Biodiversity News

Issue 61

Summer Edition



Contents - News - Features - Local & Regional - Publications - Events



If you would like to receive Biodiversity News via email, or know of somebody who would, please contact us at biodiversitynews@defra.gsi.gov.uk



conservation

In this issue

Editorial	3	Local & Regional	
News		Swift Conservation Lifts Off in Perthshire	20
State of Natural Capital Report	4	Saving Hertfordshire's dying rivers	
Woodland Trust's urgent call for	5	 a catchment-based approach 	
new citizen science recorders		Creating a haven for wildlife in West Glamorgan	23
Local Nature Partnerships – 1 year	6	Glamorgan	
ON	0	Wildlife boost could help NW economy	25
Historic result for woodland in Northern Ireland	8	First Glencoe sighting for	26
		Chequered Skipper	20
Features		Bluebells arrive at last	27
Researching Bechstein's Bat at Grafton Wood	9	Wales plans a brighter future for Natura 2000	28
The Natural Talent Apprenticeship scheme	10		
Conservation grazing at Marden	11	Publications	
Park	4.0	Marine Biodiversity & Ecosystem	30
Where on Earth do British House Martins go?	13	Functioning Undates on implementation of the	31
Large Heath Biodiversity Campaign	14	Updates on implementation of the Natural Environment White Paper	31
British scientists are first to identify record-breaking migration flights	15	Wood Wise: invasive species management in woodland habitats	31
'Cicada Hunt' lands on the app markets	16	Events	
Recent launch of Bee policy review	18	Communicate 2013: Stories for Change	32
Local & Regional		Do your bit for the moors	32
Cutting-edge heathland	19		

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.



Editorial

Welcome, Croeso, Fáilte... to Issue 61!

A warm welcome to the summer edition of Biodiversity News. Firstly I would like to thank everyone who sent in articles. As is always said it is your level of interest and commitment that keeps this Newsletter alive. I would also like to thank Alan Wright for his photograph of bluebells at Cuerden Valley Park which is on the front cover. The bluebells are hybrids of native common bluebells and Spanish bluebells. This hybrid is becoming a problem and can be caused from the dumping of garden waste that contains the Spanish variety, for more information head to page 27.

In this edition you will find lots of interesting updates from the length and breadth of the UK, many containing some of our most iconic species.

Finally, as mentioned in the editorial of issue 60 there have been talks about changes to be made to Biodiversity News. It has been decided that Biodiversity News will focus more on the aims of *Biodiversity 2020*. This does not necessarily mean Biodiversity News will become solely English, not only will it remain a public document but there will always be lessons to be learnt from Northern Ireland, Scotland and Wales so articles from across the UK we still be welcome. It does mean however that there will be less focus on policy and governmental issues from the Devolved Administrations (DAs). This is partially to do with low numbers of responses to our questionnaire from readers within the DAs but also after discussions with our colleagues from the DAs they are happy for Biodiversity News to take this focus as they have their own Biodiversity newsletters.

I thoroughly hope you enjoy reading this edition. All feedback is welcomed so please feel free to contact us biodiversitynews@defra.gsi.gov.uk. For more up to the minute news and publications about biodiversity follow the new Defra Nature twitter account at https://twitter.com/DefraNature.

As this is the last issue I will edit I would like to take this opportunity to thank you all for subscribing and my colleagues here for helping me along the way.

All the best

Alistair Wheeler

Click on the boxes to see previous issues this past year

60—Winter

59—Autumn

58—Summer

News

State of Natural Capital Report

Defra

The independent Natural Capital Committee (NCC) has published its first annual State of Natural Capital report, available here: www.defra.gov.uk/naturalcapitalcommittee. The Committee will be producing these reports annually in order to help fulfil its remit. The NCC was set up in 2012 in order to advise the Government on how to ensure England's 'natural wealth' is managed efficiently and sustainably, thereby unlocking opportunities for sustained prosperity and wellbeing.

The key messages from this report are:



Dendles wood stream © Peter Wakely, Natural England

- The available evidence shows our natural capital is in long term decline. Given its importance to our wellbeing, this matters.
- We need to start measuring and valuing our natural capital better and including it in national and corporate accounts, so that the information can be fed into decision-making and we can manage our natural capital better.
- If we do not properly measure, account for and value our natural capital then we will never understand which of our natural assets are critical for our continued prosperity and wellbeing and hence we will continue to make decisions that ignore the value of our natural capital. The cost of these decisions is that our economic growth will not be sustainable and our wellbeing will suffer.

This first State of Natural Capital Report is a high-level document setting out the NCC's approach to achieving these goals. It recommends a set of actions that the Committee views as essential if we are to move towards managing our natural capital sustainably and thereby achieve the Government's environmental objectives (primarily as set out in the 2011 Natural Environment White Paper [NEWP]). These are 'to leave the natural environment of England in a better state than it inherited' because a 'healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal wellbeing' (NEWP, p.3).



Corn Bunting © P N Watts, Natural England

The Report does not aim to be comprehensive. Instead, it sets out strategic priorities and corresponding actions to fulfil the NCC's remit. It also identifies current knowledge gaps, some of which the Committee intends to address in subsequent reports (the next one of which will be published in early 2014).

News

Woodland Trust's urgent call for new citizen science recorders

Woodland Trust

Have you ever wondered what effect last winter had on your area and its wildlife? Or speculated

how this year's spring compared to last year's spring, or even spring ten years ago? The Woodland Trust's Nature's Calendar project, which has records dating back to the 18th century, allows people to record the signs of the seasons where they live, to help answer questions just like these.

In the year's earlier months this could mean noting wildflowers in the garden, insect or bird activity in the nearest park or the leafing of trees in a local wood. In autumn, Nature's Calendar recorders are asked to look for departing migratory birds, autumn fruits and the tinting colours of leaves. The project then uses these records to understand more about the response of the natural world to the changing climate.

This branch of science is more scientifically known as 'phenology', effectively meaning the study of natural timings. Over the past thirty years phenology



Hainault Forest © Kat Jaiteh

has provided clear evidence that spring is arriving earlier. Working with scientific partner the Centre for Ecology and Hydrology, it has been found that in spring, insects are being seen three weeks earlier on average, plant growth is up to two weeks earlier and bird activity is a week earlier.



Swallow © Dave Foker

The great thing about Nature's Calendar is that an interest in nature and an internet connection is all you need to become an aptly-qualified citizen scientist, making it a great way to get family and friends as interested in nature as you are. As Dr Kate Lewthwaite, Nature's Calendar Project Manager, enthuses: "the best thing about phenology is its simplicity. Anyone can do it at any time of year. Every sighting adds to what we believe is the longest written biological record held in the UK; a dataset constantly in demand by the

Committed Nature's Calendar

scientific community."

recorder Brian Edwards said: "why do I do this? As a nature lover I enjoy observing the changing of the seasons and noting the surprising differences from year to year. It has made me more aware of my surroundings and more observant. I'm proud to be part of something which could benefit my grandchildren and subsequent generations to understand the effects of climate change and the resultant effects on the world around us.

The number of active recorders like Brian is falling sharply, and crucially, the Trust needs to maintain a network of recorders in all



Elder © P Fost



News

Woodland Trust's urgent call for new citizen science recorders continued...

parts of the UK to help maintain the scientific integrity of the data. Whilst tens of thousands of people sign up to receive Nature's Calendar news and findings, the number of actual recorders is declining year upon year. Since the effects of climate change are constantly becoming more apparent, this data collection has never been more important. With this in mind, the Trust is keen to find new volunteer recorders and is calling for Biodiversity News readers to get involved. Even a single sighting is of value, so please consider taking part.

To find out more and get started, visit: www.naturescalendar.org.uk

Local Nature Partnerships – 1 year on

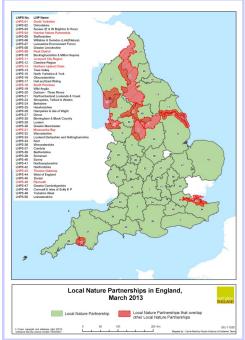
Defra

In <u>Issue 59 of Biodiversity News</u> we were delighted to report that Ministers had confirmed the establishment of the first Local Nature Partnerships (LNP)s. By October 2012 there were forty

eight partnerships, providing almost total geographic coverage in England (see attached map). Wednesday 17 July marks one year since the first LNPs were established. This first birthday seems like an excellent opportunity to highlight their progress and the benefits they can help bring for the natural environment and local communities.

The ambition in the Natural Environment White Paper (2011) was that LNPs would be strategic partnerships of a wide range of local organisations with members drawn from environmental, business, health, community, academic and landowning sectors. They would look to embed the value of the natural environment into local decision-making by establishing themselves as a credible authority on the natural environment and by working closely with important local decision-makers. From the emerging findings from research commissioned by Defra we can see that this ambition is now beginning to develop into a reality as LNPs firm up their priorities and begin to exert their influence.

Some LNPs are already working with their local authorities on various planning related issues including the development of



Map of LNP coverage.

local plans or activities which will help the planning process such as environmental baselining. Others are working with local partners on identifying locally determined Nature Improvement Areas or potential habitats for offsetting and a few are looking to work with local providers or beneficiaries of payment for ecosystem services schemes. Several are working on State of the Environment Reports for their area.



News

Local Nature Partnerships – 1 year on continued

Below are just a few examples of where LNPs are helping to deliver the Government's ambitions in *Biodiversity 2020* (the biodiversity strategy for England):

The **Humber Nature Partnership** is actively involved in developing biodiversity offsetting approaches for the estuary which will give developers some certainty about planning outcomes while improving management of key sites. The Humber Estuary is one of the most important estuaries in Europe for migratory birds and its ports complex is the largest in the UK. The LNP is aiming to bring developers, local authorities and nature conservation advisers closer together to engage at an early stage of the development process. One of their objectives is to identify tracts of land around the estuary where it will be possible to create strategic areas to mitigate the impact of development in a strategic manner and create biodiversity gain.

The **Northern Upland Chain LNP** is developing highly collaborative projects and programmes at a large 'super-landscape-scale' to provide a stronger, clearer and better co-ordinated voice for nature and sustainability in the northern uplands. The LNP covers two AONBs and two National Parks from Nidderdale to the Scottish border. The boundaries take in common sets of species and habitats and common economic circumstances. The LNP's current themes include: working towards an EU LIFE bid for peatland restoration, developing connections between the individual award-winning hay meadow conservation programmes, developing four pilot High Nature Value Farming schemes, undertaking new work on woodland and ecological networks mapping and developing an approach to biodiversity/carbon offsetting.

Engagement with the economic and the health sectors has proved more challenging but there are some good examples of both. For instance, **Link2Nature**, **the Swindon and Wiltshire LNP** has worked collaboratively with the local Health and Wellbeing Boards since it started and is recognised in the local Joint Strategic Needs Assessment as 'the ideal body to provide the framework for the future collaboration of partners from the health, environment and planning sectors'. The **Tees Valley Nature Partnership** has established strong links with the Tees Valley LEP. This includes LEP membership on the LNP Board, strong working relationships and plans for joint working. It will be working with local partners on a natural network mapping project which will help the LEP and other growth partners to have a better understanding of the natural assets of the Tees Valley and will facilitate a landscape scale approach to biodiversity.

LNPs are all about developing new ways of integrated working, working with new partners, from different sectors, working across often new landscape and large scale boundaries. This has been no mean feat to achieve, even if partnerships are largely building on what went before. It's about prioritisation and alignment and deciding how they will work in a way that best suits the needs and challenges of their local area. In the last year there has been a tremendous amount of work done by the LNPs to begin to realise their ambitious aims for the natural environment. Well done and Happy Birthday LNPs!

More information, including a map and contact details for each LNP, can be found on the GOV.UK website at:

https://www.gov.uk/government/policies/protecting-biodiversity-and-ecosystems-at-home-and-abroad/supporting-pages/local-nature-partnerships



News

Historic result for woodland in Northern Ireland

Woodland Trust

The introduction of new legislation to regulate the felling of trees signals a brighter outlook for Northern Ireland's natural heritage, says conservation charity the Woodland Trust.

The Department of Agriculture's reintroduction of felling licences, which took effect on 17 June, follows almost 15 years of campaigning by the Woodland Trust and its supporters. It brings Northern Ireland into line with the rest of the UK, where felling controls have been in place for years.

Under the new regulations, licences are now required for the felling of woodland over 0.2 hectares (0.5 acres), together with a requirement to re-establish the woodland under an approved management plan. Forest Service will have responsibility for assessing and administering felling licence applications, in line with legal requirements and forestry standards.

Patrick Cregg, director of the Woodland Trust, comments: "In the late 1960s a decision was made to abandon the need for felling licences here in Northern Ireland. And this lack of legal protection has resulted in decades of destruction to our trees and woods. This month, some 45 years on, sees the welcome reintroduction of felling controls, bringing the province back in line with the rest of the UK.

"It's no secret that we're one of the least-wooded countries in Europe, with just 7 per cent woodland cover. This very basic legal protection will now put our trees and woods on a more secure footing. It's good news for people, for wildlife and for the future of our natural environment."





Features

Researching Bechstein's Bat at Grafton Wood

Worcestershire Wildlife Trust

In 2005 the Bechstein's bat population was believed to be just 1500 in England, confined to a handful of sites ranging from Gloucestershire to Sussex. Apart from a record, in 1993, where a single bat was found clinging to the side of a building on a trading estate in Evesham, the bat was unknown in Worcestershire and there was no evidence to suggest a breeding colony.



Bechstein Bat © Derek Smith

As a member of the *Myotis* genus of bats Bechstein's are very difficult to locate by conventional survey techniques so in 2009, the Bat Conservation Trust launched a detailed study aimed at gathering better data on distribution and in the hope of locating unknown colonies for further study. This involved trained volunteers gaining access to suitable looking woodlands in order to run catch-and-release traps.

In 2010 the Worcestershire bat group worked very hard to make the project a success in the county, surveying a total of 18 woodlands, including 3 WWT reserves. 8 Bechstein's were caught at 4 different woodlands, 2 in the west of the county

and 2 in the east.

Much to our delight, and surprise, a lactating female was caught at Grafton Wood - which is managed in conjunction with Butterfly Conservation.

After surveying a further 5 county woods in 2011, 2 of which had Bechstein's in, Funds were secured from People's Trust for Endangered Species to carry out a detailed radio-tracking study aiming to establish the population size, foraging range, and roosting ecology of Bechstein's bats at Grafton Wood SSSI.

Twelve Bechstein's bats were caught in Grafton Wood during survey periods in late May, early June and late August 2012 (four animals in each period), and eight (one male and seven females) were radio-tracked for between six and nine nights each.



Woodpecker hole roost © James Hitchcock



Setting up mist-nets © Nick Underhill-Day

cavities, six were located outside woodland in features such as woodpecker and rot holes in short-lived trees such as Crack-willow. Roosts were also found in semi-mature Ash trees.

Roost emergence counts were used to estimate the size of the colony based in Grafton Wood: a minimum of 50 adult bats were present in the population during summer 2012.

11 Bechstein's bat roosts were

found during the study, all in tree



Features

Researching Bechstein's Bat at Grafton Wood continued

This is thought likely to be an under-estimate of the population as it is likely that other roosts not known to us were available to the bats.

Compositional habitat analysis revealed a clear preference for dense clutter (areas of active coppice re-growth within woodland) and clutter with open areas (derelict coppice, tree lines and wooded river corridors). More open habitats (clearfell in woodland and arable fields) within home ranges were least preferred. These findings are broadly consistent with those from other studies of Bechstein's bat and will be used to inform



Grafton ride © Wendy Carter

decisions about future management of habitats in Grafton Wood.

Although a preference for woodland habitats and avoidance of large open expanses was a dominant feature of bat behaviour observed in this study, non-woodland habitat was clearly of some importance to the population: woodland edge, un-grazed grassland, tall herb habitat and hedgerows were used for foraging and work is planned to engage surrounding landowners and raise awareness of the importance of Bechstein's bat in the area.

The Natural Talent Apprenticeship scheme

TCV

The Natural Talent Apprenticeship scheme continues to produce environmental professionals who have progressed into employment and further research across the United Kingdom. The scheme, delivered by The Conservation Volunteers (formerly BTCV) in Scotland and Northern Ireland has been funded by the Heritage Lottery Fund through its training bursary programme since 2006. The outcomes are excellent; with 100% of those completing the programme continuing to use some or all of the skills they have gained during their apprenticeship to benefit the UK environmental heritage sector. At the time of writing this article, 25 of the 32 apprentices completing the programme are in employment and 5 are currently undertaking PhD's.

Each apprenticeship, usually lasting between 12 and 18 months, has trained an individual in either a taxonomic speciality or specialist habitat management skills in areas where there is a recognised heritage skills gap. In addition, new skills including event planning & management, project planning & management, community engagement skills, stakeholder engagement, training & mentoring are absorbed into the role of the newest generation of apprentices.

Having recently received further funding from The Heritage Lottery Fund to deliver another 12 apprenticeships, the scheme continues to be supported by partner organisations and experts from across the United Kingdom to provide the highest level of tuition and support for each apprentice. Current and future apprenticeships embrace the need for individuals who complete apprenticeships to not only have a specialism as part of their skill-set, but also develop a broad suite of additional transferrable skills, extremely important in today's employment market. This has resulted in



Features

The Natural Talent Apprenticeship scheme continued

apprenticeships being developed where there is both a habitat and a taxonomic focus, an examples of this being the recent 'Bryophytes of Scottish Temperate Rainforests' post based with RBGE.

Various techniques have been use to highlight the work carried out by the Natural Talent apprentices. This has included attending and contributing towards SNH Sharing Good Practice events, the TCV website TCV Natural Talent, the TCV Natural Talent blog, YouTube TCV Natural Talent and Twitter TCV Natural Talent. The ability to share experiences with a wide audience has been used to raise the profile of the scheme and make the Natural Talent experience a sharing and informative one.

Natural Talent has the potential to achieve outcomes beyond the UK and could provide training for the conservation professionals of tomorrow across Europe and beyond. There is support across the sector for a UK wide Natural Talent Scheme which would help achieve long term outcomes across the sector on a UK wide scale. Partners have identified a need for the programme to continue to fill existing skills gaps as well as responding to skills needs only just appearing on the horizon as the UK environment adapts to climate change and recreational, housing and development pressures.

The Conservation Volunteers will continue to build the programme, with strategic guidance from partners across the sector, to ensure that Natural Talent supports and develops natural heritage conservation as widely as possible in the coming years. We will be recruiting in the coming months so please look out for opportunities on the TCV website, http://www.tcv.org.uk/jobs

The closing date for the Soil Ecology post is 21st July, the others will be slightly later.

For more information about the scheme, contact Kerry Riddell <u>k.riddell@tcv.org.uk</u> 01848 200381

しいししししししししししししししししししししししししししし

Conservation grazing at Marden Park

Woodland Trust

The Woodland Trust's Marden Park (made up of Marden Park and Great Church Wood) is a 67.3 hectare (ha) site high on the North Downs, within the Surrey Hills Area of Outstanding Natural Beauty (AONB). It is also incorporated into the Woldingham and Oxted Downs Site of Special Scientific Interest for chalk downland. Unfortunately only three per cent or 325 ha of the chalk grassland resource in the south east of England remains in Surrey. This is often highly fragmented and open to destruction through neglect, because of this calcareous grassland (lowland and upland) is a priority habitat.

The woods are predominantly broadleaf, including a number of veteran beech, *Fagus sylvatica*, trees, whitebeam, *Sorbus aria*, field maple, *Acer campestre*, yew, *Taxus baccata*, and wayfaring tree, *Viburnum lantana*.



Features

Conservation grazing at Marden Park continued

The habitats vary from 16.2 ha of ancient semi-natural woodland to large areas of secondary ash, *Fraxinus excelsior*, woodland and three areas of recently restored chalk grassland amounting to three hectares.

The site has considerable conservation interest. It supports a number of ground flora species characteristically associated with the calcareous, rendzina soils derived from the underlying chalk bedrock, such as dogs mercury, *Mercurialis perennis*, and greater butterfly orchid, *Platanthera clorantha*. The chalk grassland supports 25 species of butterfly, including the marbled white, *Melanargia galathea*.

The vision for the restored open areas is to achieve a mix of 80 per cent grassland and 20 per cent scrub. As the soil quality is high, scrub can quickly and easily grow up and take over the site. Therefore a grazing plan was established to maintain openness and good structural and species diversity. The grazing work is carried out by the Downlands Countryside Project.

Overstocking of grazers can cause a loss of plant and animals species and prevent natural regeneration, through soil compaction and overgrazing. But balanced regimes with appropriate grazing pressure can increase habitat diversity, support important wildlife populations



Marbled While Butterfly © North East Wildlife

and encourage natural regeneration. A lack of grazing often allows more aggressive plants to outcompete and dominate sites.

Originally Jacob sheep, *Ovis aries*, were introduced. These are a rare piebald breed of more traditional horned sheep known to be present in England in the 1750s. They are long-lived and very hardy, content to over-winter outside without many disease or foot health problems. Usually only around a dozen are used on the site.

However, the sheep were found to be too finicky and mostly ate the important grasses and wildflowers. They were not keen on eating the scrub and were therefore not keeping it at a manageable level. Therefore in 2010 the grazing plan was amended to include goats, *Capra aegagrus hircus*, for a small part of the year.

Initially a dozen goats were introduced, but this was found to be too much and the number was halved. They are less fussy than the sheep and happily graze the scrub down, reducing it significantly. They are kept on site for a limited time, otherwise they would completely strip the scrub and have negative impacts on the more mature trees.



Features

Conservation grazing at Marden Park continued

At present the goats are kept on site from autumn until just before Christmas, while small numbers of sheep are kept on site from March until May – generally not more than a dozen unless scrub levels are high. No grazing is carried out over the later winter months or during summer. Fallow deer, Dama dama, occasionally move through the site. However, they cause minimal damage to the woodland flora and coppice regeneration and are not subject to control.

Once a balanced grazing regime was developed there was a marked rise in floral diversity and displays. Species such as bee orchid, Ophrys apifera, pyramidal orchid, Anacamptis pyramidalis, and man orchid, Aceras anthropophorum, have increased in number. The scrub is now maintained at a suitable level, providing some habitat for wildlife but without it dominating the site.

Future plans are to extend the area of chalk grassland by linking several smaller areas of grassland to the currently managed section. This will triple the current resource, and will require the use of larger numbers of livestock for longer periods. It will also increase the connectivity of grassland habitats within the Surrey Hills AONB and contribute to better supporting a wide array of species.

Where on Earth do British House Martins go?

BTO

It is one of ornithology's greatest mysteries but also one that the British Trust for Ornithology (BTO) hopes to answer using the very latest that technology has to offer.

The House Martin is well known to many people; from April to September it lives cheek by jowl with those lucky enough to have this energetic little bird nest under their eaves. In recent years, however, the number breeding here in the UK has fallen by two-thirds, leading to the species being amber listed as a bird of conservation concern and in need of some help.

Whilst we know a lot about the breeding ecology of the House Martin in the UK, once September comes and this enigmatic bird heads off for the winter it virtually disappears from our radar. It is not known where in Africa House Martins winter, or how precisely they get there. If we are to start to understand what is driving the decline of this wonderful species, then it is these questions that we will need to answer.

This summer, the BTO aims to use the latest technology to discover the routes that House Martins take to Africa and to answer that great ornithological mystery, exactly where do they spend the winter months? BTO researchers plan to do this by fitting a tiny (shirt button-sized) device known as a geolocator. Weighing less than a gramme, the device contains a clock, a calendar and a light sensor, together with enough memory to store all of the data collected from the day it is fitted until the day it is retrieved.

By comparing daylight length, as measured by the light sensor, with the time and date recorded, scientists at the BTO are able to determine where on the planet the device was at any given time. This information will then reveal the wintering areas, together with the location of possible stopover and refuelling sites, precise migration routes and the timing of the migration through Europe and Africa.



Features

Where on Earth do British House Martins go? continued

Paul Stancliffe of the BTO commented, "I have long dreamed of being able to follow a bird like the House Martin on its migration from Britain to Africa, to get a glimpse of the places it is passing through and the places that it chooses to stay and rest for a while before continuing on its journey. It is very exciting to think that we are on the brink of new discoveries that should help these delightful birds and provide them with a more optimistic future."

He added, "This technology comes at a price and we need help to secure enough of them to make the project worthwhile. Anyone interested in seeing how they might be able to help can find out more by visiting www.bto.org. Each device costs £170 and we hope to be able to fit them to at least 20 birds. We need help to support the scientists developing this project."

For more information please visit http://www.bto.org/volunteer-surveys/house-martin-survey/movements

Large Heath Biodiversity Campaign

Central Scotland Forest Trust



Green Hairstreak butterfly
© Butterfly Conservation, Peter Eeles

Following the success of biodiversity projects on British Bluebells, Bats, Bumblebees and Tree Sparrows, CSFT are focusing of peatland and heathland butterflies for 2013, in an attempt to improve the CSF area for Large Heath, Green Hairstreak and Small Pearl Bordered Fritillaries.

This campaign will have 3 main elements: raising awareness through promotional activities and events; producing educational packs for schools; and undertaking practical peatland restoration projects in suitable areas.

CSFT will have a stand to be taken around community events and given to community groups with a range of information, hints and tips and activities which can all

help to improve the habitat needed by these butterflies. We will produce a 'bog garden kit' for 100 primary schools in the area which will have all a class or eco-committee needs to produce a small bog garden in the school grounds, along with lots of information and educational resources for teachers to use in the classroom . Finally, we will be running practical conservation days to improve peatland habitats by blocking ditches, removing scrub and planting the food plants for the butterflies.

More information on the campaign and how to get involved can be found on CSFT's website



Large Heath Butterfly
© Butterfly Conservation, Peter Eeles



Features

British scientists are first to identify record-breaking migration flights

GWCT

For the first time British scientists have proved that migrating woodcock from the UK are travelling enormous distances to breed. It is estimated that one particular woodcock called 'Monkey' has travelled at least 39,000 km in the course of his short life time.

This incredible revelation has been made possible through the use of tiny satellite transmitters attached to migrating woodcock by scientists from the Game & Wildlife Conservation Trust (GWCT) who have tracked the migration routes of 24 woodcock wintering in Britain and Ireland using this state-of-the-art technology. The birds tagged this spring came from regions across the country including west Wales, Cornwall, south-west Ireland, Norfolk and Scotland.

'Monkey', tagged as an adult bird (at least two years old) in Cornwall last year, has now just completed at least his third spring migration.

The scientists have discovered that following his over-winter stay in Britain, 'Monkey' has returned to exactly the same breeding ground in Siberia in the last two springs, where he was probably hatched. This is an extraordinary feat for such a small bird and the distances he has travelled to Siberia to breed and then back to Cornwall to spend the winter, most likely over at least three years is impressive.

Dr Andrew Hoodless who leads this unique research on woodcock migration explains, "This state of the art technology is a dream-come-true because for the first time, we are able to understand some of the mysteries surrounding this elusive bird. Being able to watch these birds 'live' through satellite technology is helping us to piece together an accurate picture of where these birds go to breed, their stop-over locations and how far they can travel in one flight. The speed and distances of their migrations is astounding and it is sometimes quite heart-stopping to watch their perilous journeys as they get blown off course or delayed by bad weather."

But 'Monkey', the current record-holder has a younger contender following in his flight-path. 'Crugith', a female known to be two-years old, who was tagged in Cornwall earlier this spring, has already caught up with the more experienced Monkey in Siberia and is now preparing to breed.



Scientists from the Game & Wildlife Conservation Trust have proved that migrating woodcock from the UK are travelling enormous distances to breed. 'Monkey' who was satellite tagged in Cornwall two years ago has travelled at least 39,000 km in his life-time © GWCT

Andrew Hoodless, explains, "The data we are receiving from our satellite-tagged birds shows that they are returning to the same breeding grounds, year after year. This is the first confirmed evidence that woodcock are faithful to their breeding sites in Russia and Eastern Europe as well as their over-wintering grounds in Britain."

Although sixteen birds have arrived safely on their breeding grounds across Europe, two birds called 'Busy', tagged in Cornwall in February 2012, and 'Moc', tagged in west Wales this spring, have gone missing.

Andrew Hoodless says, "We have not received a signal from 'Moc' for some time. His last known position was near Horning, north of Norwich and it is likely that he has died. Should anyone come across the satellite tag it would be really valuable to have this returned. We know that 'Busy' was predated by a sparrowhawk near Andover, because the event was witnessed by a member of the public who kindly returned the tag."



Features

British scientists are first to identify record-breaking migration flights

The woodcock's status as a breeding bird in the UK is causing concern among some conservationists, Dr Hoodless says, "Our unique research is important because the woodcock is amber listed as a species of conservation concern owing to a decline in breeding numbers of about 86 per cent in the UK over the last 30 years. Across Europe its status is poorly documented. Compared to many birds we know very little about its behaviour and ecology because of its secretive nature. The information we gather through the satellite-tracking will help inform international conservation policies for woodcock in the future."

To view the incredible migration flights of the satellite-tracked birds and follow their latest movements, visit the GWCT's dedicated website at www.woodcockwatch.com

The GWCT is looking for people to sponsor a satellite-tracked woodcock for £36 a year, which will cover the cost of downloading data from satellites for a bird on one day every month. The progress of each bird can be checked daily. To sponsor a bird email: woodcock@gwct.org.uk or telephone: 01425 652381.

としてしているとしているとしているとしているとしていると

'Cicada Hunt' lands on the app markets

Davide Zilli

A smartphone app that will help visitors to the New Forest find the endangered New Forest cicada has been released on iTunes and Google Play.

Researchers from the University of Southampton have released a smartphone app designed to help in the search for a rare insect found only in the New Forest National Park.

The New Forest Cicada (*Cicadetta montana s. str.*) is the only cicada native to the UK. During May to July it sings with a very characteristic high-pitched song, which is at the limits of human hearing, and is particularly difficult for most adults to hear. Sightings of the cicada within the New Forest date back to 1812.

Cicada © Jaroslav Maly

of the cicada within the New Forest date back to 1812, but the last unconfirmed sighting was in 2000.

However, it's quite likely that colonies remain undiscovered in less visited parts of the forest.

Modern smartphones have extremely sensitive microphones and enough computing power to automatically detect and recognise the song of the New Forest cicada. Millions of visitors to the New Forest can use their smartphones to help locate any remaining colonies of the cicada that might remain in the forest, in one that could soon become one of the largest citizen science experiments ever performed.



Cicada Hunt' lands on the app markets continued

The app records a 30 second survey using the smartphone's microphone, and searches for the particular frequencies and sound patterns that characterise the cicada's song. If there is a potential match, it prompts the user to upload the recording, so that it can be analysed in more detail.

Cicadas like sunny south-facing clearings, and will only sing on a warm day when there is little wind, so people are encouraged to use the app when conditions are best. The reports from the app are then used to compile a map of areas that have

already been searched. Users can then visit the website and locate places where they have submitted their surveys, manage their reports and connect to the community online.



New Forrest © New Forrest Cicada Project

But how does the app work? The approach to detecting the cicada's song is similar to that used in human speech recognition. As the sound is acquired by the microphone, the phone searches for the high frequencies that characterise the call. It also ensures that these frequencies continue uninterrupted for a few seconds, since the cicada call is about 30-40 seconds long. If this is not the case, the app suggests that the song may belong to a different insect, and asks the user for their input. Recordings of where the cicada was not found are also very valuable, as they will eventually help to assess whether the species can be considered extinct, should no specimen be found in the following few years.

The search for the cicada was launched at the New Forest National Park BioBlitz, a public engagement event organized by the New Forest National Park Authority on 7th and 8th June 2013. The app is available free for both iPhone and Android smartphones and can be downloaded from iTunes and Google Play app stores by searching for 'Cicada Hunt'. More information about the cicada and the app can be found on the project's website – www.newforestcicada.info.





Features

Recent launch of Bee policy review

Defra

Speaking at the Friends of the Earth Bee conference on 28th June, Defra Minister, Lord de Mauley launched an urgent and comprehensive review of current policy, evidence and civil society action on pollinators to identify what needs to be done to integrate and step up our approach. We already spend millions each year on bees, but we know we need to do more, faster.

Defra is bringing together experts from across the government, scientists and other organisations to look at why bee and pollinators are declining, and how we can help them. By the end of the year, we will have a National Pollinator Strategy: a long-term, targeted plan to ensure that bees and pollinators survive and thrive throughout the country.



© Defra





Local & Regional

Cutting-edge heathland conservation

Mandy Marsh

In the past 100 years there has been a dramatic decrease in the area of heath on the Llŷn peninsula, with a 50% reduction in dry heath and a 97% reduction in wet heath coverage from 1922 to 1988. Much of the remaining heathland is in a poor state, with a dominance of western gorse and bracken. The HLF-funded Llŷn Landscape Partnerships Heathland Restoration Project is a response to this decline.

Two innovative techniques have proved useful: aerial spraying of bracken by helicopter has resulted in dramatic reductions in bracken on three separate sites on the Llŷn; and a Ryetec machine (specifically designed for conservation) has allowed us to cut and remove gorse, which is very important because maintaining low nutrient values will create conditions which favour the re-growth of heather.

This project has revived the age-old practice, which had disappeared from the area, of using gorse as bedding for animals, saving a small fortune for the handful of local farmers who trialled it. Quality heathland beef is another outcome which may emerge from the project. Local graziers are being given the opportunity to participate in a scheme that will process quality beef from livestock reared on the peninsula's heathlands and sell it locally.

Cattle v. sheep

The reintroduction of grazing to some of these neglected heaths is crucially important, and cattle and ponies seem to be more effective than sheep. One of the National Trust's tenants, Gareth Roberts, has begun grazing Bychestyn (one of the target sites) with Welsh Black cattle. The resulting tussocky vegetation structure is good for breeding birds and provides microclimates for invertebrates. Cattle dung is also good for invertebrates, and the Chough that feed on them.

This management has already helped to spread three-lobed water crowsfoot at Cilan,



Welsh Black © Mandy Marsh

another of the project sites. This rare buttercup grows in ditches and hoof-prints, where competition from other plants is minimal. The cattle are able to trample bracken and gorse, opening up the ground so that heather and other plants can establish themselves. Bruising bracken slows its growth and spread so it doesn't take over. A well-managed grazing regime should allow us to sustain the desired conditions, providing a valuable habitat, and also an economic resource.

Bringing back heather

At Bychestyn severe and regular burns have resulted in the dominance of gorse, causing a reduction and abandonment of the site for grazing. As a result, heather (*Calluna vulgaris*) has almost disappeared, with only occasional purple patches being seen in late summer. To restore heather, we have introduced an experimental heather re-seeding project to Bychestyn. This has involved combs, leaf blowers, school children and, later on, big bales made out of heather.



Local & Regional

Cutting-edge heathland conservation continued

We used combs to strip the seed-containing fruits off the old flower-spikes; we then use leaf blowers in reverse to gather up the material containing the seeds; and we used a group of schoolchildren from Ysgol Foel Gron, Mynytho, as willing volunteers. Once we had a sufficient amount (approximately 120kg) it was sent to Shrewsbury to be filtered, separating the seed from the flower heads. This was then heated and chemically treated to break the dormancy of the seeds, and returned to us in a small plastic container full of pure heather seed weighing a mere 1.86kg. This represents approximately 15 million seeds.

We prepared 11 plots by cutting the gorse down to the ground, using a chain harrow to disturb the soil, then applying the heather seeds suspended in water with a knapsack sprayer. The heather bales, collected from other sites, were then used to cover the plots with a coating of material containing seeds. We have already begun preparing the ground for re-seeding two much larger plots at Bychestyn later this year.

Threats to wildlife

Coastal and lowland heath is considered a highly threatened habitat in the UK, and the Llŷn's heathlands support an array of plants and animals, some of which are rare.

Ground-nesting birds such as Skylarks, Pipits and Yellowhammers, and the Chough, which nests in nearby sea cliffs, rely on the heathland habitat. Chough depend on short grazed areas, livestock dung and anthills for a variety of invertebrates including dung beetles, which form their main food source. This means that correct grazing patterns are crucial in creating a chough-friendly habitat.

One of Llŷn's heathlands is also the only mainland site in the



Golden Hair Lichen © Mandy Marsh

UK for the spotted rock rose. This plant is an annual, and each flower is only open for a short while, typically dropping its petals after mid-day. The golden-hair lichen is restricted to the Welsh coast and South West England. It can be seen at a number of sites on the coastal heathland around Aberdaron.

This species was widespread across Great Britain and Ireland but, because of a loss of suitable habitat and its sensitivity to air pollution, it has become very scarce and confined to a handful of sites. Threats to this lichen include sulphur dioxide in the atmosphere, eutrophication, and air-borne ammonia from the application of slurry on agricultural land and other sources.

しいしししししししししししししししししししししししししししし

Swift Conservation Lifts Off in Perthshire

Tayside Biodiversity Partnership

This summer an exciting new partnership project is taking place across the Carse of Gowrie in Perthshire (a rural area stretching some 20 miles between the two cities of Perth and Dundee). The Carse of Gowrie Sustainability Group, working with the Tayside Biodiversity Partnership, has received funding from the SITA Tayside Biodiversity Action Fund to employ a part-time project officer to take forward a new initiative: the Carse of Gowrie Swift Conservation Project. Swift numbers in Scotland have fallen by over 60% in the last fifteen or so years, and they have recently been 'amber listed' by the RSPB.



Local & Regional

Swift Conservation Lifts Off in Perthshire continued

One of the main causes for this disturbing decline is loss of nests sites - swifts rely on gaps in our buildings to nest but as old buildings are renovated or demolished, these nest sites tend to be lost.

Swifts mate for life and the same pair will return to the same nest site year after year.

The new project is working with community groups, schools, eco-congregations and local businesses to raise awareness of what's happening to swift numbers through swift walks, talks, training days, church and school visits. By taking part in the fun and simple Tayside Swift survey, local people of all ages are helping to find and recommend new 'Swift Priority Areas' to Perth & Kinross Council's Planners and to work with the Buildings Conservation department.

Project Officer Danièle Muir said 'This is a brilliant project which, in just the first few weeks, has already involved hundreds of people. By taking forward the Tayside Swifts Nestbox Trial and working with



Swift ready to fledge © Martin Fledge

developers and businesses, we hope to provide new nest sites for swifts to help boost their numbers across the Carse. The local schools are also looking forward to setting up a Schools' Swift Twinning Project with a school in central or southern Africa where the birds overwinter – we've already heard from a school in South Africa very keen to take part.'

A project update will be available at the end of October and it is hoped funding will be found to expand the project elsewhere across Tayside. A new 8-page newsletter which includes advice to developers and contractors on swifts can be downloaded from:

http://www.taysidebiodiversity.co.uk/PDF Newsletters/Swifts In Tayside 02.pdf.

Anyone with an interest in swifts is invited to join the Tayside Swifts Facebook page — www.facebook.com/TaysideSwifts. Further information, together with John S. Wilson's report "Action to Halt the Decline of Swifts in Scotland" can be downloaded from the swift section on www.taysidebiodiversity.co.uk. Contact taysideswifts@yahoo.co.uk.

Saving Hertfordshire's dying rivers – a catchment-based approach

Herts & Middlesex Wildlife Trust

The state of our rivers

Hertfordshire's rivers are dying of thirst. The demand for water in the county – well above the national average – means that pumping stations work day and night to lift huge amounts of groundwater from underground aquifers. This groundwater, so valuable as a clean and easy source of tap water, is the same groundwater which feeds our precious chalk rivers. So much water is taken from the ground that many of our chalk rivers suffer unsustainably low flows, or even dry up completely. The exceptionally wet year we've just experienced has thrown our chalk rivers a lifeline, but this has only bought us a little time – it's vital we come up with a longer-term, more sustainable solution.



Local & Regional

Saving Hertfordshire's dying rivers – a catchment-based approach continued

That's the situation in Hertfordshire, where our rivers are truly 'on the edge'. But think back to when you last visited your local river. How did it look?

Unless you live near an exceptionally good or bad stretch of river, the chances are your answer might be: 'not perfect, but not terrible'. And, superficially, many of our rivers are doing ok – they aren't visibly polluted or stinking, and are pleasant, green places to visit. However, do a little digging, and it's no secret that most of the UK's rivers are not as healthy as they should be. Although tighter environmental regulations and more enlightened management have seen rivers improve dramatically over the past few decades, they are by no means out of the woods. Ongoing



River Beane is dying of thirst © Charlie Bell

problems include pollution, invasive non-native species, over-abstraction and the legacy of past physical modifications, such as weirs and dredging.

Hertfordshire's rivers have also been unable to escape the relentless march of invasive species such as Himalayan balsam, Signal crayfish and American mink. Pollution from agricultural and urban run-off and sewage treatment works has also impacted on water quality – what should be the gin-clear, cool, mineral-rich waters of chalk rivers are all too often warm, turbid, and milky-grey. The problems facing the UK's rivers have been recognized at a European level by the Water Framework Directive (WFD). This European legislation states that all waterbodies in the UK must reach 'Good Ecological Status' by 2027. Under the WFD, a river's ecological status is classified as either 'bad', 'poor', 'moderate', 'good', or 'high'. Various things are measured to inform this assessment, including fish, diatoms, macrophytes, aquatic invertebrates, flow and water quality.

Catchment Management Plans

Defra and the Environment Agency are the bodies tasked with helping our rivers achieve 'Good Ecological Status'. **Catchment Management Plans** are a key part of their strategy for doing this. Previous attempts to manage river catchments failed, because the plans were too large, too generic and didn't include local people. This time, the approach is very different.

The Catchment Based Approach involves developing plans specific to each catchment, recognising that each river is unique and faces different challenges and opportunities. Instead of a top down approach, Catchment Management Plans are developed and implemented by a partnership of local people and organisations with an interest or stake in the river. The emphasis is



Work begins on one of the projects outlined in the catchment management plan © Charlie Bell

on collaboration and partnership working, with a 'host' organisation taking on the role of bringing the partnership together, acting as the single point of contact and driving the process forward. This Catchment Based Approach has been trialled in over sixty catchments across the country.



Local & Regional

Saving Hertfordshire's dying rivers – a catchment-based approach continued

Defra has gathered feedback from each of these pilot catchments, and selected the best examples of good practice into the rollout of a national approach.



A healthy section of the Mimram © Charlie Bell

In Hertfordshire, Catchment Management Plans have been developed for the Mimram, Beane, Stort and Colne catchments. Herts & Middlesex Wildlife Trust (HMWT) are 'catchment hosts' for the Beane, Mimram and Stort Catchment Management Plans. We also sit on the steering group for the Colne catchment.

Although the Beane and Mimram are separate rivers with different identities, they are grouped together for the development of the Beane & Mimram Catchment Management Plan. The Stort has its own, separate Catchment Management Plan. All three rivers share several features: they are tributaries of the Lea and face many of the same issues – low flows, invasive species, pollution and physical modifications.

There are differences too; the Mimram and Beane are chalk rivers, described as 'Cinderella Rivers' by the World Wildlife Fund (WWF). This recognises the fact that their fate goes largely unrecognised nationally, as they do not have the same levels of protection as more famous chalk rivers further west. Much of the Stort, by contrast, is canalised as the Stort Navigation.

The Living Rivers Project is hosted by Herts & Middlesex Wildlife trust and funded by the Environment Agency. For more information on the Catchment Management Plans, of Hertfordshire's rivers in general, please contact Hertfordshire Living Rivers Officer Charlie Bell on 01727 858901 (ext 245), or charlie.bell@hmwt.org.

Creating a haven for wildlife in West Glamorgan

Buglife



Kilvey Hill, Swansea © Buglife

Thanks to funding from WREN, a landfill tax grant giving body, Buglife has embarked on its first project in Wales, identifying and improving the biodiversity found on brownfield sites in Swansea and Neath Port Talbot.

The exciting new 3 year 'West Glamorgan Stepping Stones' project will focus on 5 brownfield sites: Kilvey Hill and Pluck Lake (owned by the City and County of Swansea); Nant-ewlaeth (nr Cymmer), and Bryn Tip (owned by Neath Port Talbot Council); and non-operational land at Tata Steel Port Talbot.



Local & Regional

Creating a haven for wildlife in West Glamorgan continued

The rich industrial heritage of this area, including coal mining and heavy metal smelting, has created a legacy of sites, some of which contain contaminated substrates; this is the case at Pluck Lake, a former copper smelting site. The varied and often stressed ground conditions found on brownfield sites can support unique habitat mosaics such as bare ground, wildflower rich grassland, heathland, lichen heath and scrub – making these habitats a haven for wildlife; especially for invertebrates.



Tata Steel, Port Talbot © Buglife

Invertebrate, reptile and flora surveys are now underway and survey data gathered this year will be used to inform habitat management and enhancement work at the sites, which is likely to include:

Scrub clearance and thinning to promote the establishment of wildflower rich grassland and heathland;

Enhancing microhabitat features through the creation of bare ground scrapes. Bare patches of ground are ideal warm spots for basking invertebrates and reptiles, and will encourage the development of early successional vegetation;

Wildflower meadow creation at Tata Steel Port Talbot to enhance floral diversity and provide high quality forage

resources for invertebrates; Bee bank creation to provide burrowing habitat for bees and wasps. Bee banks will provide topographical variation and will vegetate over time creating micro-habitats to

support a variety of invertebrates including ground beetles and spiders. Through survey, management and subsequent monitoring this project will work in the West Glamorgan landscape to restore and enhance 48 hectares of brownfield habitat for many threatened invertebrates including UK and local BAP species, such as Shrill carder bee (Bombus sylvarum), Brown banded carder bee (Bombus humilis), Dune tiger beetle (Cicindela maritima), Dingy skipper (Erynnis tages), Grayling (Hipparchia semele), Small blue (Cupido minimus) and Grizzled skipper (Pyrgus malvae). UK BAP reptiles to benefit from the project include Adder (Vipera berus), Grass snake (Natrix natrix), Common lizard (Zootoca vivipara) and Slow worm (Anguis fragilis). Buglife will work with local conservation organisations such as

Bumblebee Conservation and Amphibian and Reptile Conservation, planners, ecologists, developers and land managers to raise awareness of the importance of brownfields; and will also carry out brownfield resource mapping in Swansea and Neath Port Talbot to identify high quality brownfield sites.

There will be lots of events for members of the public and local recorders to get involved with such as Bioblitzes, moth trapping, species ID workshops, and wildlife walks, as well as practical conservation task days.

If you would like any further details about the project please contact Buglife's Brownfield Officer, Clare Dinham on 01733 201210 or clare.dinham@buglife.org.uk for further details.



Bombus Humilis © Sam Ashfield



Cicindela Maritima © Roger Key



Local & Regional

Wildlife boost could help NW economy

The Wildlife Trust for Lancashire, Manchester and North Merseyside

Wildlife will be given added protection after a vast area of Greater Manchester was adopted as a local Nature Improvement Area (NIA).

And the adoption could help to boost jobs and the economy in deprived areas of the region. The Manchester Wetlands stretches from Wigan and Bolton in the north, down to Woolston on the edge of Warrington in the south and Salford in the east, taking in Chat Moss, Wigan Flashes and Woolston Eyes.

A major part of the plan is to join these areas using wildlife corridors which will create larger, protected areas for creatures to live and thrive.



Brown Hare © Terry Jolly



Water Vole © Tony Dunn

Anne said: "The Wetlands Partnership has continued to deliver its ambitious £3.7million programme (up to 2014/15) and has been successful in attracting further funding. By adopting it as a local NIA we are showing our support and giving it formal recognition

The wetlands contain areas of mossland, vitally important in capturing and retaining carbon, and rare water voles, brown hare, willow tits and a great deal more wildlife native to the region.

The adoption of the Manchester Wetland Partnership as a local NIA was announced by the Greater Manchester Natural Capital Group. It comes after the wetlands were turned down as a national NIA last year.

Group chair and Lancashire Wildlife Trust Chief Executive Anne Selby said: "I am really delighted with this development. The MWP put in a very strong bid, and were very unlucky not to be chosen by Defra as one of the 12 national NIAs. They were however

identified as one of eight "near misses".

We welcome the three strands of the partnership, which are to improve biodiversity, deliver carbon savings and also social benefits.

The partnership wants to get local people and businesses involved in the wetlands, eventually creating jobs, training and volunteering opportunities.



Cotton Grass on Astley Moss © Tony Dunn



Local & Regional

Wildlife boost could help NW economy continued

of the value of its work both to nature improvement, local communities, and the local economy. We wish them every success in the future and will be following their progress with great interest." The Wetlands Partnership area of interest covers some 40,000 ha. Its vision is that by 2025, Manchester Wetlands will be a thriving, resilient and inspirational landscape that delivers real benefits to local communities and the local economy. Its programme includes restoration of mossland areas, creation of new wetlands and improvement of existing ones, and creation of new reedbeds and wet woodland areas.

The wetlands are surrounded by areas of high social deprivation. The partnership is determined that its programme will bring real benefits to local communities, as well as improving the prospects for nature. There is therefore a strong community engagement element to the programme. Dr Amanda Wright from Natural England north west said "This is great news for the protection and improvement of rare species and habitats in our area, but it's also great news for carbon emissions and the local communities."

Mark Atherton, Director of Environment at AGMA said "I welcome the fact that the partnership is working with the private sector and aims to show that important commercial developments can go hand in hand with nature improvement."

としてしているとしているとしているとしているとしているとして

First Glencoe sighting for Chequered Skipper

National trust for Scotland

The glorious sunshine of this weekend enabled the ranger team at the National Trust for Scotland's Glencoe and Dalness to spot a species that is new to the area, the Chequered Skipper butterfly.

The species is only known in the UK within a 30 mile radius of Fort William, but had never been recorded at Glencoe until Saturday.

Ecologist Dan Watson, joined by volunteers Joss Ratcliffe and Callum Gilhooley, decided that the conditions were perfect for a butterfly hunt.

Dan said:

"We targeted suitable habitat in Glen Etive, starting at a fenced off area in Dalness. This looked perfect for Chequered Skippers, having a south-east facing slope covered with scattered trees, purple moor-grass (the larval food plant) and bluebells, which the adults prefer to nectar on.



Chequered Skipper © Dan Watson

"After a few false alarms caused by similarly-sized Common Heath moths, Joss caught something different in his net which turned out to be our target species. Once we'd got a better search image we started seeing them everywhere, counting at least thirteen individuals, four of which were metres from the road, seen while we were eating lunch.



Local & Regional

First Glencoe sighting for Chequered Skipper continued

"We continued a bit further up the glen to a smaller fenced off area and found another seven within a few minutes of crossing the fence. The records made will go to Butterfly Conservation, who are carrying out a survey of this butterfly as there is a suspicion that it is severely under-recorded at present. Our findings would seem to support this theory, but it is great to know that our habitat management is benefitting one of Scotland's rarest butterflies."

The find comes during the Year of Natural Scotland which aims to celebrate Scotland's outstanding natural beauty throughout 2013. From stunning natural and historic landscapes, art inspired by nature, surprising wildlife and delicious food and drink, enjoy the nature that's right on the doorstep.

Glencoe is arguably the most famous Scottish glen of all. It is also one of the most dramatic, with forbidding mountains, thundering waterfalls and sparkling lochs. The drama is also reflected in Glencoe's history, both real and imagined – myths, massacre and movies are all now part of the fabric of this magical, mysterious place.

Walkers and climbers are drawn from all over the world to tackle its many mountaineering routes, including eight Munros, while animal-lovers come to catch a glimpse of Scottish wildlife including red deer, golden eagles and pine martens.

Bluebells arrive at last

Wildlife Trust

Bluebells are finally flowering in Lancashire's woods after the severe winter weather set them back up to four weeks in some areas. The blue and purple flowered plants are announced the arrival of spring only six weeks after snow lay on the ground.

Carpets of the flowers can now be seen in wooded areas with striking examples being Aughton Woods, near Carnforth, Boilton Woods on the edge of the Brockholes Nature Reserve, in Preston, Borsdane Wood in Hindley, Seven Acres in Bolton, Mere Sands Wood in Ormskirk and Clinkham and Red Brow Wood in St Helens.

Generally bluebells are seen in late April and May but, in recent years, they have flowered earlier after milder ends to winter. Lancashire Wildlife Trust Wigan Projects Manager Mark Champion said: "Bluebells are definitely late this year because of the cold end to winter. There are wonderful displays at



Bluebells © Alan Wright

Borsdane Wood but they can be seen in most broadleaf woodland in the region." Some higher areas are still awaiting the arrival of the flowers but the green plants can be seen and it is only a matter of time before they will arrive.

The UK is home to half the world's population of common bluebells with the majority of the rest in Northern France and Belgium. Native bluebells are protected by the Wildlife and Countryside Act and it illegal to dig them up.

It means that garden centres are more likely to sell Spanish bluebells which are stronger and more upright that our native variety.



Local & Regional

Bluebells arrive at last continued

Householders dumping garden waste has led to these Spanish Bluebells escaping and growing in the wild.

Mark said: "While native bluebells grow in woodland, these Spanish bluebells are more likely to grow out in the open. However bees are attracted to both plants and this leads to hybridisation so it is affecting the native bluebell population. It is a big problem.

"Spanish bluebells and the hybrids tend to be thicker and stand up straight while native bluebells have the lovely curve at the top where the flowers are too heavy for the stem. I had hybrids in my garden but I dug them up."

Bluebells can be blue, purple or white, however pink bluebells are probably the Spanish variety.



Bluebell Carpets © Alan Wright

Wales plans a brighter future for Natura 2000

Cyfoeth Naturiol Cymru

Over 100 delegates from organisations across Wales came together in June to identify key issues and risks impacting upon Natura 2000 habitats and species and the management mechanisms used to address them.

The four workshops held across the country were part of the LIFE Natura 2000 Programme's work to develop strategic plan to manage and restore all Welsh Special Areas of Conservation and Special Protection Areas within the next decade.



Local & Regional

Wales plans a brighter future for Natura 2000 continued

The Programme Manager Kathryn Hewitt said "Incorporating the expertise and opinions of those involved in managing and using Natura 2000 sites is essential if we are to create a plan which will really deliver results. So we were very pleased that so many people from a range of organisations took the time to contribute."

Over the coming year the Programme, which is lead by Natural Resources Wales and co-funded by the EU's LIFE+ scheme, will be producing costed and prioritised Action Plans for every Natura 2000 site in Wales. They will be also investigating new ways to facilitate and fund essential work.

A sister project (IPENS - Improvement Programme for England's Natura 2000 sites) is underway across the border.

For more information visit <u>www.ccw.gov.uk/LIFE</u> or contact the project on (01248) 385797 or <u>hayley.macdonald-jones@naturalresourceswales.gov.uk</u>





Publications

Marine Biodiversity & Ecosystem Functioning

Oxford University Press

The biological composition and richness of most of the Earth's major ecosystems are being dramatically and irreversibly transformed by anthropogenic activity. Yet, despite the vast areal extent of our oceans, the mainstay of research to-date in the biodiversity-ecosystem functioning arena has been weighted towards ecological observations and experimentation in terrestrial plant and soil systems. This book provides a framework for extending these concepts to a variety of marine systems

Marine Biodiversity and Ecosystem Functioning is the first book to address the latest advances in biodiversity-function science using marine examples. It brings together contributions from the leading scientists in the field to provide an in-depth evaluation of the science, before offering a perspective on future research directions for some of the most pressing environmental issues facing society today and in the future.

The publication is a graduate level text suitable for students, professional researchers, and

practitioners in the fields of marine ecology, conservation biology, and marine resource management.

 The first book to incorporate the latest developments in the field of marine biodiversity and ecosystem function

- Integrates some key findings of MarBEF (Marine Biodiversity and Ecosystem Functioning, a network of excellence funded by the EU and consisting of 94 European marine institutes) with more recent research in the field
- Includes guidance for new researchers examining marine biodiversity-ecosystem functioning relationships in marine systems
- Builds on the success and influence of the highly cited
 'Biodiversity and Ecosystem Functioning' (OUP, 2002)

marine biodiversity & ecosystem functioning frameworks, methodologies, & integration martin solan rebecca j. aspden david m. paterson

For more marketing information please contact:
Science Marketing Team UK
Oxford University Press
science.books.uk@oup.com

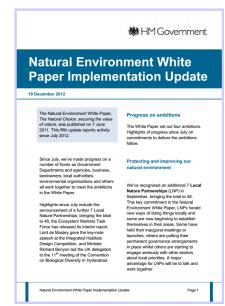




Publications

Updates on implementation of the Natural Environment White Paper

Defra



In 2011, the Government published the Natural Environment White Paper which outlined the Government's ambitions for the natural environment, backed up with a programme of practical action. Defra regularly produces an on-line information sheet highlighting recent achievements and progress on implementing these commitments. These *Implementation Updates* are available on the GOV.UK website.

The latest publication was in July 2013 and is available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211315/newp-imp-update-20130709.pdf

All of the updates can be found here

Wood Wise: invasive species management in woodland habitats

The spring 2013 issue focuses on the problem of invasive non-native species management in

woodland habitats. Species covered are American skunk cabbage, deer, floating pennywort, giant hogweed, Himalayan balsam and rhododendron. Case studies on best practice come from a range of organisations, including the Woodland Trust, New Forest Non-Native Plants Project and Yorkshire Pennywort Forum

Invasive non-native species are defined as 'species whose introduction and/or spread threaten biological diversity or have other unforeseen impacts'. They are one of the most serious global threats to biodiversity today, along with habitat destruction and climate change. They also impact on humans; each year they cost the UK economy around £1.7 billion.

Wood Wise issues can be viewed online via the link below. If you would like a pdf version or would like to be added to the subscription list please email your request to

Conservation@woodlandtrust.org.uk

http://www.scribd.com/collections/3664279/Wood-Wise





Events

Communicate 2013: Stories for Change

BNHC

Registrations are now open for Communicate 2013: Stories for Change, to be held on 6th and 7th November at Arnolfini, central Bristol.

With inspirational plenary sessions, challenging debates and practical workshops on the themes of *telling stories* and *liberating stories*, as well as outstanding networking opportunities, Communicate 2013 is the essential conference for environmental communicators from across the sectors.



Do your bit for the moors

Moors for the Future

Local people – whether keen moorland walkers, runners or general enthusiasts of the moors - are invited to sign-up to be a volunteer and come along to learn how they can help make a difference to protect the moorland landscape and become 'MoorCitizens'.

The day will begin with an introduction to the new project, which is designed to involve local communities in monitoring how climate change is affecting their local moors and in helping to conserve them for future generations. Participants will learn how to identify Bilberry and Tree and Red-tailed bumblebees and be given their all-important monitoring pack to get them started. They will also receive training in scientific monitoring techniques and learn about personal safety on the moors. Anyone completing the training will be able to carry out their own surveys along the Pennine Way – either on their own or with a group of friends. And then be able to spread the word and pass on their skills to fellow volunteers.

Community Science project manager Gareth Roberts says:

"For some of the survey work, volunteers will have to receive training before they go up onto the moors. As well as being informative we're aiming to make sure the day is fun too – a chance for people to meet and get to know like-minded volunteers in what's set to be a really exciting new initiative."

The next volunteer day will be at Sheffield Wildlife Trust's HQ, Sheffield on Saturday 20th July.

Special training events can be organised for clubs or groups that would like to get involved. All potential participants should email gareth.roberts@peakdistrict.gov.uk to say they are planning to attend.