



Sherwood Forest NNR

The true legacy of the ancient woodland

Power to the people

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Amateurs as experts

The launch of a new
three-year partnership project

Lakes £1.4m makeover

The fight to rescue our lakes

English Nature is the statutory body which achieves, enables and promotes nature conservation in England.

We do so by working in partnership with individuals and a wide range of organisations including Government, representative bodies, agencies and voluntary organisations.

English Nature Magazine is published six times a year to promote nature conservation in England and make people aware of the latest developments. The views expressed in it by individuals are not necessarily those of English Nature.

For further information contact any of our offices. English Nature's National Office is: Northminster House, Peterborough PE1 1UA. Tel: 01733 455000 Fax: 01733 568834

We operate a number of other offices across the country, from where our staff deal with local nature conservation issues.

Details of your nearest office can be obtained by phoning Northminster House, or by requesting a copy of English Nature Facts and Figures Information guide, free from the Enquiry Service at Northminster House, Tel 01733 455100.

You can also learn more about us via the Internet. Our address is: www.english-nature.org.uk



Awarded for excellence

Cover picture



Cover photograph: Peter Wakely / English Nature

The home of Robin Hood, Sherwood Forest, now has a new claim to fame – the first NNR to be designated in Nottinghamshire. See the full article starting on page 8

English Nature magazine can now be read on the English Nature website at:
www.english-nature.org.uk/magazine

brief update

£1.27 million boost for Yorkshire Dales

English Nature is helping to fund a £1.27 million project to encourage a return of sustainable mixed livestock farming to the Yorkshire Dales National Park.

Over the next five years, the Limestone Country Project will strive to reintroduce traditional farming practices and promote extensive cattle farming in the Malham-Arncliffe and Ingleborough areas of the Park, which have been designated Special Areas for Conservation.

This will be done by reintroducing native upland cattle to address the decline in mixed livestock farming, which over the last 40 years has seen a rise in sheep production at the expense of cattle.

Roy and Irene Newhouse, of New House Farm – the first farm to enter the Limestone Country Project.

Partners of the project include the Yorkshire Dales National Park Authority, the National Trust and the European Union LIFE Fund.

English Nature Conservation Officer, Dr Paul Evans, said, "The project will help enhance some of England's most important wildlife sites. This project will have a vital role in conserving the special environment of the limestone country of the National Park, whilst helping to rebuild farm businesses in a sustainable way.



"The project will show that conservation of the natural environment and livestock management can go hand in hand. By working in partnership with the area's farmers over the coming months, we will set about reintroducing hardy beef breeds, such as beef shorthorn, Galloway and Dexter, to help conserve one of this area's true national treasures."

Man-made marsh

November 2002 saw the largest coastal realignment project ever undertaken in Europe with the breaching of the sea wall at Abbots Hall Farm, Essex.

The project, supported by English Nature, aims to convert over 84 hectares of arable farmland into salt marsh, mud flat and grassland

as part of a nationwide initiative to restore the UK's rapidly-declining coastal wetlands.

The sea will sweep through the man-made breaches created in the 3.5 kilometre sea wall defending the area, and it is hoped the flooded area will gradually generate as natural salt marsh and saline lagoons,

both internationally important wildlife habitats.

The farm is situated on the Blackwater Estuary – an internationally important wetland area (Ramsar site) for wildlife, a Site of Special Scientific Interest, a Special Protection Area for Birds and a marine Special Area of Conservation.

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Although English Nature magazine does not have a regular letters page, I am always interested in receiving feedback about the magazine, or letters on subjects that may be of interest to our readers. If there is a subject that you feel would be relevant to our readership, please write to me or email me, and I will certainly consider publishing your letter in the magazine.

Contact me, Gordon Leel, at English Nature, Northminster House, Peterborough, PE1 1UA, or at gordon.leel@english-nature.org.uk

If this copy of English Nature magazine is not your own, and you would like to go on our mailing list to receive the magazine regularly, please contact Alison Eley, IMT, English Nature, Northminster House, Peterborough PE1 1UA.

Or you can e-mail your details to alison.eley@english-nature.org.uk

The truth about bats

Bats hit the headlines in November last year when conservationist David McRae from Angus, Scotland, tragically died from rabies after being bitten by one of the mammals.

Only two bats (both Daubenton's) have been recorded as carrying the European Bat Lyssavirus (EBL) in 15 years of monitoring by the Veterinary Laboratories Agency.

There is no risk of catching rabies from touching bat droppings or being in close proximity to bats roosting in buildings. All 16 species of British bats are protected by law and must not be harmed.

Most bats found roosting in houses are pipistrelles or long eared bats and none have been found to carry EBL. Daubenton's bats, which represent a quarter of one per cent of bats roosting in buildings, have little contact with people.

It is only possible to contract rabies from a bat bite or from saliva from an infected animal entering an open cut. The best advice is to avoid handling any bats.

If you find a sick or injured bat, do not touch it. Call the UK bat helpline on 0845 1300 228, or find your nearest bat worker on the Internet at www.bats.org.uk

On the rare occasion of being bitten, you should:

- Wash the wound immediately with soap and water
- Clean with an alcohol-based substance or disinfectant
- Seek medical advice straight away – call the NHS helpline on 0800 783 5066. Prompt post-exposure treatment is believed to be completely effective.

English Nature is now insisting that registered volunteer bat workers are immunised against rabies before they handle bats. English Nature strongly advises that all bat licence holders, including researchers and consultants, obtain this immunisation.

Farmer fined £750 in landmark case

In a landmark case, a farmer was fined £750 after pleading guilty to recklessly destroying shelter for endangered water voles on a drainage ditch running across his Wiltshire Farm.

Magistrates at Devizes, Wiltshire, fined Charles William Butcher, 53, of Sleight Farm, and awarded prosecution costs of £150 for offences committed in March 2001 under the Wildlife and Countryside Act. Butcher admitted that he had ignored Environment Agency guidelines designed to protect water vole burrows during work to widen Crookwood water course.

It is believed to be the first



Hugh Clark / English Nature

successful prosecution for water vole habitat using the recently amended Wildlife and Countryside Act.

English Nature's mammal expert, Tony Mitchell-Jones, said, "We don't want to stop work taking place on farms. All it needs is a small change to working practices to

ensure the survival of this seriously threatened species, whose numbers have plummeted by 88 per cent from 7,295,000 to 875,000 between 1990 and 1998.

"This case sends out a clear message that landowners should follow the guidelines to help save the water vole."

NEWS IN SHORT

English Nature funds Ecologist

English Nature is helping to fund a new Woodland Ecologist for the South East England District of Forest Enterprise for an initial period of three years.

Jay Doyle has taken up the post, having previously worked for Scottish Natural Heritage and Surrey Wildlife Trust.

Jay said, "I am really looking forward to building on the good work already done, particularly on the restoration of ancient woodland sites."

Lowland heathland more rare than rainforest

English Nature has produced a new leaflet highlighting the plight of Britain's lowland heathland – which is now more rare than rainforest.

Heathland Ecologist for English Nature, Isabel Alonso, said, "Britain holds 60,000 hectares, or 20 per cent, of all lowland heathland in the world, but for too long, heathland has been seen as little more than wasteland, prime areas for urban development and forestry."

Lowland heathland: a cultural and endangered landscape, outlines why lowland heathland is important for wildlife and what we need to do to conserve and restore it. The booklet is available free from English Nature's Enquiry Service.

Thumbs up for strategy

English Nature has welcomed the new Biodiversity Strategy for England, launched by Secretary of State for Environment, Food and Rural Affairs, Margaret Beckett, at the London Wetland Centre in October last year.

English Nature has played a key role in developing the strategy, providing nature conservation advice and information, and will take a lead role in three strategy areas – urban areas, engaging business and local and regional issues.

brief update

NEWS IN SHORT

Help our hedgerows

Local community groups, from women's institutes to farmers, are being encouraged to help conservationists find desperately sought information about the state of our hedgerows with a little help from a newly-published handbook, *the Hedgerow Survey Handbook*, which English Nature has helped produce.

Conservationists need to know how many hedges are left across the country, how important they are for wildlife, what condition they are in and what their distinctive qualities are.

Environment Minister, Michael Meacher, said, "Hedgerows need the care and commitment of local people, land managers and the wider public. The handbook will give local communities the chance to take part in the delivery of the UK Biodiversity Action Plan for ancient and/or species-rich hedgerows."

The Department for Environment, Food and Rural Affairs (Defra) is funding grants for groups to carry out hedgerow surveys.

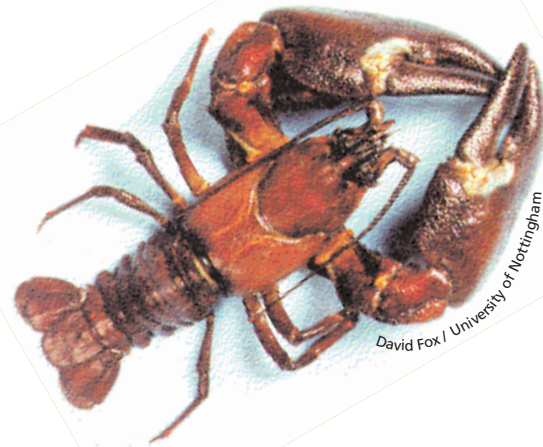
To apply for a grant and to get a free copy of the handbook, call Defra on 020 7238 5662 or email farmland.conservation@defra.gsi.gov.uk Alternatively, the handbook is available on the English Nature website - look under publications and keyword search hedgerows.

Flora English Nature

The winter 2002 edition of *Flora English Nature*, outlining some of the key botanical projects that English Nature is involved in, is now available from the Enquiry Service on 01733 455100.



Crayfish pick up the wrong signals



David Fox / University of Nottingham

English Nature and the Environment Agency are sponsoring an innovative research project to trick North American signal crayfish (shown left) into 'sex traps' to lure the invasive species from British waters. The crayfish are being lured into underwater baskets with the scent of pheromones for bait - the natural chemicals produced by crayfish to attract a mate. The native British crayfish faces an uncertain future, threatened by pollution and habitat destruction as well as competition from its trans-Atlantic rival.

Now is the time for... moss

Continuing in our expert series, Ron Porley, Vascular Plant Botanist and Bryologist for English Nature, fills us in on moss...



Ron Porley / English Nature

"This time of year, when flowering plants die back, and short winter days stretch ahead, the magical world inhabited by mosses and liverworts comes alive and delights our senses.

Although many are conspicuous, forming verdant tapestries, many others hide themselves from all but the most determined bryologist. The moss genus *Ditrichum* is a real hands-and-knees (or better still, belly) job; they can be exceedingly tiny, with stems reaching no more than a few millimetres tall, but sometimes forming dense stands so making them easier to find.

Cornish path moss *Ditrichum cornubicum* is found at just two spots on Bodmin Moor (and nowhere else in the world!), and is restricted to mine-spoil rich in copper. Lead moss *D. plumbicola*, once considered endemic to Britain but recently found in Germany, grows on mine-spoil rich in lead. Both are Biodiversity Action Plan species and both like to grow on disused mine sites. This is unfortunate, since industrial land is often

Lead moss *Ditrichum plumbicola*, rediscovered at Allenheads, Northumberland, in 2002.

seen as an eyesore, full of opportunities for tidying up, landscaping or growing conifers. It is important that we protect the few known sites where these curious little mosses grow.

To add to their mystery, these *Ditrichum* species have never been found in Britain with capsules (the spore containing organ) and seem only to reproduce asexually, spreading by deciduous shoots and subterranean 'tubers'. They were placed in the genus *Ditrichum* on vegetative characters alone - which is not wholly satisfactory. So Fred Rumsey of the Natural History Museum is looking at their genetics, along with a third species, *D. lineare*. From this work we hope to gain a better understanding of their taxonomic relationships and population genetics."

Ecological networks – a new concept for the UK

Cheshire County Council

The initial findings of a unique biodiversity project called Life EConet will be presented at a conference taking place in Chester between 2 and 4 April 2003.

The project has been running since September 1999 and is exploring the best ways of creating networks to connect areas of wildlife. It will demonstrate how to use these networks to make land use planning and management more sustainable and was the only project presented by the Local Government International Bureau at the World Summit on Sustainability Development, which took place in Johannesburg in August 2002.

Across Europe, increasing demands on land have changed many landscapes, with wildlife habitats becoming small, isolated and ecologically fragile, threatening the survival of many plants and animals.

Life EConet is working with communities in Cheshire and Italy. Partners from the Netherlands, world leaders in ecological networks, are also advising the project.

Across Europe, increasing demands on land have changed many landscapes, with wildlife habitats becoming small, isolated and ecologically fragile, threatening the survival of many plants and animals.

The five-strong Life EConet team, headed by Ian Marshall of Cheshire County Council, is specifically looking at ways of expanding and linking Cheshire's priority habitats - peatlands, heathlands, woodlands, grasslands and wetlands.



(Top) The mid-Cheshire sandstone ridge - one of the core areas of Cheshire's ecological network.

(Right) The project depends on the support of local people, including farmers.



Cheshire County Council

Funding for the project until September 2003 (£1.55 million) has come from the European Union's Life-Environment Programme. Ian is currently seeking additional funding to support the project until 2020.

Ian said, "The Project has had to adapt to changing circumstances. Foot and Mouth was a very difficult time for Cheshire's farmers and landowners, and we were unable to get to farms. We kept in touch, however, and have built up excellent relationships, with over 1,500 stakeholders now involved.

"Ultimately, the creation of new habitats will depend on the support and participation of these people, and the project is attempting to show not only how new habitats benefit wildlife but also how they could encourage farm diversification and stimulate rural employment."

English Nature is one of 18 partners represented on the project board and in 1996 helped provide initial funding to develop the idea in Cheshire.

Environmental Information Manager for English Nature, Keith Porter, said, "Life EConet has brought home to us the common problem across most of Europe of loss of linkages and gives us an excellent opportunity to find solutions on the ground. Our Sites of Special Scientific Interest are often isolated and fragmented by intensive farming, housing or roads and need to be linked to help animals and plants move between them."

Anyone interested in finding out more about the Life EConet Project or if you want to attend the conference, log on to www.lifeconet.com

WHEN NATURE CALLS

January. Another year of enquiries to look forward to and another to look back on. As you might have guessed, 2002 ended with a flurry of calls about bats and rabies, after the tragic death of Scottish bat worker David McRae. I hope we were able to reassure worried callers that they were in no danger.

Someone must be reading this column because, after my remarks about a request for a source of hardwearing picnic benches, I received a catalogue of wooden furniture from the Forestry Commission in the New Forest!

A horrified colleague told me about the small and uninvited mammals who had been visiting her home – rats. This is the first time I have heard of this in the seven years of the Enquiry Service – in an inhabited house at least. They apparently gained access via a building defect. I am told that we are all no more than three metres from a rat. An unsettling thought for some.

The number of enquiries tails off in December but we are still getting asked about the effects of foxes in gardens – do they kill cats? Are my children safe? No and yes are the answers.

January may be the heart of winter but, on mild days, song thrushes are singing. Bird courtship is well underway. This has been a 'vole year' and up to 70 short-eared owls have been feeding on them at Nene Washes – a sort of supermarket dash, eat now while stocks last.

By the month's end, frogs will be spawning in the south west, and our phones will start to ring. A sure sign that spring is on its way.

By Dick Seamons
English Nature's Enquiry Service

Power to the people

In its first year alone, Wildspace! awarded no less than 113 grants to 90 community-based projects – a total of nearly £5 million. Here we look at three where local people are being helped to create, enhance and maintain green spaces for all.

The living green spaces that form parts of our towns, cities and villages are important to us, not only because they support a rich and vibrant variety of wildlife, but because they make the places where we live and work healthier and less stressful.

Enabling local communities to care for these green spaces sits at the very heart of what Wildspace! is about. Run by English Nature, with the support of a



New Opportunities Fund
PARTNER

National Lottery award from the New Opportunities Fund, it provides grants of between £5,000 and £25,000 to local authorities, wildlife trusts, Local Nature Reserve (LNR) management groups, 'friends of' groups, charities and other organisations.

For advice on developing a project, declaring an LNR or applying for funding, contact English Nature's Wildspace! grant management team on 01733 455415. Further information can be found by visiting www.english-nature.org.uk or, for an application pack, call free on 0845 0000 121.

ESSEX

Putting a new slant on nature

Local Nature Reserves are for everyone. And Epping Forest District Council has been using art to get all ages involved.

After Roughtalley's Wood was declared an LNR in August 2000, English Nature gave Epping Forest District Council a grant to lay a 700 metre path around the wood, but Countryside Manager Paul Hewitt knew he had to get creative to encourage more people to visit. With a Wildspace! grant, Paul, who works for the Council's Countryside Service, was able to commission Kent-based artist Will Glanfield. The brief was to interpret the environment of the wood in a new way.

The project included volunteer days in the wood and workshop sessions with local schools and residents. Trips to the wood were also organised and talks were given to local sheltered housing units for the elderly and families in temporary housing.

The result? A beautiful oak seat and a standing sculpture in the wood, artworks in the two primary schools and an influx of new volunteers and visitors. "Children and adult volunteers helped clear trees and install the bench and sculpture," says Paul.

"Before the project, it was surprising how few people from the village even knew where the wood was. Even children from the local primary school were unaware there was a wood in the middle of their village. We brought them onto the reserve and soon they were bringing their mums and dads along too."

One of the sculptures at
Linders Field NNR, Epping Forest



Paul Glanfield/English Nature



Engineers install a kestrel box in a water pumping station next to Oxmoor Wood LNR

NORTH WEST

Kingfisher-cam puts wildlife on the web

Where do you go when you really want a bird's-eye view of the world? Jeff Clarke, Wildspace! Officer for Halton Borough Council has the answer. He and his colleagues have created 'Wild about Halton' – a zone on the Council's website that will broadcast live pictures from the area's new Local Nature Reserves (LNRs) at Oxmoor, Dorchester Park and Clinton Wood.

Four web-cams are being set up on-site – one of them on a kingfisher perch and another in an area noted for kestrels. "If you're not lucky enough to be visiting the website just as a kingfisher arrives, you can look at footage from as many as 21 days previously," says Jeff.

While wildlife movies on your PC screen might be good fun, they're an important part of Jeff's ground-breaking educational work too. He has teamed up with education consultants and schools to develop learning packages linked to science and humanities at Key Stages 3 and 4. All Halton's 71 schools have direct links to the website too.

The LNRs themselves have huge potential for education – not just for schoolchildren, but for adults too. Oxmoor LNR is a tranquil spot with spring butterflies, water vole and beautiful flora – yet, it's in the middle of a light industrial area.

"The local community is the business community," says Jeff. "I'm looking at ways of encouraging them to visit the wood during their work breaks."

Dorchester Park is a varied mix of birch woodland and orchid-strewn grassland in the midst of a housing development. Not only is it easy for local people to get to, it's an important site for biodiversity. Many people also live close to the third LNR, Clinton Wood, but its wet conditions deter many visitors, especially those with a disability. Part of the £67,600 Wildspace! grant will be used to create a new pathway.

"The three reserves are important in many ways and the website is a great way of promoting them and of encouraging people to use them," says Jeff. "It's also an important promotional tool within the Borough Council."

LONDON

Community spirit lives on in cemetery

Walking through Hackney in London's East End, you can expect to hear any of 220 different languages – and that's just among the residents. So how do you encourage such a mixed bunch to discover their Local Nature Reserve (LNR)?

Kirsty Peterken, Community Liaison Officer for Hackney's Wildspace! scheme, has put together a programme of events and activities that reaches out to every part of the community. Abney Park Cemetery, one of the oldest garden cemeteries in London, is Hackney's first LNR. A 13-hectare woodland, important both for its ecology and its impressive architecture, the park is managed by the Abney Park Cemetery Trust.

"Leading up to our open day earlier this year, we organised all kinds of arts and crafts workshops for groups with special needs, groups of elderly people, schools and many others," says Kirsty.

"The elderly people went on journeys through the park and collected leaves and flowers to set into handmade paper; we did old-fashioned photography that uses light activated paper, but needs no cameras, and we made small chairs to fit with our theme of the enchanted forest."

And that was only part of it. Teenagers – a notoriously difficult group to get involved – got stuck into creating banners and windmills; elderly people from a local Jewish centre visited the reserve for the first time, and Kirsty even brought in an interpreter to help with history and nature walks for Turkish visitors from the Daymer Centre. Over the summer, hundreds of local children came along to the summer playscheme to play games, make masks and learn about the wildlife.

"We have an amazing mix of people around here," says Kirsty. "Not only are there 220 languages spoken, people have different abilities and different interests. I use my background in arts and crafts to offer workshops, walks, talks and events that bring all kinds of people into the reserve."

Members of a local Jewish centre
enjoy a visit to Abney Park LNR

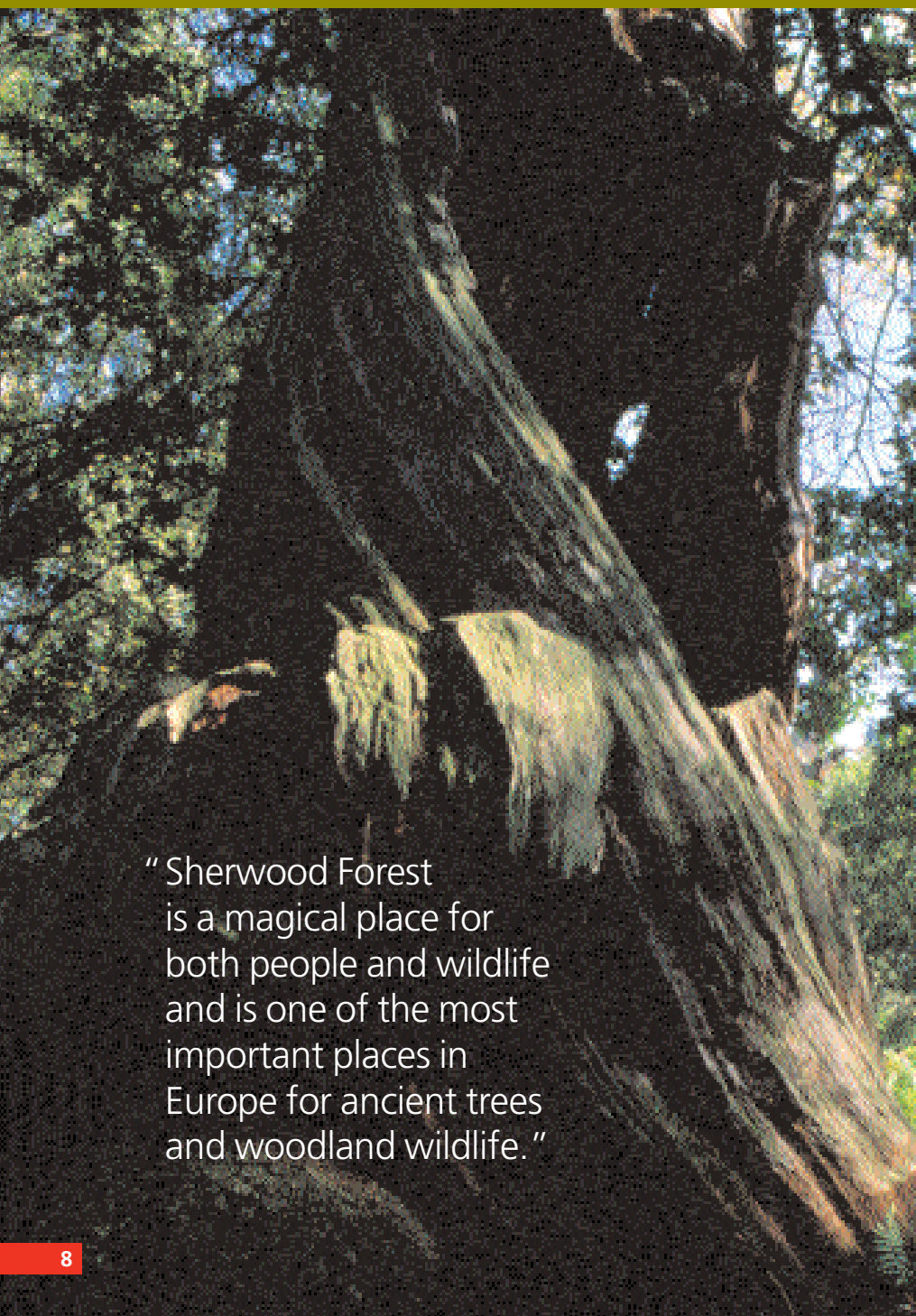


Paul Glanfield/English Nature

Wildspace! is one of eleven grant-making schemes delivered by award partners like English Nature for the New Opportunities Fund's Green Spaces for Sustainable Communities Programme. Further details can be found at www.nof.org.uk

The true legacy of Sherwood Forest

Over 200 hectares of woodland set in arguably the most famous forest in the world will be protected and preserved for the foreseeable future.



“Sherwood Forest is a magical place for both people and wildlife and is one of the most important places in Europe for ancient trees and woodland wildlife.”



Chris Gomersall / English Nature

Declaration of the NNR in front of The Major Oak tree, with the Duke of Gloucester (left) and English Nature's Chair, Sir Martin Doughty

a priority species on the UK Biodiversity Action Plan.

Animals dependent on the trees include

The ancient forest of Birklands, an extensive area of pasture-woodland and heath set in Sherwood Forest, Nottinghamshire, was designated the county's first National Nature Reserve (NNR) in November last year.

The fact that the NNR was introduced last year made the event extra special as 2002 marked the 50th anniversary of NNRs and the Queen's Golden Jubilee. A ceremony was held at the Major Oak, the biggest oak tree in Sherwood Forest, and was attended by the Duke of Gloucester.

A Site of Special Scientific Interest and a Special Area of Conservation candidate, Sherwood Forest is, of course, best known for its most famous inhabitants Robin Hood and his band of merry men, who supposedly robbed the rich to give to the poor in around the 14th century.

Whether this is true or not, we shall never know, but what is fact is that Birklands is dominated by

over 1,000 veteran oaks – sessile oak and pedunculate oak – and some are over 500 years old. Other native trees adding to the make-up of the forest include silver birch, rowan, holly and hawthorn.

The NNR is one of the most important sites in the UK for old trees and invertebrates. Over 1,000 species of beetle and spider have also been found, many of which are rare and dependent on those old trees for their survival, like net-winged beetles, darkling beetles and false scorpions. Over 200 different species of fungi have been recorded on the trees and on the woodland floor, including the rare oak polypore,



Peter Walely / English Nature

birds like the great-spotted woodpecker, tawny owl and redstart and a number of bat species, such as noctule. The nightjar can be heard during the summer months, whilst the tussocky, grass-dominated heaths are particularly important for ants and spiders and are favoured feeding areas for green woodpeckers. Large tracts of sandy heathland, dominated by heather, were once typical of Sherwood Forest and remnants can be found within more open areas of the new NNR.

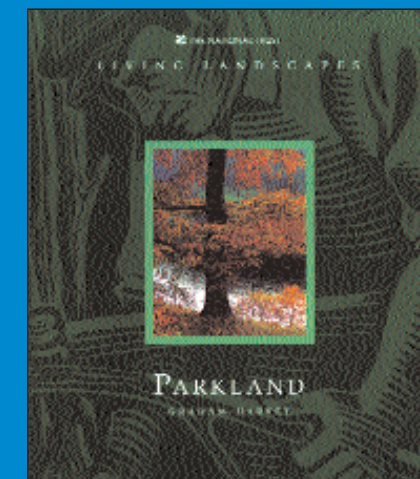
Conserving the forest habitat is a key aim for managers of the NNR and they are planning to remove non-native conifers from around the ageing trees, restore grazing animals to the forest and carefully manage the half a million visitors that come to Sherwood Forest every year.

Sir Martin Doughty, Chair of English Nature, said, “Sherwood Forest is a magical place for both people and wildlife and is one of the most important places in Europe for ancient trees and woodland wildlife. It is steeped in history with magnificent old trees rich in birds, beetles and bats and is truly deserving of its status as an NNR.”

Local Conservation Officer for English Nature, Steve Clifton, said, “The NNR declaration is an historic landmark in the fascinating and turbulent history of this unique forest and highlights the fact that there is certainly much more to Sherwood Forest than Robin Hood!

“It recognises the great commitment of Nottinghamshire County Council and Forest Enterprise, as managers of the NNR, to continuing their hard work to maintain the outstanding ecological and cultural significance of this timeless and inspirational place.”

Book review



“Parkland” by Graham Harvey
Published by the National Trust in their Living landscape series, £18.99

Graham Harvey is a freelance journalist and author who has written for *The Sunday Times* and *New Scientist* and is the Agricultural Story Editor for the radio series *The Archers*. His first book *The Killing of the Countryside*, won the BP Natural World Book Prize in 1997.

In the foreword to *Parkland*, Fiona Reynolds, Director General of the National Trust, expresses her hope that, “Graham Harvey's excellent account of the story of parkland will inform and inspire us all to explore them further.”

In my view he succeeds admirably. His book of just 160 pages, delves into the history of parkland as an enduring landscape of immense richness and diversity. He takes us through the many different uses for which parklands have been planned, designed and created – from wildwood to Arcadian dream; from being the personal hunting grounds of medieval aristocracy to protected landscapes for wildlife.

The book is lavishly illustrated, with reproductions from paintings, woodcuts and tapestries that depict the work and leisure of all those who have taken advantage of what these remarkable places have provided throughout their thousand-year history.

Many specially-commissioned watercolour illustrations of wildlife by the artist, Dan Cole, further illuminate this delightful book.

With regard to the future of parkland, Graham Harvey signs off his very readable text with a plea to, “ensure that this thousand-year-old link continues by working even harder to integrate parks... into contemporary life. Only then will we be certain of passing on this magnificent heritage to future generations.” Let's hope we listen.

Reviewed by John Lincoln,
National Nature Reserves
Communications Officer, English Nature

Our knowledge of the natural world owes much to the efforts of amateur naturalists – take Charles Darwin. However, due to the informal means by which they are made, their contributions are often invisible.

AMATEURS AS EXPERTS

Now a new three-year study funded by the Economic and Social Research Council has been launched to better understand – and utilise – this relationship between ‘amateur’ and ‘professional’ knowledge for the benefit of nature.

A three-way partnership between English Nature, the Natural History Museum and the Institute for Environment, Philosophy, and Public Policy (IEPPP) at Lancaster University, the project will look primarily at the work that amateurs do. It will also develop ways of encouraging them to take an active role in the Biodiversity Action Plan (BAP) process. Now more than ever, the process places greater emphasis on the ways in which broader participation can influence policy relating to the natural world. The close and regular contact that the UK’s 100,000 amateur naturalists have with their local environment means that there is a definite place for them in this process.

“We are promoting the active participation in the BAP process by amateur specialists on previously

neglected groups of invertebrates and plants such as sawflies, beetles, mosses and lichens,” says Dr Gill Stevens, Cryptogamic Plant Co-ordinator within the Natural History Museum. “We will help provide the resources and know-how to the amateur societies as a means of bridging the gap between them and statutory agencies.”

“This is a ground-breaking initiative,” adds Professor Robin Grove-White, who leads the Lancaster University team. “Our own role as social scientists will be to act as friendly observers and advisers, whilst at the same time documenting lessons learnt from the exercise as a whole. New forms of collaboration outside specialist boundaries always pose novel problems and challenges, and everyone wants to learn the right lessons in this case. It’s a first in Britain and we’re confident that by the end of three years, there’ll be a fascinating story to be told. There’s already a lot of interest, both here in Britain and internationally.”

For Gill and Invertebrate Co-ordinator Bridget Peacock – both posts are sponsored by English Nature – this is the natural extension of their previous work to forge links with amateur

“It’s a first in Britain and we’re confident that by the end of three years, there’ll be a fascinating story to be told.”

organisations. Indeed, much of the project relies on the existing partnership between English Nature and the Natural History Museum, and the project is based on a current joint venture to survey BAP cryptogamic plants and invertebrates. English Nature Chief Scientist Dr Keith Duff, who sits on the study’s 12-strong advisory board said, “The Natural History Museum and English Nature have a long history of working together, and we welcome the opportunity this new project will provide for more people to get involved with conservation work by increasing our knowledge of the rarest organisms.”

“We are delighted to have this unique opportunity to work with English Nature and the social scientists at Lancaster University,” adds Dr Johannes Vogel, one of the researchers at the Natural History Museum. “The study will provide new insights into how best to stimulate and direct specialist amateur enthusiasm into the BAP process.”



Members of fly-fishing clubs around the country learning techniques for collecting insects from the river bed and receiving advice on insect identification at the John Spedan Lewis Trust fish farm on the River Test, Hampshire.

Photo courtesy of the Natural History Museum

Tales from the river bed

Fly-fishermen spend considerable time on local river banks and have built up an in-depth knowledge of the flies there. Yet these anglers have identified an apparent decline in fly-life over the past decade. Anthony Keith Bridgett of the Leek and District Fly Fishing Association is one such who has attended a series of river fly identification workshops developed to tap this valuable source of information.

“I’m very interested in river environments so, once I found out about the workshops down on the River Test in Hampshire, I contacted the Natural History Museum to find out more. I spoke to Invertebrate Co-ordinator Bridget Peacock who helped to bring the workshops together and she invited myself and our Treasurer down. I was very impressed with what I saw and talked to Bridget about introducing organising a workshop in our own region. There are now plans for such an event early next year.

“Having fished the River Dove in the Peak District for over 30 years, I’ve seen a definite decline of what were once prolific insects. When once an ‘Iron Blue Done’ was an essential part of any fly box here, I’ve not seen evidence of the fly for eight or nine years. By attending these workshops and learning these identification skills, we can begin to play an active role in monitoring the recovery or otherwise, of a river and its invertebrates. People like myself, other

anglers and river keepers certainly have more time than a professional naturalist to cover a specific site.

“I think that what sets an amateur and a professional apart is that the latter is a recent phenomenon. We’ve been identifying insects for a very long time now – in 1653 when *The Compleat Angler* was published, angling and the imitation of flies was an age-old skill. If we all start feeding in and sharing our experience on a formal basis, problems – and solutions – may be identified all the quicker.”

A flowering interest

A love of walking and wildlife has kindled many an amateur naturalist’s interest in nature. This much, at least, is true of Tom Blockeel, a former President of the British Bryological Society with 30 years of continuous experience and expertise in identifying bryophytes – mosses and liverworts – under his belt.

“Although this wasn’t my subject at university, I’ve been interested in bryophytes since my student days – especially bryophyte floristics and taxonomy – and have bryologised widely in Britain and Europe. During that time I’ve built up quite a detailed knowledge of regional floras, particularly of Derbyshire and South Yorkshire, and have amassed a large amount of distributional data. As a result, I’ve contributed to many surveys of priority Biodiversity Action Plan (BAP) bryophytes.

“Amateurs like myself can contribute to the BAP process both through specialist knowledge and expertise, and in the provision of relevant data. Also by working closely with professionals. A particularly good example was in 1978 when I came across an unknown moss in arable fields in Yorkshire. With the help of the late Dr Harold Whitehouse of Cambridge University, I was subsequently able to describe this as a new species (*Barbula tomaculosa*, now *Didymodon tomaculosus*).”

Partnerships such as these will form the theme of the forthcoming Species Recovery Programme (SRP) conference. ‘Partnership in Action’ will be hosted by London Zoo on 26 February 2003 and will provide all SRP partners with the opportunity to share best practice and consider progress against the England Biodiversity Strategy. For more information, contact Angie Brewell of English Nature’s Terrestrial Wildlife Team on 01733 455 271 or email angie.brewell@english-nature.org.uk

A river runs through it

Bleak it may be, but the moorland in and around Moorhouse – Upper Teesdale National Nature Reserve (NNR) has a compelling story to tell. Anthony Toole took to the hills in one of our largest nature reserves.

Covering an area greater than 7,000 hectares, westward from High Force almost to the summit of Cross Fell, Moorhouse – Upper Teesdale NNR is a union of two former nature reserves and encompasses the first twenty miles of the course of the River Tees.

Trickling out of the sodden sponge of the highest Pennines, the water flows through heather and blanket bog, gathering supplies to fill the reservoir at Cow Green. It flows over the dam and almost immediately crashes down the staircase of Cauldron Snout before meandering through hay meadows and finally falling over the abrupt shelf of High Force.

Cow Green reservoir was constructed during the late 1960s to provide water for the industries of Teesside. Its building created controversy, as its waters inundated 312 hectares of scientifically important habitats, containing rare plants found nowhere else in England.

To the west of the reservoir lies the Moorhouse section of the NNR whose 3,894 hectares are owned freehold by English Nature. Its southern boundary crawls up the side of Knock Fell then over the Pennine watershed. It moves north for a few miles to enclose Great Dun and Little Dun Fells, then returns over the saddle between the Little Dun and Cross Fell to follow the infant Tees back down to Cow Green.

After the last ice age, much of the area was colonised by birch trees. As the climate grew warmer and wetter, these were replaced by the heather, grasses and mosses that decayed to form a thick blanket of peat. For the last thousand years, the appearance of the land in and around the NNR has been shaped by sheep grazing. English Nature now manages the reserve to conserve the moorland habitats, while monitoring

any changes brought about by sheep farming and recreational use.

Part of the Pennine Way follows the high summits within the reserve, so that hundreds of walkers each year can enjoy the spectacular views. To the east, the moorland slopes are gentle and channels that cut through the peat to the bedrock, carry tributaries into the Tees, which runs along the valley bottom. The western escarpment is much steeper and falls to the plains over which the Eden flows. Beyond that, agricultural flatland reaches across to the hills of the Lake District.

English Nature funds research into the geology and soil structures of the reserve, and the interactions between species of plant and animal life here. Weather observations have also been made continuously since 1952, and the effects of heather burning on the grouse moors, grazing and climate change are documented in several hundred scientific papers. This means that the NNR contains some of the best-understood upland environments in the world.

“For the last one thousand years, the land in and around the NNR has owed its appearance to the grazing of sheep. English Nature now manages the reserve so as to conserve the moorland habitats”

Few mammals are found here, other than rabbits and the occasional fox. Birds, however, are more plentiful and include red and black grouse, snipe, curlew, lapwing, golden plover, dunlin, teal, mallard and widgeon.

Stretching away from the eastern end of Cow Green reservoir, the Upper Teesdale half of the NNR offers a complete contrast. It is managed by a partnership consisting of English Nature, local farmers and the Raby and Strathmore estates. From the car park that overlooks the lake, a nature trail laid out by English Nature follows a well-surfaced track, much of it negotiable by wheelchair, for about one-and-a-half miles. It leads the visitor along the base of Widdybank Fell, past the spoil heaps of old lead and barytes mines and across a number of different geological zones, each with its own ecology.

The early rocks of Upper Teesdale consist mainly of carboniferous limestone, laid down by the corals of ancient seas. Nearly 300 million years ago, volcanic activity forced through these the quartz dolerite of the Great Whin Sill to form the crags that dominate the land beyond the dam. The heat and pressure of the vulcanism cooked the existing rocks into a crystalline marble known as sugar limestone. The varied habitats created by this geological history give rise to the flowers for which Upper Teesdale is world famous. Often referred to as the “Teesdale assemblage”, these are alpine and arctic in nature, and have survived here since the last ice age. Mountain pansies are abundant, along with dog-violet, the starlike spring sandwort and common rock rose. The bogginess of the ground encourages several species of sphagnum moss and insectivorous plants such as butterwort and sundew. The pride of the NNR, however, is the rare, deep blue spring gentian, found in the British Isles only in Teesdale and the west of Ireland.

From the end of the nature trail, the ground drops steeply to the top of Cauldron Snout. Here, the track becomes much more rugged as it threads its way, sometimes precariously, down the side of the cataract.

By comparison, the flat approach from the bottom of Cauldron Snout to Falcon Clints is quiet. The Pennine Way, having come back over the hills from Dufton, is picked up again and follows boarded walkways and large, semi-submerged rock slabs over the boggy terrain of the riverbank.

Falcon Clints and the crags of Cronkley Scar, across the river, are part of the Whin Sill. As the Tees flows out of the gorge, it emerges into boggy pasture, which in spring, is a yellow blaze of buttercup and noisy with the constant call of curlew. Every walled field, large or small, contains numerous rabbits and nesting lapwings. Fiercely protective of their chicks, the latter will dive-bomb, without hesitation, any pheasant that comes too close.

Over the next couple of miles, the river swells in readiness for its final spectacle, which sees it crash, in full volume, over the precipice of High Force, said to be the largest waterfall in England. After reaching such a crescendo, the Tees has little else to do, but bid farewell to the NNR and continue on its way towards the North Sea at Middlesbrough where English Nature manages part of its estuary as the Teesmouth NNR. But that's another story.

New lease of life for our lakes

English Nature is undertaking a two-year flagship project to rescue some of our most important lakes, 190 of which are designated Sites of Special Scientific Interest (SSSIs) because of their aquatic plant communities.

The Lakes Flagship Project will cost around £1.4 million. Most of the funding will come from the £10 million grant English Nature secured from the Treasury's Capital Modernisation Fund in October last year. The rest will come from the budget for Biodiversity Action Plans, with a small contribution from the Environment Agency.

Fish present a problem in at least 30 lakes. Carp and bream, introduced for coarse fishing, feed on the lake bottom and stir up sediments. This creates turbidity and reduces light penetration, causing some plants to die out.

The situation is so bad that, in some shallow lakes, two-thirds of the contents may be silt and only one-third water. In these cases, most, if not all, of the plants and animals the lakes were designated SSSIs for, have disappeared.

Invasive alien plants are a further problem. For example, Australian swamp stonecrop has smothered hundreds of ponds and small lakes in England, and is now a problem in a few SSSI lakes.

At least half of our SSSI lakes, 19 of which have also been recognised as being of European importance and have been designated candidates for Special Areas of Conservation, are suffering from a build up of nutrients, such as nitrates and phosphates (eutrophication). These inputs come mainly from sewage or agricultural run-off.

(left) Aqualate Mere NNR, Staffordshire

The project will also identify work needed to bring other SSSI lakes up to favourable condition. Preparatory work is being undertaken at 10 SSSIs and English Nature is working with the Environment Agency on a protocol to prioritise other lakes for action.

Lakes Restoration Project Manager, Allan Stewart, said, "Healthy lakes are not only good for wildlife and enrich our quality of life, they are also important recreational places for people. The importance of maintaining or restoring the variety of wildlife in lakes is now recognised."

"Water companies are installing treatment processes to reduce the amount of nutrients discharging into watercourses from sewage effluent so that lakes will once again be rich in plants and have clear water. There still remains a

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- ③
- ④

The Lakes Flagship Project will concentrate on the following areas:

- ① **Aqualate Mere National Nature Reserve, Staffordshire:** removal of silt from the lake bed to enable water plants to recolonise. The silt came from a spillway from Shropshire Union Canal and English Nature is pushing to get the spillway closed, with the help of British Waterways, and the silt spread on surrounding farmland. Progress depends on the results of sediment analysis confirming that the silt is not contaminated.
- ② **Norfolk Broads:** consolidation of initial restoration work in the 1990s using novel techniques to reintroduce and encourage the spread of aquatic plants.
- ③ **Swanholme Lakes, Lincolnshire; Brown Moss, Shropshire; Hatchet Pond, New Forest:** surveys to determine the spread of Australian swamp stonecrop and to work out the best control options. English Nature has contracted the Centre for Aquatic Plant Management at Sonning, Berkshire, to carry out this work.
- ④ **Hatchet Pond, New Forest:** surveys of fish and other impacts in order to identify the action required to reduce turbidity, and improved interpretation of the special European interest of this lake for the public.

WHAT'S ON? GUIDE

2003

JAN 24

Weed control demonstration day

Demonstration day Cherry Lodge Farm, Parsonage Down NNR, Wiltshire for landowners and farm managers, looking at aspects of weed control. Topics will include weed wiping/spot spraying, good grazing management practices, restoration techniques and the role of the Wiltshire Interactive Grazing Initiative.

Contact: David Burton, 01980 620485

FEB 26

Species Recovery Programme (SRP) Conference London Zoo

The 11th Species Recovery Programme Conference will be held as a one-day event at London Zoo, courtesy of the Zoological Society of London which has played a major part in the programme since its launch. The theme will be 'Progress through Partnership', speakers will be drawn from English Nature's major partners.

Contact: Angie Brewell, 01733 455271

APR 16

Mineral Collecting and Conservation – Hammering out a Future

The first conference on mineral collecting will be held on 16 April 2003. The 'Mineral Collecting and Conservation – Hammering out a Future' event will be held at the University of Salford and has been organised by English Nature, the Geological Society's Geo-conservation Committee and the Russell Society.

Contact: Hannah Townley, 01733 455304

For further details visit english-nature.org.uk

(Above) Swanholme Lake

The situation is so bad that, in some shallow lakes, two-thirds of the contents may be silt and only one-third water.

(left) Yare broads-marshes, Norfolk

Ice Age discovery

After the bones of a woolly rhino were found at a Staffordshire quarry, English Nature has funded internationally-important rescue work – helping to uncover what life was like during the Ice Age.



Woolly Rhino fact file

- It was about 2 metres high at the shoulder
- Its scientific name is *Coelodonta antiquus*
- Woolly rhinos were herbivorous and enjoyed grazing on grass
- Its closest living relative is the Sumatran rhino
- Remains of the huge beast have been found all across Europe, although they apparently did not make it across to Ireland or North America

Archaeologists were digging at Whitemoor Haye Quarry in September last year when quarryman Ray Davies pulled up an important geological find in the bucket of his digger - a massive skull of a woolly rhino. English Nature immediately allocated £15,000 to help fund a team of experts to further explore the area and skeletons of four of the great beasts were uncovered.

The team of archaeologists and other specialists were from the universities of Birmingham, Coventry, Cambridge and Royal Holloway, London and the Natural History Museum. The team is particularly pleased about the find because the remains are so well preserved. So much so, in fact, that one of the rhinos had plant material still stuck to its teeth, giving possible clues to its last meal.

The dig also uncovered the remains of mammoth, reindeer, wild horse and a wolf, as well as plants and beetles, which provide an extraordinarily detailed picture of the environment in which the rhinos lived and died.

Gary Coates, an archaeologist from Birmingham University, said, “I’ve been working at the quarry for five years and have excavated everything from prehistoric burial grounds to Roman farmsteads, but this find was totally unexpected. It’s the biggest find – in all senses of the word – I’ve ever been involved with.”

English Nature funded the dig through the ‘Rescue Work’ component of its Aggregates Levy Sustainability Fund. The Fund is helping to conserve and enhance the geological and geomorphological features and biodiversity in areas affected by aggregate extraction.

English Nature geologist, Natalie Bennett, said, “We were delighted to be able to support this project as finds of this calibre are unusual. We are expecting to receive a request for further support to help display the remains to the public.”

The remains of the rhinos, which are believed to be 30 to 40 thousand years old, are currently being analysed, cleaned and preserved at the Natural History Museum, and it is hoped they will be put on display near where they were found.