BIODIVERSITY NEWS

2015/16

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Issue 71

WINTER EDITION

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Please note that the views expressed in Biodiversity News are the views of the contributors and do not necessarily reflect the views of the UK Biodiversity Partnership or the organisations they represent.

From the Editor

Welcome to the 71st edition of Biodiversity News,

Firstly I would like to thank everyone who has contributed to this edition, there is a brilliant variety of articles, from the first grey seal to be born on Walney Island, to how the most remote part of the British Isles holds some of the most breath-taking wildlife. There is a really good selection of articles on volunteer recording, including new training opportunities with the Field Studies Council, HLF funded projects to encourage participation in recording, and acknowledging the excellent work carried out by volunteer recorders at the inaugural UK awards for biological recording information sharing.

There was a excellent response to our twitter competition, people submitted their winter themed photos using #BNcover. After much thought, I am glad to announce @MvPdressage as the winner, with their picture of a wintery Wagtail. On the back cover of this edition, and surrounding this editorial, you will find some more of the fantastic entries we received.

Please feel free to share this newsletter with anyone you feel may enjoy it. For more stories and news on biodiversity and wildlife follow our partner twitter page @DefraNature. If you would like to receive this newsletter via email, or have some biodiversity stories you would like to submit for the next edition, please do not hesitate to get in touch at: biodiversitynews@defra.gsi.gov.uk.

I hope you enjoy this issue as much as I enjoyed putting it together!

Best wishes,

Emily Broadwell

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Seal pup makes Irish Sea history

A fluffy white pup is making history as the first grey seal to be born on a remote Irish Sea island. The pup was spotted on Walney Island by Wildlife Trust officers who have been monitoring seals there since the 1990s.

Despite seals using the protected beaches to haul out and rest at South Walney Nature Reserve for decades, there has never before been one so tiny recorded on the island. North West Wildlife Trusts Marine Trainee Sally Tapp discovered the pup while conducting a seal survey. Sally said: "This is incredibly exciting and unusual. The colony at South Walney has previously been thought to be a non-breeding colony.

"Usually, the seals found here are older bulls no longer able to control a harem on the breeding beaches and younger, sexually immature males and females, so this is a wonderfully encouraging sight showing that seals are thriving on Walney Island."

Grey seals are fairly common in the Irish Sea but, until now, they are born mainly in Scotland, Wales, Northern Ireland and the Isle of Man.

Sally said: "The pup was approximately three to four days old when we first spotted it. The mother is likely to be an inexperienced, first-time mum who regularly uses the beaches at South Walney as a haul-out site and has come back to pup here. Unlike harbour seal pups, grey seal pups are born with thick white fur and are not able to swim very well at first. Therefore, the pup was almost certainly born on the island."

During the 1970s and 80s seals were seen only singly around Walney Island and gradually over time their numbers have increased with up to 100 individuals now on and around the island at certain times of the year. The mother will stay with the pup for only a short time, feeding it with fat-rich milk, until it is weaned and then she will leave both the pup and the area.

During this time, the pup will gradually moult its thick white fur revealing its adult coat with its own individual markings. After weaning, the pup may remain on the island for up to another few weeks or so before it is ready to head out to sea to forage for itself.

Grey seals have an annual, synchronous breeding cycle and females give birth in the autumn to a single pup at the same time each year. They usually return to their own place of birth to breed year on year in the same location. Towards the end of the weaning period the seals will mate again. Sally said: "This is extremely exciting as this female may now choose to come back here to pup again next year and if the pup is a female, she too may pup here in the future. We could well be seeing the establishment of a breeding colony on South Walney."

Seal surveys have been carried out for five years, every two weeks between September and March, by trainees from Lancashire and Cumbria Wildlife Trust's Marine and Coastal Heritage Programme, funded by Heritage Lottery Fund.

The survey aims to continually monitor the seal population structure in the area from year to year and the results are reported on by one of the marine trainees as part of their training to gain nature conservation skills. The trainees undertake a variety of on-the-job training and taught courses, gaining experience in organising and delivering events and training to for scientific surveys and writing reports. The project aims to provide people with the skills to pursue a career in marine heritage – a specialised area of the environmental sector.

The behaviours displayed by the seals at South Walney Nature Reserve are also monitored to gain understanding about the percentage of time that seals spend exhibiting different types of behaviour and how this is affected by human disturbance such as boating and recreational use of the sea surrounding Walney Island. The findings from the survey help to create management plans for the nature reserve.

Due to the young age of the seal, it is incredibly vulnerable to disturbance, which would cause the mother to abandon it and the pup to starve. For this reason, there is strictly no access to the area of the nature reserve where the seal pup is, and so it is not possible to view the pup at South Walney Nature Reserve. However, the rest of the seals can be seen playing in the water at high tide, along with thousands of wintering wildfowl and wader birds, from hides elsewhere on the nature reserve.

Charities take on the mantle of sustainable farming

An influential audience of farmers, scientists, agricultural experts and policy-makers attended the launch of a unique farming resource called Agricology at Daylesford Organic Farm in Gloucestershire this month.

With growing uncertainty about the state of natural resources, pollinator health, climate change and access to good nutrition, the need for resilient and sustainable farming has never been greater.

Agricology is a new online resource that translates scientific research into practical advice to help farmers become more profitable, resilient and more sustainable, while protecting the environment.

Founded by three independent charitable organisations – the Daylesford Foundation, the Organic Research Centre and the GWCT Allerton Project – Agricology aims to provide farmers with the best practical information on ecological techniques, regardless of labels via a website www.agricology.co.uk, on social media, and through on-farm events.

The Daylesford Foundation has pledged nearly £500,000 to the project over the next five years.

Guest speaker at the launch of Agricology was Sonia Phippard, Director General of Policy at Defra, who expressed her excitement and enthusiasm for this project. She was impressed that Agricology works in partnership with a diverse range of organisations within the farming and environment sectors to bring together knowledge and experience to create practical and workable tools for farmers.

"I have always been passionate about sustainable agriculture," says Carole Bamford, trustee and founder of the Daylesford Foundation. "There is a great deal of good and diverse information available on this important area and we wanted to bring this all together in an accessible format for farmers and landowners. By sharing knowledge on organic and other ecological farming techniques, I believe we can work together for the benefit of the soil, the pollinators and the wider natural environment".

Agricology is guided by a steering group of leading figures from the worlds of agriculture and horticulture. Together, they represent a diverse range of farming principles including organic, integrated conventional, biodynamic, agroforestry and permaculture.

Dr Susanne Padel from the Organic Research Centre (ORC) comments: "Agricology allows us to make the best resources on ecological practices available to all farmers and growers, and those that support them, and encourages the sharing of knowledge and experience".

AGRICOLOGY
PRACTICAL SUSTAINABLE FARMING

Dr Alastair Leake, Head of the GWCT's Allerton Project, said: "Making agriculture more sustainable is challenging. We are collating useful information found in scientific journals and making it understandable, practical and available, then demonstrating their use with experts 'in the field'."

Topics covered by Agricology's resources include:

- Improving soil structure, quality and health
- Encouraging biodiversity, notably pollinators and other beneficial insects
- Utilising grassland and home grown feeds for livestock
- Minimising pressures of pests, diseases and weeds

Agricology also features inspirational farmer and grower profiles, which are designed to stimulate farmer–led innovation and help spread the word.

Richard Smith, Senior Farms Manager at Daylesford and Chairman of the Agricology Steering Group explains how he and fellow farmers will benefit from Agricology: "Each farm has its own environment, yet often advice is too generic or can be driven by a particular agenda. By following Agricology, a farmer has access to the best available information, which may be the latest agri-tech advancement or a traditional skill. Most importantly, it is honest, practical and user-friendly".

Partners in the Agricology project pictured at the launch. From left to right: Dr Alastair Leake (GWCT's Allerton Project), Dr Susanne Padel (Organic Research Centre), Sonia Phippard (Director General of Policy at Defra), Patrick Holden (Sustainable Food Trust). © Peter Thompson, GWCT

Winners of the inaugural UK Awards for Biological Recording and Information Sharing

During the National Biodiversity Network's 15th conference, held in York in November 2015, the winners of the first UK Awards for Biological Recording and Information Sharing were announced.

These awards have been developed by the National Biodiversity Network, the National Forum for Biological Recording and the Biological Records Centre and were sponsored by Swarovski Optik UK, with the marine awards supported by Cameras Underwater and by the One Stop Nature Shop. Their intention is to recognise and celebrate the outstanding contributions made by adults and young people to biological recording, which is helping to improve our understanding of the UK's wildlife.

There were four categories of awards – two for terrestrial and freshwater recording (adult and youth categories) named after **Gilbert White** (1720-1793) one of England's first naturalists – and two for marine and coastal recording (adult and youth categories) named after the Scottish naturalist **David Robertson** (1806-1896) who founded the University Marine Biological Station at Millport.

Ian Evans and the late **Pat Evans** are the winners of the Gilbert White adult award for recording terrestrial and freshwater wildlife. A husband and wife team who have been tireless exponents of and ambassadors for biological recording for many years. They have submitted 14,295 records to the Highland Biological Recording Group database in multiple taxonomic groups including butterflies & moths, mammals, fungi, lichens, dragonflies, vascular plants, annelids, molluscs, arachnids, fish, amphibians, reptiles, and many different insect groups.

Pat Evans co-authored the 'Flora of Leicestershire' and the 'Flora of Assynt', while Ian Evans held many committee positions of the Highland Biological Recording Group and was involved in the publication of 'Wildlife of Scourie' in 2006 and 'Wildlife of Rogart' in 2007. The couple were instrumental in founding the Assynt Field Club in 1986, a local club devoted to natural history and biological recording, which is still thriving today.

James McCulloch is the winner of the Gilbert White youth award for recording terrestrial and freshwater wildlife. 12-year old James' interest in wildlife began through bird watching in his garden and at local nature reserves and he now regularly submits records to Birdtrack and Sussex Ornithological Society. However his interests now extend well beyond birds. He joined the Pan-species Listing web site (http://www.brc.ac.uk/psl/?q=home) during 2015 and has already recorded almost 1000 species across virtually all the non-marine taxonomic groups.

James writes a blog about his wildlife experiences at https://jiainmac.wordpress.com/ detailing not only what he has seen but provides background information about the ecology, distribution and identification of the species.

Left to right the people are: Nic Jee (on behalf of his father Nigel Jee), Ro Scott (on behalf of Ian & Pat Evans), Michael Hassell (National Biodiversity Network Chairman), Callum Ullman-Smith, The Earl of Selborne (National Biodiversity Network Patron), James McCulloch, David Fenwick, Dr Fiona Mathews (on behalf of the Mammal Society).

He has been an extremely active member of iSpot since December 2012, contributing over 2200 observations and over 2500 identifications. He has acquired over 6000 social points. He has also originated a dozen projects on iSpot ranging from Longworth trapping to Bryophyte identification. As well as enjoying recording species of all kinds, James is passionate about passing on his knowledge and enthusiasm for nature. He is beginning to share his observations through short YouTube videos in which he is intending to feature as many species in his garden as possible: https://www.youtube.com/watch?v=FIcf6NwBllk.

Continued...

David Fenwick is the winner of the David Robertson adult award. David has been a dedicated recorder for many years. He has a dogged and determined approach to finding, photographing and recording marine and terrestrial species but in recent years his particular strength has been his work with Stauromedusae, rare and protected stalked jellyfish, and the bizarre and often colourful marine nudibranchs or sea slugs. David shares his passion via beautiful and comprehensive websites: www.aphotomarine.com and http://www.stauromedusae.co.uk/

These are an inspiring and useful resource for new recorders and professionals alike. He uses Facebook: https://www.facebook.com/groups/NE.Atlantic.nudibranchs/?fref=ts to share his discoveries and to press and inspire others all around the world. David has given up his time to help with Cornwall Wildlife Trust's Shoresearch programme which engages with local people, and raises the profile of Cornwall's local marine wildlife.

Callum Ullman-Smith is the winner of the David Robertson youth award for recording marine and coastal wildlife. 13-year old Callum has been out recording wild flowers, fungi and basically everything with his mother since he was tiny. He developed a personal passion for amphibians and began recording coastal palmate newt populations in Highland in spring/summer 2011 when he was 8 years old.

In 2012 Callum began a research project to investigate whether stable breeding populations of palmate newts occur in coastal brackish rock pools.

His first report was published in the Highland Naturalist (May 2012, No. 8, 7-8). Over the following three years he sampled up to 9 rock pools on a monthly basis (weather-depending!) – his results were presented at the Amphibian and Reptile Conservation Symposium at the Royal Botanic Garden, Edinburgh in 2014. Callum has also been a regular seashore recorder on the Highland Seashore Project for the past three years.

In the first year of the UK-wide awards 53 high quality nominations were received. Professor Michael Hassell, Chairman of the National Biodiversity Network, said: "We were delighted to receive so many excellent nominations. We are running the awards again in 2016, so if you would like to highlight the painstaking work that an individual or group of biological recorders is undertaking, please come forward and nominate them."

In fact, the standard of the nominations was so high that a special award was given (posthumously) to **Nigel Jee**. Nigel can best be described as Guernsey's own gentleman naturalist, a Gilbert White personified. Following his retirement in 1985, Nigel started gathering data from the large garden and fields that he owned on the west coast of Guernsey. Over the next 27 years he methodically collected data on the plants and animals that lived there.

Most noteworthy was his weekly written records of the flowering dates of all the plants in his garden and in the fields surrounding, where many different Narcissi had become naturalised.

Nigel recorded the date when flowers first appeared, the days when the plants were in flower and when flowers were no longer seen. As a consequence his recording is almost without precedent as he recorded not just the first date of flowering but the duration of flowering of each plant species. In all, between 1985 and 2011 he recorded several hundred species of plants and made 163,433 written observations. This dataset has arguably become one of the most important long-term datasets in the British Isles.

Dr Tim Sparks of the Centre for Ecology at Monks Wood was involved in 2006 and analysed a small part of the dataset. Tim Sparks was searching for long-term datasets in an attempt to show how wildlife was affected by climate change. Nigel wrote out in long hand the data that he had collected on a selection of spring flowering plants and these were sent to Tim Sparks for analysis. It was Nigel Jee's meticulous recordings that proved that climate change was affecting plants and animals in the Channel Islands.

While separate from the awards for biological recording and information sharing, another award was presented at the same ceremony in York last year – the John Sawyer NBN Open Data Award – to **the Mammal Society**.

Rachel Stroud, Interim Chief Executive of the National Biodiversity Network, said: "The National Biodiversity Network has 160+ data partners, and these organisations vary in their commitment to open data. Our national online database, the NBN Gateway, has more than 112 million biological records and some of these data are shared openly, but many are not available at full resolution or are hidden from public view.

"The National Mammal Atlas Project dataset on the NBN Gateway currently has 43,207 open records on the NBN Gateway, 38,546 are available at 100m resolution, and the remainder are also fully available at 1km, 2km and 10km depending on the capture resolution.

"The NBN Secretariat is honoured to present the inaugural John Sawyer NBN Open Biodiversity Data Award to the Mammal Society because of their commitment and dedication to sharing these valuable data more widely."

NBN National Biodiversity Network

If you would like to nominate an unsung biological recording hero, heroine or group for the 2016 awards, please subscribe to the National Biodiversity Network's monthly "eNews" for more information, via: http://ow.ly/VEZYW

Cold-blooded and Spineless

By Samantha Tranter

Cold-blooded and Spineless creatures will be loved in the North Pennines.

Have you ever stopped to think what our world would be like if insects were as large as mammals or birds? Over 320 million years ago in the carboniferous period, dragonflies were as artful predators as they are today but back then they were over half a meter long! If they were it's likely that insects and other invertebrates would receive similar interest to that of raptors or mammals. Yet their diminutive size means that often this kingdom of spectacular, mysterious and vitally important creatures is woefully overlooked.


© Rebecca Barrett

The good news is that the North Pennines AONB Partnership's new project, Cold-blooded and Spineless aims to put invertebrates squarely in the spotlight. According to the State of Nature report, 66% of known invertebrates have declined in the last 50 years, and we are particularly lacking information about species that live in the uplands. Invertebrates are underappreciated for their contribution to biodiversity and the healthy function of our landscape, from soil nutrient cycling and pest control, through to pollination. Many invertebrates are a vital food source for all kinds of birds and mammals.


© Sheree Wilson

Thanks to a £500,000, five-year grant from the Heritage Lottery Fund, these unsung heroes are to be celebrated in the North Pennines through research, education and monitoring and since its launch this spring hundreds of people have already got involved.

The launch was a biohunt where volunteers recorded the hardy wintering Satellite moth Eupsilia transversa and the litter chomping white-legged millipede Tachypodoiulus niger. At the event the project's ambitious and progressive programme of training was presented. In a matter of weeks all of the project's 120 training places for this year were taken and on these people will get to survey day-flying moths and hunt out hoverflies in hay meadows.

Fortunately, there are many ways people of all ages can contribute. A community and schools programme has launched at the AONB Partnership's Bowlees Visitor Centre in Teesdale. The aim is to teach children that insects, slugs and snails are vital to the health of people and the countryside. In July the first of our five annual invertebrate art installations was be unveiled along the Pennine Way at Low Force. Pupils from Teesdale Comprehensive helped to inspire the design for stone carvings (pictured) highlighting the river flies that flourish in the Tees. These invertebrates are fascinating in their own right but are also an important food source for fish and birds. The arts programme will move around the AONB in subsequent years from Derwent Reservoir to Allenheads and on to Cumbria.

Teachers and youth groups can also take advantage of a unique bug trolley that is free to loan. It is filled with equipment designed to focus outdoor sessions on identifying animals in the undergrowth and uncover their amazing life stories. From the young of violet oil beetles hitching a lift from a solitary mining beetle, to caterpillars that mimic bird droppings, children in the North Pennines will be encouraged to discover and celebrate their local invertebrates.


© Rebecca Barrett

By motivating interest and participation through education events we hope to increase the data we have for smaller creatures in the uplands. Ultimately this citizen science programme is intended to create a surge of invertebrate recording in the North Pennines and help map important sites for their conservation. Informal survey days will encourage volunteers to form a group of invertebrate champions in the region. The North Pennines AONB Partnership's WildWatch website has been enhanced to offer features to help budding entomologists. Recorders can upload images of their observations, join a forum to get expert advice and share their interest in important local sites.

Already invertebrate records and photos are flooding in. We hope to add thousands more.

To register and add your wildlife observations go to www.northpennines.org.uk/wildwatch.

Features

Biodiversity boom on Fenland waterways

Five years of working towards biodiversity targets have produced real gains for wildlife in the districts of 36 Drainage Boards in the Middle Level Biodiversity Action Plan Partnership. The Partnership's annual meeting on 2nd December 2015 will include a review of targets achieved.

One much-loved species that has benefitted from Drainage Board Biodiversity Actions is the kingfisher. To provide nest sites for these jewels of our waterways **150 holes** have been drilled during the last five years through steel, brick and concrete structures at **80 Internal Drainage Board (IDB) sites**. When a 50 to 70mm diameter hole is drilled through steel piles or concrete headwalls that have soil behind them an opportunity is created for kingfishers to establish very safe nesting tunnels and chambers. Natural nest sites in riverside soil cliffs are often quickly eroded and only last a few years but sites like these behind steel piles will remain available for more than 20 years. 2015 has been a boom season for kingfishers in the Middle Level with many more sightings than usual reported from drains and rivers throughout the area.

Kingfishers nesting in brick at Needham & Ladus IDB district

A barn owl leaving a nest box in Upwell IDB district

Other species that have benefitted in the five year biodiversity plans of the **36 IDBs** have been **bats, barn owls, water voles, otters and black poplars**. **82 large panel bat boxes** have been attached to pumping stations and **26 bat bricks** have been installed in culvert tunnels. During the first five-year IDB Biodiversity Action Plan period **91 barn owl boxes** have been erected in the 36 Drainage Board Districts, consolidating the Middle Level of the Fens as a stronghold for the species.

The 70,000 hectare Middle Level catchment is also a national stronghold for water voles. **1,770 meters of coir rolls** pre-planted with native marginal water plants have been installed at **23 sites** to create 'instant habitat' for water voles, provide pollen for insects and to stabilise bank margins.

Otters have benefitted from the construction of **79 otter holts** (dens) in the banks of Middle Level waterways and spraints (signs of their presence) have been recorded at over 60 bridges throughout the 120 miles of drains and rivers in the catchment.

Established coir rolls on the Sixteen Foot Drain near Bedlam Bridge, March East IDB district

The black poplar is the UKs rarest timber tree and traditionally grows in damp locations beside water. **140 black poplars** have been planted from cuttings taken from local trees and have been established at new sites throughout the Middle Level.

A black poplar cutting thriving beside the Black Ham in Holmewood IDB district

Berkshire's rare butterflies making a come-back

Good news for two butterflies, the silver-studded blue and silver-washed fritillary, which are making a come-back in Berkshire and Buckinghamshire – thanks to the hard work of BBOWT volunteers and staff.

The State of the UK's Butterflies 2015 report from Butterfly Conservation and the Centre for Ecology and Hydrology shows that more than three-quarters of the UK's butterflies have declined in the last 40 years, but thanks to the hard work of BBOWT volunteers and staff two butterfly species are making a comeback.

Each year an 'army' of enthusiastic BBOWT volunteers carry out weekly butterfly surveys of specific transects (a fixed route walk) on our nature reserves. These transects are part of the UK Butterfly Monitoring Scheme and the data collected has contributed to The State of the UK Butterflies 2015 report.

This year the 55 volunteer surveyors walked 44 transects every week from the beginning of April to the end of September on BBOWT nature reserves. The data collected not only significantly contributes towards the national monitoring scheme but also allows BBOWT to assess butterfly population trends on its reserves and plan the most appropriate habitat management work.

This year our new nature reserve, Yoesden near Bledlow Ridge in Bucks, was surveyed for the first time and 28 species were recorded including three scarce blue species: Adonis, chalkhill and small blue butterflies. If we are able to extend the nature reserve there will be more habitats for these and many other species including grizzled and dingy skipper butterflies. Donate now to the Yoesden Extension Appeal.

Silver-Studded blues on Wildmoor Heath © Gavin Bennett

Targeted and intensive conservation work by the Berkshire team and volunteers at Wildmoor Heath, our heathland nature reserve in east Berkshire is benefitting the elusive silver-studded blue butterfly.

Cutting some of the heather very low creates the perfect habitat for the butterfly to lay its eggs. Bare soil is ideal for the two species of black ant that tend the larvae when it emerges, and look after it within the ant-hill until the butterfly emerges in July. Adult silver-studded blue butterflies feed and roost on taller mature heather and gorse. We continue to manage the reserve on a rotation cycle to create the right combination of height and diversity of habitats to meet the butterfly's life cycle.

Four butterflies were recorded on any one survey visit in 2011 and, since the habitat management work has been carried out, the numbers have increased: a maximum of 15 were counted there in one day in 2015.

The silver-washed fritillary butterfly has also shown an increase in numbers on our woodland reserves where teams of volunteers and staff have coppiced trees and cut back scrub to create open flower-rich, sunny rides and glades which are favourite habitats for these large orange and brown coloured butterflies.

Finemere Wood and Homefield Wood in Bucks, and Moor Copse and Bowdown Woods in West Berkshire have all seen dramatic increases of silver-washed fritillary butterflies in recent years.

Read The State of the UK Butterflies 2015

Find out more at: http://www.bbowt.org.uk/

Silver-washed Fritillary © Kate Dent

More training opportunities for biodiversity volunteers

Field Studies Council (FSC) has secured support from the Heritage Lottery Fund (HLF) to start expanding its highly regarded biodiversity training work across a new region. It has received 'earmarked funding'* for a £1.2m bid from HLF for the BioLinks project.

The project will provide more taxonomic training for underrepresented species, especially those difficult to identify. It will support, signpost and mentor volunteers to help them become more proficient biological recorders.

BioLinks aims to 'link together' volunteers so they can help mentor and support each other and link together the existing volunteers and those involved professionally in natural history.

FSC has been providing volunteer training in biological recording for many years and has learnt how to effectively support people, helping them to become more confident and competent so they are able to provide more accurate and validated biological information. An HLF development grant of £41,000 will help FSC to prepare to deliver this work in a new area. London and the South East has been chosen because of the number of active biological organisations in the region.

FSC aims to involve existing and new biological recorders in the project, hoping to extend not only the number of active natural history observers but also increase their age range and diversity. The Development work will get underway in January 2016 and towards the end of the year FSC will prepare its final application for the full £1.2m grant.

Activities like Bioblitz events, creating and consulting species reference collections, developing species distribution atlases and using identification resources will be part of the project alongside traditional day and weekend courses learning how to identify plants and animals. FSC hopes over 2000 new volunteers will come together within BioLinks and our knowledge of how to protect and conserve the natural world will increase through improved mechanisms, shared knowledge and the use of new technology.

Sue Townsend, FSC Biodiversity Manager said "I am so pleased that the Heritage Lottery Fund has given us this support. It will help FSC to make sure as many people as possible can get involved in biological recording and identification. Conservation of our natural world depends on having good quality and robust information and this project will support more people to enjoying providing this vital information." Tom Tew, Heritage Lottery Fund Trustee, said "The Heritage Lottery Fund supports a wide range of natural heritage projects, and that includes those that protect the 'uncharismatic' parts of our environment such as beetles and bees – these groups are poorly understood and poorly recorded, but are threatened by habitat loss and development just as much as otters and orchids.

Our support will get the BioLinks project off the starting blocks and will enable large groups of volunteers – from dedicated and skilled amateur enthusiasts to schoolchildren and communities just starting - to learn about and better record their local insects and plants.

It's early days for this ambitious project but it's heartening to be investing in some highly innovative 'citizen science' pilot projects which, we hope, will have national roll-out in due course."

Energy boost for native trees

By John Bark, The Conservation Volunteers

This winter, thousands of volunteers are being encouraged to 'join in, feel good' by planting 157,000 native trees in over 2,000 green spaces across the UK. Backed by energy supplier OVO Energy, the 'I Dig Trees' project spans the bare-root planting season, with approximately 97,000 hours of volunteering. The work is managed by community volunteering charity The Conservation Volunteers (TCV) and TCV's network of local groups.

OVO Energy is one of the leading independent suppliers in the UK energy retail market and the 10th fastest growing private business in the UK. Under their Greener Energy tariff, OVO is committed to reduce, offset or positively impact against their CO_2 emissions. "We asked our Greener Energy tariff customers how we should do this, and they said 'local improvements first'," explains Justin DeKoszmovszky, Head of Sustainability at OVO. "So rather than plant trees in a distant industrial forest, 'I Dig Trees' delivers CO_2 impact in local green spaces where customers can appreciate the results - and perhaps get their hands dirty by volunteering."

The Friends of Rede Common in Strood, Medway, prepare to use their free Wildlife & Shrubs pack.
© The Friends of Rede Common

Packs of 50 trees suitable for a variety of green spaces were provided completely free of charge to community groups, schools, clubs and OVO Communities who registered for the programme.

Pack 1. Parkland: Common Oak, Small Leaved Lime, Green Beech, Sweet Chestnut, and Hornbeam.

Pack 2. Large Garden: Silver Birch, Aspen, Common Alder, Wild Cherry and Norway Maple.

Pack 3. Small Garden: Rowan, Bird Cherry, Field Maple, Crab Apple and Cherry Plum.

Pack 4. Wildlife & Shrubs: Wayfaring Tree, Guelder Rose, Hawthorn, Dogwood and Goat Willow.

All packs contain 10 bare-root plants of each species, 50 x spiral guards (60cm x 50mm dia.) and supporting cane (90cm 12/14lbs) packaged in forestry co-extruded bags. Comprehensive planting guides and OVO sponsored web site guidance are also provided.

The programme launched by planting 1,000 trees at Henbury on the outskirts of Bristol where volunteers and staff from TCV and OVO employees joined in with pupils from Cabot Primary School and Kings Weston Special School. "The entire Trading Team from OVO volunteered for tree planting and it was amazing," commented OVO Energy Trading Director, Stephen Harris. "It was physically tiring but the sight of all the new trees at the end of the day was well worth the effort."

TCV's other tree planting activities range from wide scale programmes with DEFRA and the Forestry Commission, to community tree planting in local parks, community spaces and school grounds. Major projects include the Kent Heritage Tree Project, the Forestry Commission's BIG Tree Plant and Hull's Heywood Initiative.

For more information go to www.ovoenergy.com/IDigTrees or email idt@tcv.org.uk

The OVO Trading Team who helped plant 1,000 native trees at Henbury, Bristol.

Natura 2000 - the Natural Wealth of Wales

Action plans have recently been completed for 112 European protected wildlife sites in Wales. Each Prioritised Improvement Plan (PIP) describes the actions needed to bring the 123 threatened species and habitats of the Wales' Natura 2000 sites into favourable condition. Natura 2000 is the collective term for Special Areas of Conservation and Special Protection Areas.

The work is the culmination of the LIFE Natura 2000 Programme for Wales, a major 3 year project funded by EU LIFE+ scheme and led by Natural Resources Wales. A total of 3600 actions across Wales have been identified to tackle key issues and risks on the sites.

Kathryn Hewitt, the Programme Manager said "The Natura 2000 network represents the very best of Wales' wildlife and natural heritage but the sites do require active management and restoration if they are to continue to act as key reservoirs of biodiversity."

The plan for Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses Special Area of Conservation near Wrexham gives a good example of the type of priority actions required - management agreements with landowners, direct management on the National Nature Reserve and the preparation of a Site Nitrogen Action Plan. Work includes tree and scrub removal, blocking drains to retain water on-site, removal of solid waste, and improved ditch management. Vital resources to fund this work are now being sought in an EU LIFE submission led by Natural England, which the PIP has helped to inform.

The total cost to deliver the actions across Wales has been calculated at £120 million by 2020. While this may seem like a substantial sum, it is worth noting that the protected sites cover over 700,000 ha or around 7% of the land area of Wales and nearly 36% of Welsh seas. Kathryn added "Any investment is returned many times over as these amazing places deliver benefits to us all, such as recreation, tourism, carbon sequestration, flood defence and pollution control."

Eleven key challenges were also highlighted by the Programme which affect Natura 2000 sites right across Wales, including invasive species, inappropriate grazing, air pollution, diffuse water pollution, changes to water conditions, climate change and habitat fragmentation. Thematic Action Plans have been prepared for each of these, which consider strategic measures such as changes to policy and legislation which could help resolve issues which cannot be tackled at a local level.

A set of Wales-wide Natura 2000 priorities has been established to help target scarce resources where the need is greatest. Actions on specific sites have been prioritised based on the extent and severity of impacts, and urgency. At a Wales level, an analysis has drawn out priority ecosystems, particularly where the designated species and habitats are in poor condition. These include peat lands, sand dunes, woodland, rivers and, in the marine environment, estuaries and saltmarsh, lagoons and shingle.

The LIFE Natura 2000 Programme has been used to prepare the revised version Prioritised Action Framework, a document required under the Habitats Directive which informs the European Commission of the Natura 2000 priorities and Wales' requirements for co-funding. It is hoped that this will provide a platform for successful funding bids in the future.

The Programme has also produced a series of 11 short films, showcasing the wealth of Welsh wildlife and narrated by broadcaster Dei Tomos. The films communicate the importance of Natura 2000 protected sites not only to wildlife but also to people and the economy, in an accessible and engaging way.

The summary report, PIPs, Thematic Action Plans and other outputs of the LIFE Natura 2000 Programme, including the short films are available on the LIFE Natura 2000 web pages at www.naturalresources.wales/LIFEN2K. Also look out for the project on social media – search for LIFE Natura 2000 Programme on Facebook and twitter and on the NatResWales YouTube channel.

Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses Special Area of Conservation © Natural Resources Wales

RESTORE project ends on a high

After three years and close collaborative working between seven partners across four countries in north-west Europe (U.K., Belgium, the Netherlands and Germany), this stage of the RESTORE project has now officially come to an end.

Funded by the European Regional Development Fund through the INTERREG IVB NWE programme, RESTORE worked to promote the benefits which can result for people, wildlife and local economies, when mineral sites are restored to a biodiversity-led end-use. The project was led by the RSPB here in the U.K. and incorporated much of the ongoing work of Nature After Minerals, the RSPB/Natural England partnership programme.

Key achievements and milestones of the project have been:

- Engagement with stakeholders from a wide cross-section of sectors across north-west Europe through communication channels including best-practice events, conferences, social media, advisory materials, as well as articles in industry and specialist media. A dedicated RESTORE website to present the case for biodiversity-led minerals restoration continues to provide an information hub for stakeholders across north-west Europe.

- Provision of practical advice for priority habitat creation and management on around 2,300 hectares of land and creation and management of priority habitat on approximately 500 hectares of land.

- Positive influence over the conservation of priority species such as white-clawed crayfish, bittern, turtle dove, otter, twite and willow tit here in the UK, as well as yellow-bellied toad, eagle owl and midwife toad on the continent, as a result of advice and management work undertaken.

- The publication of a report which assesses the ecosystem services benefits which can result from restorations focussing on nature — from flood alleviation, improved water quality and carbon storage, to enhanced health and wellbeing and income generation through green tourism. Focusing on ten sites across the project region as case study examples, the report helps strengthen the case for restoring mineral sites to a nature conservation end-use.

- A review of minerals planning policy across the north-west Europe region which led to recommendations being presented at the project's final conference in Brussels in June last year, attended by MEP and EU representatives as well as heads of industry, planning and environmental non-governmental organisations.

- The strengthening of collaborative working across north-west European countries, sharing expertise and best practice and exploring innovative ways of working.

The opening of the ambitious stairway was a fitting event to conclude the project, highlighting the benefits which local people can also enjoy when quarries are restored for nature.

The grand opening of an ambitious public access stairway overlooking restoration work some 50 metres above ENCI quarry in Maastricht has brought the trans-European RESTORE project to a successful conclusion © ENCI

Attending the event, Nigel Symes, Head of Business Advice at the RSPB, commented:

"RESTORE highlights the benefits and services which local communities experience as a result of carefully considered biodiversity-led minerals restoration. Places where nature is able to thrive can, at the same time, provide benefits like flood alleviation safeguards, carbon storage and sympathetic green leisure pursuits, all of which directly help the positive regeneration of local economies.

"Appropriate and sustainable restoration of finished minerals sites represents a mighty opportunity to contribute to the regeneration of Europe's natural capital. This is a unique opportunity which needs to be seized upon by all interested parties as a means of safeguarding European biodiversity and enhancing the lives of European citizens."

Whilst this phase of RESTORE has come to an end, plans are in place to explore possible ways to continue building on the momentum which the project has created over the last three years, so that the potential for minerals restoration to deliver for species, habitats and people continues to be recognised and acted upon, at a European level.

Meanwhile, here in the UK, Nature After Minerals will continue its work to promote the benefits of biodiversity-led minerals restoration.

All outputs of the project are detailed on the RESTORE website: www.restorequarries.eu

RESTORE

Nature After Minerals
Working together to restore quarries for people and wildlife

Islands at the edge of the world: exploring St Kilda's sea caves

The World Heritage Site, St Kilda, lies 41 miles west of Benbecula in the Outer Hebrides and is the most remote part of the British Isles. With life on the islands becoming increasingly challenging, the archipelago's last 36 human residents were evacuated to the mainland in 1930.

A Yarell's blenny in a sea cave © George Stoyle, SNH

However, the islands remain hugely important for their wildlife: they host huge seabird populations, including the world's second largest colony of North Atlantic gannets. The waters around St Kilda are designated a Special Area of Conservation (SAC) for their reefs and sea caves, which attract a wealth of spectacular sea life. A scientific dive team led by Heriot-Watt University and commissioned by Scottish Natural Heritage has recently returned from a sea-cave survey to these 'islands at the edge of the world'. An experience they are unlikely to forget.

Anemones on a rock wall outside a sea cave © George Stoyle, SNH

The survey was part of a four year multi-site contract with Heriot-Watt University to conduct site condition monitoring of a number of Scottish marine SACs and SSSIs. The team sent to investigate the caves included leading marine scientists and photographers to pay justice to this rare opportunity.

A diver studying marine life © Richard Shucksmith, SNH

View of the survey vessel © George Stoyle, SNH

Two weeks of storms, engine failures and sheer bad luck initially thwarted all attempts to make it out to St Kilda. Through liaison with the boat's skipper and SNH representatives on the team and back on land Dan Harries, who led the team, managed to redirect efforts to make best use of the time regardless: "We were able to spend the time on method testing and preparation work in caves in Loch Eriboll, and then went on Loch Laxford and Loch nam Madadh, two other marine SACs, to complete other components of site condition monitoring".

At the start of the third week aboard the team had resigned itself to the fact that St Kilda just wasn't going to happen this year, and a scapegoat was prepared to be made to walk the plank. But the skipper and crew had mercy and steered the boat on an exciting roller-coaster-ride up and down big Atlantic swell in a final attempt to make it out to St Kilda. The boat was buzzing with excitement when the islands finally appeared in view and the team realised they would get a chance to jump into the blue oceanic waters to join the sea cave dwellers in their dark tunnels for a few hours.

Due to the remoteness of St Kilda diving had to be conducted within very conservative safety limits. "Before conducting the biological surveys, snorkelers had to check the cave entrance to see if there even was a cave which continued far enough to make it worth surveying. Some purported caves turned out to be just blind caverns and surge gullies. But if the cave was suitable, we would lay a distance line up to 100 m into the cave and do a physical survey of the passage dimensions and directions. After that the biologists and photographers worked along the distance line to record species." said Lisa Kamphausen, a marine ecologist from SNH.

Between line-laying and measuring cave dimensions, defining biological zones, taking video and photographs, recording the details of animals which live inside the caves, and collecting specimens for the National Museum of Scotland, the team had quite a few jobs to do between them, and it sometimes got quite busy in the caves. Too busy for some of the resident seals who would occasionally sneak past the startled divers on their way out into the Atlantic Ocean.

The team could only stay as long as their Scuba tanks would give them air, their dry suits would keep them warm, their torches had batteries, and as long as the wind blew from the right direction to avoid the worst of the swell. A detailed report on the survey will be produced in due course, but Dan Harries' initial impression of the condition of the caves was very positive: "The cave entrances were teeming with life, from kelp to colourful sponges, sea-squirts, bryozoans and anemones with many other species hiding between them. Deeper inside the caves, in the true darkness where the light no longer reached life was scarcer, but sponges, sea-squirts, anemones and bryozoans still occurred. Overall the caves looked in good condition without signs of damage – as should be expected in such a remote location".

In 2016 the team will tackle caves and reefs around the Mousa SAC.

Our website has more info on World Heritage Sites, Site Condition Monitoring and the St Kilda National Nature Reserve. We've uploaded hundreds of photos from the St Kilda trip and previous SNH marine surveys to Flickr for you to browse and share - all we ask is that you credit Scottish Natural Heritage and the photographers. And here is a blog and website of the Heriot Watt Scientific Divers.

Jewel anemones on a rock wall outside a sea cave
© George Stoyle, SNH

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Double, double, toil and trouble: Halloween funding boost for home of Pendle Witches!

£31m National Lottery investment in UK landscapes, including Pendle Hill

On the 31st October, the Heritage Lottery Fund (HLF) marked the spookiest day of the year with a £31m investment in some of the UK's most distinctive landscapes, including the home of the infamous 17th-century Pendle Witches. This major funding package - impacting 3,000km^2 of countryside - will support urgent conservation work to the natural and built heritage, help reconnect local communities to where they live and create 50 new jobs and 6,000 paid training places.

Tales of the Pendle Witches have passed into Lancashire legend: a time of fevered accusation and counter-accusation with 10 local people convicted of witchcraft and nine executed in 1612 as a result. The area has a wide and fascinating heritage and the Pendle Hill Partnership will help people gather and research it as well as a myriad of other stories, including the founding of the Quaker movement by George Fox.

Rory Stewart, Environment Minister, said:
"This is wonderful news. The Heritage Lottery Fund is now playing an absolutely central role in conserving and restoring our landscape. This is only the beginning of what we can all do, working together, to really protect and transform nature and beauty across the British Isles. And above all, ensure people are connected to those landscapes, seeing them and enjoying them."
The 13 areas benefiting from HLF's investment stretch from the Orkney Isles in Scotland to Penwith's peninsula on the south western tip of mainland England. Highlighting the extraordinary range of the UK's natural heritage - from a World Heritage Site to Britain's largest protected wetland – the areas funded include:

Halvergate - Highs Mill © Julian Claxton

- **Pendle Hill Landscape Partnership Scheme, Forest of Bowland, Lancashire - £2m, including £156,400 development grant.**
Pendle Hill's summit acts as a divide both geographically and socially to the communities who live on either side of it. The scheme includes restoring important wildlife and landscape features and researching local stories. Formal skills apprenticeships will be available for 20 young people, four graduate trainees and one university student placement.

- **Water, Mills and Marshes – The Broads Landscape Partnership, Norfolk – £2.6m, including £226,000 development funding.**
  Located in the Southern part of the Broads National Park – the former Great Estuary – this beautiful but threatened drained marshland needs urgent help. A consortium of 55 partners is taking action to help revive the area and get the surrounding community to support long-term conservation work. Local wildlife is wonderful but declining with threatened species including: water vole; marsh harrier; bittern; and the Norfolk hawker dragonfly. A long-term goal of this project is to boost the local economy through improved business and tourism opportunities.

- **'Our Picturesque Landscape', Dee Valley, North East Wales - £1.4m, including £67,900 development grant**
  This scheme focuses on the landscape of the Dee Valley and the Pontcysyllte Aqueduct and Canal World Heritage Site. An inspiration to writers and artists for over 300 years, the area's success as a tourist destination has also put it under increasing pressure. HLF's support will enable much better management of visitor 'hotspots' such as The Panorama and a community partnership will look at cleaning up the River Dee in order to reduce flooding. Key volunteering opportunities include the creation of a 'stumpery' – an upturned tree feature - in the Delly at Plas Newydd and training in traditional heritage skills such as hedge laying, dry stone walling and the use of lime mortar.

- **Callander's Pass – Mind the Gap – Loch Lomond & The Trossachs National Park, Scotland - £1.5m, including £119,600 development funding**
  This Landscape Partnership project is at the eastern most corner of Scotland's first National Park, Loch Lomond & The Trossachs. Set in an exquisite landscape along the Highland Boundary Fault in a geological 'gap' between the Lowlands and Highlands, Callander provides a natural gateway to the National Park and the Highlands. Ambitious plans include: transforming the town of Callander into the 'Outdoor Capital of the National Park'; developing both cultural and natural heritage; and creating a cycling and walking network.


© Alastair Lee

Continued...

The other projects that have secured support are:

- 'Elan Links – People, Nature & Water', Mid Wales - £1.7m, including £85,900 development funding.
- 'Living Levels' Partnership, Gwent, South Wales - £2.8m, including £321,100 development funding.
- North Isles Landscape Partnership Scheme, Orkney Islands, Scotland – £3m, including £169,400 development funding.
- Galloway Glens Landscape Partnership, Dumfries and Galloway, Scotland - £2.9m, including £185,500 development funding.
- Lough Erne Landscape Partnership, Fermanagh, Northern Ireland – £2.9m, including £253,900 development funding.
- 'Nenescape: Revealing the Hidden Stories of the Nene Valley', Northampton - £2.8m, including £208,300 development funding.
- Brightwater Landscape Partnership, County Durham – £2.8m, including £223,100 development funding.
- 'Revitalising Redesdale', Northumberland - £1.8m, including £115,700 development funding.
- 'First and Last – Our Living Working Landscape', Penwith, Cornwall – £2.7m, including £140,600 development funding.

Drew Bennellick, HLF Head of Landscape and Natural Heritage, said:
"Landscapes are more than just beautiful scenery: they are the backdrop to some of history's most notorious events. What better way to mark Halloween than to look at how Pendle Hill with its bleak peat bogs and rugged heather moorland was witness to the witchcraft trials phenomenon that spread right across Lancashire in the 1600s. Now in its eleventh year, our Landscape Partnership programme has revealed so many fascinating hidden histories as well as protecting many of our most breath-taking and iconic landmarks. This has all been achieved thanks to National Lottery players."

HLF's Landscape Partnership programme – which has now been running for over a decade - is the most significant grant scheme available for landscape-scale projects.

To date, £177m has been invested in 99 different areas across the UK helping forge new partnerships between public and community bodies and ensuring people are better equipped to understand and tackle the needs of their local landscapes. Over its life-span, the LP programme has helped repair over 100 km of dry stone walls, enabled 810,000 people to participate in learning activities and helped more than 45,000 volunteers get involved – the equivalent of 64,000 working hours.

Callander's Pass

It's looking all Twite!

By Jenny Oldroyd and Jamie Dunning


© Tim Melling

The red listed Twite (Linaria flavirostris) has suffered declines in the number of breeding individuals and breeding range over last 20 years. These declines have led to the Twite becoming a rare bird in England, known to breed in only a few small pockets situated in the South Pennines and the Twite population is now estimated to be only a few hundred pairs.

However, it has long been known that there is also a small breeding population of Twite near the CEMEX Dove Holes quarry. This is at the very southern edge of Twite's range. Onsite, the CEMEX/RSPB partnership have been supplementary feeding to help maintain the population, and this autumn the Business Advice Unit organised ringing. Joining forces with Jamie Dunning, ringer and leader of research group Twitenet@googlegroups.com (part funded by the BTO) and RSPB volunteer George Hudson, have now caught and colour ringed 41 Twite from this it seems likely the post breeding flock in the area was around 60+. This is a great increase on recent years.

We are now hoping to learn more about the ecology and demography of this isolated population and confirm the long expected theory that these will mix with Pennine birds on the South East coasts. We have had one report back already which a Derbyshire bird was sighted first week in November at Thornham harbour, Norfolk.

For those of you visiting the coast this winter, please look out for any colour ringed Twite. To report a colour-marked bird, we require the colours of the rings (of which there will be 3 as well as a metal ring) and their positions on the leg.


© Dan Keightley

More information on Twite and the conservation effort in the UK can be found at RSPB/NE English Twite Recovery Project or through contacting the external research group directly at Twitenet@googlegroups.com.

Thanks to Jamie Dunning, George Hudson and volunteers in the area.

For more information contact jenny.oldroyd@rspb.org.uk at the BAU.

A harvest mouse nest found onsite
© Deborah Wright

A Warwickshire mouse hunt

Harvest Mouse Officer, Deborah Wright, is on a quest to find Britain's smallest rodent. Deborah is working with the Warwickshire Wildlife Trust to find out where these elusive mammals are in the county. She is engaging with local communities, organisations and land owners to survey sites across Warwickshire, with the help of a team of hardy volunteers. This short-term project is being funded by the People's Trust for Endangered Species, and aims to boost records and increase our understanding of distribution and habitat preferences.

Deborah and Paul scoping the reed bed
© Fiona Mackenzie

The harvest mouse is thought to be experiencing a considerable decline, likely owing to habitat loss and changes in farming practices. The extent of this decline is largely unknown, however, partly due to the intensive effort required to survey for this tiny mammal. Harvest mice are active climbers, using their prehensile tails and broad feet to move through dense vegetation, in which they build their nests. These are distinctive woven structures, usually made from shredded grass leaves and often situated between stems above the ground. Deborah searches for these hard-to-see nests when she surveys sites, looking amongst grasses, rushes, brambles, cereals and other dense vegetation. She also sets baited humane traps designed to catch small mammals from which she re-releases any caught animals.

One of the sites Deborah surveyed this season was Coombe Country Park. Coombe is a 500 acre country park run by Coventry City Council on the fringes of the Warwickshire countryside.

Although Deborah has surveyed various flora and fauna in the park over the past two years, she has never specifically looked for signs of small mammals. However, Paul Hodges, Estate Officer, had previously spotted harvest mouse nests in the reed bed during cutting, and was keen to find out if the species was still present on site. Fiona Mackenzie, Information and Interpretation Assistant, was also interested in getting involved and engaging some of the park volunteers. "For your average park visitor, it is not easy to see the benefits of long term conservation work and habitat management. So surveys such as this are fantastic for the site as it gives us some tangible evidence we can show our visitors that the long term support they give us to manage the site, really is worth it when you see that it is home to so many creatures. We are delighted to be working with Deborah once again and very grateful of her help developing survey skills of staff and volunteers."

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Armed with volunteers from both the park and the Warwickshire Wildlife Trust, Deborah, Paul and Fiona set out in December to survey the reed bed and an adjacent area of neutral grassland. Surprisingly, no conclusive evidence of harvest mouse presence was found amongst the reeds. However, nests were found in the neutral grassland, with 15 nests found by the team in less than an hour of searching. Other species were also recorded during the survey, including bank vole, common shrew and pygmy shrew.

A harvest mouse in the wild © Steve Stroud

Paul explains that the neutral grassland is a very important piece of land to the site and it is currently sensitively maintained as part of the long term park management plan and the site's Higher Level Stewardship Agreement. "We've always known of the rich biodiversity of this area given the large number of huge yellow meadow ant nests, which support green woodpeckers at their highest density on site, and a range of rarer flora including Parsley Peirt which grow on the ant hills. Grasses are left long, and we manage the scrub, however it also helped along by the scores of grazing rabbits. With this varied vegetation we can see why the harvest mice would build their nests here, however the evidence from the survey has been so overwhelmingly positive we will certainly look at how we can continue to manage these areas in a small mammal friendly way." Paul also says that Coombe have already got plans to increase the amount of surveying on site. "It's great to have ecologists like Deborah coming to Coombe to survey some of our under recorded species and it really helps us improve how we manage the site. We hope to launch our first in a series of BioBlitz days in the park in May 2016". If you are interested in getting involved with a BioBlitz at Coombe, please contact paul.hodges@coventry.gov.uk.

Deborah says, "It's always rewarding to work with an organisation that not only wants to find out more about the wildlife present onsite, but that also wants to think about ways to alter their management of the site accordingly. Although this project aims to increase both knowledge and awareness of harvest mice specifically, I hope that the work will benefit a variety of species through wider habitat and landscape conservation."

Conducting a nest search of the neutral grassland © Deborah Wright

THSP helps hedgehogs in construction

By Simon Cole

In 1981 the Government gave unprecedented powers to protect rare and endangered species under the Wildlife and Countryside Act. Hedgehogs at that time were considered to be at risk, but no UK population estimates had been considered since Maurice Burton published his book: *The Hedgehog: A Survival Book on Hedgehogs* in 1969. Burton thought at that time that there were 36.5 million individual hedgehogs in the UK, based on an extrapolation of population density (one hedgehog per acre). In the 80's decision makers knew that hedgehogs were at risk and we are lucky that they were included in Schedule 6 of the Act, especially given that there was such a weak evidence base at the time.

As the Wildlife and Countryside Act 1981 became increasingly mainstreamed into national policy, it was found that it did not lend itself to protecting species that were not intentionally killed. The first UK Biodiversity Action Plan in 1994 recommended that 'action plans' be drawn up for each protected species scheduled in the Act. It was decided that these action plans did not work and are now in the national archives. In 1995, the Joint Nature Conservation Committee (JNCC) published their report: *A Review of British Mammals* that estimated hedgehog populations in the UK were just over 1.5 million individuals. The 2010 JNCC Priority Species Account listed 5 action targets for hedgehogs (focussed mainly on research) and was unable to provide any estimates for hedgehog populations in Northern Ireland. Hedgehogs were still recognised in local and regional Biodiversity Action Plans (BAPs), but few statutory tools that could actually increase the hedgehog population.

This all changed in 1999 when the Environmental Impact Assessment (EIA) Regulations were introduced to control and mitigate construction developments that had potential to harm the environment. Within a few years, road-kill statistics for hedgehogs were produced by the People's Trust for Endangered Species between 2001 and 2008. These statistics did not demonstrate significant trends in population decline, but helped to get the European Hedgehog *Erinaceus europaeus* classified as a Biodiversity Action Plan 'priority' species in 2007. Hedgehogs were still being overlooked as environmental managers struggled to incorporate mitigation for bats, newts and badgers into construction sites across the UK. Mitigation for hedgehogs was not consolidated and ecologists rarely found an approach that was acceptable to the planners.

How times have changed! Saturday 21st November 2015 celebrated the first ever Day of the Hedgehog and marks a transition point as conservation charities rush in to stem the decline in hedgehog populations. 'Hedgehog Street' was launched 3 years ago by the People's Trust for Endangered Species and the British Hedgehog Preservation Society as a campaign that focusses on direct action by members of the public to create hedgehog highways and refuge areas across the United Kingdom. The message was even louder last year, with several hundred attending a large open conference in Telford, UK on the 21st November 2015. Celebrities and wildlife stars including Twiggy, Ben Fogle, Bill Oddie, Chris Packham

and Chris Beardshaw have raised media attention and hedgehogs are once again thrust into the spotlight. We recently consulted Natasha Ennew from Shepreth Wildlife Conservation Charity Hedgehog Hospital (SWCC) for her appraisal of the challenges ahead. She told us that they currently rehabilitate 550 hedgehogs each year from across Cambridgeshire and Bedfordshire and that the 'hospital' operates on as little as £2,500 per month. In common with our own observations, a significant number of hedgehogs they receive are thought to come from construction sites. Wildlife response training is very rarely a requirement on construction sites and is not included in the operator's CITB CSCS test. As a result, developers do not know what to do and the charity can barely cope. Our appraisal of the situation is that population decline is far worse than anyone could have expected. This could be a regional phenomenon, but Natasha believes things have gone out of control.

Management of hedgehogs is likely to become increasingly difficult as habitat fragmentation increases pressure on existing populations. In the past, legislation has been created exclusively for threatened species, most notably the Badger *Meles meles* and freshwater Eel *Anguilla anguilla*. Primarily, the legislation in both cases was created in response to deliberate human persecution, but new legislation could focus on a wider range of issues. One example would be to regulate new fencing so that mandatory gaps are included to permit the passage of hedgehogs. This could help developers to minimise their impact under the EIA Regulations. There also needs to be a more concerted effort to influence decision-makers to give hedgehogs greater material planning consideration. There is certainly scope for further research, although the extent of land use change in the UK means that there are relatively few solutions that allow hedgehogs to flourish under systems of intensive agriculture. These areas have shown the greatest decline in hedgehog density despite having less road traffic, indicating that the situation is very complex.

BBC Wildlife Magazine named the hedgehog as the country's "favourite national species" in 2013. Public involvement and support for hedgehogs is currently very strong, but this may not continue forever. Policy makers must now decide whether to adopt a different approach towards hedgehogs or to continue to rely on rehabilitation and rescue efforts by a dedicated group of enthusiasts. Without the help of these wildlife champions, the situation could be far worse.

THSP visit Shepreth Wildlife Conservation Charity Hedgehog Hospital © THSP Risk Management

If you are interested in Hedgehogs in Construction or want to comment, please do not hesitate to contact us: simon.cole@thsp.co.uk. We are also looking for long-term partners that can help us take this message to the construction industry if you want to take the lead in meeting these challenges head-on.

To find out more about the good work of Shepreth Wildlife Conservation Charity visit: http://sheprethhedgehoghospital.co.uk/.

Urban Buzz takes flight

Buglife will be running an exciting 3 year project to establish eight flagship Buzzing Cities across England and Wales. The project will transform mown and unused grass and urban sites into vibrant pollinator habitats full of wildflowers and nesting spots; and engage a variety of people and organisations along the way.

Pollinators are vitally important to landscapes and people, but the UK's pollinators are in serious decline. Thanks to funding from Biffa Award, Garfield Weston Foundation and HLF, Buglife will be working with the following cities: Birmingham, Bristol, Cardiff, Ipswich, Leeds, Leicester, Plymouth and York; converting them into Buzzing cities. These cities have been chosen for their potential to deliver the National Pollinator Strategy has identified improving habitat in urban areas as a key step to tackling pollinator decline.

Local government, organisations and people in each community are backing the project, as well as wider partners such as Landlife, Natural England, River of Flowers, University of Bristol and University of East London.

Urban Buzz will train 800 local volunteers to be Urban Buzzers, these volunteers will assess local sites and their pollinators. The project will also identifying case studies and best practice and train land managers to ensure that the pollinator habitats created will be maintained into the future. Each city is unique and so the project is being tailored via local steering groups, to define unique opportunities and needs as well as achieving local targets.

Urban Buzz will lead to the creation of 800 Buzzing Hotspots, increasing forage and nesting sites for a wide range of pollinator species; and engage 80,000 local people in the process. With more flowers and wildlife, these cities will be more attractive, and healthier and happier places to live. For more information on the project please see www.buglife.org.uk/urban-buzz.

Volunteers sowing seed at The Green Backyard © Richard Smith, Buglife

Wood wise - fabulous fungi

This issue looks at the fascinating world of fungi and their essential role in supporting woods and trees. Plants and fungi have evolved complex relationships that we need to understand to properly conserve our natural environment.

To read current and past issues of Wood Wise please just follow this link. If you would like to subscribe to future Wood Wise issues, please email conservation@woodlandtrust.org.uk.

Bees Needs information sheets

Defra has published its latest information sheet on how to manage urban environments to make them more suitable for pollinators. View all these sheets and find more information on the Bees Needs campaign, here: http://www.wildlifetrusts.org/bees-needs/information-sheets.

Greening the transport system

In October last year, what appeared to be a reasonable and reasoned question on the BBC Radio 4 panel show Gardeners Question Time revealed the ongoing difficulty in improving public understanding of the problem of invasive species in the countryside. On the show, an audience member asked the panel whether they agreed that planting Buddleia on motorway verges would make a valuable contribution for wildlife. Given that the panel has no prior notice of the questions posed, the panel made a good fist of responding to the question and talked around the value of green infrastructure. However, the proposal remained largely unanswered and the impact of invasive species not highlighted.

Fortunately, Yorkshire Wildlife Trust's Mark Cleaver, was listening to the programme. Mark is one of two the Green Transport Corridors Project Officers working with Highways England and Network Rail to pilot an approach to improve the ecosystem services of the strategic road and rail networks. Mark immediately emailed the show and they agreed to interview him about the project.

The show was aired on Friday 4th December and repeated on Sunday 6th and the interview with Mark along with the original question and panel answer can be heard here at 13:17: http://www.bbc.co.uk/programmes/b06qmtzy

Wellies on? Binoculars ready? Let's go count some birds!

The third **Big Farmland Bird Count (BFBC**) will take place between the 6th and 14th February 2016, the Game & Wildlife Conservation Trust (GWCT) announced today.

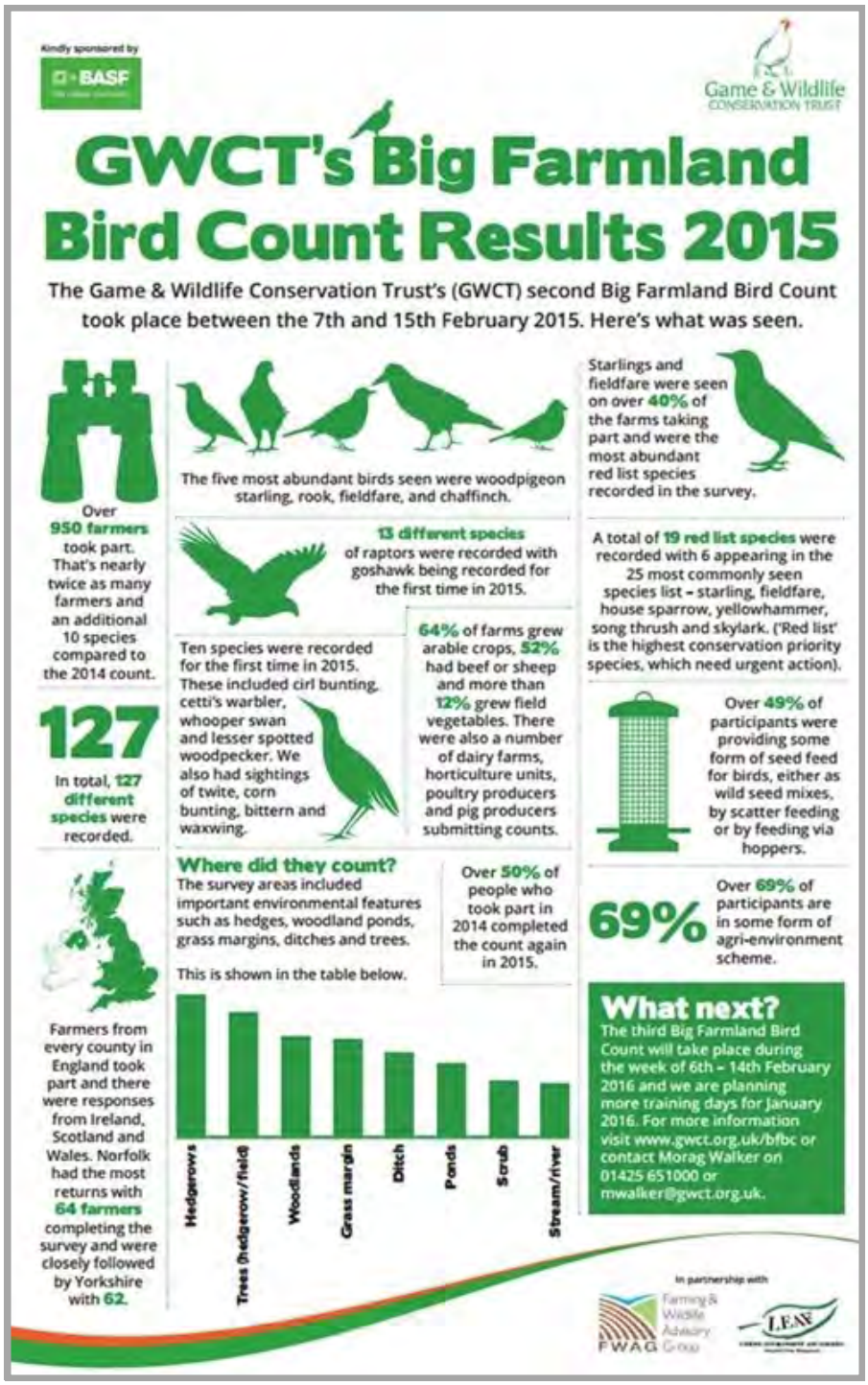
Launching this now annual event, GWCT's Jim Egan said "more people than ever took part in last year's count. The more people who count the better idea we have as to how our farmland birds are faring, so I urge farmers to get out and count!"

"Once again we are asking farmers, landowners, birdwatchers and gamekeepers to spend 30 minutes recording the species and number of birds seen on one particular area of the farm this coming winter."

2015's results were impressive; **nearly one thousand farmers** took part, counting birds across nearly **a million farmed acres**. The results show the great work that many farmers under-take to support birds with **127 different species spotted**, including those of conservation concern such as Starlings, Lapwings and Tree sparrows.

Jim Egan continues, "It's now time to do it all again and this time we're offering more help on how to identify those tricky "little brown jobs" (LBJ's), including a downloadable ID guide to take out into the field."

For those interested in taking part in the **2016 Big Farmland Bird Count**, there is a simple recording sheet that can be downloaded from the GWCT's website to record sightings. Participants will then be able to fill in their results on a dedicated web page.



Last year we introduced identification days for those wishing to take part in the count but were unsure how to identify some species from others. Such was the popularity of these events that **17 more farmland bird identification training days** are being organised for January and February 2016 at locations across the UK.

The ID days are designed to help participants improve their identification skills ahead of the count. Each session is run by an expert and will last for approximately two and half hours. At the end of the training participants should be able to recognise the top 24 bird species likely to be seen on farmland this coming winter.

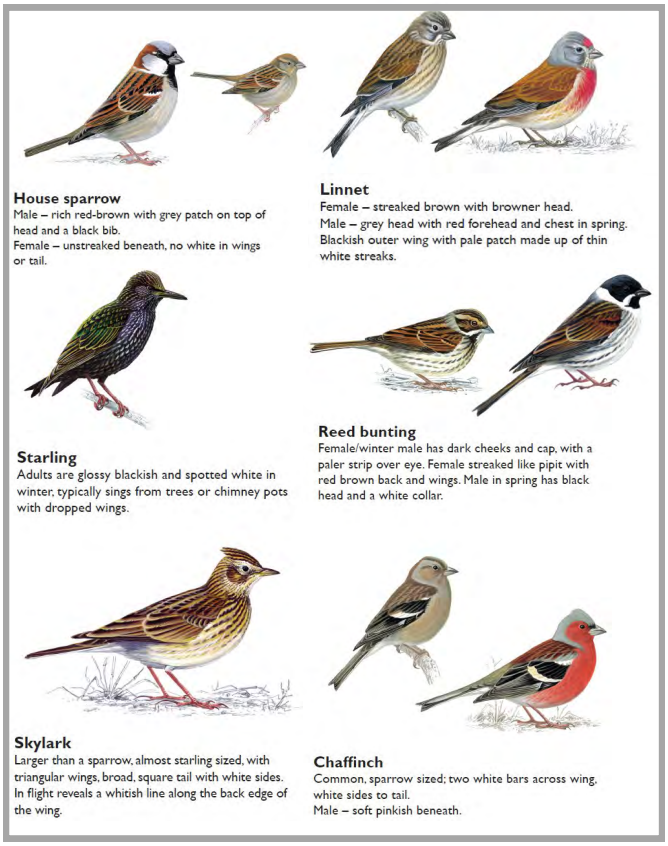
If you took part last year then this is chance to take part again and see how numbers have changed. If you didn't take part last year then this is your chance to find out what species are around!

From GWCT's pioneering research at the Allerton Project over the past 23 years we know what's needed to help farmland birds. Hopefully taking part in the count will help demonstrate how simple practical measures can increase farmland bird numbers.

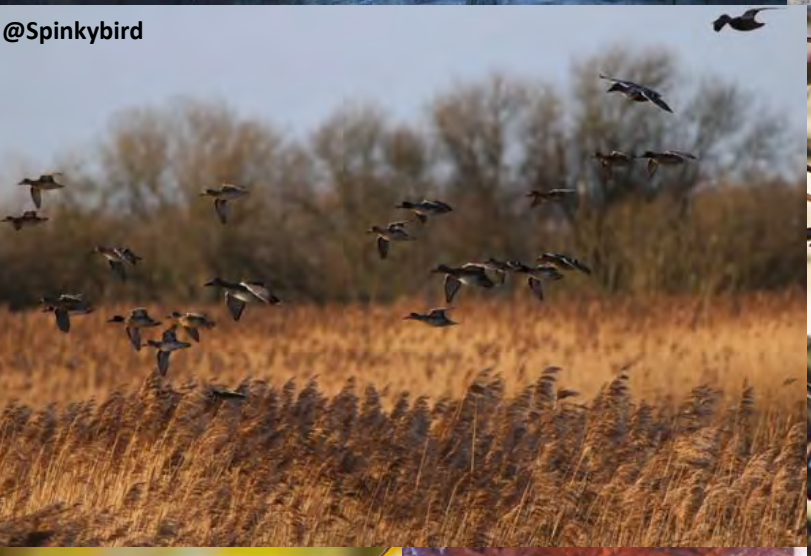
Those who take part and submit their fully completed forms have the chance to win a pair of SLC 8x42 binoculars worth over £1,300, which have been donated by Swarovski Optic.

The GWCT's Big Farmland Bird Count has captured the imagination of all those interested in the future of farmland birds.

Sponsored by BASF, the count is run in partnership with the FWAG Association, LEAF (Linking Environment and Farming), the NFU and the CLA. The count also receives support from RSPB, Kings, Waitrose, Soil Association, Heather Trust, Conservation Grade, Songbird Survival and Countryside Alliance.



To sign up to our Bird Identification Days being held in 18 locations across the country, or to download count forms, please visit: www.gwct.org.uk/BFBC or telephone: 01425 651000



A huge thank you to everyone who tagged their photos with #BNcover to enter our “winter” themed competition on Twitter.

We hope to run further photo competitions in the future so make sure you follow @DefraNature to find out more.

Follow