



Nature

Winter Biodiversity Newsletter - No. 28



Corporate
membership

Berkshire
Buckinghamshire
Oxfordshire



Highlights of 2019

Plantlife - Colour in the Margins Project Officer, found this Harvest Mouse nest at our Fivehead Arable Fields Reserve last month whilst collecting rare arable plant seed!

This is the first record of Harvest Mice on the reserve for many years.

HeritageFundUK support enabled **BuzzingPeak** to deliver the Bumblebee Education Experience (B.E.E.) to secondary schools in the Derbyshire area and reach over 1,000 students since launch.



North York Moors NP
@northyorkmoors

#givenatureabreak with our national partner @forestholidays raised an incredible £51,065 for bees/butterflies/red squirrels!

Thank you so much to @forestholidays for supporting our Rare Butterfly Conservation project which will help habitat restoration work in the national park



2020

David Attenborough announces new BBC nature series Green Planet



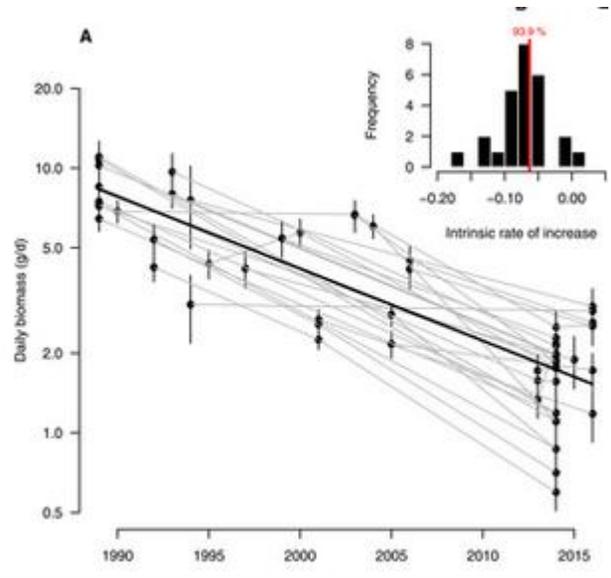
Insect decline

More than 75 percent decline over 27 years in total flying insect biomass in protected areas

Global declines in insects have sparked wide interest among scientists, politicians, and the general public. Loss of insect diversity and abundance is expected to provoke cascading effects on food webs and to jeopardize ecosystem services. Our understanding of the extent and underlying causes of this decline is based on the abundance of single species or taxonomic groups only, rather than changes in insect biomass which is more relevant for ecological functioning.

In Germany there has been an ongoing research project using Malaise traps, these have been deployed for over 27 years in 63 Nature protected areas. Their research has shown a 76% decline over the 27 year period. This considerably exceeds the estimated decline of 58% in global abundance of wild vertebrates over a 42-year period to 2012. The results demonstrate that recently reported declines in several taxa such as butterflies, wild bees and moths, are in parallel with a severe loss of total aerial insect biomass, suggesting that it is not only the vulnerable species, but the flying insect community as a whole. They have shown that this decline is regardless of habitat type, they have also provided evidence that changes in weather, land use cannot by themselves explain this overall decline.

The widespread insect biomass decline is alarming, ever more so as all traps were placed in protected areas that are meant to preserve ecosystem functions and biodiversity. While the gradual decline of rare insect species has been known for quite some time these results illustrate an ongoing and rapid decline in total amount of airborne insects active in space and time. Agricultural intensification, including the disappearance of field margins and new crop protection methods has been associated with an overall decline of biodiversity in plants, insects, birds and other species in the current landscape. The major and hitherto unrecognized loss of insect biomass that we report here for protected areas, adds a new dimension to this discussion, because it must have cascading effects across trophic levels and numerous other ecosystem effects. There is an urgent need to uncover the causes of this decline, its geographical extent, and to understand the ramifications of the decline for ecosystems and ecosystem services.





Year of Green Action (YOGA)

The Year of Green Action (YOGA) is part of the Government’s 25 year environment plan and is attempting to connect people all around the UK with nature. The YOGA will show how we can take positive actions to improve our environment by taking part in projects in our own gardens, schools or workplaces, and as consumers through our shopping choices.

How you can take part

There are countless ways to help wildlife and the natural world:

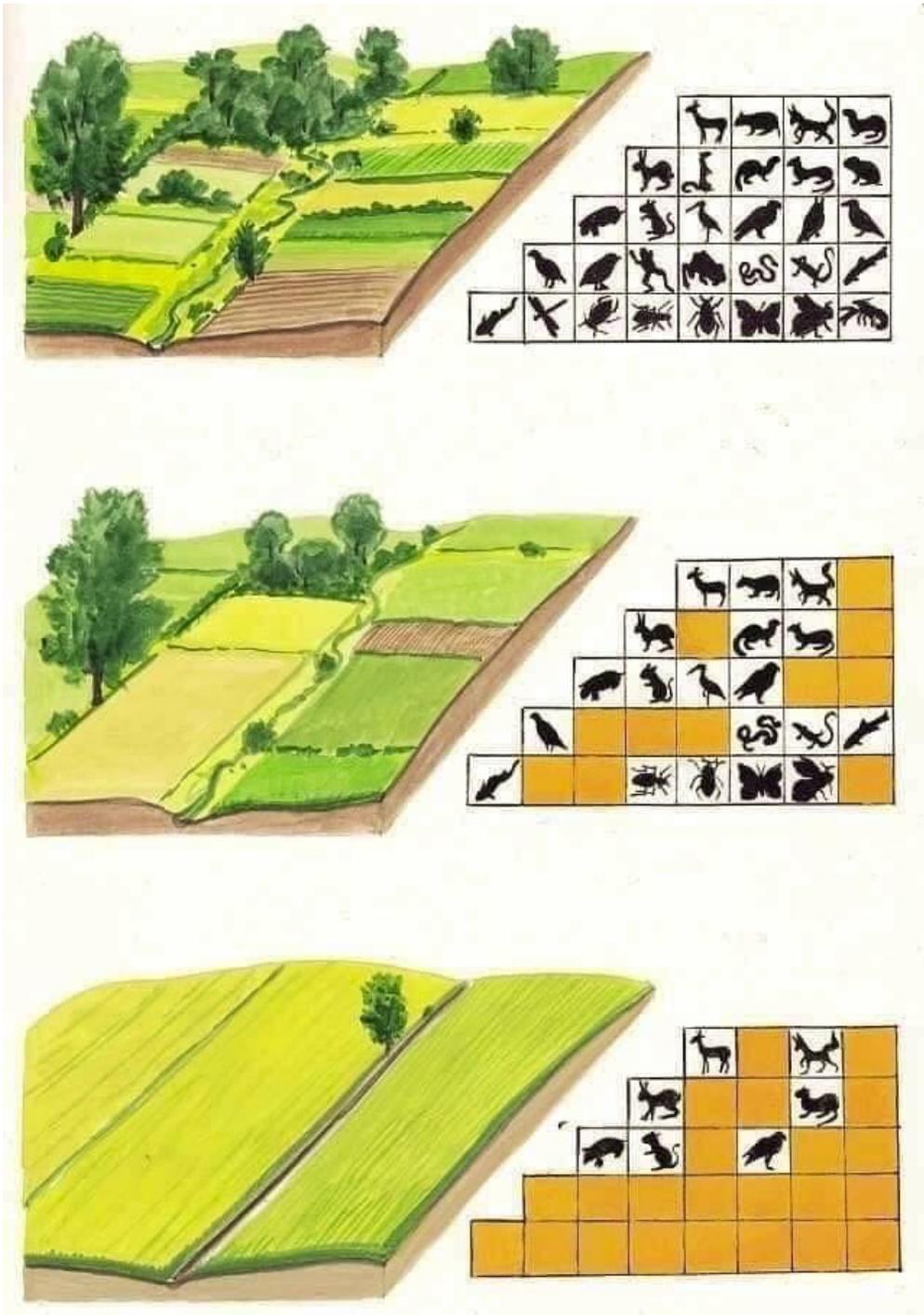
- Put the 'wild' back into wildlife gardening and start planting with butterflies and moths in mind. Not only is this one of the most rewarding things you can do in your own backyard but you'll be helping an array of other animals who rely on our gardens for food and shelter.
- Take some time out, relax and slow down to appreciate the beauty of the natural world by visiting a nature reserve or other local green space.
- Volunteer - There are a wide range of exciting opportunities for people who would like to get involved, whatever your age or experience.
- Citizen Science - Help us build up a picture of the health of the Biodiversity take part in a citizen science projects. The Big Butterfly Count, the biggest survey of its kind in the world, saw over 100,000 of you taking part in 2018 to submit 97,133 counts of butterflies and day-flying moths from across the UK.

For more ways to take part, visit the website: www.yearofgreenaction.org

Connect	Protect	Enhance
<p>Improving people’s understanding of the state of the environment, the benefits a healthy environment can bring, and the effect of their actions on the natural world.</p>	<p>Helping communities and businesses to reduce their impact on the environment through greener decision-making.</p>	<p>Inspiring people to enrich the environment, encouraging individuals and organisations to actively improve their local environment.</p>

Why are so many species on the brink of extinction?

Sometimes a picture is worth a thousand words...



UK animals back from the brink of extinction

Habitat protection, hunting controls and captive breeding have led to significant successes for Britain's threatened species



▲ Clockwise from left to right: red kite, pine martens, ladybird spider, water vole, corncrake, large blue butterflies.
Photographs: Press Association

Birds

The UK's birds have seen a dramatic reversal of fortune over the past decade. Almost 60% of Britain's rarest birds, including once near-extinct species such as the red kite, bittern, avocet and osprey, have seen numbers increase over the past decade. Five birds of prey which became extinct in the UK have returned. Ospreys, white tailed eagles, honey buzzards, marsh harriers and goshawks all successfully managed to re-establish themselves in this country. Other birds including the corncrake, eagle owl, grey partridge and cirl bunting have also seen a population resurgence. The great bustard – the heaviest flying bird and one of Europe's most threatened species – now breeding in the wild the first time in almost 200 years in the UK.

Insects and spiders

A decade ago there were only 56 ladybird spiders in Britain, when a breeding and reintroduction programme began. The number of ladybird spiders in the wild is now thought to be more than 1,000. Among the UK's rapidly declining butterfly species, the heath fritillary – Britain's fastest disappearing species – has seen a comeback, while conservation efforts have seen five more species starting to recover. The other butterflies are the high brown fritillary, the wood white, the silver-spotted skipper, the adonis blue and the large blue - which 25 years ago was extinct.



NATIONAL 'WHAT' WEEK?

A banner for the 'Festival of Winter Walks'. The text 'Festival of Winter Walks' is written in white on a green ribbon-like background. Below the ribbon, the text 'Choose from thousands of festive walks' is written in a smaller, light blue font. The background of the banner is a photograph of a snowy, rocky landscape under a cloudy sky.

Festival of Winter Walks

Choose from thousands of festive walks

December 2019

Why not walk off the Christmas lunch with the ramblers association?

Walks take place across England, Scotland and Wales, from cities to the coast and from parkland to country fields. All our walks are led by experienced volunteers.

A photograph showing a group of children in a school setting. They are all looking through binoculars, focused on something off-camera. The children are of various ages and are dressed in winter clothing.

Big Schools' Birdwatch

Inspire your class with Big Schools' Birdwatch 2019

The Big Schools Birdwatch runs from the 6th January – 21st February 2020 and is an educational activity that gets your class closer to nature. It takes just an hour and works for all ages and abilities.



National Nest Box Week

NNBW takes place each year from 14-21 February, and after more than 20 years it is now an established part of the ornithological calendar.

NNBW aims to encourage everyone to put up nest boxes in their local area in order to promote and enhance biodiversity and conservation of our breeding birds and wildlife.

No Mow May
because
EVERY FLOWER COUNTS



And Finally...

