

COUNCIL
27TH AUGUST 2020

Report of the Director of Community & Environmental Services

BIODIVERSITY OF ROAD VERGES AND PUBLIC OPEN SPACE

PURPOSE OF REPORT

This report outlines the potential to increase biodiversity of the road verges and public open spaces, managed by Derbyshire Dales District Council.

RECOMMENDATIONS

1. To set up a Working Group made up of: Members; Officers from the Community & Environmental Services team; Members of our Clean & Green Team. The Working Group would research and develop the project.
2. To continue discussions with Derbyshire County Council on changes in the management of the rural road verges to increase their biodiversity within the District.
3. To work with Parish and Town Councils in the identification and management of wildflower urban road verges.
4. To investigate and trial changing the management of urban road verges that already have some wildlife interest to increase both the number of species and the population of wildflowers, using options 2.
5. To carry out a trial of the creation of wildflower verges using options 3 and 4.
6. To raise awareness of these verges amongst residents of Derbyshire Dales and to ask for their help in identifying verges rich in wildflowers.
7. To investigate and trial increasing the biodiversity in our parks and open spaces by either creating wildflower areas or changing the management of grassland.

WARDS AFFECTED

All

STRATEGIC LINK

Increasing biodiversity across the district through the creation of wildflower road verges and wildflower areas within our parks and open spaces supports the delivery of the District Councils priority 'Place'.

1 BACKGROUND

- 1.1 The UK has lost 97% of its wildflower meadows since the 1930s (Natural England) and those remaining meadows are often isolated. Road verges provide important corridors for plants and animals by linking these wild spaces, they are also habitats for plants, invertebrates, small mammals and birds.
- 1.2 Over the last two decades road verges have declined in biodiversity due to changes in management (Plant life). They are either mowed too regularly, at the wrong time

of year or they have been neglected and developed tall, coarse vegetation and scrub.

- 1.3 The conservation charity Plantlife have been campaigning since 2013 to change the way road verges are managed, for the benefit of wildlife. In 2017 they produced guidelines to help local authorities achieve this. With over 300 local authorities having declared Climate Emergency an increasing number have taken up some or all of their recommendations.
- 1.4 Community and Environmental Services have received a number of requests from residents in the past few years to reduce the number of cuts we make to the road verges to allow plants to flower.
- 1.5 Although this project is primarily looking at native wildflowers from an ecological point of view, plants also have other environmental benefits. Recent studies (Chris Smith, Goldsmith University) have revealed that some plants can help in reducing pollution. A few have the ability to take up pollutants from the soil, particularly heavy metals or they can absorb gaseous pollutants into the leaves but many more are able to trap particulates on the fine hairs on the leaves. Some of these plants are natives or are of benefit to pollinating insects. These plants could be of interest where the planting is near housing or public open spaces particularly play areas.

2 REPORT

DDDC Road Verge Management

- 2.1 Derbyshire County Council (DCC) are responsible for all the road verges within the Derbyshire Dales and fund DDDC to manage the verges within the District to specified standards.
- 2.2 The verges are divided into rural and urban verges:-
 - 2.2.1 *Rural Verges:* DCC specify a 1m wide strip cut at the road edge, once twice a year and the rest is left uncut, then every three years the whole width is cut. The work is carried out by contractors between May and the end of October.
 - 2.2.2 *Urban Verges:* DCC specify these verges are cut at least five times per year but they currently pay for six cuts. However, the District Council aims to mow eight or nine times per year or approximately every three weeks between April and the end of September. DCC give the District Council more discretion on how we manage these urban verges.
 - 2.2.3 DCC have identified 16 road verge reserves with the Derbyshire Dales, the majority are in the northern area. The management of these verge reserves varies slightly depending on the species of plants but the majority are down to be cut once a year in September and cutting removed. There are a few where one cut in three years is sufficient but any encroaching scrub is removed. Any new verge reserves are to be assessed by Natural England or Derbyshire Wildlife Trust.

Managing Wildflower Road Verges

- 2.3 There are a number of options to increase the biodiversity of road verges which are outlined below. Improving the number of plant species and enabling them to flower and set seed will provide food for pollinating insects, seed eating small mammals and birds and then for other species further up the food chain.

Option 1

- 2.4 Continue to cut a 1m strip at the edges of the road verges once or twice a year for rural verges but cut the rest of the verge once a year in September. This will allow the plants to flower and set seed. The disadvantage is where there is tall vegetation there would be a build-up of this dead plant material, thatch which will inhibit the germination of the wildflower seed and increase soil fertility that encourages the growth of coarse rank vegetation. Although it is an improvement on the existing regime.
- 2.5 This option is suitable for the rural roads in general and in the urban verges where vegetation is short as leaving long cut vegetation lying on and around the verge will too untidy in urban areas and may lead to more complaints.

Option 2

- 2.6 The same cutting regime as above but the cut vegetation is removed to allow the germination of the seeds and to reduce the soil fertility over time.
- 2.7 This is the ideal management regime for road verges and is the one recommended by Plant life. The cuttings can be removed either by hand with help from Parish or Town councils or from local interest groups or by using a mower that collects as it cuts. DDDC doesn't have such a machine so would need to either buy or hire it. This extra work and cost means that it is only suitable to those verges with the greatest biodiversity, where there is the greatest impact or there is community interest.
- 2.8 A local example is the orchid verge in Middleton by Wirksworth. It is a species rich verge that includes common spotted orchids. The verge is cut early April and then left uncut until mid-August once the orchids and other plants have set seed. The cuttings are raked up by the Parish Council Caretaker and bagged up for the Clean & Green Team to remove, see Appendix 1.

Option 3

- 2.9 Wildflowers grow and thrive in areas where they are able to compete with grass. We can encourage this by sowing seeds from the Yellow Rattle plant. Yellow Rattle is a semi parasite on grass and weakens it by taking nutrients, it is also a native wildflower so is beneficial to pollinators. Once the Yellow Rattle takes hold and the amount of grass is reduced then the existing wildflowers will be able to spread and new ones will colonise and spread throughout the verge.
- 2.10 This option could be used for verges that have some wildflowers but are dominated by grass. It has been used extensively in meadow management to reduce the growth of grass and Dorset County Council has sown it on verges on certain junctions to reduce the growth of grass and enable better visibility. There does need to be some preparation of the verge in order to create bare patches to sow the

seeds into. This is suitable for both rural and urban verges and parks and open spaces.

Option 4

- 2.11 Where there is very little in the way of wildflowers it is possible to create a wildflower verge or area within a green space. The key to success is to reduce soil fertility which allows the wildflowers to successfully compete with grass and other vegetation. This can be achieved by the removal of existing turf and much of the topsoil or by adding suitable subsoil, following which an appropriate seed mix is sown, preferably from a local source. An alternative to reducing soil fertility is to remove the turf but to sow a cornflower mix containing poppies, cornflowers, corn cockles and corn marigold. This will give an instant colour and impact but this method does tend to require additional seeds added each year, see appendix 2. The perennial wildflowers won't need further seeding if done correctly in the first year.
- 2.12 This is more suitable for urban verges or in the creation of new road verges and in parks and open spaces. As Derbyshire Dales has quite a distinct local flora it is recommended that we use plant seeds native to the area and preferably from a local seed source. Once established wildflower verge or area it will require cutting just once a year in September.
- 2.13 There are costs for each of these options but these can be reduced by developing partnerships with Parish and Town Councils and local interest groups. Also urban wildlife verges will only need to be cut once a year instead of the eight or nine times as at present. There are a number of Local Authorities with highway responsibility that manage their verges for wildflowers which either have made savings or where there is no cost extra.

Wildlife Areas with Parks and Open Spaces

- 2.14 Our parks and open spaces are already home to wildlife, trees, wildflowers, invertebrates, birds and small mammals. There is, however, scope to do so much more. We have large areas of short mown grass that are ecological deserts and, while these areas are important for recreation, there is enough space to give some over to provide habitats to our local wildlife. This may entail:-
- leaving areas of vegetation to grow long to allow the existing plants to flower;
 - creating wildflower meadows within short mown grass and planting native plant bulbs such as blue bells under trees;
 - planting trees.
- 2.15 We have already left areas uncut in some of our open spaces. The most successful is Northwood Recreation Ground in Darley Dale. However, it would be more successful in terms of the number of wildflowers if it was cut once a year or at least every three years and the cut vegetation removed.
- 2.16 In the parks and open spaces, non-native pollinators can be added to the mix of plants and seeds and even plants that reduce pollutants.

The Way Forward for Wildflower in Verges and Open Spaces: Year 1

Working Group

2.17 Set up a Working Group to research and develop this project. The Group would be made up of Members, Clean & Green Team and Community Development Officer. The group will need to consult with other organisations such as DCC and Derbyshire Wildlife Trust.

2.17.1 *Road Verges:* This summer three urban verges have been identified as having wildflower interest and are suitable to managing as such on a trial basis. We are not looking at rural verges at the moment because this would require agreement from DCC due to additional safety concerns of these faster roads. It was hoped to have a verge in each of the three regions in the District but, due to the short notice, the only verges identified so far are two in Matlock and one in Wirksworth. However, the Clean & Green cutting teams have been issued with an identification sheet of the most common roadside wildflowers and we hope they will be able to identify other wildflower road verges during their work this year.

2.17.2 The aim of the trial is to judge the public reaction in leaving the verges uncut until September and from our point of view that the verges don't cause an obstruction to vehicles or pedestrians and that we can maintain them successfully.

2.17.3 *Parks and Open Spaces:* Carry out a trial to increase the biodiversity in three of our parks and open spaces. The sites chosen for this year are:

- Ashbourne, Fish Pond Meadow
- Bakewell Recreation Ground
- Hall Leys Park, Broadwalk

2.17.4 Each area will be relatively small but have the potential to be extended if successful. The main factors in judging their success is the resulting wildflowers, public perception and the cost to create and maintain them.

The Way Forward for Wildflower in Verges and Open Spaces: Year 2

Road Verges

2.18 Work with Parish and Town Councils and local residents to identify suitable road verges that either already have wildflowers or the potential to create a wildflower verge and discuss with DCC any new additions to their road verge reserves and changes to management of rural and urban verges.

Parks and Open Spaces

2.19 If the trial areas are successful then look to extend the wildlife areas within the three parks and identify potential wildlife areas in other parks and open spaces.

2.20 Discuss with the diocese leaving wildlife areas within church grounds we manage.

2.21 Develop partnerships in maintaining the wildflower road verges and parks with Parish and Town Councils, local voluntary interest groups and schools.

- 2.22 Consider the financial impact of this project on savings and the costs of additional equipment and staff time.

The Way Forward for Wildflower in Verges and Open Spaces: Year 3

- 2.23 Evaluate the results of the project in increasing the biodiversity of road verges, parks and open spaces and gauge the public's reaction together with the costs involved which will be used to decide the future of this project

3 RISK ASSESSMENT

3.1 Legal

DCC must be consulted on any changes of management as they own and are ultimately responsible for the road verges. Road safety is paramount so any changes must ensure that there is still good visibility for vehicles and pedestrians. As long as Road Safety is the primary consideration then the legal risk is low.

3.2 Financial

Any changes to the management of road verges and parks & open spaces may involve a change in cost. Although there will be an initial cost when creating a wildflower verge or sowing yellow rattle seeds, these verges will require considerably less cuts thereafter so there may be a saving long term. The financial risk is, therefore, assessed as low.

4 OTHER CONSIDERATIONS

In preparing this report, the relevance of the following factors has also been considered: prevention of crime and disorder, equalities, environmental, climate change, health, human rights, personnel and property.

5 CONTACT INFORMATION

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6 BACKGROUND PAPERS

None

7 ATTACHMENTS

Appendix 1 – Examples of wildflower road verges
Appendix 2 – Examples found growing on road verges in Derbyshire Dales