



## WILDFLOWER VERGE PROJECT



### East Goscote, Long Furrow 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 undertaking ecological surveys of the verges, meeting residents and parish councillors on site and promoting these sites as featured Wild Places on its award-winning website.

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

[https://www.naturespot.org.uk/East\\_Goscote\\_Long\\_Furrow\\_verge](https://www.naturespot.org.uk/East_Goscote_Long_Furrow_verge)

This feature page also displays any species records and images recorded by local residents so it would be helpful to publicise this to the community and encourage others to add to the findings.



#### **SURVEY AND DATA**

The verge surveys are primarily focussed on the grasses and wildflowers to be found growing in the verge, though casual sightings of other wildlife are also recorded.

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 and to provide management recommendations based on this.

It is important to note that the meadow 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 visit to this verge was carried on on 2<sup>nd</sup> August 2022 by David Nicholls (NatureSpot). Cllr David Cannon of the Parish Council was also present.

#### **SURVEY FINDINGS**

The verge site extends approximately 35m either side of a bus shelter on Long Furrow. It is around 3m wide and backed by a mature hedge with woodland behind. A few trees from this woodland overhang the verge.

The area was brought into the biodiversity project in 2021 and was initially surveyed by NatureSpot in June 2021. Subsequently the verge was cut in late summer and the arisings removed before being scarified and sown with a mixture of annual and perennial native wildflower seed purchased from Naturescape. The verge was resurveyed in 2022 to assess the impact of this treatment and to advise on future management.

The lack of rain and later survey date made a direct comparison with the 2021 findings difficult, nevertheless most of the species found previously were still present, plus a few introduced from the seeds. Four seeded species were clearly present: Yellow Rattle, Corncockle, Cornflower and Common Poppy, though only a very few plants of the latter two were found. The Yellow Rattle has established well and should continue to thrive, helping to weaken the grass growth on the species it parasitises. There was little evidence of perennial plants from the seed introduction, though the Phleum may have originated this as it is not on the 2021 species list. However some perennial wildflowers can take two years to grow to maturity so it is possible that additional seeded species will appear in 2023.

The presence of large and dominating grasses such as False Oat-grass, Cock'sfoot and Yorkshire Fog indicates high fertility in the soil. These species tend to out-compete many smaller wildflowers and leave the sward very 'grassy'. Though the habitat this creates is still of good wildlife value, it can be enhanced further by diversifying the plant community. To reduce the grass domination, soil fertility needs to be reduced and this is achieved by removing the cuttings each year following the annual mow/cut. Yellow Rattle also helps by reducing grass vigour and creating space for other plants.

Overall, 33 flowering plant species were recorded (with an additional 5 recorded in 2021). Seven of these species are found in quality grassland meadow habitats so there is a good base to build on.

The hedge bordering the verge at the rear adds additional habitat value. This is predominantly Hawthorn but a number of trees from the woodland behind overhang both the hedge and the verge, these include Osier, Crack Willow, Grey Alder, Wild Cherry and Ash.

### **SURVEY SUMMARY**

Floral diversity: **33** (38 including additional species recorded in 2021)

Local Wildlife Site indicator species: **1** (seeded Yellow Rattle)

Desirable meadow species: **7**

Meadow quality: **Medium**

### **MANAGEMENT RECOMMENDATION**

Continuation of the existing mowing regime with removal of the cuttings in September is the most important action. This will help reduce soil nutrient levels and also avoid a build-up of a thatch of dead vegetation, helping to encourage greater plant diversity.

Further seeding isn't recommended but if considered desirable, to add further colour and increase diversity, a few wildflower plug plants could be added. These should be British sources plants sourced from a reputable supplier. Black Knapweed, Oxeye Daisy and Lady's Bedstraw are good choices. Only a few plants should be introduced.

The hedge at the rear of the verge adds a valuable additional habitat. Ideally a 0.5m strip between the hedge and the verge grassland should be treated differently and only cut every three years. The species here thrive in the partial shade and will provide a valuable over-wintering site for invertebrates.

The overhanging tree branches will bring increasing shade and limit the growth of the grassland species. Ideally these would be trimmed back.

Daffodils or any other bulbs should not be planted as these are not appropriate species in a natural meadow.

Some residents have complained about the verge appearing untidy and being a litter trap. A compromise here is to regularly mow a 60cm strip alongside the road edge. This brings two benefits: it gives the message that the unmown grassland has been left purposefully and not through neglect, it also helps to 'frame' the meadow and improves the aesthetic.

Ideally the verge should be publicised locally as much as possible to generate community interest in the project and to help challenge the out-dated view that all grassland should be kept 'tidy' by regular mowing.

Appendix 2 explains the wildlife benefits of letting the verges grow and also describes management options in more detail.

## Appendix 1 – species recorded during the survey

Any highlighted in green are notable as indicators of quality meadow grassland. Those highlighted in darker green are indicator species for Local Wildlife Sites designation.

Abundance key: D (dominant), A (abundant), F (frequent), O (occasional), R (rare)

\*Seeded species

Group	Species	Common name	Abundance
Wildflowers	<i>Achillea millefolium</i>	Yarrow	F
Wildflowers	<i>Agrostemma githago</i> *	Corncockle	A
Wildflowers	<i>Anthriscus sylvestris</i>	Cow Parsley	O
Wildflowers	<i>Bryonia dioica</i>	White Bryony	R
Wildflowers	<i>Calystegia silvatica</i>	Large Bindweed	O
Wildflowers	<i>Centaurea cyanus</i> *	Cornflower	R
Wildflowers	<i>Geum urbanum</i>	Herb Bennet	O
Wildflowers	<i>Heracleum sphondylium</i>	Hogweed	O
Wildflowers	<i>Papaver rhoeas</i> *	Common Poppy	R
Wildflowers	<i>Plantago lanceolata</i>	Ribwort Plantain	O
Wildflowers	<i>Potentilla reptans</i>	Creeping Cinquefoil	O
Wildflowers	<i>Ranunculus repens</i>	Creeping Buttercup	O
Wildflowers	<i>Rhinanthus minor</i> *	Yellow-rattle	A
Wildflowers	<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
Wildflowers	<i>Rumex sanguineus</i>	Wood Dock	O
Wildflowers	<i>Taraxacum officinale</i> agg.	Dandelion	F
Wildflowers	<i>Trifolium repens</i>	White Clover	O
Wildflowers	<i>Urtica dioica</i>	Common Nettle	F
Grasses, Rushes & Sedges	<i>Arrhenatherum elatius</i>	False Oat-grass	A
Grasses, Rushes & Sedges	<i>Dactylis glomerata</i>	Cock's-foot	F
Grasses, Rushes & Sedges	<i>Festuca rubra</i>	Red Fescue	O
Grasses, Rushes & Sedges	<i>Holcus lanatus</i>	Yorkshire-fog	F
Grasses, Rushes & Sedges	<i>Lolium perenne</i>	Perennial Rye-grass	A
Grasses, Rushes & Sedges	<i>Phleum bertolonii</i>	Smaller Cat's-tail	F
Grasses, Rushes & Sedges	<i>Poa trivialis</i>	Rough Meadow-grass	F
Trees, Shrubs & Climbers	<i>Alnus incana</i>	Grey Alder	
Trees, Shrubs & Climbers	<i>Crataegus monogyna</i>	Hawthorn	
Trees, Shrubs & Climbers	<i>Fraxinus excelsior</i>	Ash	
Trees, Shrubs & Climbers	<i>Prunus avium</i>	Wild Cherry	
Trees, Shrubs & Climbers	<i>Rubus fruticosus</i> agg.	Bramble	
Trees, Shrubs & Climbers	<i>Salix euxina</i> x <i>alba</i> = <i>S. x fragilis</i>	Hybrid Crack-willow	
Trees, Shrubs & Climbers	<i>Salix viminalis</i>	Osier	
Trees, Shrubs & Climbers	<i>Sambucus nigra</i>	Elder	
Butterflies	<i>Pyronia tithonus</i>	Gatekeeper	
Beetles	<i>Apion frumentarium</i>		
Moths	<i>Chrysoteuchia culmella</i>	Garden Grass-veneer	
Grasshoppers & Crickets	<i>Leptophyes punctatissima</i>	Speckled Bush-cricket	

## **Appendix 2 – General Management of Verges**

### **VERGES AS WILDLIFE HABITAT**

Grassland road verges represent a habitat that has suffered a devastating decline over the last century. 97% 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. Even an unmown grassland without flowers offers excellent wildlife habitat.

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. 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 part of 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 often better 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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David Nicholls, NatureSpot: [dnicholls@naturespot.org.uk](mailto:dnicholls@naturespot.org.uk)