

ENGLAND'S WETLANDS

Monuments at risk

English Heritage is committed to the conservation and good management of wetland landscapes and the monuments they contain, a most fragile part of the historic environment. We will work to extend the cooperation and understanding between the historic environment and nature conservation disciplines that has been developed in recent years

Research into monuments at risk in England's wetlands, commissioned by English Heritage from the University of Exeter, shows:

- at least 50% of the original extent of lowland peatland has been lost during the last 50 years, and
- an estimated 2,930 wetland monuments have been totally destroyed, and some 10,450 are likely to have suffered damage, desiccation and partial destruction in the same period;
- the main causes of this widespread destruction are drainage, water abstraction, conversion of pasture into arable, peat wastage, peat erosion, peat extraction, and urban and industrial development, but
- 72% of local authorities have no policy for the identification, assessment, preservation, or management of wetland archaeology.

For almost thirty years, English Heritage has supported a long-term strategy of survey and research of the main lowland wetlands areas of England (the Somerset Levels, the Fens, the raised mires, basin, and valley wetlands of north-west England, and the Humberside Levels). Unlike free-draining soils, wetland landscapes preserve both organic archaeological remains (especially wood) and natural palaeo-environmental material, a uniquely important component of our cultural heritage.

In the early 1970s, it was apparent that wetlands were under severe pressure from peat extraction, intensifying agricultural exploitation and natural erosion. The primary aim of four wetland projects was to identify and record the archaeological potential of each area in order to support a proactive management strategy to conserve areas of high archaeological potential and significance.

That extensive survey programme, completed in 2001 with the publication of the final reports of the North-West Wetland Survey Project and the Humber Wetland Project, was celebrated at a

conference held by the British Academy on the subject of 'Wetland Landscapes and Cultural Responses' and also by the publication of a special wetland issue of *Current Archaeology* (sponsored by English Heritage).

'It is through visiting wetlands that people come into direct contact not merely with fascinating flora and fauna, which is our ecological heritage, but also with areas of long-standing social and cultural significance.'

Michael Meacher MP,
Minister for the Environment
'Wetlands and the Community'
(speech on Wetlands Day,
31 January 2002. London)

For the future, English Heritage has developed a high-level strategy to encourage more effective conservation, protection and management of England's wetlands. This strategy is based on the results of the four survey projects, the Wetland Management Project and a desk-top assessment of Monuments at Risk in England's Wetlands. Implementation of this strategy is a key component of our Monuments at Risk agenda.

Wetland management project

Throughout the work of the surveys, the threats and pressures acting on wetlands continued unabated. It had been possible to respond in particular circumstances with specific conservation or excavation projects (such as the preservation of the Sweet Track, the Fenland Management Project, experimental monitoring at Market Deeping and Sutton Common), but there was a limit to what could be achieved by a reactive, site-specific and resource-intensive approach. We needed, instead, to adopt a much broader proactive role to define the causes of damage and destruction to wetlands in a landscape context and to develop management techniques to mitigate them.

In 1993 English Heritage commissioned a survey of techniques used to protect and manage wetlands in other contexts (including wetland

nature reserves). This survey showed that considerable expertise already existed in other disciplines and that archaeologists had a great deal to learn from agencies managing the natural heritage. The survey also demonstrated that wetlands with an archaeological component require active management if they are not to degrade, and it concluded that archaeological and nature conservation interests should work together to manage wetlands. To achieve this, archaeologists would need actively to promote the concept of cultural heritage to agencies managing wetland nature reserves to ensure that archaeological interests were neither neglected through lost opportunity nor inadvertently damaged through ignorance of the historic environment.

Monuments at Risk in England's Wetlands Project

The final stage of our strategy was the Monuments at Risk in England's Wetlands Project, commissioned from Exeter University in 2000 (www.ex.ac.uk/marew/). This desktop assessment collated data on the destruction of wetlands in England over the past 50 years together with evidence for the rate of destruction or damage to archaeological sites in wetlands. It provided a general picture of the condition of England's wetland archaeological resource and

the risks it faces, creating a benchmark for future monitoring. It examined, in particular, the effect of hydrological changes on waterlogged organic archaeological and palaeo-environmental remains and the impact of peat extraction, forestry, and urban and industrial expansion. The project also collated and assessed information on governmental and non-governmental policies that effect wetlands and wetland archaeology.

The results of existing surveys, together with data drawn from relevant Sites and Monuments Records, allow us to calculate that the average density of archaeological sites in all England's wetlands (including lowland and upland peatlands and alluviated lowlands) is 1 per 100 hectares (220 acres), with an estimated total of at least 13,400 individual monuments. Before the drainage and cutting of peat, each of these sites would have been well preserved, and many would have contained important waterlogged materials.

The most visible and widely recognised threat to the wetland archaeological resource is peat extraction, and several organisations including the Council for British Archaeology have long campaigned against the continued extraction of peat. The project demonstrates clearly, however, that the greatest impact is from the drainage of

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Wicken Fen, Cambridgeshire. A fen reserve managed to encourage the diversity of wildlife that developed as a result of human exploitation over the centuries. In order to maintain the ecological interest of the reserve, crops of reed, sedge and litter are harvested regularly. The area shown has been cut for sedge, and the surface pools are indicative of the success of measures taken to prevent loss of water from the reserve

land for agriculture and the subsequent drying out of archaeological remains, followed by peat wastage from agricultural land. Other significant threats include urban and industrial expansion onto wetlands and the eutrofication of peat through agricultural fertilisation. In all, an estimated 1.1 million hectares of wetlands can now be shown to have been destroyed as a result of these various threats.

New threats, such as short rotation cropping (including the encouragement of energy crops as part of the England Rural Development Programme) continue to emerge. Generally the lowland wetlands have suffered considerably more than upland wetlands, many of which are located in our national parks (Dartmoor, Exmoor, the Peak District) with a rather more sympathetic land management regime. Nevertheless, taken across the country as a whole, the rate of destruction of the wetland archaeological resource over the past 50 years is staggering: well over half of the potential 13,400 sites will have been destroyed or damaged, resulting in the unrecorded loss of a very significant part of our cultural heritage.

Of the surviving wetlands, less than 1% constitute areas of semi-natural land or are under active nature conservation management (although much larger areas are subject to schemes that benefit from land management and conservation regulations and subsidies that recognise and enhance wetland habitats). In most cases, such measures help protect the archaeological resource by discouraging the conversion of pasture into arable land. Nevertheless, the use of fertilisers on permanent pasture and the variable watertable that exists in such schemes (high in the winter but lower in the summer) poses a serious threat to the waterlogged archaeological resource. Despite the conclusions of the Wetland Management Project, close cooperation between nature conservation agencies and the archaeological community has been slow to develop.

The project also surveyed the prevailing land use and management regimes of surviving wetland areas in order to estimate the current condition of our wetland heritage. Although the majority of known wetland monuments have suffered from partial destruction and desiccation and a very significant number have been completely destroyed in the past 50 years, the extent of unsurveyed wetland areas (including the inter-tidal wetlands and urban waterlogged deposits) is still considerable.

Hydrology is the critical factor in preserving the archaeology of England's wetlands. Sites can be preserved only if their hydrology can be controlled. The project highlighted both the need for better prospection techniques to identify wetland archaeology and also for new approaches to the management and conservation of wetland deposits. These must address issues of drainage, catchment and water quality in order to preserve whole wetlands rather than isolated sites or 'islands' of monuments. This broader approach requires an active partnership between archaeologists, nature conservationists and a wide range of interest groups in order to preserve the natural, cultural and recreational values of surviving wetlands.

English Heritage's wetland strategy

Following completion of this project, we have developed a high-level strategy for conserving and managing wetlands that sustains many of English Heritage's core activities: identifying, understanding, protecting and managing the historic environment. It includes elements of the *Power of Place* agenda, in particular, the link between cultural heritage and nature conservation in the regeneration of the countryside, training and education to promote better conservation, and increased public access and enjoyment.

The strategy is based on four main principles:

- **Management**, promoting ways to conserve and protect the cultural heritage by developing guidance and best practice jointly with nature conservation;
- **Outreach**, promoting understanding and appreciation of the cultural heritage of wetlands by making the results of wetland research easily accessible to the general public, landowners, managers and specialists;
- **Policy**, promoting the cultural heritage interests of wetlands in the work of local authorities, national, international and intergovernmental agencies;
- **Research**, continuing with programmes of survey and excavation as a pre-condition of successful management and promoting applied research to underpin management and inform future policy.

In addition, we are also exploring how to support public participation in wetland research during fieldwork and have commissioned a project from

Exeter University to create GIS-enabled wetland archaeological resource information to support local authority planning curators. Later this year, we will be supporting a pilot project at the Lancaster University Archaeological Unit to explore in more detail the archaeological potential of upland peats and to assess the extent and causes of upland peat erosion.

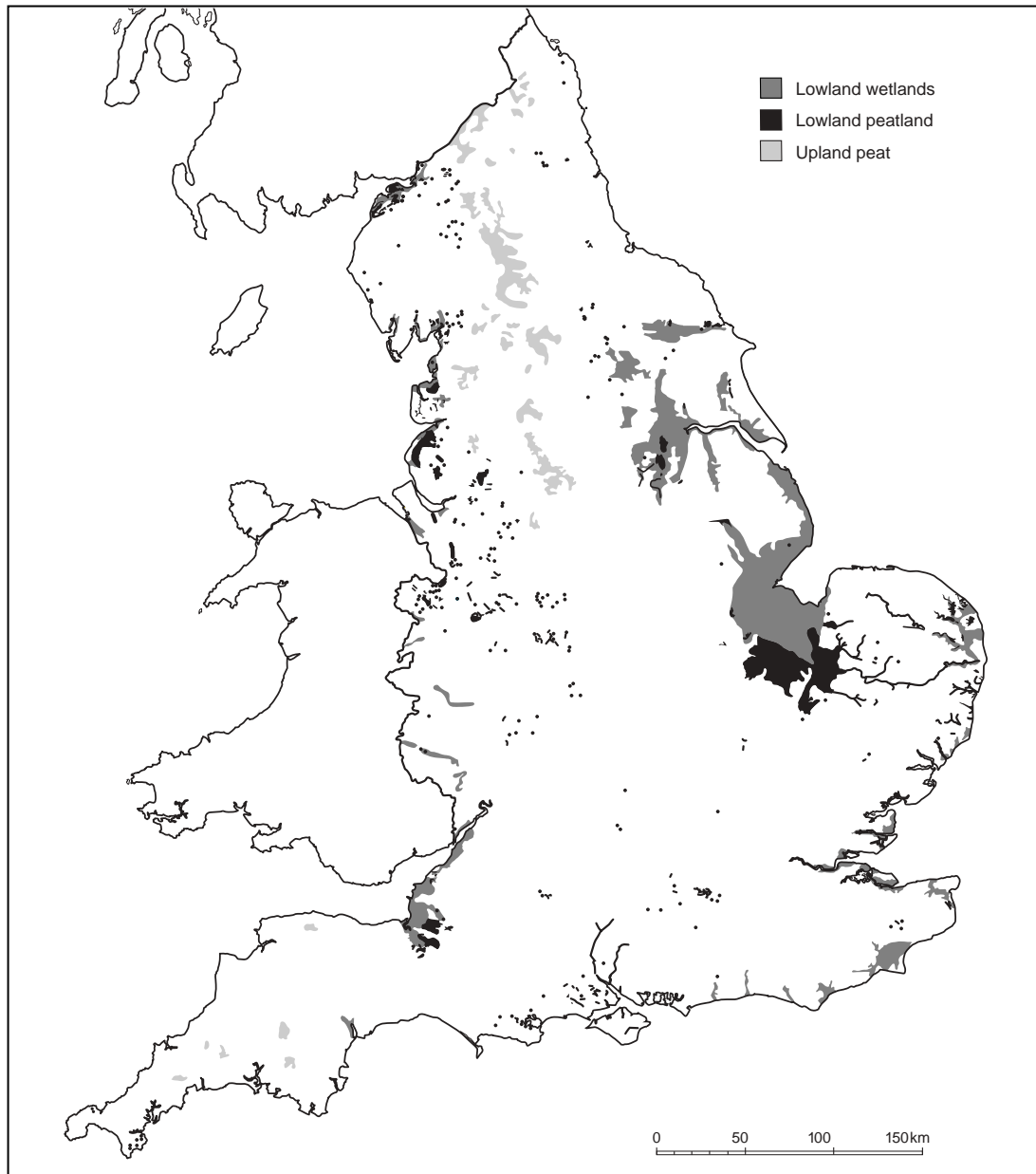
Archaeologiae Consilium or the European Archaeological Council) held a major international symposium on the archaeological heritage management of wetlands in Europe, jointly organised by English Heritage and the Wetlands Archaeological Research Project (WARP), an international association of wetlands archaeologists.

A European perspective

The problems of wetland archaeology are not unique to England, and we are working closely with our sister heritage agencies throughout Europe to find common solutions to common problems. In 1999 a newly formed network of European state heritage services (*Europae*

The symposium included a number of regional reviews of heritage management issues and practices in Europe and explored the nature of the management problems facing European archaeologists working in a wetland context. Speakers showed that, although there are clear similarities in the wetland archaeological resource across the Continent, the critical issues relating to

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Distribution map of the wetlands of England

its management vary considerably. The symposium highlighted the importance of national and international nature conservation designation and legislation for wetland archaeology and emphasised the urgent need to forge closer links with nature conservationists. In particular, the symposium promoted the better use of the international Ramsar Convention on wetlands worldwide.

The proceedings of the symposium, published by English Heritage, include a survey of wetland concepts and legislation, regional reviews, case studies and related topics that bring together heritage management and nature conservation interests. It concludes with an overview, recommendations for action and a broad strategy for heritage management of wetlands throughout Europe.

The Ramsar Convention on Wetlands

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty that provides a framework for national action and international cooperation on the conservation and wise (sustainable) use of wetlands. One of the oldest global intergovernmental environmental treaties, it was set up to safeguard wetland habitats and the species that depend upon both inland and coastal and nearshore marine systems (www.ramsar.org). One hundred and thirty countries are party to the Convention, and 1,129 separate wetlands covering more than 91.3 million hectares have been designated as wetlands of international importance.

The UK signed the Convention in 1976 and has 150 wetlands of international importance. Despite advances made since its inception, however, only a relatively small proportion of the world's wetlands is yet afforded the better protection and management that derives from designation. Many countries still lack adequate information about wetlands.

Ramsar sites are designated for their significance in terms of ecology, botany, zoology, limnology and hydrology. Much of Europe's wealth of archaeological and cultural heritage is closely associated with the great natural richness of our wetlands, and many peoples throughout the world continue to depend on wetland resources for water, food and other materials, as well as for safeguarding human health. However, despite a clear recognition of the importance of the cultural heritage (physical structures and artefacts of the past, palaeontological records of environmental and climate change, traditional water and land-use management practices, religious significance, and 'sense of place' for these often mysterious places and their wildlife), the Convention does not allow for site designation under specifically cultural terms. Because Ramsar sites contain an enormous wealth of cultural and archaeological material, it is vitally important that the cultural heritage of these sites is properly identified, documented and incorporated in management plans. Only in this way will the archaeological heritage gain any advantage from the undoubted benefits of sympathetic management regimes that ultimately derive from Ramsar designation.

The Biskupin fortified settlement, Poland. In the foreground, Bronze Age wooden posts in situ being sampled for dendrochronology, and parts of the structures preserved by the surrounding wetland. Beyond, a house and walkway re-created for public display. The site and its wetland are protected by national legislation





Looking east from Burrow Mump, Somerset. In winter, large parts of the Somerset moors are flooded for considerable periods

English Heritage now works closely with the Ramsar Bureau and is taking the lead in a number of initiatives. We are participating in consultations on the draft Global Action Plan for Peatlands devised by the International Peat Society (IPS) and the International Mires Conservation Group. We are also contributing to a survey of National Wetland Policies in Europe and revised guidelines for management planning on Ramsar sites and other wetlands. We have delivered a keynote paper at the European Regional Meeting of the Ramsar Convention on 'Cultural aspects of wetlands as a tool for their conservation and sustainable use'. Working with colleagues in the EAC, we will also be developing guidance on archaeological heritage management in wetlands for incorporation in the Ramsar Toolkit of management guidance, to be included in a handbook of good practice for use by Ramsar site managers.

The importance of cultural values in wetlands will be highlighted at the next full Ramsar Conference of Parties, on 'Wetlands: water, life and culture' (Valencia, Spain, 18–26 November 2002). English Heritage will organise a major session at the conference which we hope will lead to the formal adoption of management guidelines for the historic environment, together with a

resolution confirming the significance of the historic environment in wetlands and the need for sympathetic management. □

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WARP occasional paper 16 is available from the EAC secretariat

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