

Magazine



Natural winners Accolades for art and for countryside champions

Child's play

Youngsters learn about their environment

Treasure island

Exploring a "secret" nature reserve

Holiday hotspot

How a road scheme is helping to ease the pressure

Issue 81 September 2005

Natural England

Major changes are currently taking place within Government about the way the future of England's landscapes and nature are managed, protected, funded and enjoyed in the future.

A new independent body – Natural England – to be created in October 2006, is bringing together the current roles of English Nature, the Landscape, Access and Recreation division of the Countryside Agency and the environment activities of the Rural Development Service.







Cover picture by Jenny Wilcockson



Jenny's picture was the Adult Professional winner in our Seasons of North Meadow art competition, capturing the character of the Wiltshire National Nature Reserve. See page 9

If you have any views or comments which you feel would be of interest to our readers, please contact Amanda Giles, at English Nature, Northminster House, Peterborough PE1 1UA, or at amanda.giles@english-nature.org.uk

If you would like to add or remove your name from our mailing list for this magazine, please contact Alison Eley, IMT, English Nature, Northminster House, Peterborough PE1 1UA or email: alison.eley@english-nature.org.uk.

For further information about English Nature contact our national office at: Northminster House, Peterborough PE1 1UA, Tel: 01733 455000, Fax: 01733 568834 or contact our Enquiry Service, tel: 01733 455100 or email: enquiries@english-nature.org.uk

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Plant survives 30-year interruption

A plant saved from extinction by the dedication of a Cambridge botanist has been returned to the wild after a 30-year hiatus.

The aptly-named interrupted brome was once a common sight in fields of wheat and clover in southern England, but is thought to have become a casualty of changing farming practices. It was only kept from complete extinction by the late Philip Smith, a botanist who grew the grass in pots on his windowsill.

Now English Nature has worked with botanists to return it to its natural habitat and thousands of the plants have been grown in a field margin at the Aston Rowant National Nature Reserve in the Chilterns.

Once the plant is fully established it will be reintroduced to other sites in the south of England – the only place in the world where it once flourished.

Bromus interruptus

English Nature's Site Manager at Aston Rowant, Graham Steven, said, "We hope that this will encourage farmers to leave the odd field margin unsprayed so rare plants like this can flourish."

Chick spells hope for puffins



Caring for a puffin chick

The sighting of the first puffin chick in more than 30 years has raised hopes for the long-term future of the seabird population on Lundy island.

Lundy, in the Bristol Channel, is one of only a handful of sites in the south west where puffins nest. Its name is the ancient Norse for 'puffin island'.

But decades of seabird decline on the island has seen the number of recorded pairs fall from 3,500 in 1939 to just ten in 2000. A Seabird Recovery Project run by English Nature, the Royal Society for the Protection of Birds (RSPB), the Landmark Trust and the National Trust has been working on the island since 2002 to improve the seabirds' chances of breeding.

The rats that feasted on eggs and chicks in the birds' ground burrows have been eradicated and waste management improved.

Project Manager, David Appleton, of English Nature, said the first sign of a potential recovery on Lundy was when Manx shearwaters were recorded there last September. Then, in July this year, Lundy island warden Ben Sampson camped overnight to watch the puffins at first light and was rewarded with the first sighting of a puffin chick since 1972.

orief u In this issue

A croak and dagger mystery



Adult male pool frog

A frog with a distinctive Norfolk accent, which became extinct in England in the 1990s, has been returned to the county by English Nature and partners.

Fifty northern pool frogs, captured in the wildlife-rich region of Uppsala in south-central Sweden, were reintroduced at a secret site near Thetford, after research showed they were natives of East Anglia.

The frogs are among Europe's rarest and experts thought they had been imported to England before being driven to extinction by Fenland drainage. But when they analysed

hours of recordings of mating frogs from across Europe, they noticed that the ones previously recorded in Norfolk had a characteristic inflection.

They began to make comparisons and genetic studies revealed that the Norfolk pool frogs were part of a distinct northern European group along

with their Norwegian and Swedish counterparts.

Pool frog remains had been found around old Saxon sites in Cambridgeshire and Lincolnshire but their origins had never been traced.

Jim Foster, English Nature's amphibian specialist, said, "Piecing together what happened to pool frogs has proved to be a real detective story. The frog's distinctive Norfolk accent, the buried remains and genetic studies all provided crucial clues. It has taken nearly 10 years of research, involving people across Europe, to get to the bottom of this mystery."

Seven new sites boost LNR Network

Conservationists in Surrey had cause for celebration this summer as seven new Local Nature Reserves were designated in one go by the County Council.

The new reserves, owned by the County Council and managed by Surrey



Bluebell wood in Hill Park, Tatsfield

Wildlife Trust Countryside Services, are at Rodborough Common; Wisley Common and Ockham and Chatley Heaths SSSI; Sheepleas; Hill Park, Tatsfield; Chinthurst Hill; Bisley and West End Commons; and Shere Woodlands (comprising West Hanger,

> Coombe Bottom and Netley Plantation).

They were declared at a launch event on Ockham Common, attended by representatives of English Nature, the County Council and Wildlife Trust.

Guardians of the land **English Nature's SSSI** award winners 4-8



Clean-up campaign Working together to tackle pollution 12

Autumnwatch How you can do your bit 17

Wild ideas The first of our new Nick Baker columns 18

Going with the flow

Editorial

Sites of Special Scientific Interest are places where England's best wildlife and geological features can be found. With CAP reform promoting a move away from production-dominated agriculture, these special sites are vital as reservoirs from where our native wildlife can re-invade a more welcoming wider countryside.

In this issue of English Nature magazine we celebrate the remarkable levels of commitment, not to mention love and affection, shown by many SSSI owners to the plants, animals and geology on their land. It's heart-warming to hear how much seeing a silver-spotted skipper butterfly or a bee orchid means to them.

But healthy wildlife also needs a healthy environment. In this issue we look at how joint working is tackling diffuse pollution on the River Teme, how the Forestry Commission is recreating heathland from conifer plantation, and how

> climate change may affect our wildwoods.

> > I hope you enjoy reading these stories, and more, in this September issue.

Amanda Giles

FACTFILE:

- Sites of Special Scientific Interest (SSSIs) have England's best wildlife and geological features.
- They are designated, or "notified" by English Nature under the Wildlife and Countryside Act 1981.
- There are more than 4,000 SSSIs in England, covering around seven per cent of the country's land area.
- They need active management and English Nature works closely with over 26,000 landowners and managers of SSSIs.
- English Nature's SSSI awards, in their ninth year, reward those who go the extra mile to conserve the nationally important sites in their care.

Guardians of the land honoured

Rare-breed grazing is good for grassland

John and Rosi Lambkin have used their interest in traditional breeds of sheep and cattle to conserve the species-rich habitats of Bonemills Hollow SSSI.

They graze the area with rare-breed Norfolk Horn sheep and Longhorn cattle and their sensitive approach

has paid dividends for the site, which supports nationally rare limestone and marshy grassland communities.

Bonemills Hollow, at Wansford, near Peterborough, is not open to the public, and has been managed by John on Farmers Weekly's behalf for nearly 40 years. It has been an SSSI for 30 years.

Under the Lambkins' regime, the sheep graze some areas of the SSSI from April to September, and other areas later, so orchids and other plants have time to flower and seed. The cattle, which are good above-ground browsers, graze the marshy grassland habitat, keeping down goat-willow and elder.

This approach has so enhanced the grassland habitat that the SSSI now meets the criteria for being in favourable condition.

"If you have the right number of sheep and have other areas for grazing when the animals can't be on the SSSI, then this combination works well," says John. "The dominant species that would otherwise encroach are kept at bay and the site ticks over nicely."

The Lambkins have a Wildlife Enhancement Scheme (WES) agreement with English Nature and also get assistance through the Traditional Breeds Incentive Scheme as Norfolk Horns are a previously endangered breed.

Peter Stroh, Conservation Officer for the Soke of Peterborough, says, "John and Rosi's sensitive grazing regime has maintained the specialinterest limestone flora of the site, and has dramatically enhanced the wetter grassland areas with the introduction of the Longhorns.



John & Rosi Lambkin at Bonemills Hollow, Wansford, Peterborough

It takes special people to maintain the UK's Sites of Special Scientific Interest. This year SSSI Awards have been handed to 19 owners and occupiers whose dedication – and sheer hard graft – has helped to preserve some of the country's most important wildlife sites.



John Bovington at Magpie Bottom, Kent

"This hardy and adaptable breed has broken up and grazed what was once a dense and impenetrable sward of rushes, creating space for the smaller, less competitive herbs."

The couple sell their rare-breed meat to a butcher in Cambridge, their rams and ewes for breeding, and their weaned Longhorn calves for bringing on as breeding heifers and as steers for fattening.

"It would seem to be a win-win situation, as the stock used by the Lambkins on the SSSI has very good commercial opportunities in the rapidly expanding niche markets, " added Peter.



Silver-spotted skipper butterfly (BAP species)

A couple who care for nature's garden

John and Annette Bovington have every right to be proud of their cottage 'garden' – it amounts to 100 acres of chalk downland and ancient woodland.

The couple bought 75 acres of land near their home in Sevenoaks, Kent, because they couldn't bear to see the fine chalk grassland swallowed up by intensive arable agriculture.

They decided that sensible grazing was the way forward and built up a herd of Sussex cattle and the rare British White. What started out as a hobby turned into a long-term commitment to the land – and a lot of hard work.

Their restoration and sensitive management of the Magpie Bottom SSSI resulted in its notification in 1987 and won them an English Nature SSSI award.

English Nature Conservation Officer, Phil Williams, said, "John has, at great expense, purchased a neglected part of the SSSI and has organised all the capital works needed to enable the area to be grazed and restored from scrub to chalk grassland.

"Without his efforts, this site would not be what it is today and, in fact, it might not have been notified at all. John has shown a lifelong commitment to nature conservation."

The Bovingtons have cleared areas of scrub and waged a constant battle against chalk downland invaders such as hawthorn and dogwood, allowing orchids, butterflies and bees to thrive.

The couple extended their conservation efforts with the purchase of nine acres of threatened ancient woodland in 1985 and, more recently, 15 acres of neglected SSSI land bordering their local golf course. With English Nature's support, they have cleared and fenced the land, which is now being grazed.

"It's my very large garden," jokes John, who is an executive board member of the Kent Downs Area of Outstanding Natural Beauty, "I love the area and I know each and every place that the bee, fly and man orchids grow. There is so much diversity. One field count showed there were around 100 species of grasses and flowers." John Buxton has created new habitats, including shallow, open water, that has attracted an important breeding population of avocet and has become a new winter roost for around 6,000 pink-footed geese. His sensitive management has brought a steady increase in the crane population over the last 25 years.

John Buxton at Horsey Hall, Norfolk

Where the heart is

John Buxton's life-long affection for Horsey Mere, in Norfolk, has always brought him back to the area where he grew up.

He returned, after periods away at school, university and in the army, to take on the work of warden and reserve manager for the Mere, which sits in the centre of the Upper Thurne Broads and Marshes, a wetland complex in northern Broadland.

The Mere is designated as one of England's few Areas of Special Protection (ASP) – largely because it has the UK's only breeding population of European cranes, as well as marsh harrier and bittern.

John has made significant improvements to the management of the SSSI and its hinterland, working with



Safeguarding



English Nature, Defra's Rural Development Service, the Broads Authority and the Internal Drainage Board.

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John – a former professional wildlife film-maker who still records the life of the Mere – has been monitoring the bird population there for 30 years.

An important part of John's work is to keep disturbance from people and predators down to a minimum. He has worked alongside other organisations to raise awareness among farmers about ochre and salt pollution from agricultural practices and has negotiated sensitively and tactfully with anglers to ensure they are aware of the need to protect the wildlife refuge.

Reed and sedge are produced on the site to supply the thatching trade, and John ensures cutting only takes place in areas where there is no risk of disturbing the birds.

English Nature Conservation Officer, Clive Doarks, described John as "a champion for nature and wildlife." He said, "He has put in more time and effort than anyone could expect – his energy has brought about big improvements."

Pink-footed goose has a new winter roost

our special sites

New approach saves lowland mire habitat

At Winmarleigh Moss SSSI, the Duchy of Lancaster has swapped intensive farming for a nature conservation programme – helping to preserve the largest area of lowland raised mire left in Lancashire.

The Moss is home to more than 90 species of butterflies and moths, including several nationally rare species. It is the only Lancashire site for the rare bog bush cricket and

The rare bog bush cricket

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This once widespread habitat, on the coastal plains of Lancashire, has suffered the effects of peat extraction, agricultural reclamation and afforestation, and is now locally and nationally rare. At Winmarleigh Moss, drainage from peat cutting and ditches had caused the edges to dry out, allowing birch scrub to gain a foothold.

The Duchy's agents, Smiths Gore, recognised the problems faced by the SSSI and took advantage of a change in tenancy of two blocks of land to take the areas out of agri-production, creating a more sustainable system

and extending habitats for wildlife.

The Duchy has three Wildlife Enhancement Scheme (WES) agreements on the Moss. The main one is for managing lowland raised bog, where a three-year phased programme of scrub clearance and spraying is being undertaken.

The others, covering the once intensively farmed

land immediately outside the SSSI, will involve re-wetting the land to create a wet grassland habitat with fen and wet woodland.

The Environment Agency, with the support of Smiths Gore and English Nature, has dug a ditch around the site to maintain the water table, which will also prevent drainage problems for the remaining agricultural estate. The land will be fenced and grazed.

Simon Derby, of Smiths Gore, explained, "The land is naturally wet around the SSSI, so it was difficult to farm, but we recognised that this was an important habitat. We wanted to help preserve it and provide extra land to support the management of the SSSI."

English Nature Conservation Officer, Deborah Rusbridge, said, "These areas are an important hydrological buffer to safeguard the SSSI. The habitat continues to improve and special interest at the site is being restored.

"The Duchy – with the excellent support of Smiths Gore – has a longterm commitment to the project."

Simon Derby, of Smith Gore, land agents for the Duchy of Lancaster, at Winmarleigh Moss





Adrian Lewis & Sylvia Lewis (mother and son) at Vicarage Farm, Northamptonshire

The SSSI, in Northamptonshire, was in corporate ownership and had been neglected, overgrazed, and fallen victim to poaching and unauthorised use for horses. Its rare flood meadow habitats were in danger of being lost altogether due to years of mismanagement.

Stepping in to save a childhood haunt

Adrian Lewis had fond memories of playing on Wollaston Meadows as a child, and was sad to see the area blighted by neglect.

The SSSI, in Northamptonshire, was in corporate ownership and had been neglected, overgrazed, and fallen victim to poaching and unauthorised use for horses. Its rare flood meadow habitats were in danger of being lost altogether due to years of mismanagement.

But Adrian and his mother Sylvia stepped in and bought the site two years ago.

The Lewis family now farm the land around Wollaston Meadows and today it is well on its way to being restored to flood plain meadow – thanks to their determination and hard work in the face of often aggressive opposition. This summer saw its first hay-cut and the family plans to move cattle on to graze the site. Adrian recalls a happy childhood playing on the meadow. He said, "We farm more or less all around the site and it was a place my mother knew well. My sister and I used to walk through the meadow and play in the ditches."

A hard-won battle to remove the horses from the land succeeded after ditches, gates, hedges and bridges were introduced – work overseen personally by Adrian to ensure high standards were maintained.

English Nature supported his efforts with a Wildlife Enhancement Scheme (WES) agreement and funding for some of the capital works.

The Lewises have also fenced the SSSI, cleaned out ditches, put in a water supply and drained an area where there was excess surface water.

Their efforts have ensured that future generations of the family will be able to enjoy Wollaston Meadows. "We can see an unbelievable difference. The land is slowly reverting to the meadow I knew 25 years ago, and I'm happy that my children will be able to enjoy the meadows in the same way that I have," said Adrian.

And the other winners are

Sue Sheppard, Cannock Chase SSSI

Paul Millard, Sutton Combe SSSI

Andrew Hindmarsh, Attenborough Gravel Pits SSSI

David and Christine Troth, Salt Meadow SSSI

Harry and Kate King, Hillend Meadow and Orchard SSSI

Lt Col Andrew Drake, Clare Hetherington and Jez Kalkowski,

Helbeck Wood and Appleby Fells SSSIs

Duncan Glen and MoD, Otterburn Training Area SSSIs

Ogston Bird Club, Ogston Reservoir SSSI

Dominic Acland and Torbay Coast & Countryside Trust, Torbay area SSSIs **Trevor Ball,** Humber Estuary SSSI

Jeanne and Tim Webb, Cleeve Hill SSSI

Peter and Joan Clarke, Kingcup Meadows SSSI

Phil Webster and Helen Annan, Duddon Estuary SSSI

John and Mary Howe, Lingwood Meadows SSSI

Portraits of nature



April Meadow by Wendy Howard: runner-up, Adult Amateur



Spring Meadow by Jake King: winner, **Children 11 years** and under



The stunning landscape of North Meadow NNR in Wiltshire inspired visitors to show off their artistic talents through an English Nature competition.

Thirty-five people sent in a range of photographs and artwork interpreting the reserve's changing character through the seasons and four winners have been picked in the Children's, Adult Amateur and Adult Professional Categories.

Image by Sean Bolton: winner, Adult Amateur

Some of the best images were exhibited in the nearby Cricklade Town Council offices during July and the winners are being reproduced by English Nature as free postcards.

The winners, from Cricklade, Calne, Swindon and Chippenham in Wiltshire, received photography vouchers worth a total of £300, two digital cameras, books on England's NNRs and guided tours of Pewsey Downs NNR.

WHAT'S ON? GUIDE

OCTOBER – NOVEMBER

Oct **Myths and Legends of** Lathkill Dale

> 10.00 Lathkill Dale, Derbyshire **Dales NNR**

Traditional Peak District tales of ghostly voices, local legends UFOs and more on a three-hour walk . Some narrow paths and steep slopes are involved

Booking essential.



Contact Peak District & Derbyshire Team 01629 816640



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Devon Hedge Week

Find out why Devon's hedges are so important for dormice during a packed programme of events around the county.

Join in family events, like farm walks and talks, hedgerow craft demonstrations or hands-on training courses on traditional skills.

Information is available from libraries and tourist information centres.

Contact Peter Chamberlain 01392 382257 or Robert Wolton 01392 889799

Visit www.devon.gov.uk/hedges

Halloween

18.30-20.30 Oakerside Dene Lodge, Castle Eden Dene NNR

Spooky tales in the dark wood with prizes for the best costume and lantern. Pie and pea supper. Booking essential.

Contact Steve Metcalfe 0191 518 2403



Oct

29

Real Sustainable Communities

9.00-16.30 Hotel Russell, London

BTCV Conference with English Nature for people involved in community development.

The event will bring together over 300 decision-makers, practitioners and funding recipients and features speakers on a range of topics, an exhibition and market place.

For information or booking:

Contact 020 7607 5680

visit www.bctv.org/conference

FOCUS ON... Scolt Head Island NNR

A remote shingle island off the North Norfolk coast provides a peaceful haven where terns and other seabirds can breed undisturbed and coastal plants like sea campion, sea bindweed and sea holly are allowed to thrive.

Scolt Head Island is one of our "secret" nature reserves, a wild outpost where important species are protected round-the-clock by English Nature wardens who live on the island in the summer.

Site Manager, Michael Rooney, explains, "Our colony of breeding terns has international significance – the island supports the largest population of sandwich terns in the UK. We have a big responsibility to ensure they can breed successfully, by protecting them from predators, like foxes, or disturbance from humans, which are the two main threats."

Until recently, the wardens, Neil Lawton and Jonathan Brown, eked out a primitive existence in a onebedroomed shed with the most basic facilities. But now they are enjoying relative luxury in a new environmentally-friendly home designed to be selfsufficient in electricity, water and waste treatment – with minimum impact on their surroundings.

This new ternery hut was created by Paul Lucas of Wymondham-based architects Lucas Hickman-Smith and built by Norfolk firm Groove Construction with ecological building specialists GreenBuild.

Roof-mounted solar panels power the lights and electrical appliances while rainwater from the roof is filtered and pumped into the building for washing. A chemical-free composting toilet is a most-welcome modernisation, says Michael.

He said, "It is great that the new hut incorporates so many sustainable features. It has very little environmental impact and blends in well with the rugged landscape of the island. This was an important element as Scolt Head is an unspoilt site with very few man-made structures."



The environmentally-friendly hut at Scolt Head

With that in mind, the hut has a curved wall, to mirror the sand dunes and the exterior is clad in Welsh-grown Western red cedar, a durable wood which needs no preservative and will fade to the colour of the sand. It is built in timber from Britain or certified sustainable sources in Europe and is made up of framed panels insulated with recycled paper.

The island, a National Nature Reserve (NNR) since 1923, is owned jointly by the National Trust and Norfolk Wildlife Trust.

It is a barrier island, formed by a series of coastal processes. Its isolated location and a minimumintervention management which allows these processes to function naturally, makes it ideal for ecological research. For the past 80 years, Cambridge University has studied the development of saltmarshes here. The reserve has a major educational function and the wardens often assist students visiting the site.



Brent Geese

Watch out for wildlife

Scolt Head Island is internationally important for its over-wintering populations of geese and, in late September, dark-bellied brent geese will be arriving from Siberia.

Pink-footed geese from Iceland and Greenland roost at the west end and can number 50,000 by mid-winter. The reserve supports other wildfowl, such as wigeon, mallard, shelduck and teal.

With the difficulties in reaching the island at this time of year, it is worth knowing that the wintering birds can be viewed quite easily from the mainland.

The ternery in the west is closed to visitors during the breeding season (mid-April to mid-August) when several tern species raise broods in the shingle and dunes. The reserve supports up to 25 per cent of the UK total of nesting sandwich terns. No dogs are allowed during this period.

How to get there

- Scolt Head Island NNR is on the North Norfolk coast 10km west of Wells-Next-the-Sea.
- There is open access but, in practice, getting there can be difficult.
- The island can only be reached by boat from Burnham Overy Staithe on the A149.
- Visiting is limited by the tide check the boat times advertised on the quay.
- There is car parking near the quay.
- Visitors are advised against walking across the mud flats to the island.

NNR NEWS

Join extended NNR celebrations



Humberhead Peatlands NNR

Members of the public will be invited to celebrate the declaration of the extension of the Humberhead Peatlands NNR – the UK's largest raised peatland site.

An open day will be held at Hatfield Moor, near Doncaster in South Yorkshire, from 10am to 3pm on Saturday, 8 October.

It will give people a chance to learn more about the neighbouring moors,

from the wide range of wildlife that thrives on them, to the history of the sites and the walks that visitors can enjoy.

Visitors will be offered crane lifts to get a bird's-eye view of Hatfield Moor and there will be hourly walks around the site, as well as refreshments.

The open day will follow the formal NNR declaration of an additional 1,500 hectares of Thorne and Hatfield Moors, by Environment Minister Elliot Morley, on Friday, 7 October. This will extend the Humberhead Peatlands NNR to about 3,500 hectares.

The declaration comes four years after the land was acquired from the Scotts Company using funding from Defra. The company handed over the land as part of a £17.3 million deal, ultimately halting peat extraction and turning the sites over to English Nature in the biggest deal in its history.

Wild summer parties

It was a summer of celebrations on our National Nature Reserves with a host of different events for visitors. More than 600 people attended a family fun day to mark Ainsdale NNR's 40th birthday in August, enjoying activities like pond dipping, 4x4 trips, searching for sand lizards in the dunes and meeting the wildlife of the Sefton coast.

Hundreds of local schoolchildren enjoyed a privileged glimpse of the Undercliffs NNR on Devon's Jurassic coast where they were taken by boat to deserted beaches for seashore exploration. The trips were part of the 50th anniversary Understanding the Undercliffs project backed by the Heritage Lottery Fund and Stuartline Cruises.



Painting in the craft tent



Children admiring Undercliffs coastline from the boat



Bank erosion by livestock leads to sedimentation in the river channel

Joining forces to tackle river pollution

The River Teme, which rises in the Kerry Hills of Mid Wales, flows through some of the most attractive countryside in England, and was traditionally a wildlife haven.

But in recent years, it has faced a number of pressures which are adversely affecting its health and quality, particularly diffuse pollution from local agriculture, including the run-off of fertilisers, manures, pesticides, and sediments.

The Teme cuts through the scenic rural areas of Powys, Shropshire, Herefordshire and Worcestershire to join the River Severn a mile south of Worcester.

The main river has been designated a Site of Special Scientific Interest for the whole of its 122km length, supporting priority species like freshwater pearl-mussel, otters, water voles and native crayfish.



Water vole

Now a partnership project is underway to enhance its quality. The Natural England partners, English Nature, Defra's Rural Development Service (RDS) and the Countryside Agency, are working with the Environment Agency and, ultimately, the farming community.

Peter Knights, English Nature's representative on the project, explained, "There has been a progressive intensification of agriculture from the 1950s onwards in the catchment, with more arable cultivation, reseeding of grassland and drainage, together with greater use of fertilisers and pesticides. Even if farmers take great care, it is very easy for some contamination to occur and it only needs a small amount to wipe out all aquatic insect life over a long stretch of river.

"We have also seen increased numbers of sheep and cattle. Prior to this, the upland areas of the catchment would have been largely low-intensity grassland with substantial areas of heathy ground and scrub, so rivers like the Teme have gone through rapid change in the very recent past."

Early this year, the Teme was confirmed as one of four pilot catchments to test joint working arrangements between the country agencies for tackling diffuse pollution, as part of the Multi Agency Catchment Sensitive Farming project. The partners are working towards a shared vision – to create a clean and healthy river which enhances people's quality of life and supports the local economy.

The coming months will see relationships strengthened with other stakeholders who have a wider interest in the well-being of the river, such as the National Farmers' Union, Country Land and Business Association, local wildlife trusts, local authorities and leisure and fishing interests. The project will also work closely with the Welsh Assembly Government, the Countryside Council for Wales and other organisations with environmental responsibilities in Wales.

Environmental Stewardship will be a key mechanism for delivering water quality improvements and the project will encourage take-up of both Higher Level and Entry Level schemes within critical parts of the catchment.

A project officer, Andrew Sherrott, has recently been appointed on secondment from the RDS to drive forward the project. He said, "The success of this project depends on making links. Since CAP reform, farming is at a major crossroads and individual businesses are critically examining their long-term strategies. We have an opportunity here to guide policy at farm level towards greater sustainability and improved river quality, making full use of expanding agri-environmental schemes."



Ailsa Campbell with one of the school groups at Shapwick

The natural way to learn

Children are going hi-tech to connect with their local environment and wildlife.

Children in Somerset and Bristol are being kitted out with the latest equipment to help get them in touch with nature.

Hundreds of pupils have taken part in the Avalon Marshes and Community Project, which gives them a chance to learn about wildlife first-hand by visiting English Nature's Shapwick Nature Reserve and the Royal Society for the Protection of Birds' (RSPB) Ham Wall Nature Reserve.

It also helps them to develop classroom projects based on their visits and to improve their school wildlife gardens. They follow up the visits with artwork, sound recordings, story writing, making nestboxes and feedboxes, mask making and surveys.

The project looks at the natural, economic and social history of the area from early man through to peat working and today's management for wildlife.

Education officer Ailsa Campbell's latest project has been the development of a Wildlife Resource Box.

It equips schools with everything they need to make the most of their days at Shapwick and Ham Wall – audio recorders, a digital camera, binoculars and ponddipping equipment.

Two schools have also bought nestbox webcams to give children a bird's-eve view of wildlife, such as nesting robins and blue tits in their school grounds.

Ailsa's part-time post is jointly funded by the Heritage Lottery Fund, RSPB and English Nature.

The project has been so successful it has been extended from the immediate catchment area of the Avalon Marshes to the whole of Somerset and Bristol.

Andy King, English Nature Team Manager, said, "We're seeking to expand Ailsa's post to meet the growing demand for visits to our Shapwick NNR and to establish a professional development package for local teachers to ensure continuity for the schools involved."

Log on to wild sites

Schoolchildren in Lincolnshire will be able to log on to learning with a new CD-Rom about the Coversands Heathland Project.

The project, which aims to restore 700 hectares and recreate 250 hectares of lowland heathland across the area, is hoping to encourage teachers to find out more about their heathland heritage by organising a school visit to a site, using the CD-Rom as a back-up tool.



Image from the CD-Rom

There are 28 heathland sites across Lincolnshire and North Lincolnshire within the Coversands Project. They are distinguished by the scattering of windblown sand that covers them, lending the area its name.

The two-disc CD-Rom package is aimed at pupils aged five to 16. It offers information about how the Coversands region developed and the variety of settlements and wildlife species that have thrived there, as well as five games that test pupils' knowledge about the sites they have visited.

Free copies are available from Susan Glock, Coversands Heathland Project Manager, at susan.glock@english-nature.org.uk



This month, the Forestry Commission celebrates 2,000 hectares of heathland recreated from conifer plantations across the UK

Heathland in the historic New Forest

Clearing the way for heathla



Brecklands Forest, where restoration has been carried out

Few people would associate The Forestry Commission with heathlands – by its nature, an open habitat with few trees.

However, this unlikely guardian is, in fact, one of the country's biggest managers of lowland heath, caring for around 30 per cent of England's sites, including the most extensive tract in Europe, the historic New Forest.

The Forestry Commission's Biodiversity Reporting Officer, Rebecca Haworth, explained, "There is no doubt that forestry has damaged heathland, shading out ground vegetation and making the habitat unsuitable for heathland wildlife but in contrast to agricultural and urban development, where the changes are more profound, heathland can recover very quickly when trees are removed."

In recent years it has become clear that forestry and heathland are not so incompatible. Open forest glades and young conifer crops in heathland areas produce a heath-like environment suitable for species such as the nightjar and smooth snake. Where remnants of the original heathland vegetation survive, the habitat can be re-created by permanently removing the conifer crop and by managing the restored heathland.

Projects to restore existing heathland or to create new tracts are taking place on Forestry Commission land across the country, from Haldon Forest, Devon, to the eastern coastal heaths of Suffolk and as far north as Allerthorpe Common on the North York Moors.

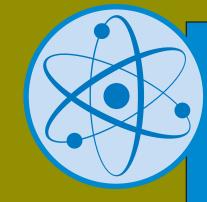
The Forestry Commission has now recreated a total of 2,000 hectares of heathland across the UK. This landmark will be celebrated in Dorset with a heathlands wildlife event.

Some of the most remarkable changes to the landscape are in Thetford Forest, in East Anglia. Open habitats throughout the forest have been extended and linked to create a mosaic of plantations, heaths and trails which have been opened up to the sunlight. Species like the nightjar and woodlark have responded so well to the changes that Thetford Forest has recently been designated a Special Protection Area (SPA) under European Union legislation for its breeding bird interest. The rare stone curlew, a summer visitor to open heathlands, can also be seen here.

However, unless the newly re-created heathlands are carefully managed, they will soon revert to scrub and eventually woodland. To prevent this, many Forestry Commission heathland sites are now being fenced and grazed with hardy livestock. Grazing animals are now commonly seen on many Forestry Commission heaths including the The Park, the newly restored heathland in Tidenham Chase, Gloucestershire.

Here, hardy traditional breeds like White Park cattle and Hebridean sheep are being used to hold back birch and coarse grass and to graze the sward to favour typical heathland plants like bell heather, cross-leaved heath, ling and western gorse.

Barry Embling, Conservation Ranger for the Forest Of Dean, said, "An indication of the project's success is that the area is being used by two breeding pairs of nightjars as well as the first Gloucestershire sightings of anomalous and heath rustic moths."



Science update

One way we share our scientific knowledge with others is through a series of English Nature Research Reports (ENRRs). Here are some of the current hot topics.

ENRR 600 BAP fungi handbook



From the pink waxcap to the sandy stiltball, the fascinating field of fungi is revealed in this report. The UK **Biodiversity Action** Plan (BAP) process Immature tiered tooth fungus, Hericium cirrhatum highlighted how little we then knew about

on felled turkey oak trunk in deer park

this vast kingdom. Some 27 species appeared on the BAP list, stimulating much survey and research. The report, with its many photographs, pulls together our current knowledge on each species and its habitat. For background, there are chapters on fungus fundamentals, formal and informal classification, ecology and nutrition, and recording and distribution.

ENRR 648. Large herbivores in the wildwood and in modern naturalistic grazing systems

Frans Vera's book *Grazing Ecology and Forest History* challenges our views on what the natural landscape of Britain would have been like around 7,000 years ago.

He proposes that, rather than closed woodland, it was a half-open park-like landscape, in which large herbivores, such as wild cattle. were the main factors driving



The horn of an extinct ox

vegetation change from woodland to grassland and back. The report concludes that there is insufficient evidence to justify Vera's assumptions about the openness of the wildwood, even though the role of grazing animals may have been underestimated.

For a full list and electronic copies of recently published ENRRs, visit the publications section of our website on www.english-nature.org.uk or contact our Enquiry Service on 01733 455100/01/02 or email enquiries@english-nature.org.uk for a printed version.

nd habitats

Recreated heathland at Wareham Forest, Dorset, now supports thriving populations of sand lizards and smooth snakes as well as many breeding pairs of nightiar and Dartford warbler. The area was planted during the 20th century as an enclosed conifer forest, inhospitable to heathland wildlife. But since the 1990s many conifer plantations have been removed to recreate a mosaic of wet and dry open heathlands and landscaped forest.

Jonathan Spencer, Senior Ecologist for Forestry Commission England, said, "The completion of our 2000th hectare of heathland restoration is part of our commitment to the UK Biodiversity Action Plan and represents no less than a third of the total national lowland heathland target.

"Our teams work hard to ensure they are maintained in a way that allows appropriate wildlife to thrive. It is a testament to their skill and commitment that the sites are in such good condition. Work to re-create yet more open habitats will continue well into the future."

The Forestry Commission report Heathland on the Forestry Commission Estate is due out shortly. For further information contact the Forest Enterprise headquarters in Bristol on 0117 906 6000.



Hebridean sheep in the Forest of Dean





Look out for the first ripe conkers

Over the past 50 years, dramatic changes to our countryside have arisen from changing woodland management methods, land-use practices and air pollution. Increasingly climate change is also having an effect.

Gransden Wood, Trust Reserve – primrose in first-year coppice

Getting to the root of woodland changes

Effects on the richness and structure of our woodlands are gradual and not immediately obvious. So, English Nature and partners funded a new study¹ undertaken by the Centre for Ecology and Hydrology, on 103 woods across Britain that were first looked at in 1971.

A major finding was that the richness of ground plants has declined over 30 years. This appears to be partly due to the woods becoming more shady, but the results also indicated that changes for some species were related to increased January to March temperatures.

In most cases the flowers, such as wood anemone, tutsan, herb Robert, common cow-wheat and black bryony, increased with higher spring temperatures, but a few plants, like wood horsetail, declined.

English Nature's Forestry & Woodland Officer, Keith Kirby, said, "As in other studies of climate change, each species is responding differently to the effects of changing temperatures. Over the next 50 years, the composition of our woods is likely to change. Some plants that are now common may become rarer. Beech and primrose, for example, appear to be particularly sensitive to increased summer droughts. Others will increase – the spread of holly in many woods may, in part, be related to milder winters." There is no simple way to predict how plants will respond to climate change in our woods, but in general, larger populations are more likely to be able to adapt and survive than small ones. This is a case for encouraging woodland expansion (to give more space for woodland plants) and other measures (such as wider field margins) that may make it easier for species to spread through the countryside.

Keith added, "These actions will only start to have an effect in the medium term, because it takes a while for new woodland to become suitable for many plants. In the short term, we also need to address other factors that may be limiting growth and flowering, such as over-grazing or excessive shade, which can be tackled by improving the management of our woods."

The study was funded by the Countryside Council for Wales, Department of Environment, Food and Rural Affairs, English Nature, the Forestry Commission, Joint Nature Conservation Committee, Scottish Natural Heritage and the Woodland Trust.

¹KIRBY, K.J., SMART, S.M., BLACK, H.I.J., BUNCE, R.G.H.,CORNEY,P.M.AND SMITHERS,R.J. 2005. Long term ecological change in British woodland (1971-2001). Peterborough: English Nature (Research Report 653). To obtain a copy of the report contact our Enquiry Service on 01733 455100/01/02 or email enquires@english-nature.org.uk

Autumnwatch How you can do your bit..!



Ripe Hawthorn bemes

As the summer begins to fade, our thoughts turn to the first signs of autumn. Hedgerows are laden with glittering jewels, the plump, glossy berries providing a veritable feast for many birds and mammals like waxwings and woodmice.

By simply keeping a record of the first signs of autumn you can make a vital contribution to climate research by helping scientists to build a picture of UK climate change.

Autumnwatch is the biggest survey ever into the arrival of autumn across the UK. It's run by the BBC in association with the Woodland Trust and the UK Phenology Network.

English Nature supports Autumnwatch and wants to encourage as many people as possible to get involved with the survey. Why not take part and do your bit to help build a picture of UK climate change? Anyone can take part and you don't have to be an expert. All you need to do is keep a look-out and record your sightings of any of the following six autumn events;

- 1) First ripe blackberry
- 2) First ripe conker
- 3) Last swift
- 4) First flowering of ivy
- 5) First ripe hawthorn berry
- 6) First tint of oak

Ivy flower

Submitting information about the first signs of autumn will help to build a complete picture of the season as it unfolds across the UK. This will help climate change scientists understand how autumn is changing and what needs to be done to help wildlife thrive in the UK. This is especially important, as there is currently little autumn data available to scientists.

Make a note of the date and the grid reference or postcode where you see any of the events for the first time, or in the case of swifts, for the last time. Record your results by completing the record card enclosed in the magazine or submit your results on-line to: http://www.bbc.co.uk/nature/animals/ wildbritain/autumnwatch/record

Everyone who completes a record card will be contributing to over 300 years of observations and research into climate change science. You can get more information about this research by visiting http://www.phenology.org.uk

Autumnwatch results will be revealed in a one-off programme on BBC 2 called *Wild Autumn with Bill Oddie*, which follows this year's hugely successful *Springwatch with Bill Oddie*.

Global views on hot topics

A challenge has gone out to all European Member States to commit to a joint course of action to adapt to climate change – or face severe losses of wildlife and biodiversity over the coming decades.

The stark warning was issued by scientists at this month's annual conference of the European Environmental Advisory Council (EEAC), a network of organisations, including English Nature, appointed by European governments to provide independent, scientific advice on the environment and sustainable development.

The conference, held in Oxford, was titled *Climate Change and Biodiversity – Meeting the Challenge.* Elliot Morley MP, the UK Minister of State for Climate Change and Environment was one of the keynote speakers, along with a number of international experts. Scientific evidence was used to highlight the effects of climate change and solutions were put forward, from vast ecological regions such as the Arctic region, spanning Canada, America, Europe and Asia, through national plans, to common areas like agricultural, freshwater or marine.

The EEAC will now issue a statement with recommendations for action. The conclusions will feed into climate change discussions taking place in the European Union as part of the UK Presidency. The EEAC has been invited to address the directors of European Ministries and will submit its findings to a meeting of European Agriculture and Environment Ministers.

To find out more about the conference, visit www.tcp-events.co.uk/eeac1





Nick reveals the secrets of wildlife to a young visitor at the launch

We tend to get all wateryeyed and melancholy as we contemplate this season of 'mists and mellow fruitfulness' but the reality is that, for the natural world it is a period of much activity that in some cases borders on panic. frozen. The leaves in these conditions simply loose more water than is replaceable, so the trees sack them.

Just this process alone removes the cloak of secrecy behind which much activity has been surreptitiously going on all year right under our noses, but out of our sight. As the leaves fall I enjoy what they reveal; the dry architecture of birds' nests and squirrel dreys, the latter, of course, still in use, or at least some



Waking up to wildlife during the celebrations

This autumn, challenge yourself to see beyond the sentimental human condition and wake up to the reality of the natural world all around you.

For starters, just take that simple seasonal signpost; the turning of the leaves.

These thin green slithers of life are the light factories that, during our summer months, harness the sun's light, ultimately for all our benefit, but now as the sun is falling in our skies, so the leaves fall in our woods and hedgerows.

These leaves become less efficient in the lower light levels and shorter days of winter and, in harsh climates, much water will get locked away and TV nature presenter Nick introduced visitors to the delights of the natural world at Sheffield's Shire Brook Local Nature Reserve during the launch of this summer's LNR celebrations. Thousands of people across the country joined in a host of events showing what nature reserves have to offer.

are. Summer nests tend to be out on a limb away from predators but winter nests are dense and leafy and usually built in the fork of a tree or at least close to the trunk.

Bizarre 'living sculptures' created in some mysterious manner as the tree or other plants' tissues react to an egg laid by a gall wasp are on show.

Galls such as the smooth marble gall found in oaks as well as the outrageous fuzz of robin's pincushion may not even stir a thought as you pass, but have a look at them, hold them between your fingers and marvel at the beautiful form and function of these nurseries.

How does each species cause such a distinctive cancer-like reaction

from its host's tissues? It's a mystery to me – cut one open and you will see the chambers within, once home to the minuscule and seemingly insignificant grub.

The 'fall' of leaves reveals the activities of many other creatures too. Most warm-blooded creatures are busily stuffing themselves and hoarding away reserves either as fat on their bodies or as caches of resources. Spangle galls are another way insect has manipulated plant. These little 'flying' saucer shapes occur in huge numbers on the underside of oak leaves in particular, and many small birds will have worked out that just a peck away, inside each, is a tasty morsel of protein.

Large mixed flocks of tits, tree creepers and other small birds often gang up about now to form large mixed-species feeding flocks and quiet hedgerows can suddenly become a bustle of activity as such a flock moves through, flossing the limbs and the leaf litter of all the nutrition they divulge.

Many other movements, both great and small, are underway in this season of transition. Birds will be passing through and some will stick with us for the winter months. Crabs and many shore creatures head for deeper water and the last of the season's insects either hibernate or die with the first frosts. Those still alive are taking on board the last of the season's nectar from late flowers such as ivy or are frantically looking for a dry, sheltered, predator-free place to spend the cold season, just around the corner. Conservationists in Cornwall are welcoming a traffic scheme which will help to take the heat off a nature reserve.

The road to recovery for



A public open day on Goss Moo

nglish Neture

Traffic across Goss Moor at the notorious bottleneck It is August Bank Holiday on the A30, the main road in and out of Cornwall. Families, surfers, art fans and locals, stew together in a hot, flat bottleneck in the very centre of the county. Trapped in their vehicles, passengers gaze out over an expanse of apparently inaccessible moor and wet heath.

For most people who pass through, all they ever know of Goss Moor National Nature Reserve (NNR) is this grim, unpleasant experience. But now the reserve is the hub of a dynamic project bringing people and nature together.

Work has begun on the A30 Road Improvement Scheme between Bodmin and Indian Queens, which involves the realignment of the busy trunk road out of the reserve.

Stephen Warman, Area Team Manager for Cornwall and the Isles of Scilly, says, "It's not often that wildlife gains from roads, but in this case there is a fantastic opportunity for precisely that to happen."

Goss Moor, on the edge of the Clay Country, is not the most fashionable part of Cornwall. The county has its holiday hotspot

own economic problems and, beyond the pretty seaside towns there are many households struggling on very low incomes.

"We've been working very closely alongside the local community for many years," says Martin Davey, the Reserve Manager. "The problems Goss faces are complex. It has a trunk road, a railway line, a legacy of mining and a power station to contend with. Against that backdrop, expectations for change can be raised to unreasonable heights all too easily.

"But now some real improvements are being made to a site that contains a very diverse set of habitats, and large populations of important species."

One of those species is the marsh fritillary. Because Goss Moor is part of a Candidate Special Area of Conservation (cSAC,) this has brought in European funding from the LIFE Nature scheme. The Mid-Cornwall Moors LIFE Project (www.midcornwallmoors.org.uk) is using the money spent on downgrading what will become the old A30 as match funding for Euros from Brussels. Overall the Project is worth £1.2 million. Led by English Nature, the project has brought together key partners including the Environment Agency, Butterfly Conservation, the Cornwall Wildlife Trust and the Highways Agency to bring back sustainable cattle grazing to the moor – a vital management tool.

The moors were extensively grazed up until the post-war period and, by reintroducing the traditional, hardy breeds of British White and belted Galloway cattle, the LIFE project will do two things. It will reduce the scrub that has grown over large parts of the moor, and also demonstrate to local farmers that a premium agricultural product is ready to be developed.

Project co-manager, Jo Traill-Thomson, explained, "It's an exciting project because we're making an impact in so many areas. As well as improving conditions for the marsh fritillary, we're also improving public access, and ultimately contributing to the goal of seeing Goss Moor become a key asset for the sustainable regeneration of mid-Cornwall."

Hopefully trippers heading down west to visit the Eden Project or Tate St Ives, next summer, will take time to get out of the car and see for themselves.

Messing about on the river



Kate Humble introduces youngsters to wildlife at the launch

Hundreds of people have been watching out for wildlife on canal banks and riversides this summer in response to a call by TV nature presenter Kate Humble. They reported sightings of herons, kingfishers, dragonflies, frogs and toads, as well as rare species like otters, bats and water voles, for British Waterways' 2005 National Waterway Wildlife Survey. Kate, who co-presents the BBC's Springwatch programme launched the survey at the London Wildlife Trust's Camley Street Natural Park.

All the information gathered will be added to British Waterways' species database which records wildlife on the 2,000-mile network of canals and rivers across the UK. The results, to be published later this year, help to guide the management of our waterways and the protection of the creatures living there.

For more information visit www.waterscape.com/wildlife or call British Waterways Customer Service Centre on 01923 201120.

Search is on for waterways champions

English Nature is sponsoring the Natural Environment Category in the 2006 Waterways Renaissance Awards, which recognise best practice in waterway development and regeneration.

Entries are already being invited to the prestigious awards, run by the Waterways Trust and the British Urban Regeneration Association (BURA).

This is the second year that English Nature has provided sponsorship for the Natural Environment Category and it is hoping to see a wide range of projects submitted.

Projects that qualify for the Waterways Renaissance Awards could be selfcontained or part of a bigger scheme.

They might use innovative materials, designs or techniques to enhance the

areas round canals and rivers. The improvements could involve creating soft banks and marginal planting schemes or installing interpretation boards to inform the public about the natural or historical significance of the waterway and its wildlife habitats.

Projects submitted to the awards will be judged by a panel made up of waterway, conservation and regeneration experts, including English Nature Council Member Anne Powell.

The winners will be announced at a ceremony hosted by TV presenter and Vice-President of the Waterways Trust, John Craven, in March 2006.

Stewart Clarke, Fresh Water Ecologist with English Nature, said, "These awards carry enormous prestige and I'd urge anybody involved with or aware of projects that deserve this recognition to visit the BURA website and get more information about how to enter."

How to enter

For information and on-line entry to the Natural Environment Category of the Waterways Renaissance Awards go to: http://firsthand.bura.org.uk

The closing date for entries is 5 October 2005.



Otter, BAP species

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



