



Road Verges Habitat Action Plan

1. Introduction

Two Section 41 (Natural Environment and Rural Communities [NERC] Act 2006) species, Deptford pink (*Dianthus armeria*) and tower mustard (*Arabis glabra*), occur on road verges in Worcestershire and many other road verges in the county are notable because they contain unimproved grassland habitat.

2. Current Status

2.1 Description of habitat

The road verge is an important habitat resource and an important wildlife corridor. A roadside verge is defined for the purposes of this action plan as the thin ribbon of the highway, usually grassland but also often incorporating scrub and trees, that lies on either side of a road. It is confined by a boundary: usually a hedgerow, wall or fence away from the road. The boundary is not considered as part of the verge here. The verge may frequently incorporate a ditch, which can represent an additional valuable wildlife feature.

Road verges in Worcestershire show great variability in age, width, soil type, geology, aspect and slope, extent of shading by vegetation, drainage, management and ownership. These factors interact to determine the flora and fauna that inhabits or uses a particular stretch of road verge. The verge may also have geological or archaeological interest.

Traditional verge management was generally benign to wildlife. In the past local lengthsman would have hand-cut verges with a scythe or slasher and hay making or grazing on verges was common. The cost of this labour intensive work and the development of the mechanical flail in the 1960s resulted in the far less wildlife-friendly procedure of flailing by tractor or mowing. This mechanised process leaves the cuttings on the verge, which enriches the soil, results in thick mulch and suppresses all but the most vigorous plants.

Where management is more sensitive verges can be rich in wildflowers and provide important habitat for pollinating and other beneficial insects. Wildflower rich verges have usually survived in locations where intensive management of the verge by mechanical means has been difficult, for example due to gradient of slope, or where the soil type and geology restricts the growth of taller, vigorous plants, meaning the intensity or frequency of cutting is reduced. Some of Worcestershire's rarest plant species exist on road verges, for example the only known colony of Deptford pink in the county exists on the A449 road verge. Wildflower rich verges are often all that remains of traditional hay meadows in some parts of the county.

Other notable species that may be found on road verges include the glow worm (*Lampyrus noctiluca*), harvest mouse (*Micromys minutus*), dormouse (*Muscardinus avellanarius*) and slow worm (*Anguis fragilis*).

2.2 Distribution and extent

In Worcestershire the length of road verges managed by Worcestershire Highways totals 8000km. Motorway and trunk road verges, managed by Highways England, add to the resource.

2.3 Protection of the habitat

There is no legislation protecting road verge habitat except in instances where species present on the verge have their own legal protection. In Worcestershire this applies to the Deptford pink, which is protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) and listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2.4 Summary of important sites

Worcestershire has a network of locally-notified Roadside Verge Nature Reserves (RVNR). The purpose of the RVNR system is to identify, protect and manage road verges of significant conservation interest. The system is managed by the Worcestershire County Council (WCC) Countryside Services team in partnership with the WCC Ecology team and Worcestershire Highways. At the time of writing there were 45 RVNRs listed and all are important with specific examples being:

- The RVNR at Hawford, north of Worcester, where the county's only population of Deptford pink is located.
- A cluster of RVNRs around Kidderminster that comprise one of only two meta-populations of tower mustard in the UK. Within Worcestershire tower mustard is now known only from road verges.

3. Current factors affecting the habitat

- Dumping of spoil or fly-tipping.
- Temporary dumping / storage of road-building materials.
- Trenching for mains services.
- Methods used in ditching.
- Car and lorry parking.
- Vehicles including tractors impacting on the verge edge.
- Hedge cutting machinery.
- Use by travellers.
- Pollution and spillage from vehicles.
- Run off and spray containing salt.
- Herbicide application and pesticide drift.
- Over management by adjacent landowners.

- Trampling by horses.
- The spread of non-native or weed species, including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*), oil-seed rape (*Brassica napus*) and ragwort (*Senecio jacobaea*).
- Lack of management leading to invasion by coarse grasses and scrub vegetation on grassland.
- Planting and growth of trees on grassland.
- Planting of cultivated / ornamental plant varieties.
- Reseeding with inappropriate seed mixes.
- New urban developments including road widening.
- Inappropriate cutting regimes.

4. Current Action

4.1 Local protection

Two sites that incorporate road verges are notified as Sites of Special Scientific Interest (SSSI): Cropthorne New Inn (0.2 ha) on the A44 and Burcot Lane Cutting (0.4 ha) at Blackwell near Bromsgrove. Both were notified for their geological interest. At several other sites, including Castlemorton Common SSSI and the Malvern Hills SSSI, the road verge is incorporated where the designation covers land on both sides of the road.

Road verges listed within the RVNR system.

A number of RVNRs are also listed as Local Wildlife Sites (LWS), which gives protection within local planning policy.

4.2 Habitat management and programmes of action

- The adjacent landowner usually owns the land forming the road verge. Worcestershire County Council is the guardian of the public's right to use the road and is generally responsible for the maintenance of the road verge. The maintenance of the ditch, hedgerow and any trees within the hedgerow is the responsibility of the landowner. The primary drivers for road verge maintenance are the safety of the highway user, the integrity of the road surface and the maintenance of drainage structures. Worcestershire Highways and their contractors carry out verge maintenance on all roads in the county apart from motorways and trunk roads, which are the responsibility of Highways England. The biodiversity value of road verges is increasingly a consideration once the above drivers have been met. Worcestershire Highways is actively working with partners to identify and implement revised management regimes and integrate new technology that will facilitate an improvement in the botanical diversity of the whole of the road verge network.

An example of this partnership working is the planned delivery of a pilot project within the Worcestershire portion of the Malvern Hills Area of

Outstanding Natural Beauty (AONB) to trial the removal of cut material from the verge. It is hoped that by reducing nutrient input to the verge the soil conditions and vegetation structure will become more favourable to the growth of wildflowers. The trial will look at the economic viability for the removal of cut material on a greater scale.

- The RVNR scheme in Worcestershire is funded by Worcestershire Highways: management is undertaken by Worcestershire County Council's Countryside Service and a rolling programme of monitoring by the Council's Ecology team. A useful overview of the most recent history of the scheme can be found in a report prepared by Worcestershire Wildlife Consultancy (2013).
- Highways England published a 5-year Biodiversity Action Plan in 2015 and annual reports are published against the delivery of five key outcomes. A Biodiversity Metric tool is being trialled to monitor what will hopefully be positive gains for wildlife habitat on the Highways England-owned estate.
- Wyre Forest District Council and Worcester City Council are sowing annual pollinator mixes on a number of verges and roundabouts within the urban areas of Kidderminster, Bewdley, Stourport and Worcester.

4.3 Survey, research and monitoring

- The last full review of Worcestershire's RVNRs was undertaken in 2013 by Worcestershire Wildlife Consultancy (the previous review, undertaken by the same, was in 1996) and management prescriptions for each brought up to date. The RVNRs are currently monitored on a five-year rolling programme. Another full review of RVNRs is planned for 2019.
- Several road verge sites were targeted by the Worcestershire Flora Project and Plantlife for rare and uncommon plants and surveyed in 1998/99. As well as Deptford pink and tower mustard, other threatened species of interest recorded included bithynian vetch (*Vicia bithynica*), spreading bellflower (*Campanula patula*) and woad (*Isatis tinctoria*). Sites found to support these species were subsequently listed as LWS.

5. Associated Plans

Ancient and Veteran Trees, Urban, Grassland, Hedgerows.

6. Conservation Aim

Enhancement of the biodiversity value of Worcestershire's road verge network is embedded into all highways plans and strategies and is evidenced in the delivery of wildlife-friendly verge management.

7. Conservation Objectives

- Prioritise the re-survey of sites with tower mustard records to confirm current population size and distribution and direct appropriate verge management to the relevant sites

- Undertake a full review of all sites currently listed as RVNRs and those proposed as potential RVNRs
- Maintain bespoke RVNR management and monitoring regime
- Complete the pilot road verge management project in the Malvern Hills AONB and disseminate information about the outcomes and conclusions of the project and recommended next steps for the county
- Work in partnership with Worcestershire Highways to refine and implement a more biodiversity-friendly approach to management of the wider highway verge network
- Newly created or re-landscaped road verges to be seeded with native pollinator-friendly mixes
- Use the Worcestershire Habitat Inventory to identify target areas for road verge survey and enhancement work where verges can form linking corridors or 'stepping stones' between areas of species-rich grassland
- All Local Plans to include policy recognition of the biodiversity value of road verges and the desirability of creating or enhancing species-rich verges

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