



Biodiversity Newsletter 2017
Number 22



Corporate
membership

Berkshire
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Oxfordshire



Focus - BUTTERFLIES

Spring Appeal

The Small Tortoiseshell butterfly has seen its numbers drop by 73% in the last 40 years. Help halt the decline of our best-known butterflies and moths before their fate becomes critical.



First Sightings

If you have seen a butterfly this year please let us know so we can add it to our records.



UK butterflies worst hit in 2016 with 70% of species in decline, study finds

The annual UK butterfly monitoring scheme (UKBMS) found that 40 out of the 57 species studied saw numbers drop between 2015 and 2016, making 2016 the fourth worst year on record for the insects.

The results were even worse when the UK's three migratory butterfly species, the red admiral, clouded yellow and painted lady – whose numbers are dependent on weather in Europe – were excluded from the study. Leaving out those species makes 2016 the second worst year on record for butterflies in Britain.

Experts said the bad news was the result of a mild winter and a cold spring – both of which can be harmful to butterflies. The largely pleasant summer weather, which is normally ideal for butterflies, came too late to make up for the damage done earlier in the year.

Several species had their worst years on record over the past year, including the wall, grayling, white-letter hairstreak and white admiral butterflies, as well as grizzled skippers, whose numbers fell by 24% over the year to a record low.

Serious concerns have also been raised about the heath fritillary, a species only found in a handful of sites in southern England. Its numbers have fallen 82% in a decade.

It was, however, a good year for 17 species, including some of the rarest types of butterfly in the country, including the large blue, which was reintroduced to the UK after becoming extinct in 1979. Its numbers were up 38% compared with 2015. The red admiral also recorded a rise of 86%.

Back From The Brink

Some of the UK's most threatened species will be brought back from the brink of extinction, as part of an ambitious project funded by the National Lottery.



Garden Butterfly Survey

Record the butterflies that visit your garden over the course of a year, and help us save butterflies.



Focus - BIRDS



More than a quarter of UK birds face extinction risk or steep decline

What kinds of birds are in most trouble?

How does the Red List break down across habitats? Despite no new additions, farmland birds still have the greatest percentage of species (12 of 26) on the Red List. Lowland wetland species have the smallest proportion: only four of 31. Five upland birds (Curlew, Dotterel, Grey Wagtail, Whinchat and Merlin) were added, bringing the total for this habitat to 12. Three more woodland birds, Woodcock, Nightingale and Pied Flycatcher, were added to the Red list bringing the total of woodland birds to sixteen.



With the addition of Kittiwake, Shag and Puffin to the Red list, the number of seabirds on the list has nearly doubled and it now includes four of the UK's sea ducks. House Sparrow and Black Redstart are the only two urban species. The Red List now includes eight globally threatened species, 16 long distance migrants, three of the UK's four gamebirds and five of the UK's six larger thrushes.

Silver linings?

There is also good news. Two previously red-listed species (Nightjar and Bittern) have shown marked improvements in population status, attributed largely to sustainable forest management and targeted conservation action, have moved to the Amber list. The rapidly spreading Red Kite is another conservation success story, moving from Amber to Green. Former red-listed species such as Stone-curlew and Marsh Harrier, continue to show modest recovery in numbers and remain amber-listed. Overall, the Amber list has been reduced from 126 in BOCC3 to 96 in BOCC4 as a consequence of both negative changes (moves to the Red list) and positive changes (moves to the Green list). The Green list, now 81, includes a range of common garden species such as Blue Tit, Blackbird, and Robin, and saw a net increase of 14 species such as Little Egret, Little Grebe, Firecrest, Woodlark, Whitethroat, Wheatear and Bearded Tit.

Focus – Wild Flowers

Nettles and other 'thuggish' plants forcing out endangered wildflowers



Conservation experts say nitrogen emissions are having a "devastating impact" on UK wildflowers and landscapes, posing a greater threat than climate change. The study by nature charity Plantlife says more than one third of flowering plants are now under threat from pollution.

Emissions from transport, power stations, farming and industry are deposited back into the natural environment directly from the air, or in the rain, over-fertilising the soil. The pollution creates nutrient-rich soils which allow "thuggish" plants such as nettles, giant hogweed and hemlock to thrive, overpowering rare and endangered wildflowers, the charity warns.

The study shows that 37 per cent of UK flowering plants prefer low-nutrient conditions and are under threat, declining while high nitrogen plants are on the rise.

Lichens, mosses and liverworts are particularly sensitive to nitrogen, while other plants at risk include harebell, which was recently classified as near-threatened in England, and bird's-foot trefoil, which supports 160 species of invertebrate. In total, 90 per cent of habitats across England and Wales that are sensitive to levels of nitrogen, such as heathlands, acid grasslands and sand dunes, are receiving pollution from the air and rain at higher levels than they can tolerate, researchers warned.

Researchers said the British countryside was being threatened because pollution is "force-feeding the natural world a diet of nutrient-rich junk food". The emissions of nitrogen, in the form of nitrogen oxides and ammonia, come in addition to the impact of nitrogen fertilisers being spread on the land.

The report is backed by conservation organisations including the National Trust, the Woodland Trust, the RSPB, the Botanical Society of Britain and Ireland, and Chester Zoo. Dr Trevor Dines, Plantlife's botanical specialist, said nitrogen being deposited from the air and rain could present a far more immediate threat to parts of the countryside than climate change.

"Once diverse habitats are becoming monotonous green badlands where only the thugs survive and other more delicate plants are being bullied out of existence," he said. With the problem spreading across borders, and nitrogen pollution coming to Britain from the continent, Dr Dines called for European and international action.

Locally, habitats could be managed to reduce nitrogen levels, with grazing, hay meadow management and tree coppicing to remove vegetation.





United Nations Decade on Biodiversity

NATIONAL 'WHAT' WEEK?

big butterfly count

14th July - 6th August



Help us take nature's pulse by joining the big butterfly count. [Find out more about this project](#)

The Great Bug Hunt 2017

An exciting competition for Primary Schools that takes you outside to explore the bug world!

Identify a local habitat, explore and discover the bugs that live there, draw them and record your findings – it's that simple!



"...It's so addictive I can guarantee once you've been on a bug hunt you will never ever be bored again."
Nick Baker



What will you find?

Entries to reach us by: June 16th 2017
www.schoolscience.co.uk/competitions

HEDGEHOG AWARENESS WEEK

30th April - 6th May 2017

#hedgehogweek



See www.britishhedgehogs.org.uk for details

Bat Conservation Trust



International Bat Weekend

27-28th August 2016