

Breaking new ground with eco drive to bring the country's verges to life

The company has announced a step change in the way it improves roads, which will breathe new life and colour into the verges and land around the country's motorways and major roads – a policy which will cover hundreds of miles in the second road investment period.

The key is creating the type of soils on the verges and roadsides which encourage the growth of wildflowers. More fertile areas with lots of topsoil – rich in potassium, phosphorus and nitrogen – favour aggressive grasses, dock and nettle, which are all fast-growing plants that can out-compete delicate wildflowers for water, nutrients, space and light.

On all major schemes, contractors are now being instructed to follow a new Low Nutrient Grasslands policy aimed at keeping away the 'bullying' plant species which love high nutrient soil, and allowing wildflowers to thrive, creating vital habitat for insects and other wildlife.

Highways England Environmental Advisor Ben Hewlett said:

Our new policy means we'll create more biodiverse new grasslands as standard. And as 97% of all species rich grasslands have been lost in the last century, it is great to think that our construction design standards could create substantial areas of biodiverse grasslands, stretching throughout England.

This is another great example of how we are moving away from simply minimising the impact of our work on the environmental impacts towards actually improving the environment through our work.

The increase in wildflowers and wider biodiversity should also provide some impressive visual displays, and help to connect people with nature and improve the wellbeing of millions of people using our roads every day.

Wildflowers thrive on low nutrient soil and the new policy is focused around the management of topsoil – or rather removing it from new grassland areas to lower the nutrient level, creating the perfect conditions for the flowers.

Removing soil nutrients slows growth rates of vegetation, reducing mowing and management requirements, while improving biodiversity by allowing wildflowers to germinate and thrive without competition from more vigorous plants.

The new initiative will see all grassland areas on improvement schemes finished with subsoil or bare substrate such as chalk. These will then be allowed to regenerate naturally or be seeded with wildflowers and grasses appropriate to the substrate type to create open grasslands high in

biodiversity, which in turn support pollinators and other wildlife, while providing road users with a more aesthetic landscape.

By adopting this new policy, Highways England is hoping to:

- improve safety by reducing the number of maintenance visits;
- reduce the carbon footprint through fewer maintenance visits;
- maximise grassland biodiversity of new construction projects;
- reduce long-term maintenance costs by reducing vegetation growth;
- capitalise on potential cost savings by eliminating the need for topsoil import and haulage.

The new grasslands initiative is being rolled out on all major projects initially, and will be implemented by Highways England's supply chain within the Major Projects Project Control Framework on a scheme-by-scheme basis, and the aim is to apply the instruction to operational projects and wider standards in due course.

Over the last few years a number of biodiversity schemes have been undertaken by Highways England, including extensive habitat connectivity planting, species-rich grassland creation and management and a project to protect and promote the habitat of the narrow-headed ant, England's rarest, on the A38 in Devon.

A Highways England wildflower scheme, the size of eight football pitches and visible during spring and summer along the A38 between Ashburton and Ivybridge in Devon, has won a Pollinator Award in the Big Biodiversity Challenge run by CIRIA (Construction Industry Research and Information Association). The scheme was started in 2018 with seeds from over 20 variety of flowers – including cornflowers, oxeye daisies, yellow rattle and poppies – sown over five hectares of verge, adding to 10 hectares recently created along the A38 and A30 in Devon and Cornwall.

Highways England ecologist Leo Gubert at the company's grassland planting site on the A30

Highways England has also been working with Cumbria Wildlife Trust, to boost pollinator habitats alongside key A roads, including the A590 and A66, and the verges and embankments of the A303 Stonehenge scheme, recently given the green light by Government, will create a flower-rich, six-mile long butterfly highway and large areas of species-rich chalk grassland.

The latest information on Highways England's biodiversity work can be found in its [2018-19 biodiversity report](#) and further details are available in its [Strategic Business Plan](#).

Case study

A successful case study is Dorset Council's Weymouth Relief Road where wide chalk cuttings were left bare, with minimal top soil (max 15mm thick), and seeded with wildflowers that thrive in chalk. These cuttings are now

supporting over 140 plant species and 30 species of butterflies and in the 10 years since construction, the verges have required minimal maintenance, some none at all.

Dr Phil Sterling, Building Sites for Butterflies Programme Manager at the Butterfly Conservation charity, said:

Over the past 10 years the Weymouth scheme has proven the benefits of the low nutrient approach – abundant wildlife and drastically reduced verge maintenance costs.

It's encouraging that Highways England have seen the light and followed this lead, and we welcome this significant change of approach. Butterflies need linked habitats across landscapes to reverse their declines and Highways England are now on the pathway to achieve this on all their new schemes.

Clare Warburton, Natural England's Green Infrastructure Principal Advisor, said:

This is a step change in the way road verges are designed and managed, and could make a significant contribution to recovering nature on our verges.

Low nutrient verges can help to reduce the likelihood of invasive species like creeping thistle, and increase native species we love to see, like oxeye daisy and bird's-foot trefoil and even rarer flowers, such as orchids, as well as being great for bees and pollinators.

Dr Kate Petty, Plantlife's Road Verge Campaign Manager, said:

Our research shows that nearly half of our entire flora grows on our verges, making this an exceptionally important habitat for wildlife, which needs all the help it can get.

We warmly welcome this new approach – it's highlighted in our best practice guidance developed in partnership with Highways England and others – and this exciting move to reduce verge fertility will help shift the balance of power on new road verges, giving delicate plants like harebells, bird's-foot-trefoil and kidney vetch a vital chance to grow. And, of course, where the flowers bloom the insects follow; bird's-foot-trefoil is a food plant for nearly 150 species of invertebrates alone.

General enquiries

Members of the public should contact the Highways England customer contact centre on 0300 123 5000.

Media enquiries

Journalists should contact the Highways England press office on 0844 693 1448 and use the menu to speak to the most appropriate press officer.