



## WILDFLOWER VERGE PROJECT



### Barrow, Cotes Road Verge Survey and Management Recommendations

Leicestershire County Council is working with a wide range of Parish Councils and local communities to change the management of selected road verges in order to improve their biodiversity value. The Leicestershire wildlife charity NatureSpot is supporting the project by organising ecological surveys of the verges and by promoting these sites as featured Wild Places on its award-winning website.

Details of this verge together with the species recorded during the survey can be viewed at:

[https://www.naturespot.org.uk/Barrow\\_Cotes\\_Rd\\_verge](https://www.naturespot.org.uk/Barrow_Cotes_Rd_verge)



Mowing of all verges participating in the project should cease between April and August. A narrow visibility strip may continue to be regularly mown alongside the carriageway and footpath.

#### **SURVEY**

The verge surveys are primarily focussed on the grasses and wildflowers to be found growing in the verge, though casual sightings of other wildlife may also be recorded. It is important to identify the grass and wildflower species already present in order to assess the quality of the grassland habitat before deciding on ongoing management.

Where a hedge is present at the back of the verge, or when individual trees are present, these species are included in the survey as they generally add to the wildlife value. The shade and shelter they provide often supports species of plants and animals that prefer these conditions, adding to the overall diversity.

The species listed in appendix 1 includes all the plants and animals identified during the survey. Any species that are used as indicators when assessing Local Wildlife Site designation are highlighted in green. These species, plus other desirable meadow plant species, are given a score that enables the verge as a whole to be rated as to its current quality as meadow grassland. This score helps us to assess the quality as low, medium or high and to provide management recommendations based on this.

It is important to note that the meadow score and quality rating only refers to the plant composition and not the overall biodiversity value of the verge. All verges left to grow provide excellent wildlife habitat compared to the short-mown alternative.

All species records from the survey have been submitted through NatureSpot's website and have been checked by an expert. The records now form part of the Leicestershire and Rutland species database and are shared with local and national recording schemes, the Leicestershire and Rutland Environmental Records Centre and the National Biodiversity Network.

#### **SURVEY DATE**

The survey of this verge was carried on on 8th June by Catherine Hand (NatureSpot).

#### **SURVEY FINDINGS**

The survey revealed a number of interesting plant species that are often found in quality meadow. These include Autumn Hawkbit, Black Medick and Red Clover. The overall species number was 32 flora species which represents a good diversity for a verge of this size.

#### **SURVEY SUMMARY**

Floral diversity: **32**

Local Wildlife Site indicator species: **2**

Meadow quality score: **13**

Meadow quality: **Medium**

#### **MANAGEMENT RECOMMENDATION**

This verge is a medium quality meadow with a good species diversity which provides valuable wildlife habitat due to the tall and dense vegetation. It could be managed solely by altering the mowing regime and removing the cuttings, which over a few years would reduce soil fertility and encourage a more diverse and flowery grassland habitat.

If seed or plug plants are added then this should be done in moderation and only in small areas. The verge is grass-rich so it would be helpful to introduce Yellow Rattle which should help to reduce grass domination and promote the growth of more wildflowers.

Appendix 2 describes management options in more detail.

## Appendix 1 – species recorded during the survey

Any highlighted in green are notable as indicator species for Local Wildlife Sites

Taxon	Common name	Taxon group	Meadow Quality Score
<i>Hypochaeris radicata</i>	Cat's-ear	Wildflowers	1
<i>Scorzoneroide autumnalis</i>	Autumn Hawkbit	Wildflowers	2
<i>Veronica persica</i>	Common Field-speedwell	Wildflowers	1
<i>Medicago lupulina</i>	Black Medick	Wildflowers	1
<i>Taraxacum officinale</i> agg.	Dandelion	Wildflowers	0
<i>Alliaria petiolata</i>	Garlic Mustard	Wildflowers	0
<i>Urtica dioica</i>	Common Nettle	Wildflowers	0
<i>Geum urbanum</i>	Herb Bennet	Wildflowers	0
<i>Vicia sativa</i>	Common Vetch	Wildflowers	1
<i>Rumex obtusifolius</i>	Broad-leaved Dock	Wildflowers	0
<i>Trifolium pratense</i>	Red Clover	Wildflowers	2
<i>Plantago lanceolata</i>	Ribwort Plantain	Wildflowers	1
<i>Galium aparine</i>	Cleavers	Wildflowers	0
<i>Lamium album</i>	White Dead-nettle	Wildflowers	0
<i>Jacobaea vulgaris</i>	Common Ragwort	Wildflowers	0
<i>Foeniculum vulgare</i>	Fennel	Wildflowers	0
<i>Anthriscus sylvestris</i>	Cow Parsley	Wildflowers	0
<i>Bellis perennis</i>	Daisy	Wildflowers	1
<i>Trifolium repens</i>	White Clover	Wildflowers	1
<i>Cirsium arvense</i>	Creeping Thistle	Wildflowers	0
<i>Holcus lanatus</i>	Yorkshire-fog	Grasses, Rushes & Sedges	0
<i>Dactylis glomerata</i>	Cock's-foot	Grasses, Rushes & Sedges	0
<i>Alopecurus pratensis</i>	Meadow Foxtail	Grasses, Rushes & Sedges	1
<i>Arrhenatherum elatius</i>	False Oat-grass	Grasses, Rushes & Sedges	0
<i>Poa pratensis</i>	Smooth Meadow-grass	Grasses, Rushes & Sedges	1
<i>Bromus sterilis</i>	Barren Brome	Grasses, Rushes & Sedges	0
<i>Bromus hordeaceus</i>	Common Soft-brome	Grasses, Rushes & Sedges	0
<i>Holcus lanatus</i>	Yorkshire-fog	Grasses, Rushes & Sedges	0
<i>Fraxinus excelsior</i>	Ash	Trees, Shrubs & Climbers	
<i>Hedera helix</i>	Ivy	Trees, Shrubs & Climbers	
<i>Acer campestre</i>	Field Maple	Trees, Shrubs & Climbers	
<i>Prunus spinosa</i>	Blackthorn	Trees, Shrubs & Climbers	
<i>Coccinella septempunctata</i>	7-spot Ladybird	Beetles	

## **Appendix 2 - Management of Verges**

### **VERGES AS WILDLIFE HABITAT**

Grassland road verges represent a habitat that has suffered a devastating decline over the last century. 98% of traditional wildflower meadows have disappeared in Britain so the plants and animals that rely on this habitat have very few places left where they can thrive. Road verges, if appropriately managed, can help to reverse this trend and make an important contribution to supporting local biodiversity.

Regularly mown verges offer very little to wildlife. Few plants are able to flower so there is little food for nectar-feeding insects such as bees and butterflies. The exposed ground dries out creating a very inhospitable environment for most invertebrates. Without these creatures the food chain collapses so there are fewer birds and mammals such as hedgehogs.

The answer is simple, allow the grassland verge to grow. Taller vegetation offers cover, feeding opportunities and a range of micro-habitats that are not available in regularly mown grass. In addition, many more plants can flower and offer nectar to pollinators such as bees and butterflies.

In general, the more species of grasses and wildflowers that grow in the verge, the better it is for wildlife. Many insect species are specialised to feed on just one or two types of plant so the more diverse the flora the more wildlife it supports. The verge surveys have shown that in most cases there is a surprisingly diverse flora already present. By simply allowing the verge flora to grow during the Spring and Summer they will produce a valuable wildlife-rich grassland habitat.

### **MOWING REGIME**

The simplest and most important action is to stop mowing between April and August. This allows the grassland to grow, flower and set seed. Ideally in early September it should then be cut short and the cuttings left for a few days to dry and drop their seeds.

Many mowing machines will struggle to cut long vegetation so a strimmer or a reciprocating blade mower is probably needed. Traditionally meadows were cut by hand with a scythe so this could be an option if anyone is keen to learn this skill.

Whilst an annual cut will help the plant diversity it does deprive other wildlife of important cover and over-wintering sites. The ideal solution is therefore to only cut half the verge each year leaving the other half as tall vegetation, then alternating the areas the following year.

### **REMOVING THE CUTTINGS**

The second most important action is to remove the cuttings after a few days. This is vital to prevent the build up of a mat of dried stems which will smother the smaller plants. It will also enrich the soil as it gradually decomposes, the opposite of what is desirable!

The types of plants growing on the verge is largely determined by the soil. Most verges are rich in nutrients, particular nitrogen, which allows large plants such as Cow Parsley, Nettle, Docks and False Oat-grass to dominate. Whilst these species do support a lot of wildlife, they also out-compete the smaller species

leading to a reduced floral diversity overall. By removing the cuttings the soil fertility will gradually fall and a wider range of flower and grass species will naturally develop over several years.

Disposing of the cut vegetation can be a challenge. Once dry it is effectively hay so is ideal food and bedding for horses, rabbits and other pets. Local residents with these animals may be keen to collect the hay from the verge, especially if raked into a convenient pile. Failing this it can be composted simply by piling it into a heap. It is unlikely that the verge itself will be suitable for this so it is probably necessary to find a suitable site nearby. The cuttings can also be taken to your nearest Waste and Recycling Site for treatment as 'green waste'.

Note: if the verge contains Ragwort, it may be worth hand-pulling these before cutting so they do not get mixed into the hay.

### **TO SEED OR NOT TO SEED?**

Whilst it may be possible to add more floral diversity through seeding and/or plug planting, this is an expensive and labour-intensive process that is not guaranteed to work. Many species added artificially tend not to thrive and, in many cases, disappear within 2-3 years. The most cost effective, sustainable and generally most successful way to improve grassland habitat for wildlife is simply to change the mowing regime.

If seeding is desirable, care should be taken to source the seed from a reputable source with a mix of native wildflowers and grasses suitable for the soil. We strongly recommend using Emorsgate's [EM2 meadow mix](#) (4g per sq metre). To add some first year colour, mix in seed from the [EC1 cornfield mix](#) (2g per sq metre). Note that the cornfield species are annuals and will largely disappear after flowering in year 1, to be replaced by the perennials in the main EM2 mix.

To prepare the ground for seeding, the verge should be mown, then scarified (partially disturbed to expose some bare soil). This can be done by vigorous raking. Chemical herbicides should not be used. Seeding should take place in Autumn as many seeds require the cold chill of winter to mature ready for germination in the Spring.

Yellow Rattle is a common plant in many wildflower meadows and is generally desirable as it parasitises grasses so they weaken and become less dominant, leaving space for more wildflowers. This species isn't included in the seed mix so is best obtained separately. It needs to be sown fresh in Autumn. It doesn't usually do well as a plug plant because it needs grasses to feed on as it grows.

### **PLUGS AND BULBS**

An alternative to seeding is to plant 'plugs' of pre-grown wildflower seedlings into a small bare area of the verge in Spring. This can be easier and more effective than sowing seed. Black Knapweed, Lady's Bedstraw and Ox-eye Daisy are all relatively easy to establish as plug plants.

There are hardly any native meadow species that grow from bulbs and it is generally not appropriate to plant any bulbs in the verges. Daffodils, Hyacinths and the like are garden plants and do not have a place in a wildflower meadow.

**FURTHER HELP**

If you would like any help or advice with managing your verge then please contact:

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