Climate change is shifting Spring forward in the UK with butterflies hatching TWO WEEKS earlier and birds laying eggs sooner than they did 50 years ago

- Wildlife could get 'out of sync' with the life cycles of other species they rely on
- Aphids, moths and butterflies are also now flying much earlier, experts say
- The shift towards is also happening in shady forests as well as more open areas

Climate change is shifting spring forward in the UK and disrupt the life cycles of eco-systems, a 50 year study has confirmed.

Aphids, moths and butterflies are now flying and birds are laying eggs much earlier than in the mid-20th century, according to researchers.

This means that butterflies are hatching earlier and birds are laying their eggs sooner than in 1967.

They say that the habitat will not provide a hoped-for 'buffer' to rising temperatures and that wildlife could get out of sync with species they rely on for food.

However the amount that these ecosystems change depends on where they are in the UK and which habitat they live in.

Temperature Change in the Last 50 Years (2014-2018 Average vs 1951-1980 Baseline)



Climate scientists have warned that variations in how animals were shifting their behaviour means wildlife could get 'out of sync' with the life cycles of other species.

According to the study, wildlife will not be protected in habitats such as woodlands, which it had been thought might provide more stable conditions that could be used as a 'buffer' to rising temperatures.

The shift towards an earlier spring is also happening in shady forests as well as more open areas, the study into the seasonal habits of more than 250 UK species found.

The team used data that stretches back to 1960, reveals that the responses by species to climate change are not straightforward.

Moths which turn from caterpillars to adults on the wing earlier in the year seem to be more responsive to climate change that those which change later, with moths that start flying before June now doing so much earlier.

Lead author Doctor James Bell, who heads up the Rothamsted Insect Survey, said: 'There was already good evidence that spring is coming earlier each year.'

'But what we didn't expect to find was that it was advancing as much in forests as it is in open areas such as grassland.

'Equally, in areas where we'd expect to see much greater acceleration, such as urban parkland, the rates of advance appear to be the same.

'This all points to a complex picture emerging under climate change, which makes ecosystem responses hard to predict, and even harder for conservationists to prepare for,' Doctor Bell said.

'The work is important because it shows us that we cannot rely on habitat to slow down climate change impacts, even in woodlands and forests where the conditions are more stable, and which were expected to buffer against adverse changes.'

In the north of the UK, changes in the climate may have different impacts on species, as butterflies become active earlier in the warmer wetter west than the colder drier east, but the opposite is true for birds laying eggs.

And birds and butterflies that live on farmland – as well as birds that live in coastal areas – are seeing later activity, suggesting that other factors such as a decline in available food are also in play.

The research was published in the journal Clobal Change Biology

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