

We cannot care for the historic environment, or direct resources effectively, unless we understand what it is, its condition and how it is changing. We need continuous, thoughtful and well-targeted research to enable us to identify significance and potential.

98 Knowledge is never static. Our interpretation of the past is constantly being tested and refined, new questions asked and new information discovered. For example, English Heritage's National Mapping Programme has increased the number of known elements of buried archaeology even in comparatively well researched areas by up to 60%. Field survey in less well-known areas is generating a 500% increase in recorded features and sites. The work being carried out as a result of *Planning Policy Guidance Note 16* is continually readjusting our knowledge of sites and areas we thought we knew about.

99 Discovering more sites does not mean that they all have to be protected. On the contrary, only when we know what exists can we judge what is significant and decide what needs to be preserved. Under-researched areas include conurbations, particularly outside city centres, urban parks and the archaeology of coastal and maritime zones. Above all there is a need to look beyond individual sites and improve our understanding of the archaeology of landscape. The first priority is to complete the national coverage of historic landscape characterisation.

There is a slow and painful progress towards recognition of the importance of habitats over special sites for achieving biodiversity objectives, and appreciating landscape character over designated areas for achieving

landscape objectives. This progress needs to be accelerated and extended to embrace the historic environment.

Council for the Preservation of Rural England

100 Character assessment at all scales provides a promising new methodology. It will allow us to understand the historic environment better as a totality, and in better integration with the natural environment. (Case Study 21)

101 PPG16 sets out procedures for developers to provide for the rescue recording of archaeological sites that will be destroyed by development. At an estimated £20 to £30 million a year, this is the major source of funding for archaeology today. But this does not always cover the cost of making the results easily accessible, nor of long-term storage. PPG15 has failed to deliver any comparable funding for the recording and analysis of historic buildings.

102 The Natural Environment Research Council invests £2 to £3 million in archaeological science and the Arts and Humanities Research Board funds some archaeological and historical research. Museums, many of which have collections directly relevant to the interpretation of the historic environment, have a critical role to play, and it is essential that they continue to nurture the necessary curatorial expertise. The other main source of research funding is English Heritage. But there is very little co-ordination between the funding bodies, and work needed to inform practical conservation decisions is not always given priority.

Recommendation 14

Encourage research and scholarship to underpin conservation

For the heritage sector:

- a Develop a co-ordinated research strategy
- b Provide greater quality control over research, particularly the archaeological work commissioned by developers
- c Secure better arrangements for the storage of records and finds from excavations commissioned by developers

For Re:source:

- d Nurture curatorship as a means of protecting and enhancing the knowledge base

Case Study 21

Birmingham Jewellery Quarter

Recent survey work and area character assessment have enabled Birmingham City Council to identify and protect the special qualities of this highly-valued area, safeguarding 6,000 jobs, while providing a firm basis for neighbourhood renewal in the newly defined conservation area. Opportunities for redevelopment have been clearly defined as part of the research.

Refurbished former workshops are light and airy, and retain some of the original overhead line shafting.



Photo: English Heritage/NMR

Case Study 22

X-ray of a table from Chiswick House

Photo: English Heritage

English Heritage has experimented in transferring archaeological and architectural analytical methods to furniture conservation, with especially interesting results from X-radiography and photogrammetry. In the case of this giltwood side table from Chiswick House, believed to have been made between 1720 and 1725 by Giovanni Battista Guelfi to designs by William Kent, X-radiography exposed the clarity of carving concealed by layers of paint, gesso and gilding, identified early repairs and highlighted cracks and delamination of the blocks used in construction.



Understanding condition

103 **In order to manage the historic environment effectively we need to know its condition and how it is changing.**

104 English Heritage's *Monuments at Risk Survey* estimated the rate of loss of archaeological sites at one a day for the last 45 years and identified the five principal hazards as development, demolition, mineral extraction, agriculture and road building. Buildings at Risk surveys have identified historic buildings threatened by neglect. But some important categories of designated sites – Grade II listed buildings, registered parks and gardens, and designated Conservation Areas – have not been surveyed systematically, and there is as yet no comprehensive information about the health of the historic environment as a whole. (Case Study 22)

Despite pioneering audits such as the Buildings at Risk and Monuments at Risk Surveys, more basic work is needed before we can understand the condition of the historic environment adequately, let alone systematically monitor it.

Council for British Archaeology

105 Regular 'state of the historic environment' audits are needed to help understand the impact of change and highlight priorities for action. We need to know much more about the impact of climate change on the historic environment and the ways in which its effects can be mitigated. We need to find out more about the way the historic environment is being used. We need data on its economic and social benefits as well as its cost. We need to audit the available skills and funding. (Case Study 23)

106 Producing such reports calls for the more systematic use of existing indicators and new types of research programme, data collection and field observation. These should build on methods developed in recent years by the natural environment sector.

Recommendation 15

Publish regular 'state of the historic environment' reports

For the Government:

- a Commission regular reports to monitor the condition of the historic environment, evaluate threats and audit its cultural, economic and social benefits
- b Identify and develop sustainability indicators and targets for the historic environment
- c Develop indicators to measure the economic value of the historic environment

Communicating knowledge

107 Information on the historic environment is held in many places, nationally, regionally and locally. This archive is expanding rapidly in both electronic and printed form. There is a similar increase in holdings of archaeological material and associated documentary evidence in museums and archives. This too is increasingly recorded electronically. (Case Study 24)

108 Sites and Monuments Records (SMRs), based in local authorities, are essential to the effective operation of the planning system. Many SMRs have backlogs of data and cataloguing, but even in their current incomplete state they are the most significant local databases available. Expanded into comprehensive Historic Environment Record Centres, they have the potential to make a major contribution to decision-making, enabling local communities as well as planning authorities to manage change more effectively. In the short term, we need to ensure that all local planning authorities have access to a properly curated Record Centre. In the longer term, they need to be placed on a firm statutory basis.

Awakening people to their own environment can lead to the revelation of and appreciation of local 'treasures'.

Black Environment Network

109 Information must not be locked up in databases to which only specialists have access. The Council for British Archaeology's HEIRNET and English Heritage's Images of England project are being designed to be used by non-specialists. To put the historic environment in context, and make information about it even more widely available, they would benefit from being linked to other databases such as the National Biodiversity Network. The historic environment should be a major component of the DCMS *Culture Online* project.

Recommendation 16

Create an historic environment information network

For the Government:

- a Ensure that local authorities have access to properly curated Historic Environment Record Centres
- b Provide funding to make electronic information on the historic environment widely accessible

For local government:

- c Facilitate public access to properly funded and curated Historic Environment Record Centres

For the heritage sector:

- d Create an electronic network of information about the historic environment, accessible to professional and public alike, linked to *Culture Online*



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.



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 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.