North York Moors
Biodiversity Action Plan

Species Rich Road Verges
Habitat Action Plan 2013 – 2017

Compiled by the North York Moors National Park Authority
Objectives

1. To conserve road verges with existing nature conservation value.
2. To restore degraded, formerly flower-rich road verges and ensure their conservation.
3. To create a robust network of road verges of nature conservation value throughout the National Park, by strengthening habitat links between species-rich stretches.
4. To promote this valuable community resource.

Introduction

The growing appreciation of the importance of road verges for nature conservation has corresponded with the realisation that the wildlife value of much of Britain's farmland has been greatly reduced and fragmented by agricultural intensification. Besides being an important grassland or woodland-edge habitat in itself, a sympathetically managed road verge can serve to link fragmented wildlife habitats. Scientific studies illustrate that populations of animals and plants are much less likely to become regionally extinct if they are not isolated from one another. The strengthening of habitat networks to allow dynamic ecosystems to adapt to climate change is an increasingly important nature conservation strategy.

National status

The potential value of road verges in nature conservation is now recognised throughout the UK. Yet despite positive activity in many parts of the country this wildlife resource continues to decline. The reasons for this decline are complex, but are often centered around the reduction or complete cessation of management. Highways authorities who hold the legal responsibility for the management of verges are often restricted to management for safety and public pressure for tidiness in urban areas. In contrast, some stretches can be cut so frequently that plants never have a chance to flower and they provide no cover for wildlife.
Several projects have showcased the possibilities of bringing the verges back into wildlife management with highways authorities’ involvement. Such projects can, however, be prohibitively expensive and vulnerable to changing priorities within the organisations involved. Many districts and National Parks work on a smaller scale with teams of volunteers and charitable organisations to manage selected verges of nature conservation value within their authorities.

**Local Status**

Surveys in 1985 identified around 170 roadside verges of conservation importance within the North York Moors National Park. These verges are extremely varied and include species typical of unimproved grassland, wetland, woodland and moorland. Most wildlife-rich verges in the Park are found in farmland, with the best linked to other fragments of species-rich habitat.

Surveys in 1999 of the verge network showed that the conservation value of around half of the verges had sadly deteriorated. Selected surveys since then have often shown a continuing pattern of decline. Following the national trend, much of this has been due to a lack of management. Unmanaged verges become rank with long, coarse grasses, rosebay willowherb, hogweed, cow parsley and thistle. Where neglect occurs over a number of years the grassland often begins to be shaded out by scrub.

Currently 186 species-rich road verges, a total of 166km, have been identified in and around the North York Moors National Park, many of which contain key species. Species-rich road verges are key habitat networks and are very important links to other valuable habitats, along with the surrounding linear habitats that make up the vergescape, such as hedgerows and field margins. Management works are being undertaken to improve verges and annual monitoring of several of them is in place.

**Local examples**

- Baxtons Lane (SE607847) is a very flower-rich grassland roadside verge which includes oxeye daisy, bird’s-foot trefoil, primroses, and bluebells.
- Farndale verge (SE678920) is a wonderful long moorland verge with the main interest on the east side.
- Modes Bank/Oldstead Bank (SE531807) is a very steep green lane, unsuitable for motor vehicles. It has a rich woodland-edge flora, including the uncommon spurge laurel. It grades into a forestry track, with a diverse grassy verge with yellow rattle, common spotted orchids and lady’s mantle.
- Ridge Lane (NZ 753167) is a damp woodland verge with cuckooflower, opposite-leaved golden saxifrage, sweet woodruff and giant bellflower.

**Legal status**

Several of the North York Moors National Park’s SSSIs contain an important road verge component. Verges may shelter legally protected species such as bats in trees and reptiles and amphibians in dense vegetation. Birds’ nests, which may be in trees, in hedges, or on the ground, are also protected during the breeding season under the Wildlife & Countryside Act 1981 (as amended).
Links to other local action plans

<table>
<thead>
<tr>
<th>Habitat Action Plans:</th>
<th>Species Action Plans:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmland</td>
<td>Bats</td>
</tr>
<tr>
<td>Trees and Woodland</td>
<td>Rare butterflies and moths</td>
</tr>
<tr>
<td>Species-rich grasslands</td>
<td>Moorlands</td>
</tr>
</tbody>
</table>

Threats

- Neglect leading to coarse grasses dominating and scrub, weed and bracken encroachment.
- Over-managing or manicuring of verges leading to reduced species diversity. (If verges are cut too early or too frequently, flower species may be unable to set seed.)
- Salt and grit heaps can have a damaging effect on the verges immediately surrounding them, especially as they are likely to spread out over time, be used as parking places etc.
- Fertiliser run-off and drift from surrounding fields can reduce the species-richness of road verges. Herbicides also affect road verges through direct application or through drift from surrounding fields.
- Road improvements, engineering work on verges and unsympathetic drain maintenance can all damage or destroy sites of value.
- Cuttings that are left on the verge (as is usually the case) can raise nutrient levels, encouraging vigorous grassland species such as nettles and hogweed that out-compete smaller wild flowers. Removal of cuttings is therefore preferable, particularly from verges on richer soils.
- The use of verges to store materials, or park cars, can destroy valuable sites.
- There is no nationally funded grant scheme to encourage appropriate management of roadside verges.

Requirements

- Annual or biannual management of some species-rich verges, to cut vegetation and remove the cuttings.
- Variety of management, with certain areas left long e.g. for invertebrate interest or cut very short to benefit more delicate flowers.
- Pernicious weeds such as creeping thistle and bracken may need to be controlled to prevent their spread into diverse vegetation.
- Scrub should generally be kept from encroaching on the road verge. However in some cases (such as where the road verge is at the edge of an ancient woodland), a diverse scrub-edge zone should be encouraged whilst ensuring the ongoing maintenance of the grassland.
- Where salt use is considered essential, bins should replace heaps (usually at 30m intervals) on all vulnerable verges, or small ditches dug to direct leaching salt onto the road.
- Prevent fertilisers reaching verges and only spot-spray weeds with herbicide where necessary.
- Public promotion through press releases, talks and guided walks to promote the biodiversity value of verges and educate parish councils in particular about the necessary conservation management practices being undertaken.
- Marker posts near villages to promote adjacent wildflower verges and management regimes.
- Re-survey of priority sites every five years.
All utilities companies, highways authorities and others working on verges should have access to maps of important road verge networks and inform the National Park before work is carried out in any of these zones.

Local action

- A biodiversity leaflet, ‘North York Moors National Park Roadside Verges’, was produced and has been sent to all parish councils, volunteers and highway authorities covering the National Park.
- A county-wide Special Interest (SI) Verge Project was launched in 2007, to identify and bring into sympathetic management the species-rich verges across North Yorkshire. In association with this, the National Park Authority has used contractors to undertake limited verge-cutting within selected biodiversity hotspots and organised volunteers to rake up the cuttings on the most valuable stretches. Where appropriate, the NPA liaises with the highways authorities to reconsider cutting regimes on verges they manage.
- The People, Landscape and Cultural Environment (PLACE) education and research centre has set up a team of local ‘verge volunteers’ to monitor the Park’s special interest verges. The information collected helps to target verge management and key species.
- The National Park volunteers play a huge role in road verge management; cutting and raking importance verges along with keeping invasive species such as Himalayan balsam in check. Between 2008 and 2012 there were over 150 volunteer days dedicated to verge management.
- By the end of 2012 177 salt bins had been placed on conservation value road verges, reducing the number of salt heaps.
- The NPA and Howardian Hills AONB Sustainable Development Fund helped to fund a mini-baler for Basics Plus, a local volunteer group, to assist in removing the cuttings from verges and meadows.
- Butterfly Conservation is surveying and monitoring both small pearl-bordered fritillary and Duke of Burgundy butterflies. In 2005 they began a Heritage Lottery-funded three-year project to undertake management work on the habitats where these butterflies breed, including several road verges.

Opportunities

- The NPA played an active role in preparing the ground for the new County Council Highways verge-cutting contract in 2012. The contract takes on board the management measures required for conserving and enhancing the biodiversity of verges.
- Northern Ireland has a project called ‘The Golden Mile’ which encourages the restoration and creation of flower-rich grassland verges and greens within a one-mile radius of each village involved. This project could possibly be rolled out across the region by developing the remit of village caretakers to include local biodiversity work. A similar project is now being trialed in the East Riding of Yorkshire.
- The NPA would like to work in partnership with the AONB and Ryedale District Council on managing SI verges that cross the Park boundary.
What can you do to help?

Land managers:
- Don't use chemical sprays or spread manure directly onto or next to road verges, and try and leave unsprayed buffer zones around the edges of fields.
- If necessary manage pernicious weeds on verges by spot spraying or mechanical means.
- Cut verges if they are overgrown in autumn, and remove the cuttings if possible.
- Avoid cutting flower-rich verges when they are flowering and setting seed in spring and summer, unless it is specifically to control invasive plants.
- Contact the National Park Authority ecology team for a copy of an advice leaflet and possible help with managing flower-rich verges.

Public:
- Monitor your local flower-rich verges whilst out for walks. Contact Dr Margaret Atherden for details: PLACE, York St John University, Lord Mayor's Walk, York YO31 7EX  Tel: 01904 766291 E-Mail: place@yorksj.ac.uk
- Volunteer your time to help with grassland management. Visit the North York Moors National Park website for further details.
- Report notable species to the National Park Authority using the online recording form on the National Park’s website.
- Encourage your local parish to have a village caretaker and where possible manage the village green, verges and common-land grasslands as wildflower meadows.
- Leave wildflowers where they are for others to enjoy.