



Countryside Jobs Service Weekly Special Edition 18 August 2008

in association with the
National Biodiversity Network Trust

Featuring Habitat Management and Conservation
with an emphasis on Biodiversity



The importance of sharing wildlife information in association with the National Biodiversity Network Trust

The National Biodiversity Network (NBN) is a collaborative project involving the UK's wildlife organisations, the government and country conservation agencies and many voluntary groups, all of whom are committed to making biodiversity information available. The principal way in which the NBN does this is via the internet through its website, the NBN Gateway. The NBN Gateway currently holds over 30 million species records and provides an easy point of access to a very large amount of species data for the UK, but it is far from comprehensive; indeed 30 million records is probably less than 5% of existing data!

It is estimated that up to 60,000 people routinely record biodiversity information in the UK. Most of this effort is voluntary and is organised through about 2,000 national societies, recording schemes and the network of local record centres. The government, through its agencies also collects biodiversity data. This means that a huge amount of information exists but, because the organisations keep it in a variety of formats, from computer databases to handwritten record cards, it isn't always easy to access.

The NBN Trust, the organisation facilitating the building of the NBN, promotes agreed standards for the collection, collation and exchange of biodiversity data and encourages improved access. The NBN initiative is therefore working with data holders and data users to make more of the data that exists available to all those that need it. The shared aim is to make the NBN Gateway a more comprehensive source of species and habitat data for the UK so that it ultimately becomes the easiest way to access a complete range of UK biodiversity information at a national level. The data can either be accessed by using the public web site, from local record centres or more recently by using web services. This will become even more important as the need for up to date, accurate wildlife information continues to increase.

Many organisations have to consider environmental issues or deliver biodiversity targets in one way or another. These may take the form of government agencies monitoring changes in populations of threatened or non-native species, planners helping to devise new land use policies, countryside managers wanting to know if an area is protected, industrial companies wanting to carry out environmental impact assessments or individuals purely interested in the wildlife in their area.

Sharing information about wildlife is vital. In this respect data from the NBN Gateway, for example, has already proved to be invaluable for analysis and has been used by the Joint Nature Conservation Committee to collate trends in species. This is only one of many examples where accessible data is helping to make informed decisions, which will protect and conserve the UK's biodiversity.

By co-ordinating efforts the UK will undoubtedly increase the number of accessible data sources. If you are interested in finding out more about sharing data through the NBN, using web services or any aspect of the NBN's work, then please visit www.nbn.org.uk e-mail support@nbn.org.uk or call 0115 959 6435.

Countdown 2010 – together towards the 2010 biodiversity target

Countdown 2010 is a unique time-bound platform that brings together different partners from all walks of life to collaborate and develop a coherent approach to reach the 2010 biodiversity target. Partners include governments, NGOs, international institutions and agencies, companies and local authorities that have committed to taking direct action to save biodiversity.

The Secretariat works together with partners to build the momentum towards 2010 and chart the way forward beyond 2010. Join the network today! Find out how on our website:
www.countdown2010.net





Conservation of freshwater biodiversity around the world has been impeded by a severe lack of comprehensive, synthesized data cataloging the distributions of freshwater species. Freshwater Ecoregions of the World (FEOW) -- a collaborative project led by WWF and The Nature Conservancy -- provides the first global biogeographic regionalization of the Earth's freshwater biodiversity, and synthesizes aquatic species and threat data for the resulting ecoregions. A freshwater ecoregion is defined as a large area encompassing one or more freshwater systems that contain a distinct assemblage of natural freshwater communities and species. The freshwater species, dynamics, and environmental conditions within a given ecoregion are more similar to each other than to those of surrounding ecoregions and together form a conservation unit. The map, as well as the results of global biodiversity and threat analyses, descriptions of individual ecoregions, and a comprehensive bibliography, are available via the project website, www.feow.org. FEOW is a useful tool for underpinning global and regional conservation and water resource planning efforts, particularly to identify outstanding and imperiled freshwater systems; for serving as a logical framework for large-scale conservation strategies; and for providing a global-scale knowledge base for increasing freshwater biogeographic literacy.

Organisations :

Montgomeryshire Wildlife Trust manages a diverse range of habitats including woodland, wetland bog, upland lakes and wildflower meadows across our 19 Nature Reserves. We also lobby for wildlife conservation, offer advice to landowners and undertake large scale conservation projects. To find out more contact us on 01938 555654 or email info@monwt.co.uk

UK Coastal Dune and Shingle Network promotes the sustainable use and sharing of experience in conservation practice. Achieve this through the promotion of linkages, the use of science for evidence based decision making, and the exchange of understandings between the communities of stakeholders. Join free at www.hope.ac.uk/coast or e-mail dunes@hope.ac.uk

Joint Nature Conservation Committee (JNCC) – Statutory adviser to Government on UK and international nature conservation issues. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems. Monkstone House, City Road, Peterborough PE1 1JY. Tel: 01733 562626. Fax: 01733 555948. email: communications@jncc.gov.uk. Web: www.jncc.gov.uk

The Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT), is the only voluntary organisation in the region conserved with all aspects of nature conservation. We have 1,300 active volunteers and over 60 staff and there are usually vacancies (paid and voluntary) within our Biodiversity and Reserves teams. Visit: www.bbwt.org.uk for details.

Derbyshire Wildlife Trust manages 42 nature reserves and runs conservation projects across the county. Get involved by becoming a member, volunteering or donating to our White Peak or Transforming the Trent Valley appeals. To find out more visit www.derbyshirewildlifetrust.org.uk or call 01773 881188.

The Flora Locale website www.floralocale.org offers free information on wild plants, habitats and ecological restoration. The Flora Locale annual training programme provides ideal opportunities to see first hand wild-plant and ecological projects led by experienced practitioners. Please contact us by phone on 01488 680457, email info@floralocale.org

Plantlife International is a charity dedicated exclusively to conserving all forms of plant life in their natural habitats, in the UK, Europe and across the world. Plantlife offers various ways to support our vital work, why not join us now. Registered Charity Number: 1059559 Tel: 01722 342730 Web: www.plantlife.org.uk

OPAL is an exciting new partnership initiative which has received a grant from The Big Lottery Fund. It aims to encourage people of all ages and from all backgrounds to get back in touch with nature by exploring and studying their local environment. Across England, OPAL regional offices are developing a wide range of participative programmes including wildlife surveys, identification training and family fun-days. There will also be a series of nation-wide biomonitoring surveys covering the five key OPAL areas – soils, water, air, biodiversity and climate. To find out more, visit www.OPALExploreNature.org, call 020 7942 5894 or email OPALExploreNature@nhm.ac.uk



Cumbria – a Landscape for Natterjacks

Wealth of Wildlife is a three-year project, employing three full-time staff, which began in September 2005. Its prime purpose is to deliver elements of the Cumbria Biodiversity Action Plan (BAP) via four main areas of practical work covering particular habitats and species; upland woodlands, hay meadows & lowland pastures, bats and natterjack toads.



Natterjack toads are one of six native species of amphibians breeding in the British Isles and, with a decline of 75% in the last 100 years, are considered to be endangered. Cumbria supports around 50% of the UK sites inhabited by this, the noisiest of European frogs and toads, on mainly coastal sites. The major cause of the decline is likely to be loss of suitable habitat.

Natterjacks need shallow, temporary pools of neutral pH for breeding, as the water warms up quickly, aiding rapid metamorphosis from tadpoles to adults before the pools dry up. This gives the species an advantage over other amphibian species with a longer breeding cycle and also reduces the number of aquatic predators likely to feed on the young natterjacks. Natterjacks can also tolerate higher levels of salinity than other amphibians, which gives them a further advantage on sites where seawater encroaches, such as in the upper reaches of salt marshes. The other main habitat requirement for the adults is short vegetation, as they run, rather than hop, after their invertebrate prey.

The *Wealth of Wildlife* project has commissioned habitat and species management work by the Herpetological Conservation Trust on 16 sites in Cumbria. This has involved creation of new breeding pools, removal of encroaching scrub, re-profiling of sand dunes to enable tidal inundation, changes in grazing regimes and reintroduction of captive bred tadpoles to sites where the conditions have been restored to favourable status.

Cumbria has an active volunteer network involved in monitoring the status of sites and their natterjack populations along its coastline, with a regular cycle of visits carried out annually. Early indications are that the work of the project is already having beneficial impacts, with improvements in breeding success on a number of sites.

Wealth of Wildlife also has an Audience Development Plan involving a wide variety of training courses, volunteering opportunities, public events, educational activities, interpretative publications and an innovative, interactive web site with a database of information on wildlife sites to visit across the county. Visit the web site at www.wealthofwildlife.org.uk to see and hear more about natterjacks and the other aspects of the project – you will need to turn on your speakers or plug in your headphones to get the best from your visit!

The *Wealth of Wildlife* project is hosted by Cumbria Wildlife Trust on behalf of the Cumbria Biodiversity Partnership with funding from the Heritage Lottery Fund, Cumbria Vision (part of the North West Development Agency) and the Landfill Tax.

Dave Muir, Project Manager (29 July 2008)



photo online

Funding biodiversity projects through the Landfill Communities Fund (LCF)

The LCF aims to compensate those living in the vicinity of a landfill site by using landfill tax to support local community projects. LCF money may be distributed to projects which meet certain criteria under the Landfill Tax Regulations 1996 and which have certain aims, including: Providing Public Amenities; Conservation of Biodiversity; Restoration of Religious Buildings or Buildings of Architectural/Historical Interest; Remediation of Polluted Land; or Reduction of Pollution. If you have a project which needs funding visit www.entrust.org.uk to find out if you might qualify. (ENTRUST regulates the LCF).



Organisations:

The Farm Wildlife website brings farmers, advisers and ecologists together to discuss best farm management for wildlife and find solutions to management problems. There is a discussion forum, case studies, an events calendar and information library. Two technical events are run per year. Visit www.farmwildlife.info

Saving Songbirds with Science - A membership charity researching into UK Songbirds, their decline and UK biodiversity issues. Go to: www.songbird-survival.org.uk for full details

www.wildlifeextra.com is a free online resource that provides a guide to where to watch wildlife throughout the UK.

Free Newsletter - "UK Safari News" has been informing & entertaining nature enthusiasts & conservation professionals for eight years. It shows what to look for in the countryside each week and features the latest nature news stories from around the U.K. For your free copy simply visit www.uksafari.com

Aberdeen Greenspace is a local environmental charity offering grants for greenspace improvement and biodiversity projects in the city of Aberdeen as well as delivering projects using its dedicated volunteer group. Recent projects have involved working with communities to improve local parks through native tree planting and improving access. Contact: info.ag@btconnect.com www.aberdeengreenspace.org.uk

Northern Kites is the project that has returned red kites to northeast England. 94 red kites were released and are now breeding successfully. Partnership between Natural England, RSPB & Gateshead Council, Northumbrian Water, National Trust & Forestry Commission supported with funding from Heritage Lottery Fund and Sita Trust. 0191 4961555 www.northernkites.org.uk

The SOC is Scotland's national bird club with over 2500 members and 14 branches. The Club plays a central role in Scottish birdwatching, bringing together amateur bird-watchers, keen birders and research ornithologists with the aims of documenting, studying and, not least, enjoying Scotland's varied bird life. Visit www.the-soc.org.uk

greenspace scotland works with national and local partners to improve the quality of life of people living and working in urban Scotland though enabling the planning, development and sustainable management of greenspaces. Our activities include: research and knowledge management, policy advocacy, partnership development/support and sharing practice. More: www.greenspacescotland.org.uk

Sussex Otters and Rivers Project promotes sustainable management of river catchments and their landscapes and the restoration of wetland habitats. The project seeks to help restore and rehabilitate rivers, wetlands and floodplain woodlands and to ensure the return of key wetland species such as otter, water vole and black poplar. www.sussexotters.org.uk for further information.

Wales Environment Link (WEL) is an umbrella body for environmental / countryside Non-Governmental Organisations in Wales and the official link between eNGOs and the Welsh Assembly Government. WEL provides an information service, a forum for joint-working and a mechanism for interaction with the Assembly. Email: enquiry@waleslink.org Web: www.waleslink.org

The Hawk and Owl Trust is a national charity, working for wild birds of prey. It creates and enhances nesting, roosting and feeding habitats - both in partnership with others and on its reserves at Sculthorpe Moor, Norfolk; Shapwick Moor on the Somerset Levels; and Fylingdales Moor conservation area in the North York Moors. www.hawkandowl.org

Trees for Life is an award winning conservation charity based in the Scottish Highlands, working to restore the Caledonian forests. Join us on a Work Week and help us plant 250,000 trees as part of the United Nations Seven Billion Trees campaign!



TREES FOR LIFE
Restoring the Caledonian Forest

Conservation work includes: tree planting, non-native tree removal, habitat restoration, seed collection, survey work and more, in a variety of stunning locations. Work Weeks run Saturday to Saturday, March to June and September to November. All food and accommodation is provided. Minimum donation £60pw. Volunteers must be 18+. No previous experience needed, but reasonable level of fitness required. www.treeforlife.org.uk

Buglife - The Invertebrate Conservation Trust



Buglife is the only organisation in Europe devoted to the conservation of all invertebrates, in all habitats from terrestrial and freshwater to marine. We have produced a range of habitat management resources, many of which are available for free download from our website. These include guidance on managing the following habitats for invertebrates and other biodiversity: ● All UKBAP priority habitats ● Farmland habitats (with links to agri-environment options) ● Aggregate and minerals extraction sites ● Coastal soft cliffs ● Brownfield sites ● Freshwater habitats. Visit our website www.buglife.org.uk or e-mail info@buglife.org.uk for more information.



for birds
for people
for ever

Landscape-scale restoration in the Flow Country

Intact peat bog in the Flow Country is a massively important habitat for birds and other wildlife. In recognition of this, the majority of the 18,000ha RSPB reserve at Forsinard, in the heart of the Flows, was designated a National Nature Reserve in 2007. The reserve currently supports four pairs of black-throated divers, 43 pairs of greenshanks, over 150 pairs of dunlins and 160 pairs of golden plovers, as well as at least 11 pairs of hen harriers, 3 pairs of merlins and over 2,000 pairs of both skylarks and meadow pipits. Many of the native plants are highly specialised to survive and even thrive in this naturally nutrient-impoverished habitat, for example the carnivorous sundews and butterwort. The peat bogs of Caithness and Sutherland have been naturally treeless for over 90% of the last 8,000 years. However, in some areas, including parts of the reserve, the blanket bog has been damaged through inappropriate planting of non-native conifers and through drainage schemes, funded through government grants and tax loopholes between the 1950s and 1980s.

To achieve meaningful restoration of this prime habitat, we need to work on a landscape scale. Since 1995, we have added significantly to the size of the reserve by buying adjacent areas of plantation (nearly 2,000 ha to date) so that we can work to restore a large area to its former good condition. We are enhancing the integrity of the bog further by blocking hill and forestry drains on the reserve to raise the water table, with over 10,000 dams installed to date.

From 1994 to '98, we received European LIFE-Nature funding to trial different ways of felling trees and blocking drains to give us a value-for-money approach and one that would speed the restoration of the native flora. Following on from this work, in a second LIFE project, which ran from 2000–06, we implemented these techniques on a much larger scale. Drains were blocked using three types of dams, depending on peat depth and proximity to sensitive bog pools. Most dams are built with peat, using a very low ground-pressure excavator machine. In fact, we built so many dams that the contractor cut an excavating bucket down to size, a little wider than the average width of a hill drain, so that the size of the dam created was in keeping with the width of the drain. The same contractor developed a hydraulic shear attachment for the low-ground pressure machine, enabling him to fell trees mechanically with almost no damage to the peat surface. As the machine works, it also tracks over the brush, compressing it



into the ditch. The result is a more level surface that retains water better, which in turn will be beneficial for the restoration of the site. The water-loving bog plants will be able to colonise the area more easily, and begin the process of actively laying down peat once more.

The fact that peat bogs have been disappearing from our landscape is of international concern, not only from a wildlife perspective. The destruction of bog habitats contributes to carbon loss into the atmosphere, one of the major causes of climate change. Our restoration is a long-term vision, because peat forms so slowly that, on average, less than 4 cm builds up over 100 years. It will be several decades before the felled areas look like peatland again. On a positive note, although bog does form very slowly, we do appear to be having



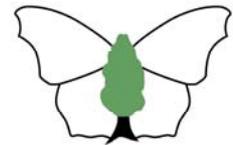
success. Water levels have been raised, native bog vegetation is reclaiming felled areas and we have been monitoring and maintaining the dams to protect this massive carbon store. We are pleased that many of the dams that we built after the first phases of tree felling eight years ago have now become invisible because of the re-growth of native bog vegetation around them. These are the first steps in a long-term project, but it is heartening to see that many birds, insects and plants are benefiting as they gradually move in to the restored areas and make Forsinard Flows their home.

Katy Robinson, Reserve Warden, Forsinard Flows reserve.



photo online

Restoring the Shimmering Rhos Pastures of the South Wales Coalfields



Butterfly Conservation Wales
Gwarchod Glöynnod Byw Cymru

In the South Wales Valleys lies a hidden oasis. Scattered across the former mining belt from Caerphilly in the east to Carmarthenshire in the west, extensive remnants of flower-rich marshy grassland persist.

These 'Rhos pastures' are a mix of Purple Moor-grass dominated wet grasslands with heath, mire and fen mosaics often in a matrix with wide hedges, and patches of woodland and scrub similar to the Culm grasslands of southwest England. These grasslands are notable for plants like Whorled Caraway and Meadow Thistle and for significant populations of the Marsh Fritillary butterfly as well as many other species of conservation concern.

In the recent past Rhos pasture was targeted for both industrial and housing development on the one hand, agricultural improvement where possible, principally through drainage and re-seeding or neglect, as these areas were deemed unsuitable for grazing modern livestock. Development pressure has diminished to a degree over the last decade but has left these grasslands fragmented in some areas, such as parts of Bridgend and consequently Marsh Fritillary has failed to survive. Habitat fragmentation as well as decline in quality of the remaining habitat patches are factors in the long term decline of the Marsh Fritillary. Favourable management consists of mainly light, summer grazing by cattle or ponies. This creates an open, variable sward that ensures the species of interest persist. On over-grazed sites it is not just a question of reducing grazing numbers or grazing period. It often requires finding additional grazing, preferably of under-grazed adjacent Rhos pasture. Neglected sites required considerable capital funding to re-instate the infrastructure, such as fencing, and undertake some restoration works, such as topping rushes or dense grasses. Control of encroaching scrub may also be required and management of some patches of gorse or willow to diversify the structure.

This work is on-going by a number of different partners. Butterfly Conservation is leading two pilot projects in Mynydd Mawr in Carmarthenshire and Tonyrefail in Rhondda in partnership with Countryside Council for Wales. For more information contact: Russel Hobson, Head of Conservation Wales. Butterfly Conservation, 10 Calvert Terrace, Swansea SA1 6AR.



Photo online

Forest restoration in the Highlands of Scotland

By Dan Puplett



TREES FOR LIFE
Restoring the Caledonian Forest

Trees for Life is an award winning charity that aims to restore a wild, native forest ecosystem to a 900 square mile area in the Highlands of Scotland. Centuries of exploitation and overgrazing have led to the degradation of our forest ecosystems and a huge decline in biodiversity. Rather than trying to recreate a forest of the past, we seek to restore natural processes, allowing our wild places to evolve and change as they have been doing for millennia.

In the long term we believe that biodiversity would best be served by having the full complement of missing native species, such as beavers and lynx, as these animals play a crucial role in the ecosystem, benefiting numerous other species. Lynx for example, not only prey on roe deer, but also disperse them, reducing browsing pressure in a given area and allowing vegetation to regenerate; beaver activity is known to provide habitat for fish, amphibians, otters and countless invertebrates.

In the mean time we are carrying out a wide range of work to restore the biodiversity of our native pinewoods and other habitats. This work includes planting natives, felling exotics, tree protection, and fence removal. We also have specific projects to restore aspen, montane scrub and woodland ground flora.

We run over 55 Volunteer Workweeks a year, on which people have the opportunity to contribute to the restoration of Scotland's biodiversity, in some of the most beautiful surroundings in Britain. We aim to plant another 250,000 trees by the end of 2009, so the more hands the better!

Please visit www.treesforlife.org.uk or call 01309 691444 for further details about our Work Weeks and our forthcoming Reintroductions Conference.



Photo
online

Other management projects:

Balls Wood Nature Reserve – Hertfordshire.

Herts and Middlesex Wildlife Trust wants to purchase a 58 hectare oak and hornbeam woodland - half of which it has been managing for over 30 years. It must raise £700,000 by December 2008 to guarantee a secure future for Balls Wood and prevent it being sold and broken up. Adjacent to a National Nature Reserve and other HMWT nature reserves, it is vital in a chain of wildlife havens – especially for butterflies. Copping management, reintroduced to woodland rides, has greatly increased the wood's biodiversity – these conservation achievements could now be under threat. Visit www.wildlifetrust.org.uk/herts for more details.

STREAM is a £1 million LIFE Nature funded conservation project centred on the River Avon and the Avon Valley in Wiltshire/Hampshire. STREAM will demonstrate a strategic approach to large-scale river restoration, and techniques to integrate the management of the river and valley. Visit www.streamlife.org.uk for details.

Developed from the 2003 River Avon SAC strategy, **the Living River** project aims to increase awareness and appreciation of the River Avon and its tributaries. This is achieved through community engagement and Biodiversity restoration at publicly accessible sites. The project is generously supported by the Heritage Lottery Fund. www.livingriver.org.uk

Montgomeryshire Wildlife Trust - The Pumlumon Project

Our vision is to inspire and lead radical change in land management to create a more diverse landscape, rich in wildlife and supporting thriving and active communities whose cultural heritage will be more secure. Contact Iestyn Thomas at iestyn@montwt.co.uk or on 01938 555654 for more details.

Three Harbours Beef is a partnership between local farmers, Chichester Harbour Conservancy and others. The scheme enables farmers to raise their cattle on coastal grazing marshes – protecting a threatened habitat which is vital for wildlife. The high quality beef is sold direct to the public and through local farmshops. For more information see www.threeharboursbeef.co.uk or call Nicki Chquer, Scheme Co-ordinator on 01243 607243.

The Lyme Bay Reefs off Devon's coast are now protected thanks largely to campaigning from Devon Wildlife Trust over the past 18 years. To find out more about the highs and lows of the campaign read 'Lyme Bay Reefs: A 16 year search for sustainability' at www.devonwildlifetrust.org

Butterfly Conservation's South East Woodlands Project is addressing some of the issues surrounding declines in woodland Lepidoptera by working with woodland owners and managers, and supporting volunteers to help with surveying and monitoring. For more information contact your local project officer; Fran Thompson frthompson@butterfly-conservation.org (Kent), Steve Wheatley swheatley@butterfly-conservation.org (Sussex) or Kate Dent kdent@butterfly-conservation.org (Hampshire & Wiltshire).

Save the Levels! - Welsh Assembly Government is planning to build a 15 mile motorway across the nationally important Gwent Levels - a historic wetland landscape, with over 5000ha designated as SSSI. CALM is protesting against this devastating plan, as it would cause habitat losses, fragmentation, and pollution of the drainage ditches (reens) that support 144 species of nationally notable invertebrates. www.savethelevels.org.uk

Northumberland Wildlife Trust own and manage a number of grassland reserves including unique whin grasslands. In 2006 an aggregate levy funded project, re-surveyed the whin grassland sites surveyed in the early 1980's. The audit found there had been a considerable loss of area and conservation interest over the last 25 years. Work now needs to be carried out to restore degraded sites. Steve Lowe 0191 284 6884.

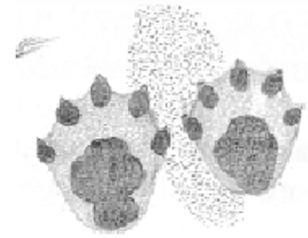
Wildlife documentary Last of the Scottish Wildcats has been released on DVD donating 50% of profits to wildcat conservation. Capturing rare footage of wildcats in the wild this acclaimed documentary also investigates its evolution, cultural status and conservation through expert interviews. See the trailer and place an order at www.coffeefilms.com/scottishwildcats

Survey & Mitigation by Access Ecology Ltd

Certain species are protected under various forms of legislation, e.g. Wildlife and Countryside Act. When it comes to managing or potentially developing areas where protected species may be resident special measures have to be taken; this usually takes the form of extensive specialist surveys and should these species be proved to be present then the impact of the proposed development, if it is allowed to proceed, must be reduced or mitigated. One such protected species is the otter. Otters and their holts are protected under Schedule 5 the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats &c.) Regulations, 1994 (as amended). EC Habitat Directive. It is an offence to deliberately kill, injure, capture or disturb otters as well as obstructing or damaging their place of refuge and breeding sites or to destroy or damage anything that conceals or protects their place of refuge.

Otter Surveys

The first stage of an otter survey is to establish if otters have used the area in the past for breeding or resting, this can be achieved by approaching local wildlife organisations for records of female otters, pregnant otters and cubs in the area. To estimate where in a catchment otters are breeding records can be found for road casualties and orphaned cubs.



The next stage is to locate potential breeding sites, habitats which will provide suitable cover for breeding include:

- Lakes and ponds ● Extensive areas of boulders and/or structures located close to watercourses ● Extensive areas of scrub ● Young conifer plantations ● Deciduous woodland ● Extensive reed beds.

It is likely that most otter breeding sites and natal dens are located close to a watercourse, wetland or water body, however breeding sites not connected to water should also be considered. A field study will then confirm the presence of breeding sites with a brief assessment of cover and likelihood of disturbance within the potential breeding site. During the survey all watercourses (including small streams) should be walked. Ideally this should be done walking the river or stream bed (using waders) to reduce disturbance and damage to bank side habitats. Photographs will be taken of important features.

The next stage is to identify local food sources where there is an abundant food supply such as: ● Estuaries and coastlines ● Amphibian breeding sites ● Fish farms and still water fisheries ● Watercourses with known good fish populations.

Otter Mitigation

Strategies for otter mitigation can involve the following approaches: ● Creating new otter holts ● Habitat connectivity ● Development of measures to minimise disturbance in areas with existing otter holts ● Compensatory planting and habitat creation of habitat areas lost ● Creating culverts under new or existing roads



Access Ecology is able to create bespoke mitigation designs tailored to the clients requirements.

Access Ecology Ltd has many years experience of otter survey and mitigation design, gained by working on a wide variety of projects across the country. We can carry out full surveys and design, implement and manage mitigation projects.

Website: www.accessecology.co.uk Email: info@accessecology.co.uk Telephone: 0114 258 3503

Ecological Consultancies:

Black Sheep Countryside Management - A small but thriving Wessex based company specialising in agri-environment work for private clients and organisations like AONBs, GAP, Wildlife Trusts and Local Authorities. Survey volunteers always welcome - birds, hedgerows, arable plants, grassland, etc. Anyone who'd like to gain some experience get in touch! 01380 871012, jemma.bat@btinternet.com

CB Consulting - Hydrological and ecological consultancy services. Recent projects: wetland habitat design/build, watervole capture and translocation, NVC habitat surveys, hydrological surveys and ecological clerk of works on wind farms, substations and road schemes. European protected species surveys undertaken. Contact Chris Baker e-mail: christopher806@btinternet.com Tel: 01738 787 480

Ecological Land Management was established in 2001 and provides conservation and wildlife protection services. Specialising in working in habitats with protected species, the company has won a Wales Business and Sustainability Award for its work in enhancing biodiversity. Further information can be found at www.elm.uk.net

The Wild Boar Consultancy - Want wild boar on your land? Want wild boar off your land? Risk Assessments; Advice and education; Expert witness or legal advice; Surveying for presence / absence. The Wild Boar Consultancy offers personalised, independent specialist advice on all matters concerning wild boar in Britain. www.wildboarconsultancy.co.uk

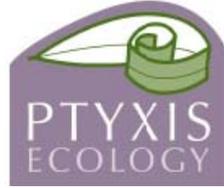
Aulino Wann & Associates are a progressive ethical ecological consultancy based in Co. Antrim Northern Ireland. We are always interested in hearing from well qualified scientists across all environmental disciplines who would like to work on a contract basis on a diverse range of ecological projects across Ireland. john@aulinowann.com

WildWorks Ecology offers expertise and advice in conservation management, grazing, wetland restoration, vegetation surveys, ecological monitoring and protected species, especially bats. We are committed to developing practical solutions for the benefit of both wildlife and people. Contact Jude Smith on 07971 861515. jude@wildworksecology.co.uk. Website under construction.

Devon Wildlife Consultants - The multi-disciplinary wildlife consultancy of the Devon Wildlife Trust, offering the full range of wildlife survey and impact assessment throughout the southwest, providing high quality reports often required within the planning process at a competitive rate. Also provide practical biodiversity management, and advice. Tel: 01392 455930, www.devonwildlifeconsultants.co.uk

Marine Ecological Solutions is a North Wales based company specialising in marine ecological surveys and research. Our dynamic team of ecologists undertake surveys above and below the sea as well as organising voluntary ecological dive projects throughout Wales. Other services include desktop research, GIS and literature reviews. www.marine-ecosol.com. Contact: mail@marine-ecosol.com

We specialise in science-based vegetation restoration and management advice, working for universities, Natural England, landscape architects and land managers, on projects ranging from calcareous grassland restoration in disused quarries to wetland habitat creation. Our experience of upland hay meadow restoration is second to none. Contact: John & Clare O'Reilly www.ptyxis.com



ECOSA is an independent ecological consultancy established in 1999. We provide a range of ecological survey, planning, habitat management and educational services. Our ecologists have a variety of specialist skills and experience and hold a full range of Natural England licences. Ecologists are IEEM members and CSCS operative certified. www.ecosa.co.uk

Conservation Contractors – Providing common sense solutions to Habitat and Arboricultural situations. Full tree Surveys & Surgery, Newt & reptile fencing. Noxious Weed Control. www.conservation-contractors.co.uk email – info@conservation-contractors.co.uk mobile 07889 461358

Milner Ecology provides expert knowledge in ecological survey and the pragmatic design and construction of ecological mitigation/habitat management throughout the UK. We are currently developing mitigation/habitat management focused on amphibians, including the construction of ponds and a corridor of scrub/woodland linking two sections of SAC/SSSI. For more information contact: MilnerEcology@btinternet.com

ADK Environmental Management Ltd (based at Lancaster Environment Centre, Lancaster University) are a group of in-house ecologists and environmental advisors that deal with habitat management and creation, protected species and invasive species such as Japanese knotweed. www.adk-environmental.co.uk

Naturally Wild Consultants Ltd - Reptiles and Amphibians are a specialist sector within ecology. Herpetological surveys and assessments undertaken by trained, qualified and experienced herpetological staff can prove invaluable in obtaining the necessary consents and licenses and dealing with translocation and mitigation involving such species. 0845 260 1107 ecology@naturallywild.co.uk www.naturallywild.co.uk

Access Ecology Ltd Environmental Consultancy provides services across the UK, these include species surveys, project management and protected species training. We have the capacity needed to respond to larger projects, whilst still providing a very individual service to our smaller clients. Email: info@accessecology.co.uk or call: 0114 2583503

Ecology Matters is an independent ecological research and survey company. Services include: Ecological survey and monitoring – including ornithological survey; botanical survey; mammal survey (terrestrial and marine); Environmental Impact Assessment; Research – ecological research services; Management planning. Contact: info@ecologymatters.co.uk or 01970 832491

Phlorum can provide services in many specialist environmental topic areas, including Environmental Impact Assessments, Japanese knotweed eradication, ecology, contamination, air dispersion modelling and environmental management. We are always happy to have an informal chat about your requirements – please visit www.phlorum.com or call 01273 704449 for more information.

Torc Ecology is an East Anglia based ecological consultancy offering a high quality and professional service in protected species surveys, licensing and mitigation design.



Specialising in bats, barn owls, great crested newts, water voles, otters and badgers, as well as Phase 1 and 2 habitat surveying. Contact Louise Brown 01485 544584

Green Ecology is a small consultancy with offices in Devon and Cornwall. As well as carrying out a range of ecological survey work our contracting department undertakes habitat management and mitigation work. This includes hedge laying, pond creation, site management, reptile fencing and habitat creation. Visit our website green-ecology.co.uk

Andrews Consulting - With 40 years experience as a surveyor with Ordnance Survey I can provide advice and expert opinion on most mapping related problems, a full mapping history of any site, together with an assessment and interpretation of what is shown, Expert opinion on the mapping of boundaries and Rights of Way. 01162695237 and Website: www.the-expert-witness-surveyor.co.uk

Absolute Ecology is a professional Ecological consultancy specialising in field survey works, contracting or on a subcontracting basis. Please note: Absolute Ecology are licensed to carry out Bat and Great Crested Newt surveys in England, Wales and Scotland Phase 1 Habitat surveys, Conservation Management Planning and Winter Site Assessments. www.absoluteecology.co.uk

Donaldson Environmental Consultancy Ltd - Specialists in all aspects of recreation and visitor management. Services include: Access survey, design and contract management, visitor management planning, greenspace audits, signage plans, visitor counter - supply and installation, visitor surveys, community consultation and project management. Providers of training in visitor management. mail@donenvironmental.co.uk 07810 810818

Crestwood Environmental provides a range of UK-wide specialist environmental consultancy services, including: Landscape Design, Assessment & Management, Phase One Habitat surveys, protected species surveys/licence applications, Environmental Impact Assessments, contract administration, environmental engineering and waste management consultancy work and training. For information contact Sid Lambert at info@crestwoodenvironmental.co.uk or telephone 01902 824037

JBA Consulting: specialists in management, restoration, creation and construction of ponds, lakes, rivers, wetlands, and grassland utilising a multi-disciplinary approach. Experienced in all types of ecological survey and assessment, including Phase 1 and NVC, as well as mitigation and enhancement. Skilled in biodiversity planning and management. Contact 01756 799919 www.jbaconsulting.co.uk

Plant ecology & Soil science Consultancy: We are a small ecological consultancy based in Wales providing services and advice relating to nature conservation and agri-environmental management. We carry out individually-tailored site vegetation assessments and soil surveys and specialise in monitoring and advising on habitat creation and restoration projects. Contact: www.phoenixecology.co.uk

Multi-disciplinary environmental and engineering consultancy with 14 offices uk wide, 900+ employees and a large environmental appraisal team. For more information visit our website www.entecuk.com

Thomson Ecology is a dynamic, professional consultancy specialising in ecology. Our expertise covers a broad range of habitats and species - terrestrial, freshwater and marine. Our services range from scoping studies, tree surveys, habitat and protected species surveys to mitigation schemes, post-project monitoring, ecological impact assessments and inputs to EIAs. enquiries@thomsonecology.com 01483 466000 www.thomsonecology.com

Marshall Agroecology Ltd
An independent consultancy providing contract agro-ecological R&D, especially in support of biodiversity, agri-environment schemes, vegetation management and the impact of herbicides. We also give environmental support for landowners with Stewardship and make vegetation and entomological assessments. Contact: Dr Jon Marshall, jon.marshall@agroecol.co.uk, Tel: 01934 844844 or 07779 719969. URL: www.agroecol.co.uk



Black & Veatch Ltd are a multi-disciplinary engineering and environmental consultancy who undertake a range of surveys, environmental and ecological impact assessments, mitigation and enhancement for a wide variety of projects and clients. For more information on our company and current vacancies please see www.bv.com/careers/europe

Nicholas Pearson Associates - Award winning EIA, ecology, landscape architecture, heritage and GIS/visualisation specialists based in Bath. Recognised by IEMA as leading environmental impact assessors with 25 years experience and over 40 professional staff. Clients include local authorities, Environment Agency, water companies, Highways Agency as well as estate owners. Contact Dr Trevor Turpin 01225 445548

Just Ecology Ltd - Located in South Gloucestershire we are a dynamic and forward thinking ecological consultancy, with over a decade of experience in delivering professional services to central and local government departments, NGOs, developers and private individuals. Win-Win and sustainable solutions lie at the heart of all our work. jeff.kirby@justecology.co.uk 01454 269650

BMT Cordah Ltd are an environmental consultancy with a wide range of capabilities including ecology (bird, mammals and habitat surveys), with full office support, GIS and wider EIA production. Ability to work throughout Scotland and Northern England. Please contact us with any enquiries on 0141 241 3236 or enquiries@bmtcordah.com

Thomson Habitats are a team of experienced professionals who design, create and restore habitats for wildlife. We also treat invasive plants such as Japanese knotweed and giant hogweed. Backed by the ecological expertise of Thomson Ecology, we undertake work all over the UK. For further details please see www.thomsonhabitats.com

River Restoration and Habitat Enhancement



RRC

The River Restoration Centre's key role is to promote the concept of best practice management and river restoration. It provides information and impartial advice based on the expertise of its staff and external advisors, an inventory of over 1500 projects collated by the Centre, and a UK-wide perspective based on knowledge gained over the last 15 years.

Restoration and enhancement

River restoration and habitat enhancement is a means by which we can turn around the past trend of damage and degradation of our riverine ecosystems. Many are no longer attractive

or desirable places for the wildlife that they once supported. Urban and rural rivers have both been affected, by the dominant activities that were perceived to be the priority at the time. By applying what fluvial-geomorphology tells us about the physical riverine system and what ecology tells us is needed for a diverse range of habitats and species, we can assess and respond to the need for conservation, enhancement or restoration of watercourses and floodplains.

The River Rhee

An upper reach of the River Cam, Cambridgeshire, the River Rhee is a good example of a degraded lowland agricultural river. A baseflow fed brook, once containing a healthy population of wild brown trout, it is now lost in its deepened channel and suffering severe siltation problems. An initial visit examined the opportunities for achieving floodplain restoration, and bringing visual and hydrological connectivity to the river. However,

Working to restore & enhance our rivers

after critically assessing land, river and water levels it was concluded that floodplain restoration would not be possible in the main area proposed without having an impact on neighbouring farmers, and the adjacent road. This can often be a major limiting constraint.

Due to the history of 'improvement' to land drainage (dredging the river deeper and frequent follow up work) there was also plenty of scope to enhance the bankside and in-river habitat. Habitat enhancement works included channel narrowing to uncover the gravel bed, shallowing the profiling of banks and existing meanders to remove years of dredging material and nettle growth, and off-river backwater habitat creation as a refuge for fish and invertebrates in times of flood. These were identified as options by carefully 'reading the river' and both aiding its natural recovery (which could take centuries in a lowland clay catchment) as well as removing obstacles to recovery (spoil embankments, steep slopes, etc). The works were funded by the Environment Agency and delivered by Roger Beecroft Wildlife and Countryside Services with support from RRC.

Benefits

Although a small scale scheme, this project has great potential as a demonstration site showing best practices for managing and rehabilitating previously heavily engineered rivers in flat, arable landscapes at low cost. The landowner has a river he can now see without having to fight through nettles and peer over raised banks. The silt has washed off of the gravel bed increasing fish and invertebrate habitat; the shallow marginal shelves support typical river's edge plants and the stripped shallow banks are developing a more typical nutrient poor grass/wildflower cover.

Martin Janes, Centre Manager. www.therrc.co.uk



Photo online

Specialist companies:

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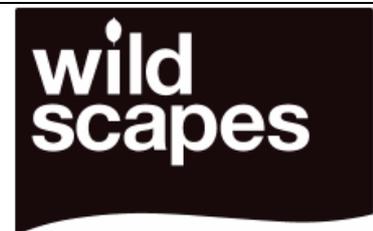
Specialists in restoration of upland and lowland heath, woodland, grasslands and rescue and re-introduction of aquatic threatened species. Many years of practical implementation and research experience. Visit www.ecologicalrestoration.co.uk (philp@liverpool.ac.uk)



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Roger Buss Specialist Land Agent – Senior Deer Consultant working on deer management throughout UK teaching stalking and harvesting of venison to Modern Standards check out www.deerland.co.uk The company also acquires and sells woodlands for clients.

IVM provide, tailor-made, guaranteed eradication solutions for all invasive weed issues, specialising in the guaranteed eradication of Japanese knotweed in one growing season using the revolutionary IVM 'FAST' System. Contact info@i-v-m.co.uk for more details.

For all your biodiversity survey needs visit our web site www.bioquip.net. Robinson, Skinner and Johnson Moth traps; pond-dipping equipment; insect nets and malaise traps; small mammal traps; bat detectors. Also full range of Schwegler Nest and Bat Boxes.

WildGuides latest, Arable Bryophytes - A field guide to the mosses, liverworts and hornworts of cultivated land in Britain and Ireland is due September. Highlighting the conservation importance of these plants on cultivated land, it affords field workers a better insight into the rich diversity of our bryophyte flora. Details 01628-529297 www.wildguides.co.uk

Ecological mitigation products and contracting, forestry, fencing, landscaping services, planting scheme and habitat creation solutions www.herpetosure.com

countryside contractors - Dry stone walling, hedgelaying, hedge and woodland planting , habitat creation visit www.jtpcs.co.uk for more details

Species Identification and Recording

As a result of various initiatives in the UK, in conjunction with European policies to protect species and habitats, many professionals are under increasing pressure to organise and participate in species survey work.

Such professionals would like to spread the recording task amongst more individuals (very often volunteers) by:

- Helping them with species identification
- Improving the accuracy of associated information, e.g. date and geographical position
- Providing a system that is capable of engaging with some younger recorders

Handheld computers (in particular Pocket PCs running Mobile Windows) have developed significantly over the last 3 or 4 years. Devices with integrated GPS and digital cameras start at about £150, and are

surprisingly robust in the face of British weather and general field conditions (though still worth using a waterproof case when you are likely to drop them in a pond).

Species identification keys for handheld computers have been around for a couple of years (www.wildknowledge.co.uk), and have been used very successfully with thousands of schoolchildren. Significantly, teachers often comment that they feel more confident in the field, as the software provides immediate support, both in terms of the actual identification process, and the extra information that the key can provide about the target species.

Species recording on mobile devices has been available for far longer (www.aditsite.co.uk), but still benefits from the enhanced capabilities of modern devices.

Two main approaches have been taken: 1. Dedicated species recording software, usually integrated with a desktop reporting and mapping system. *Example products include AditTrec and Pocket Bird Recorder* 2. A form-based system where the user can define their own data collection form (adding fields that include drop-down lists, GPS access, picture upload, sketchpad, notes, etc). Such systems are generally more flexible, but can provide a headache for whoever is responsible for collating the data. *Example products include AditForm and to some extent Pocket Excel*

The future The trend is clearly towards devices that are always or frequently connected to the internet. Software on these Pocket PC/Phone hybrids will become browser-based with local data storage on the mobile device that is capable of synchronising with an online 'master' database. The user will be able to upload their data from the field (alright, from their car when they can get a phone signal...) and view existing information online about the species or site that they are looking at.

Today The time has come to put pad and pencil away, and embrace modern technology. Direct feedback from professional and skilled amateur recorders is the only way to ensure the continued development of sophisticated software on mobile devices.

Paul Griffiths, Technical Director, Adit Limited www.aditsite.co.uk



There is a buzz of excitement within the birdwatching world, as ornithologists scan the first year's results from **Bird Atlas 2007-11**. Maps created after the first winter clearly show that species such as Buzzard have expanded into eastern areas, whilst Nuthatches have been moving north into Scotland and Little Egrets have appeared in many areas. It is harder to judge what is happening in remote parts of the UK because it is going to take a long time to fill in all of the survey squares in mountainous areas.

The last Bird Atlas, covering the period 1988-91, focused our attention on the decline of farmland birds but what will be the highlights this time? Initial findings from this summer suggest that there is bad news for wading birds, such as Lapwing and Redshank, summer migrants, like Yellow Wagtail and Willow Warbler and even the once-common Kestrel. Sightings of any of these species will be particularly valuable. Join a team of 30,000 volunteers and make sure that your bird records really count.

Bird Atlas 2007-11 is being organised by the BTO (British Trust for Ornithology) with partners the SOC and BirdWatch Ireland. The BTO organises a wide range of surveys, from Garden BirdWatch to counts of birds on estuaries and at the top of mountains. Most of the work is undertaken by volunteers and training courses are available. See www.bto.org.



Other Surveys and volunteers:

Global Vision International (GVI) runs conservation, research and sustainable development projects worldwide. Volunteers can participate in a biodiversity research project in Costa Rica, marine conservation in Mexico, or sustainable development in Honduras and Guatemala. GVI also offers a Level 3 BTEC Advanced Certificate available in Kenya and the Ecuadorian Amazon. www.gvi.co.uk

South Yorkshire Ponds Project is a joint Pond Conservation and South Yorkshire Biodiversity Forum initiative funded by Heritage Lottery Fund, SITA Trust and Environment Agency. The project will survey, map and conserve important ponds in South Yorkshire. Find out more or get involved: www.pondconservation.org.uk or Sheffield Wildlife Trust 0114 2634335.

Shark Trust
Are running several surveys: Report shark, skate & ray catches & sightings on www.sharktrust.org/recording
Basking sharks – the UK's largest fish can be seen around the coastline, report any sightings via www.baskingsharks.org
Eggcases commonly wash ashore if you find one report it on www.eggcase.org

The hypogean Crustacea include several cryptic species that live in groundwater habitats such as wells, caves and springs. The species included *Niphargus glenniei*, a recent addition to the BAP species list and which is only known from Devon and Cornwall. Recording scheme has been in operation since 1998, advice on the survey and management of subterranean habitats such as caves and mines. www.freshwaterlife.org/hcrs

The Tree Council's Hedge Tree Campaign. To highlight the habitat, environmental charity The Tree Council plans to publish recipes from its volunteer Tree Wardens and others using ingredients from hedgerows. Recipes to share? Then please send them to "Hedge Cuisine", The Tree Council, 71 Newcomen Street, London SE1 1YT, hedgetrees@treecouncil.org.uk, www.treecouncil.org.uk

SOCS plans to conduct a Sea-Trout Watch from 15th December through 15th February, to record spawning activity. This will entail weekly visits to river stretches, and we are seeking volunteers to help. We will provide training and equipment. Please contact Neil Merchant on 01273-477763, 07860-443614 or at neil.merchant@sussex-ouse.org.uk

People's Trust for Endangered Species are mapping the remaining traditional orchards of England. This priority habitat, a biodiversity hotspot, is under threat from development, neglect and intensification. We are looking for volunteers and land owners to locate and survey these orchards. Contact Anita on 02074984533 or anita@ptes.org

And don't forget there are details of these and many more surveys on the CJS website. You'll find the information at <http://www.countryside-jobs.com/Training/Surveys.htm>

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 AditSync to integrate your handheld with Recorder
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 Email info@adit.co.uk

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Biodiversity Recording Centre:
Lothian Wildlife Information Centre is the biological record centre for the Lothians. Based near Dalkeith, we co-ordinate biological recording throughout the Lothians. We are looking for volunteers to join us in recording biodiversity on sites and also computerising data and providing information to users. Interested? Contact us at info@lothianwildlife.co.uk

Tools for surveying:
DMAP Software for Distribution and Biodiversity Mapping - <http://www.dmap.co.uk/>

CMS - Management Planning tools, seminars and guidance. For information on our software tools to help you plan, record and report on work on your site go to www.esdm.co.uk/cms. See here also for details of our management planning seminar series or for free management planning guidance documents.

Sportstrack UK/Utrackit - Personal GPRS Tracking. Market leading first. Personal tracking and safety unit which allows you to be found anywhere at any time and under most circumstances. For business or for pleasure providing peace of mind for you, your staff and your loved ones. Visit www.sportstrackuk.com for further details.

Great Britain tackling non-native species

Invasive non-native species are one of greatest threats to biodiversity worldwide. These species are estimated to cost the British economy £2billion a year and they can negatively impact native species, transform habitats and threaten whole ecosystems causing serious problems to the environment and society. The government recognises the threat posed by invasive non-native species and has set up a Great Britain Co-ordinating Body, supported by a small Secretariat to direct and co-ordinate action against invasive species. The Secretariat and its website (www.nonnativespecies.org) serves as the central point for information and communication. The website contains information on legislation, policy, guidance and events as well as research, management and links to other useful organisations.

The recently published Invasive Non-native Species Framework Strategy for Great Britain (www.nonnativespecies.org) sets out how government is planning to tackle the threats posed invasive species over the coming years.

Greater practical implementation on the ground (by government bodies conservation NGOs, land-owners etc.) is the next step – with eradication attempts of South American water primrose and American bullfrogs currently ongoing. Establishing comprehensive monitoring is another priority so we can detect newly arrived species and tackle them before they get out of control. Biologists working in the field will be particularly important as the eyes and ears of this monitoring. Public awareness raising, including training of those working in the countryside is also another key theme.

The overall aim is that with strategic co-ordination and some extra resources we can help turn the tide against the ever growing problems posed by invasive non-native species in Britain.

More information on South American water primrose, American bullfrogs and other invasive non-native species can be found in the Fact File section of the on the Secretariat website (www.nonnativespecies.org).

Diane Owens, CSL

LARK RISE FARM, NEAR CAMBRIDGE

Lark Rise Farm is an arable farm in Cambridgeshire comprising approximately 400 acres. The soil type is mainly heavy clay, with some lighter sandy areas near to the Bourn Brook which flows through the farm. The farm is owned by the Countryside Restoration Trust (CRT) which is a charity dedicated to farming and wildlife conservation. The land has been bought in stages, with the bulk being in ownership for 10 years. Prior to the CRT's ownership the land was a barren, bleak, featureless landscape, devoid of hedges, wildlife and character, which we have sought to change.

The physical appearance of the land has been drastically altered. The areas adjacent to the Bourn Brook have been taken out of production and water meadows re-instated. The landscape has been further broken up by planting hedges and establishing grass margins (6m strips) either side of the new hedges. In doing this, we have turned 100 acre prairies into smaller fields with an average size of 12.5 acres. Most hedges are now of good size and provide habitat to a wealth of wildlife. This is the cornerstone of the project, because other than true arable flora and fauna, most species migrate into cropped areas via the wildlife corridors of hedgerows.

Our farming policy is to have a varied crop rotation, linked with a rich mosaic of cropping across the farm. This mosaic means there is rarely two similar crops grown in adjacent fields. The rationale behind this, is that block cropping limits wildlife to species that solely favour that crop at a given time. So this mosaic encourages more wildlife diversity, as adjacent fields will all be at different growth stages (phases of development) at any one time.

The farm is not by any means organic, but the key word is 'sympathetic' when it comes to the use of agrochemical products. For any crop to yield well it needs to be relatively disease, pest and weed free, and we are little different from most farmers. The trick is to differentiate between yield sappers and those that pose little threat to crop yield. Our pesticide usage is aimed at reducing the yield sappers but not every weed, disease and pest.

Each farming operation takes care not to unduly frighten or disturb wildlife. The best example of this is when combining. To combine a field, one has to cut around the outside first, simply to open the field up, we are no different here either. Most farmers will cut one side and combine across the field to the other side. We start in the middle and work to the outside. Why? When harvesting there is usually (certainly on our farm!) a wealth of animals of which many are young in the crop. Harvesting from one side drives them away from their home patch, often separating young from adults over vast areas. By starting in the middle, they are then pushed from the field edge into their 'home' hedgerows. Just one small, but very important consideration in our way of farming.



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To find out more about The Countryside Restoration Trust, please look at our website www.livingcountryside.org.uk or telephone 01223 262999.



photo online

The Wildlife Trusts' Biodiversity Benchmark

The Biodiversity Benchmark is an essential element in The Wildlife Trusts' vision for 'A Living Landscape', which aims to help UK wildlife adapt to climate change. It encourages the management and reporting of biodiversity as an integral part of business activities. The Benchmark uses a systematic management process to enable any organisation which owns or manages land to assess its impact on the natural world, improve its contribution to the environment and demonstrate its commitment to biodiversity by:

- Identifying relevant legislation and creating a framework to ensure compliance.
- Contributing to local partnerships by providing up-to-date ecological information and helping deliver local Biodiversity Action Plans.
- Developing targets to improve biodiversity performance and demonstrating a lead to the community.

For further information, please visit: www.biodiversitybenchmark.org



for land management

Training providers:

ADH Training & Consulting Ltd offers one day courses on EIA. We have supplied training to a wide range of local authorities, wildlife trusts, and to most of the major consultancies in the UK. Contact Shirley at 01608 663217 or by email Shirley@adhtrain-consult.co.uk for more information.

Bulmer Foundation – Want the skills to get a job you can believe in? Our unique, experiential learning model offers practical, real-life learning. Study with and learn from people from a wide range of backgrounds who share your passion for sustainability - and get fast-track entry into our networks.
<http://www.bulmerfoundation.org.uk/fls/programme.htm>

Conservation training: practical courses in habitat restoration, field skills, species ID and monitoring, site management. For conservation professionals, land use advisers, students and college groups, courses are delivered by highly experienced tutors and commended by the Countryside Council for Wales.
<http://www.shared-earth-trust.org.uk/en/train.htm> for current programme or contact 01570 493358 info@shared-earth-trust.org.uk

Moths Count Project have organised a programme of 'introduction to moths' workshops as part of the National Moth Recording Scheme, funded by the Heritage Lottery Fund and other organisations. Workshops are free and provide information about moths, moth recording and conservation. Advance booking required. See www.mothscount.org for our events listings.

Soil Inversion Works

Landlife's Soil Inversion project involves a simple intervention – totally inverting a metre of soil by deep ploughing and sowing wildflowers – something that has never been done before. . Our efforts are targeted on land of low ecological value in lowland Britain and 37 sites have been inverted on 400 acres with 18 partners across Britain. By getting the starting point right we allow sites to evolve into new habitats. This project is significant because it: • Creates suitable conditions for new woods to adapt to climate change by holding moisture at depth and promoting deeper rooting. • Reduces annual herbicide usage by burying weed seed banks at depth. • Buries carbon, thereby reducing its release from weathering organic matter. Improves tree growth by 30% with survival rates above 90% • Creates low nutrient conditions for biodiverse habitat, wetland ditches and varied topography. • Creates stunning floristic meadows that excite and enthuse people.

Our surveys show subsoil sites gaining 52 new flora species in just three years, whilst bird data also confirms impressive gains for Biodiversity Action Plan species. The number of breeding pairs on a site on Merseyside increased from 7 to 52 over a four-year period. Similar positive results for invertebrates and small mammals, demonstrate that these sites rapidly become part of the food chain.



A full colour 50 page guide to the technique launched at the Alice Holt Forest Research Centre in Surrey this month, is available from Landlife at £12.50 or as a pdf download

For more information www.landlife.org.uk
Tel 0151 737 1819
damian@landlife.org.uk



Photo online

Training Courses and Events:

Need a more in depth knowledge of habitat conservation or creation? Come to Losehill Hall for our Heathland and Moorland Management course (22 - 26 September 2008), Grassland Grazing for Wildlife (13 - 15 October 2008) or Habitat Creation course (16 - 18 March 2009).

Contact training.losehill@peakdistrict.gov.uk or 01433 620373 or see www.losehilltraining.org.uk for details.

16/10/08 Earthwatch Lecture - Shrinking Habitats, Species Survival.

7.00pm-8.30pm, at the Royal Geographical Society, London. Two talks on Earthwatch projects, 'South Africa's Brown Hyenas' and 'Wildlife of the Mongolian Steppe', species in the one case often unfairly maligned, and in the other, sadly under-researched. See: http://www.earthwatch.org/europe/get_involved/events08/habitats

20/11/08 Earthwatch Debate: The World's Most Invaluable Species

7.00pm-9.00pm, at the Royal Geographical Society, London. The ever-popular and thought-provoking Earthwatch Debate this year focuses on the world's most irreplaceable species – choose between bees, bats, fungi, plankton and primates championed by leaders in their field. See: http://www.earthwatch.org/europe/get_involved/events08/debate

MSc in Environmental Management (PG Cert, PG Dip and MSc) at Liverpool Hope University is relevant to all who are interested in managing the environment, allowing them to become skilled, informed, professional contributors to a sustainable future that conserves biodiversity. Flexible delivery for full and part time students see <http://www.hope.ac.uk/postgrad>

3/9/08 'Flying Flocks', Hill of Tarvit. In association with SWT, this event aims to promote better understand of conservation grazing and how it can be used to maintain and enhance biodiversity. Includes a site visit to a grassland SSSI. For information email sgp@snh.gov.uk or tel 01738 458555.

4/11/08 Biodiversity: Planning Obligations and the NERC Act 2006

The course focuses on the duties and delivery of the 2006 Natural Environments and Rural Communities Act. For public bodies who have a duty to take biodiversity into account. Delegates will learn about the practicalities of fulfilling their statutory obligations regarding biodiversity conservation. <http://cpd.conted.ox.ac.uk/env/courses/NERC%20Biodiversity.asp>

6/11/08 Managing Biodiversity in a Changing Climate

Changes in the UK climate are already altering the way species, populations and ecosystems behave. The course is designed for people with a responsibility for the management of biodiversity, both at a practical and policy level, and is relevant to a range of professionals in statutory nature conservation organisations. <http://cpd.conted.ox.ac.uk/env/courses/climbiodiversity.asp>

Snowdonia National Park Study Centre, Plas Tan y Bwlch

Forthcoming Professional Training Courses include: Advanced Monitoring, 8-12 Sept; Bats – Surveying Methods, 9-12 Sept; The Biodiversity Duty, 14-16 October; Invasive Plants, 14-17 October; Winter Habitat Assessment, 25-27 February; Forest Habitat Networks, 9-12 March and more. For further details contact: beth.cluer@eryri-npa.gov.uk or tel: 01766 772600

Don't forget to have a look at the online Training Section of countryside-jobs.com for lots more courses on habitat management and conservation techniques, species identification and survey skills.

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