

LEGISLATION

Government approves use of bee-killing pesticide

The Wildlife Trusts is planning a legal challenge after the Government's decision to allow the emergency application of a banned insecticide.

The Government's decision to permit the use of a banned insecticide on sugar beet crops this year has alarmed many conservationists.

Defra announced in early January that the emergency use of the neonicotinoid thiamethoxam would be allowed because this year's beet harvest has been badly affected by a virus spread by aphids.

Highly lethal neurotoxins, neonicotinoids are so powerful that one teaspoon is enough to kill 1.25 billion bees.

These insecticides have been in use since 1994, and after the evidence for their environmental impact became overwhelming, the EU banned their use on flowering plants in 2013 and then on all outdoor crops in 2018.

At time of print, The Wildlife Trusts intends to challenge the Government's decision, arguing that environment secretary George Eustice had not demonstrated that there were no alternatives to using the insecticides. There's also deep concern that Defra anticipates the derogation could be permitted for the next three years.

"Neonicotinoids not only threaten bees [as well as other insects], they are

"Neonicotinoids not only threaten bees, they are extremely harmful to aquatic wildlife, because the pesticide leaches into the soil and then the waterways."

extremely harmful to aquatic wildlife, because the majority of the pesticide leaches into the soil and then into waterways," says Wildlife Trusts chief executive Craig Bennett.

Buglife CEO Matt Shardlow believes that our departure from the EU may result in an increase in the use of insecticides in the UK, because of the power of the agri-industry. "The EU is just about big enough to stand up to the pesticide companies; member states are not," he says.

The UK lacks the independent evidence-gathering and assessment capacity of the EU, Shardlow adds, and he questions whether ministers will be "brave enough" to restrict the use of insecticides if they do not have sufficiently watertight legal evidence to contest challenges by agri-industry companies and lobby groups.

Under EU law, the 'precautionary principle' recognises that environmental regulation is justified even where there is no absolute proof to support it. Post Brexit, Shardlow argues that this concept, as set out in the UK's Environment Bill, is "crippled by a series of restrictions".

In a statement, Defra said the quantity of thiamethoxam used would be below the usual commercial rate and that farmers were restricted from planting any flowering crops in the same field within 22 months (32 months for oilseed rape) in order to limit the possible exposure of pollinators to this deadly insecticide.

James Fair

FIND OUT MORE

Use of neonicotinoids in the EU:
bit.ly/3aNuShD

Early Bumblebee: Andrew Mason/FLPA; beet: Emeric Fohlen/NurPhoto/Getty



Main: bees may be at risk. Inset: beet crops hit hard by aphid-transmitted virus that blocks photosynthesis.

ECOLOGY

Bats bounce back with moorland restoration

Five species of bat recorded following revegetation of Peak District plateau.

You may be familiar with the benefits of moorland restoration, such as carbon sequestration and rewetting the moors to help prevent flooding, but conservationists in the Peak District have discovered a less obvious beneficiary of revegetating the peat on Kinder Scout plateau: bats.

Moors for the Future Partnership has been working with Derbyshire Bat Group, and a bat detector placed on the plateau has revealed that out of 17 species of bat in the UK, five are present on the plateau and foraging there, suggesting they are living in the area, not just passing through.

“We didn’t really know whether bats were there or not, but we had a sneaking suspicion that, after all the restoration work, they might be,” says Alan Roe, a recorder at Derbyshire Bat Group.

The five species recorded were common pipistrelle, soprano pipistrelle, noctule, brown long-eared bat and one of the *Myotis* species. At 636m, Kinder Scout is the highest point in Derbyshire.

Discovering bats at Kinder Scout is the latest in a line of remarkable successes, as these moorlands recover from centuries of abuse.

Large areas of these moors had been reduced to bare peat by years of industrial pollution. The restoration process begins with scattering heather brash to establish some cover and gully blocking to rewet the peat, then the bog-forming plant sphagnum moss is introduced.

Over time, biodiversity begins to improve with other plants and shrubs taking hold, such as bog asphodel and cloudberry. These plants in turn attract a diverse

insect community, which the bats are beginning to feed on and so making the area their home.

Tom Spencer of Moors for the Future Partnership’s science team is more used to putting probes into peat, measuring hydrology, but the bat detector is just another monitoring device for him.

“Monitoring insect populations is pretty complicated – it is not something that we tend to do. But monitoring bats, we think, gives us an indication of the health of the insect population,” says Spencer.

This year, the plan is to put a second detector on the bare peat control site and monitor bat activity there. **Andrew Griffiths**

FIND OUT MORE Moors for the Future Partnership: bit.ly/3tDFyYK Derbyshire Bat Group: bit.ly/3q6zy8I

DID YOU KNOW?

All UK bats feed on insects and a common pipistrelle can eat more than 3,000 in a single night.



In the Peak District, brown long-eared bats (inset) are among the species making the most of restored habitat.

Bat: Alan Roe; landscape: Moors for the Future Partnership

CONSERVATION

Biden halts oil drilling in Arctic wildlife refuge

On his very first day in office, US President Joe Biden put a temporary halt to oil and gas drilling in the roadless expanse of the Arctic National Wildlife Refuge (ANWR) in Alaska.

For more than 40 years, the 19.3 million-acre ANWR has been the subject of a political rollercoaster when it comes to whether to drill or not to drill. The main region of contention is the vast coastal plain, also known as the ‘1002 Area’, which teems with braided rivers, lush wetlands, ponds and boreal forests – but also potentially holds up to 11.8 billion barrels of oil reserves.

“This is America’s last, best place,” says Garrett Rose, staff attorney at Natural Resources Defense Council’s Alaska Project. “If we can’t safeguard the refuge from extractive

industry, then no place in America is safe.”

Under former US President Donald Trump’s administration, oil and gas exploration leases went up for bid in January but fell far short of their financial mark of \$900 million. Many Alaskan politicians still argue drilling would be good for jobs and state revenue, and Republican Senator Lisa Murkowski said “significant progress” has been made in the past month, with the lease sale and issuance of leases.

The ANWR is the largest wildlife refuge in the USA, home to denning polar bears and migrating herds of Porcupine caribou on which the indigenous Gwich’in tribe rely for sustenance. **Chuck Graham**



Dall’s sheep is just one species found within Alaska’s ANWR.

NEW SPECIES DISCOVERY

Brookesia nana

WHAT IS IT? A tiny chameleon the size of a seed could be a contender for the title of the smallest reptile on Earth. The male nano-chameleon has a body just 13.5mm long, yet its genitals are one-fifth of its body size, possibly allowing it to mate with the larger female.

WHERE IS IT? An international team of eagle-eyed scientists spied the reptile within degraded montane rainforests in northern Madagascar. Fortunately, its habitat has been placed under protection, but the researchers have recommended that the bijou chameleon is listed as Critically Endangered on the IUCN Red List of Threatened Species. **Catherine Smalley**



Nose to tail, *Brookesia nana* is just 22mm.

FIND OUT MORE

Nature: [nature.com/articles/s41598-020-80955-1](https://www.nature.com/articles/s41598-020-80955-1)

IN NUMBERS

60%

of blue whales in Canada’s Gulf of St Lawrence have come into contact with fishing ropes and nets, based on evidence of scarring.

4,904km

is the distance covered across England (in 17 months) by a white-tailed eagle released on the Isle of Wight in 2019.

0

rhino deaths due to poaching occurred in Kenya last year – the first time in more than 20 years – prompting celebration among local conservationists.

CONSERVATION

Platypus protected

The government of Australia's state of Victoria has added to its list of threatened species the platypus – following its nomination by wildlife photographer and *BBC Wildlife* contributor Doug Gimesy.

Victoria's Scientific Advisory Committee, which assessed the evidence, concluded that Australia's iconic egg-laying mammal is "facing a high risk of extinction in the wild in the medium-term future". It found "mounting evidence that platypus populations have reduced considerably in terms of abundance and distribution in the past 30 years, due to multiple stressors that directly impact the species or degrade aquatic ecosystems".

Stressors include land clearance, bank erosion, sedimentation, urbanisation, river fragmentation, fishing by-catch, pollution and climate change. The listing grants extra protection for Victoria's platypus habitat

"To be honest, I really wish I was wrong and that my nomination had

been rejected, as that might have meant that platypuses were fine and doing okay in Victoria," says Gimesy, who made the application over two years ago. "But clearly this isn't the case, and that makes me really sad."

The platypus also occurs in the states of Queensland, New South Wales and Tasmania. It has all but disappeared from South Australia, where it is already listed as endangered.

Stuart Blackman

FIND OUT MORE

Platypus IUCN: bit.ly/3cX8cOz

Awaiting
his

Curiouser and curiouser: found in Australia, the platypus is a venomous, egg-laying mammal with a leathery bill.

TRUTH OR FICTION?

Periodical cicadas are one of a kind

Could vast hatches of cicadas every 13 or 17 years have parallels elsewhere?

IN MAY, ONE OF THE world's great wildlife spectacles returns to the eastern USA, as a massive brood of periodical cicadas hatches for the first time since 2004. Having spent all that time in the soil as wingless nymphs, billions of red-eyed, black-bodied, winged adults will emerge together. Of the seven periodical cicada species in North America, three

follow a 17-year cycle, and the rest a 13-year cycle. To complicate things, their multiple broods are out of step.

These intensively studied cicadas were always thought to be unique. Now a new study by Japanese scientists of the country's famous train millipede, *Parafontaria laminata*, published in the journal *Royal Society Open Science*, has confirmed that it too hatches en masse in a predictable fashion, after a long time underground. The train millipede is named for its swarms that become so dense they stop trains in their tracks.

The researchers studied historical reports of disruption on the railway, and carefully unearthed the millipede's different instars, or juvenile stages, establishing that there were seven of them. This enabled them to work out that the train millipede follows an eight-year cycle. Besides the cicadas, it is the only other periodical animal known – for now. More may yet be uncovered. **Ben Hoare**



A multitude of millipedes may disrupt travel.



WANT TO COMMENT? Email wildlifeletters@immediate.co.uk