



Halting the decline

Species Recovery Programme special

SRP Conference

Celebrating 10 years
of the programme

SRP partnerships

Working together
towards species recovery

SRP in action

How work on the ground
is having a positive effect

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 photographer: Paul Glendell/English Nature

English Nature, the Peoples Trust for Endangered Species and the Forestry Commission have fought against disease to help boost red squirrel numbers in Thetford, Norfolk – see the full article on page 7

brief update

English Nature – performance and planning

Copies of English Nature's 2000/2001 Annual Report are now available to order from TwoTen Communications at English Nature, PO Box 1995, Wetherby, West Yorkshire LS23 7XX or call 0870 1214 177.

The 2001-2005 Corporate Plan, meanwhile, can be ordered from the Enquiry Service by calling 01733 455100.

Both can be downloaded direct from our website at www.english-nature.org.uk.



Thousands flock to new Lundy centre



Island life. Increasing numbers of people are being drawn to Lundy's Information Centre.

Since its launch five months ago, the £200,000 information centre at Britain's only Marine Nature Reserve (MNR) in Lundy, Devon, has welcomed around five thousand visitors from all over the world.

The centre, which was a joint project between English Nature and the Landmark Trust, is at the top of the island's landing stage and enables visitors to find out about the local varied and rare wildlife. It is housed in a purpose-built beach building designed to be of use to the wide range of visitors attracted to Lundy, which is also a candidate Special Area of Conservation (cSAC).

The building also has improved facilities for visiting divers, including a brand new compressor with air tank, changing rooms, kitchen and composting toilet.

The visitor centre includes information boards, interactive puzzles and

FMD – now is the time for action

English Nature says there needs to be "urgent action" taken over the Foot and Mouth crisis to protect internationally important wildlife and Sites of Special Scientific Interest (SSSIs).

English Nature's first assessment of the effect of the disease highlights the potential loss of culm grassland habitat in Devon, a stronghold for the internationally threatened marsh fritillary butterfly.

Over-grazing on Lundy Island, in Devon, could also lead to the end of Lundy cabbage, which is found only on the island.

However, the report indicated that rare marsh saxifrage and the Lake District's heather moorland were flourishing as a result of Foot and Mouth, due to the break from heavy grazing.

English Nature's Chief Executive, David Arnold-Forster, said, "The countryside and rural economy are still seriously suffering the effects of the continuing Foot and Mouth

games, and there is a huge aquarium containing prawns, crabs, fish and other marine creatures. In the centre of the building is a hand-painted podium showing where the different types of marine life can be found.

Lundy warden, Liza Cole, said, "The centre has proved to be a huge success for both



The benefits and consequences of Foot and Mouth for species must help to inform a new approach to grazing.

crisis. Our report confirms the disease also affects the management of internationally important wildlife and SSSIs.

"We must continue to do all we can to eradicate this disease, but now is the time to look to the future. We need plans to provide appropriate grazing levels

long-term visitors and day trippers. There's something for everyone, no matter their age or background, and children and adults have enjoyed having a go at the interactive activities at the centre. The success of the centre has far exceeded my expectation and I'm sure it will continue to be popular in the future."

to prevent already scarce species from disappearing all together and we need to capitalise on those that have benefited from less grazing. We have the opportunity to create economically and environmentally sustainable livestock farming that is good for landscape, wildlife and rural business."

Over the winter period, English Nature staff will be working on putting together educational packs for school children and a diver's guide, to reflect what marine life divers can find throughout the seasons. They are also in the process of creating a video to show on the two-hour boat trip from the mainland to Lundy Island.

NEWS IN SHORT

A new challenge

Former English Nature Conservation Officer Kate Cole, has taken at least a year out of the organisation to become the Coastal Biodiversity Project Officer for East Sussex. The project, which will be funded for three years by various partners, including English Nature, the Environment Agency and East Sussex County Council, aims to protect and promote the county's precious coastal area, in particular the rare vegetated shingle – a specialised habitat which occurs in only a few places in the world. Throughout southern England, much of this rare habitat has been lost to development and the remaining areas are under threat due to trampling, dumping of waste, nutrient enrichment and coastal defence works.

Rare fungi

A number of English Nature Magazine readers have reported sightings of two rare fungi, the oak polypore *Buglossoporus pulvinus* (*Piptoporus quercinus*) and the hedgehog fungus *Hericium erinaceum*, after seeing the "Hunt for rare mushrooms" article in the September edition.

Alf Simpson, a volunteer warden for the Sussex Wildlife Trust, spotted a fungus suspected to be the oak polypore whilst strolling on Ebernoe Common National Nature Reserve.

Once it has been verified by experts at Kew Gardens, it will be added to records being updated by Dr Peter Roberts in a report commissioned by English Nature, as part of the UK Biodiversity Action Plan.

The editor would like to apologise for not crediting or acknowledging copyright to Dr. Martyn Ainsworth for his two photographs that appeared in the September edition of the magazine. One of the photographs was of a fruit body of the oak polypore and the other a very young fruit body of *Hericium erinaceum*. The description of this fungus should have read, "The fruit body of *Hericium erinaceum* is a solid knot of tissue with teeth which can be up to 4cm long."

brief update

NEWS IN SHORT

Wildspace!

The Wildspace! grant scheme has just awarded another £1 million towards projects on Local Nature Reserves (LNRs) around the country, which will involve local communities in the improvement, care and enjoyment of their local environment.

This is the second set of awards under the six-month old scheme, which is a partnership between English Nature and The New Opportunities Fund. Applications are welcomed from anyone involved or interested in managing and developing LNRs, particularly in disadvantaged areas that lack access to natural open space.

Among other projects, these awards will fund the appointment of 18 community liaison officers, who will help promote a more 'hands-on' approach amongst local people, particularly in schools.

For more information contact Lynda Barfoot on 01733 455415 or visit our website at www.english-nature.org.uk

Officers appointed

English Nature is one step closer to restoring 1,500 hectares of high and low weald heathland in West and East Sussex and Kent after appointing two project officers.

Over the next five years, Richard Allum and Caroline FitzGerald will work on revitalising the areas. Their overall aim is to create, manage and restore both private and public land, including Ashdown Forest and Chailey Common in East Sussex. They are working with many partners, including local authorities, land owners, the Forest Commission and the RSPB.

The project is being financed by a slice of the £20 million allocated to English Nature by the Heritage Lottery Fund to carry out initiatives under the Tomorrows Heathland Heritage umbrella.



English Nature's Chief Executive, David Arnold-Forster, unveils an information board featuring a new 'easy access' walk through Forge Valley Woods near Scarborough. The board also includes information on river life, bird life and woodland management.

Picture courtesy of Scarborough Evening News

Now is the time for... mistletoe

Launching the first in a new series, in which English Nature experts share their knowledge of wildlife over the seasons, is botanist Simon Leach, based in our Somerset Team. He discusses Yuletide favourite, mistletoe.

"Mistletoe is an important plant – three types of bug and a moth depend on it, while mistle thrushes would, as the name suggests, be less than happy if it was allowed to disappear from the winter landscape. As for humans, it's not only important on account of the Yuletide kiss – it is also used in herbal medicine in the treatment of high blood pressure.

"Should English Nature be concerned about this species? Yes, of course. In the 90s there was mounting concern that, given the plant's preference for orchard trees (especially apple), the grubbing-up of

Not just for Christmas. A variety of species depend on mistletoe for their survival.



Simon Leach

old orchards – and possibly the over-collecting of female (berried) plants for the Christmas trade – could have been causing a widespread decline of this woody parasite. This even within its strongholds in the fruit-growing areas of the West Country and the Severn Vale.

"So, is this plant in decline? It's hard to say. Results of the national survey I was involved in between 1994 and '96 seemed to show that mistletoe is holding its own, although it may have declined in parts of Gloucestershire and

Herefordshire. Here in Somerset, while it's true to say that its range hasn't declined, we have lost a lot of cider-orchards, which used to be festooned with literally thousands of mistletoe plants.

"And what practical steps can individuals take to help conserve the plant? Support orchards by buying locally grown apples and cider and get involved with campaigns like Common Ground's annual 'Apple Day'. Now, in Somerset at least, there are grants available to encourage the planting of new orchards."

Teeing off – the natural way

It's official – a good game of golf and wildlife conservation can go hand-in-hand. English Nature asked sports turf expert, Bob Taylor, from the Sports Turf Research Institute (STRI) to highlight ten top wildlife-friendly tips for all green-keeping staff.

- Keep wildlife happy by allowing grass to grow along the edge of ditches – it will also help stop golf balls from rolling into the water hazard.

- Improve security on your golf course by planting traditional hedgerows along boundaries and re-gap existing hedges – you'll be rewarded with birdsong.

- Compost cuttings from the golf course using old bunker sand and hollow cores (toilet and kitchen rolls) and use for top dressing or to re-instate worn or dry areas on the golf course. You could even sell it to fund wildlife-friendly projects at the club.

- Many adders are clubbed to death whilst basking on open ground next to paths. Provide a purpose-built pad for them by laying paving slabs under an area of rough, away from public footpaths. Once the grass dries, it will provide a safe haven for adders.

- Rabbits can be particularly problematic. Try moving them into areas of rough grassland



The edge of a golf course bordering Knole Park SSSI, Kent – a possible haven for wildlife.

Peter Wakeley/English Nature

by cutting the grassland very short, allowing them the clear areas that they need.

- Don't cut the grass in the middle of woods, and cut the grass on the outside less often that you would normally.

- Make a New Year's resolution and book a place at the BIGGA Turf Management Exhibition (BTME) in January 2002, and learn how to develop management plans to give stability and long-term direction to your initiatives.

- Leatherjackets may transform your emerald green course into a brown mass. Avoid using pesticides and instead draw them out using a vibrating roller to mimic rainfall – providing a feast for the birds.

- Make sure you can finish what you started by choosing a sustainable project. Start with a small project at your club, and once others see the results of your efforts, they are

bound to join in and you can move on to more adventurous projects.

- Finally, if you've got it, flaunt it – share your knowledge with others by organising wildlife walks, newsletters, and information boards.

Sir Ralph Verney 1915 – 2001

English Nature is very sorry to hear about the death of Sir Ralph Verney, Chairman of the Nature Conservancy Council from 1980 – 1983.

Sir Ralph was Chairman of the Council during the passage of the Wildlife and Countryside Act 1981 and also for the introduction of the World Conservation Strategy, which was the forerunner to the Biodiversity Action Plans.

Sir Martin Doughty, English Nature Chair, said, "Sir Ralph led at a time of significant gain for nature conservation. His work at the time of the Wildlife and Countryside Act 20-years ago set the foundations for the better protected Sites of Special Scientific Interest network we have today."

NEWS IN SHORT

Launch of LIFE

English Nature has launched a £2 million Salisbury Plain LIFE project to clean-up the chalk grassland site used as a tank training ground.

The four-year project, funded by the European Commission, aims to clear 200 hectares of scrub and 120 hectares of trees to restore the chalk grassland, and create 3,600 hectares of grazing land for sheep and long horn White Park cattle.

The site, around the same size as the Isle of Wight, is home to about a third of the UK's population of marsh fritillary butterfly and a host of rare birds, including 40 pairs of stone-curlew, 14,600 skylarks, 220 stonechat, and 40 pairs of corn bunting.

Stephen Davis, who has been seconded from English Nature's Wiltshire Team to head the project, welcomed a group of 30 representatives from the military and partner conservation groups at the launch.

The hunt is on!

The Great Nut Hunt may already be underway, but people are still being encouraged to "go nutty" and join in the largest national survey of dormice in Europe.

The survey, which English Nature has helped organise, runs until March 2002 and aims to uncover where these shy and retiring creatures can be found across the country by employing the help of the general public. The results will help conservationists develop a national plan to save the species from extinction.

To take part, contact the Great Nut Hunt, PO Box 26169, London, SW8 4AF, or register on-line at www.greatnuthunt.org.uk. Alternatively, you can telephone 0207 498 5262. All participants receive a fact-filled information pack and free magnifying lens to help find and identify dormouse-nibbled nuts.

Next month, the annual English Nature Species Recovery Programme Conference will celebrate ten years of working with partners to reverse the decline of many endangered species throughout England.

The conference, at The Hayes Conference Centre, Derbyshire, will be held over the three days from 5-7 December and will cover a broad range of species recovery issues. Among the guest speakers to address the audience of some 300 delegates will be Dr Tony Whitten, of World Bank, who will speak about the origins of the programme whilst presenting species conservation within a global context. Dave Stone, English Nature Species Recovery Programme (SRP) Manager, will take those present through the A - Z of SRP over the last ten years and Dr Roger Mitchell, English Nature Biodiversity Manager, will talk about the changing face of species recovery.

Many other issues will be presented by speakers, from both English Nature and key partners, including

- the use of genetic studies to advance the cause of species, such as butterflies and endemic beetles;
- habitats;
- maritime conservation, as applied in the case of the basking shark;
- landscapes for biodiversity;
- climate change; and
- links to species recovery in Europe.

There will also be workshops throughout the conference to discuss a variety of topics covering current and future work, and on the final day there will be an opportunity to put questions to a panel of experts. A number of Species Recovery Awards will be presented to those individuals and partners who have made sustained and outstanding contributions to the programme.

“This tenth anniversary conference is not just a celebration of species recovery, but also the special partnerships that have made it possible.”

The History of the Species Recovery Programme (SRP)

Having initially included only 13 endangered species when it began in 1991, SRP now aims to protect over 400 and identifies a further 250 that need help. During the past decade the SRP has not only halted the decline of many species, but has also enabled some, such as the dormouse, to thrive in both their original sites and further afield.

The structured approach of SRP had a great influence on the UK Biodiversity Steering Group when it drafted the Biodiversity Action Plans, following the Earth Summit in Rio de Janeiro in 1992.

In order to increase specialist knowledge and achieve better value from a limited budget, most projects run under SRP include work with at least one partner, of which there are currently over 100, including charities such as RSPB and Plantlife, local authorities, independent consultants and volunteers.

Dave Stone, English Nature SRP Manager, said, “Working with partners is the cornerstone of the Species Recovery Programme. The vision of the programme is ambitious and English Nature could not achieve success in species recovery without our partners, who bring skills, knowledge, expertise and resources to every project. Working together also means that the partnership owns the problems, the solutions and the successes.”

A new leaflet on the SRP is available from the English Nature Enquiry Service, Tel: 01733 455100 or e-mail enquiries@english-nature.org.uk. It can also be viewed on the English Nature website at www.english-nature.org.uk

Partnerships are central to the Species Recovery Programme. Over the last ten years, English Nature has actively worked with over 100 organisations in order to achieve a mix of experience and resources most appropriate for each species.

The Species Recovery Programme
Partnerships

Here a small sample of partners briefly reflects on the last decade...

Peoples Trust for Endangered Species (PTES)
Valerie Keeble, Chief Officer

One organisation that has been working with English Nature almost from the start of the programme has been PTES, a charity dedicated to raising funds and supporting fieldwork for endangered species. Since 1990 much of its focus has been on the plight of British mammals, having worked closely with bodies such as The Bat Conservation Trust and The Mammal Society.

“We came in very early to work on the red squirrel project in Thetford, Norfolk, with English Nature and the Forestry Commission, seeking to reintroduce animals and bolster the local population as well as to develop methods of controlling grey squirrel numbers. Over the last three years we’ve been paying for and maintaining captive breeding pens within the forest itself. To everyone’s delight, the first baby squirrel was born earlier this year. We had almost given up hope, as the squirrels had been held in pairs in every combination possible!



Red squirrel

Paul Glendell/English Nature

“It hasn’t been easy as we’ve had to contend with disease during the translocation of some of the squirrels. For the time being, no more squirrels will be moved. But we’ve learnt a lot about controlling the greys, which will, hopefully, be useful to others.

“As part of the Programme, we also have a number of other ongoing

projects with English Nature, including learning about pine martin ecology, with the aim of possible reintroduction into England. We have also taken over running the dormouse reintroduction programme and keeping the national database for the species.

“Overall, the Species Recovery Programme has been of huge value to conservation organisations, homing in as it does on the needs of specific species. For voluntary bodies such as ourselves, it is particularly important as it helps us target our limited budgets and use our resources as efficiently as possible. It has also brought us into contact with organisations with whom we might not otherwise have had the opportunity to work.”

Royal Society for the Protection of Birds (RSPB)
Gwyn Williams, Head of Sites & Species Conservation

A key player from the outset of the Programme, the RSPB is currently involved in around a dozen SRP projects and, as a result, has been able to strengthen its existing links with English Nature and other bodies. The Programme has also allowed it to demonstrate its commitment not only to rare and threatened birds, but to a wide range of other species.

“The Species Recovery Programme has certainly been an effective initiative from the RSPB’s point of view, but not because of the amount of money being channelled through it. Rather it’s how the money is provided: a regular flow that meets the needs of individual, threatened species that require continual attention over a long period. English Nature has also been very flexible in how it has provided the funding.

“The Programme has also been a very inspirational one. A success story we, English Nature, Forest Enterprise, Yorkshire Water and a range of other partners, including the Harewood Estate and Southern England Kite Group, have been involved with is that of the red kite. Seen as vermin, the species was hunted to near extinction around the time of the First World War with just a few pairs left in Wales.”

“Through introductions in the Chilterns, Midlands and more recently Yorkshire, numbers have risen above 430 pairs nationwide. Poisoning



Red kites

I.Carter/English Nature

– direct or otherwise – is still a problem, but the project is slowly modifying attitudes towards raptors, and this is having benefits for other species such as the buzzard. The bittern, curlew and stone-curlew are some of the other species with which we’re working in partnership.”

“But it’s not just birds. English Nature put forward the stinking hawk’s-beard – a member of the daisy family – for species recovery attention and we took up the challenge of lead partner as, in part, it falls within a reserve we manage at Dungeness, Kent. That kind of cross-pollination of skills and resources can really make a difference on the ground and is the real cementing factor for partnerships with bodies such as English Nature.”

The Species Recovery Programme Partnerships

The Natural History Museum

Johannes Vogel,
Programme Leader, UK Biodiversity

While the Natural History Museum is responsible for the national collection of species, it is also a founding contributor to the Species Recovery Programme, and has provided important research essential to informing work on the ground.

“Our partnership with English Nature has been a very profitable one: we’re satisfying our professional curiosity through research, while English Nature is receiving valuable data, which can be put to good use.

“A good example in the context of the Species Recovery Programme is the Killarney fern. A project that pre-dated the Programme, the fern seemed in dire need of a recovery plan yet there was much that was unknown about it. When we stepped in and began our research into its lifecycle, it became clear from our findings that accepted ideas about it would have to be challenged. This work allowed a re-assessment of threat levels and a revision of actions, leading to a “recovered” status.



Killarney fern

Peter Wakely/English Nature

“Our partnership with English Nature under the Programme has also taken other forms. The organisation is funding two UK Biodiversity Co-ordinators – Emily Funnell and Dr Gill Stevens – within the Museum

to encourage amateur naturalists and specialist societies to play an active role in delivering Biodiversity Action Plan objectives. Much press attention was recently paid to Emily’s launch of the hunt for the elusive mole cricket – an SRP species. It’s these kinds of initiatives that really stress to the public the importance of rare species work.

“We’ve always found English Nature to be a very responsive partner and the Programme itself to be highly effective in moving species action forward. Perhaps the next step is to integrate it more closely with work on changing land use patterns as habitat destruction is a major issue in species recovery.”

Centre Parcs

Barry Collins, Ecology Manager

The Species Recovery Programme has proved much more than a rallying call to appointed and voluntary conservation bodies. Commercial interests such as Centre Parcs and Anglian Water have also played a leading role in safeguarding the future of species close to the brink.

“The environment has been at the heart of the Centre Parcs concept since its launch in Britain in 1987. Since then, we have worked with English Nature, the Wildlife Trusts and our own expert consultants, to devise the Forest Management and Biodiversity Action Plans that are the foundation of the conservation success that our UK Villages represent.

“Although all our Villages are built within typically wildlife poor commercial coniferous plantations the underlying soils tend to be relatively natural, generally fertiliser free. Therefore, the natural habitats regenerating within the clearings and rides are a magnet for a wealth

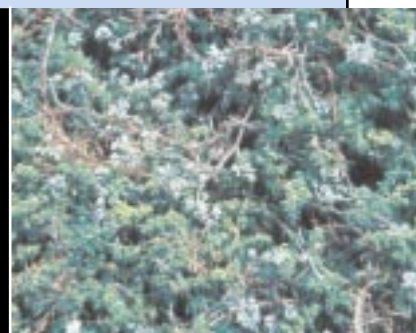
of native and often rare species. So much so that each UK Village is now an important local nature reserve each achieving SSSI status.

“At the Elveden Forest site in the Suffolk Brecklands we’ve created a wildflower meadow, introducing around 20 endangered wildflowers including the small alison and perennial knawel, both on the Species Recovery Programme. With around 300,000 visitors each year, the meadow is an opportunity to demonstrate the value of such rare species. Once we began to manage the meadow, the rare fingered speedwell appeared naturally, its seed having lain dormant in the soil for countless years. This is the only remaining native site for this plant in Suffolk.

“We’re currently working with English Nature and other key organisations to manage our other UK Villages, Sherwood Forest in Nottinghamshire and Longleat Forest in Wiltshire, where we are experiencing similar wildlife gains. It’s not just in our Villages where we are active. For example, we are currently putting our weight behind both the dormouse and bullfinch recovery programmes.

“This work has given all of us at Centre Parcs a great deal of pride, not just because of our success with biodiversity conservation, but by being involved at a level as significant as the Species Recovery Programme.”

Perennial
knewel (white
flowered plant
shown here
together with
smooth
rupturewort)



Dr Chris Gibson/English Nature

Royal Botanic Gardens Kew

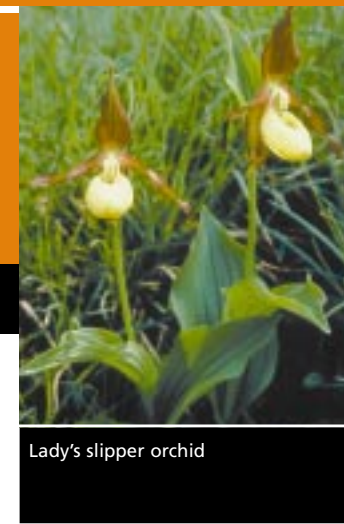
Mike Fay, Head of Conservation
Genetics and Margaret Ramsay,
Head of Micropropagation

If necessity is the mother of invention, then the Species Recovery Programme has also pushed the boundaries of contemporary science. With the support of English Nature, the Royal Botanic Gardens Kew, have been developing new methods of genetic research and propagation to give a number of previously near extinct plants a helping hand in the wild.

“A good example is the lady’s slipper orchid – at one point down to one recorded plant in the wild. If the re-introduction programme is to be successful, we have to ensure that the plants have as great a level of resistance as possible to disease and the best chance of adapting to a changing environment. That means ensuring their genetic difference or ‘variability’, in much the same way that people are different. Our job has been to study seeds taken from the wild or that can be traced back to the wild and then to assess the level of genetic variation so that appropriate plants can be used for re-introduction.

“It’s a far from easy job as lady’s slipper DNA is complicated – 130 times more so than that found in rice – but we have been able to overcome that hurdle. We have developed genetic markers that distinguish between the various types and have now published a paper on this advance.

“A lot of work has also been done in terms of propagation. We’ve learnt over the years the correct ripeness of seed to collect and developed innovative techniques for seed germination and seedling growth in the laboratory. Several hundred lab raised



Lady's slipper orchid

Peter Wakely/English Nature

plants have been reintroduced into the wild and one of these seedlings flowered 11 years after planting – the lady’s slipper orchid is a slow-growing, long-lived plant. Many other countries where the lady’s slipper is threatened are now using the methods developed in this collaborative project.

“Under the Species Recovery Programme, we’ve been able to develop our working relationship with English Nature, and we’re helping each other formulate appropriate questions and answers. In addition, we’ve been able to give relevant staff from English Nature and other partners training about what is and isn’t possible in genetics. The Programme has proved a foundation for understanding on both sides.”

Invertebrate Specialist

Annette E Binding

Not all of those who work with English Nature and contribute to the SRP are large organisations. Annette Binding is assisted only by her husband Allan, but her hazel pot beetle work in the field – and at home – has been invaluable, and achieved not a little media attention.

“It all began in 1998 when English Nature invertebrate specialist Roger Key approached me and asked if I was prepared to go and try to locate hazel pot beetles at a number of sites in the Midlands. It’s a species that feeds on birch and so should by rights be plentiful, but is actually very rare, limited to only three sites in England. Our objective was to collect a few and then try to breed them for reintroduction. The sad truth is that when we visited Kirby Moor, a

Lincolnshire Wildlife Trust site, we found only five, which I then took home and began to breed.

“I think you could say that it has been a labour of love. It’s too warm to keep them fully indoors, but outside can be too cold. The solution was to keep them in my kitchen cupboard, which is attached to an exterior wall and there they have been ever since. That really caught the attention of a BBC News 24 crew who were covering the subject earlier this year. I’ve also had to be inventive with containers, anything from pin boxes to plastic trays. This year we managed to rear over 250 beetles which laid hundreds of eggs – so many that Ian Hughes at Lifeforms is now helping to rear them.

Hazel pot
beetles



“So far it’s been a great experience and I’ve developed a very good relationship with a number of individuals, but there is still an awful lot to find out. As well as English Nature, I’ve been working with Leeds University who have devised a way of tracking the extent of the larvae’s movements once they are reintroduced at nearby Whisby Nature Park: tiny metal tags, which can be picked up with a metal detector. This year we were also able to release adult beetles marked with tiny numbered labels, which were stuck onto the beetles’ with clear nail varnish. It was then possible to return to the site and follow the beetles’ movements as very little is known about how they spread”.

Roger Key/English Nature

Species recovery: in action

Work on-the-ground is at the heart the Species Recovery Programme (SRP) and, with the help of various partners, over a hundred projects are currently taking place throughout the country. But what exactly do these involve? Here, we take a look at five such projects to find out just what is being done to protect England's wildlife.

Black grouse
Tetrao tetrix



Roger Wilton/Natural England

The English population of black grouse, which lives mainly in the North Pennines, has been in severe decline and only 650 displaying males were estimated to be in existence in the early 1990s.

The species became part of SRP in 1996 and with four partners – the Game Conservancy Trust, RSPB, Northumbrian Water and the Ministry of Defence – English Nature has successfully increased numbers to over 800 displaying males. In addition to survey and research, a key part of the project has been the improvement and maintenance of the grouses' moorland habitats, partly by reducing grazing, and this has shown to improve breeding.

John Barrett, English Nature's Deputy Team Manager in Northumbria, said, "We hope that next year's national census will show an upturn in the fortunes of black grouse and the long-term downward trend in the population will have been reversed."

Plymouth pear
Pyrus cordata



Peter Wakeley/English Nature

The Plymouth pear only existed at two sites, on the edge of Plymouth and near Truro, when it became part of SRP in 1991.

Working with the Botanical Society of the British Isles; the Royal Botanical Gardens Kew; Plymouth City Council; The National Trust and Reading University, English Nature completed extensive survey work and established the genetics of the species. This culminated in the launch of a Plymouth pear orchard at Lanhydrock, a National Trust property in Cornwall, in 1995.

Andy Jackson, of the Royal Botanical Gardens Kew, said, "The population at Lanhydrock was finally fully stocked, to a total of 60, in 2000 and all but one of these have survived – the first fruit appeared in 2000. The orchard continues to be monitored and the species now has a local Biodiversity Action Plan."

Sand lizard
Lacerta agilis



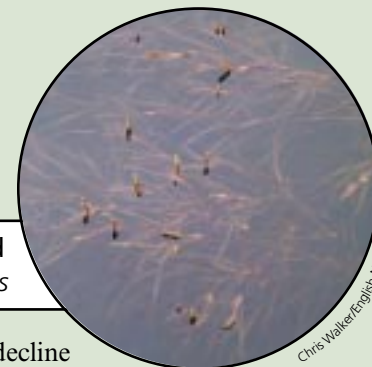
M.J. Hammett/English Nature

Loss and damage of its heathland and dune habitat is responsible for the decline of the sand lizard. Found mainly in Dorset, Hampshire and Surrey, the lizard has very specific habitat requirements and does not easily colonise new areas.

Working in partnership with the Herpetological Conservation Trust, English Nature is aiming to reverse the fragmentation of sites by habitat re-creation and management. This work includes removing trees and scrub to allow heather to grow, controlling invasive plants, such as bracken, and creating areas of bare sand for egg laying.

Jim Foster, English Nature's reptile specialist, said, "The outcomes of the project are a mixed picture, we are having some successes, but also some failures, unfortunately. The most encouraging thing though is that we are reintroducing populations to new areas – the latest introduction was to north Devon a few weeks ago, which was really good news."

Grass-wrack pondweed
Potamogeton compressus



Chris Walker/English Nature

This pondweed is on the decline and has disappeared from many of the canals and rivers it once inhabited. It was found at only four sites during a recent survey of the West Midlands and Manchester area.

English Nature began this survey, of over 30 sites, in 2000 to find out exactly where grass-wrack pondweed still exists, and is looking into possible reasons why it is struggling to survive. Two reasons are thought to be deteriorating water quality and intensive boating, but it is also suspected that this pondweed cannot survive in shaded areas. British Waterways is the main partner in this project.

English Nature's lead officer on the species Chris Walker said, "On completion of the survey we will draw-up a strategy – probably including the research of water quality in the areas that this pondweed appears. If shading does prove to be an adverse factor we may have to look at cutting down some trees and shrubs."

Stone-curlew
Burhinus oedipnemus



Dr G. H. Higginbotham

The stone-curlew, which is now mainly found in Breckland and on the downlands of Wessex, has declined at an alarming rate over the past 50 years, and when it became part of SRP in 1994, there were just 149 pairs.

The partners in this project are RSPB, the Department of the Environment, Food and Rural Affairs (DEFRA) and farmers, and by working with English Nature they have managed to increase the stone-curlew population to 254 pairs over the last six years.

The project includes locating breeding birds, liaising with farmers to prevent the birds being disturbed by agricultural operations and creating and managing special nesting plots.

Phil Grice, Senior Ornithologist at English Nature, said, "Due to loss of habitat, over half of stone-curlews now rest on arable land. By creating special nesting plots on farmers' land, we can make sure that the precise requirements of the birds, which is bare or sparsely-vegetated and stony ground, are met so they can re-locate to these much safer areas."

WHAT'S ON? GUIDE

NOVEMBER

NOV
18

Guided walk at Humberhead Peatlands NNR

Contact: Kevin Bull, 01405 740 640

NOV
18

Feeding the birds at Bardney Limewoods NNR

Now that winter has set in, Jim Rance will show you different ways of ensuring that your garden birds are well fed.

Time: 10am to 1pm

Contact: Stuart Britton, 01673 842 899

NOV
28

Annual Science Lecture at the Central Hall, Natural History Museum

Lord Robert May of Oxford will discuss the future of our natural world and the impact of science and technology.

Time: 7.30 to 8.45pm

Price: Adults £13, £11 concessions, £10 for museum members

Contact: The box office, 020 7942 5555

DECEMBER

DEC
3-4

English Nature Council Meeting

Held at Northminster House, Peterborough.

DEC
5-7

Species Recovery Programme 10-year conference

Held at Hayes Conference Centre, Swanick, Derbyshire.

Contact: Dave Stone, 01733 455 118

DEC
9

Bird watch at Stodmarsh NNR

Meet at Stodmarsh NNR carpark.

Time: 2pm until dark

Contact: David Feast, 0467 321 058

DEC
9

Making Christmas decorations, Castle Eden Dene NNR

Make some authentic festive decorations, using willow, evergreens and recycling materials. Booking is required. There is disabled access.

Time: 10.30am to 1.00pm for adults, 2.00 to 4.00pm for families

Contact: Sue Antrobus, 0191 518 2403

DEC
23

Christmas walk, Bardney Limewoods NNR

Work up an appetite before consuming all those Christmas goodies on this festive walk with Stuart Britton.

Time: 10am to noon

Contact: Stuart Britton, 01673 842899

FEBRUARY

FEB
23

Conference on mammaliens, Greenwich University, Medway Campus

A symposium where experts will be discussing mammals in this country, including mink, grey squirrels and sika deer.

Contact: Ed Goode, 0207 498 5262

The weird and the wonderful

Many weird and wonderful creatures feature in the Species Recovery Programme. Here, we take a brief look at five of them:

most mysterious
v



Edmond's ground beetle
Tachys edmondsi

Previously thought to be endemic – only occurring in Britain – it was recently discovered that there are four or five identical creatures living elsewhere in Europe and Africa under different names. This beetle is still incredibly rare, inhabiting only a couple of bogs in the New Forest, and is one of the smallest ground beetles in Britain measuring just one-and-a-half millimetres. It is known only to live deep in *Sphagnum* moss, which is the moss commonly used to line hanging flower baskets.

Large blue butterfly
Maculinea arion

Having dropped from a wild thyme plant, where the large blue lays its eggs, the caterpillar secretes a sweet liquid to attract one particular species of ant and mimics the behaviour of its grub to convince the ants to carry it underground. Once there, it safely feeds on ant grubs throughout the winter before emerging as a butterfly in June. Having become extinct in Britain in 1979 due to changes in habitat, the large blue was re-introduced using Swedish stock in 1983. This attractive butterfly was one of the first species targeted by the SRP.



best mimic
<



Ladybird spider
Eresus cinnaberinus

A vibrant red body with black spots makes the male ladybird spider the most colourful spider in Britain. It is also the rarest, with only about 600 known to exist at a single site in Dorset. Living underground, the male only comes out during the first two weeks of May, and the matt-black female never leaves the burrow. They catch their prey of insects, including the occasional queen bumble-bee, using silk trip wires. The mother feeds her 80 young, most of which don't survive, on regurgitated food before becoming a meal for them herself.

biggest ^

most colourful
<

loudest v



Natterjack toad
Bufo calamita

The male natterjack's mating call can be heard from over one mile away. Spending winter months in hibernation in various sand dunes and heathlands throughout the country, Britain's rarest amphibian emerges for the breeding season in April. Rarely seen during the day, the natterjack feeds and breeds at night. Mating takes place in a dune or heathland pool from which the male has sung to attract a partner, and the female lays up to 2,600 eggs at one time. Unlike other toads, the natterjack actively runs after its prey.

Basking shark
Cetorhinus maximus

Growing as big as 15 metres in some parts of the world, the basking shark is the second largest fish in the sea. This shark – more likely to be about four to eight metres in British waters – is harmless and feeds only on plankton, which it filters through gill rakers into its open mouth whilst swimming. A water volume equivalent to a 50-metre swimming pool is filtered every hour. Hunted for its liver, which contains oil used in cosmetics and engineering, and its fins, for use in shark fin soup, the basking shark is now rare in areas that it could once be commonly found.

Roger Key/English Nature

Roger Key/English Nature

Picture courtesy of the Basking Shark Society

Hans Dieter Brandt/EPA