

Project name - Highway Verge Management for Biodiversity

Project Location – West and North Northamptonshire

Client - West Northamptonshire Council and North Northamptonshire Council

BIG Biodiversity Challenge Award Category: Biodiversity Legacy Award

Project overview (50 words max)

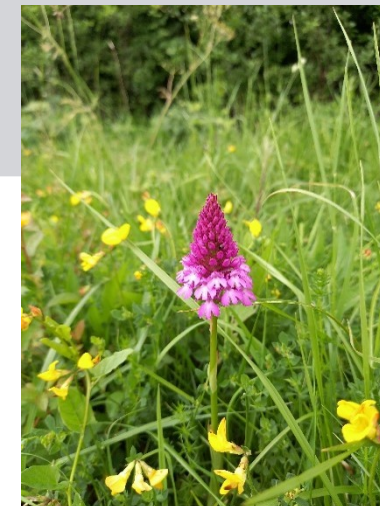
Highway verges provide valuable habitats for many different species of bird and animal. Regular mowing of verges can diminish these habitats and reduce the opportunity for species and habitats to thrive. By reviewing and amending the management and cutting regimes of our protected verges and identifying verges for improvement we are enhancing the verges for biodiversity and habitat value.

- Date completed - Ongoing

What were the biodiversity conditions on site prior to the enhancement? (100 words max)

Highway verges have historically been cut in full twice a year, which reduces the flowering time and the potential for pollination. This in turn reduces biodiversity and habitat diversity.

Northamptonshire have a Protected Wildflower Verge scheme which has been running for over 20 years. This has enabled protection and enhancement of existing species within the verges and enabled diversity of species to flourish. There are currently 33 verges which have been designated for wildlife interest and habitats they create. Prior to the scheme the verges had lower diversity of species due to cutting suppressing pollination opportunity.



Pyramidal Orchid - Clopton Ash Pole Verge

Highway Verge Management for Biodiversity

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What were the reasons behind this project? (100 words max)

Kier have made a commitment in Northamptonshire to deliver 10% BNG and the client have objectives to improve habitats for pollinator species, which have helped to shape the plan for the roadside verges. Kier are increasing tree coverage by 5% across the county to counter environmental issues including flooding, heat stress, air pollution and loss of biodiversity. Trees also provide social benefits by reconnecting people with nature and improving general health and wellbeing.

Highway verges cover a large percentage of the county and if managed appropriately, can create wildflower-rich grasslands and a network of wildlife corridors to enhance and connect habitats, other areas of protection and improve biodiversity.

What were the biodiversity measures taken? (300 words max)

The project aim is to enhance biodiversity, connectivity, and habitat potential of our highway verges.

Working with the Wildlife Trust to monitor the protected verges to ensure they are still meeting the requirements of the designation. They are cut once, late summer, to allow summer flowers to be pollinated, seeds to be released and the arisings collected to reduce soil fertility and enhance wildlife value. Additional management maybe required to ensure this is the case, for example scrub management, hedgerow management or sometimes additional cuts to encourage diversity.

In addition to the designated verges, cuts on A roads have been reduced by 50%, which has seen a net reduction of 570km in mowing and will help to increase biodiversity, authority wide, per year.

Four new verges with potential for enhanced biodiversity or improved connectivity will be selected annually. These verges will be baselined and have specific management plans produced for biodiversity net gain including wildflower seeding, tree planting and initiatives in collaboration with stakeholders and client. The intention is that these verges will improve to a point where they can be designated within the PWV scheme once the management regime has had time to embed.

Plantlife's national campaign, No Mow May, is implemented across the whole of Northamptonshire throughout May. No grass cutting took place, other than essential safety cuts, to enable flower-rich meadow grasses to flourish providing vital food for pollinators like bees and butterflies.

Kier have committed to increase tree coverage across the county by 5%. The plan to achieve this involves working with parish councils to plant small 'pocket woodlands'. Kier will provide the trees and make use of volunteering days to help plant the trees and the long-term management will be carried out by the parishes. We will also be offering two trees to every primary school in the authority, with an educational piece around the benefits of trees for the children. In addition, we intend to carry out two larger tree planting projects to create small woodlands, which will provide a larger canopy cover and the biodiversity benefits associated with woodland planting.

Further information (250 words max)

By managing verges with their biodiversity as a driver we will improve the habitat potential, connectivity, aesthetics of the verges, save fuel and emissions from the reduced cuts and provide a lasting legacy for the future of the county ecology.

- Improved biodiversity & ecosystem services i.e. pollination.
- Improved habitat connectivity.
- Fuel savings from reduced cuts.
- Kier is responsible for the maintenance of 1824.2km in NNC and 2454km in WNC (with 25,092m2 being protected verges).
- Potential for improvement to biodiversity through reduced cutting on the rest of the network.
- Reduced long-term management costs.
- Verges rich in native species are more resilient to environmental change.

This reduction in mowing will also see a reduction in CO2 due to reduced vehicle movements. Based on the kilometres saved above, this would see a saving of 257.8 kgCO2e across Northants

The maintenance regime will ensure long lasting wildflower meadows, providing connectivity between habitats and protected areas demonstrating biodiversity improvements for the life of the contract and beyond.

Project Team

- Kier Transportation

What was the motivation for carrying out the enhancement? (100 words max)

Rural highway verges are often overlooked for their ecological and biodiversity value but can offer a high level of diversity and habitat for our wildlife. They constitute refuges for many wild plant and animal species and are of considerable importance in landscape terms, with hedges and hedgerow trees forming the boundary of verges amongst the most dominant landscape features. The linear nature of verges also make them essential corridors linking some of our richest pockets of wildlife, uniting fragmented habitats. By enhancing these environments, we can start to make improvements to the overall biodiversity value within the county.