurel wreath as the charioteer hauls in the reins of the four horses. This group of figures – a quadriga – is derived from ancient models, and Jones’ work fulfils Burton’s original plan for one, following the precedents of the Victory quadrigas for the Brandenburg Gate in Berlin, 1788, the Arc de Triomphe in Paris, 1807, and the triumphal arch in Palace Square, St Petersburg, built in the 1820s



Winged figure of Peace

Detail of the winged figure of Peace

Wellington Arch, London's famous landmark at Hyde Park Corner, has been returned to its full glory. A £1.5 million conservation project will remove the stunning neo-classical arch from the English Heritage 2001 Buildings at Risk Register. Much more is planned, however, and work has already begun on the interior of the arch, giving full public access to the rooms inside and the viewing platforms beneath the arch's magnificent sculpture, *Peace descending on the Chariot of War*. From high above the swirling traffic it will be possible to see exceptional views of Hyde Park and Green Park as well as the London skyline.

When the arch opens on 4 April, there will be a chance to view exhibitions on London's monuments, war memorials and statues, find out more about Wellington Arch and Marble Arch and visit the new English Heritage information centre and shop. Special hospitality arrangements will be available for anyone wishing to hire rooms in the arch for functions. There will also be full disabled access.

More detailed information will be made available closer to the opening. Please contact Customer Services Tel +44 (0)1793 414910