

Road verges could be havens for pollinators

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Flowers in a roadside verge. Credit: Ben Phillips

Better-managed road verges can help boost pollinating insects, new research shows.

Pollinators such as bees, butterflies and hoverflies benefit from the plants and flowers in road verges, which form a network of "corridors"

that provide food and shelter.

While there are downsides of living by the road, including exposure to pollution and the risk of being hit by vehicles, the researchers found that the benefits for insects far outweigh the costs.

The team of scientists, led by the University of Exeter, reviewed more than 140 studies.

They found that verges can be dramatically improved for pollinators by measures such as creating flower-rich verges, reducing mowing and limiting the impacts of street lighting.

"There is huge untapped potential to improve road verges for pollinators through management," said lead author Ben Phillips, of the Environment and Sustainability Institute on Exeter's Penryn Campus in Cornwall.

"In many cases, this involves mowing less, and at the right times, to increase flowers and reduce the amount of pollinators, eggs and larvae killed.

"We can help pollinators further by reducing impacts of road pollution.



Flowers in a roadside verge. Credit: Ben Phillips

"This includes [light pollution](#), which can be addressed by limiting how long streetlights are switched on for, as these confuse nocturnal insects."

The study was a collaboration between the universities of Exeter, East Anglia and Cambridge, the UK Centre for Ecology and Hydrology and the conservation charity Buglife, funded by the Natural Environment Research Council.

Andrew Whitehouse, from Buglife, said: "Buglife's B-Lines initiative has identified the lack of connected wildflower-rich habitats as a major contributor to the decline in our pollinating insects."

"This new research shows the potential that road verges have to help to reverse insect declines.

"By making small changes to the management of our road verge network, [local authorities](#) and others involved in road verge management can make a [significant difference](#) to support nature's recovery."

Since writing the review, verges have undergone quite a transition due to the COVID-19 lockdown.



A trimmed roadside verge. Credit: Ben Phillips

Claire Wallace, from the University of East Anglia, said: "There were lots of reports of road verges not being mown because councils and contractors weren't operating as normal.

"This gave us a brief glimpse of the benefits of wilder verges for nature, with plants such as orchids popping up all over the place where they hadn't been seen before."

Ben Phillips said: "In Cornwall, however, it is really positive that the council has just changed its policy of mowing verges in [urban areas](#) eight times per year.

"Now they will only do this twice or three times a year, so this will be a big local change."

The results of the work support an ongoing campaign by conservation charity Plantlife to save wildlife on [road](#) verges.

More information: Benjamin B. Phillips et al, Enhancing road verges to aid pollinator conservation: A review, *Biological Conservation* (2020). [DOI: 10.1016/j.biocon.2020.108687](https://doi.org/10.1016/j.biocon.2020.108687)

Provided by University of Exeter

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