

BIODIVERSITY TASK GROUP REPORT

MARCH 2019

1. INTRODUCTION

1.1. In June 2018 a motion was unanimously carried at Gloucestershire County Council's (GCC) Full Council meeting to set up a working group to look at protecting and encouraging biodiversity in Gloucestershire. The ambitions of the task group were as follows:

- Work with districts, towns and parishes to develop highways management systems that protect and support biodiversity in Gloucestershire.
- Review the GCC highways and biodiversity guidance for Gloucestershire, taking into consideration Plantlife's Road Verges and Wildlife Management Guidelines: http://plantlife.love-wildflowers.org.uk/uploads/documents/Road_Verge_Campaign_full_guidelines_2015.pdf
- Embed action points into highway management contracts which give contractors clear instructions and communicate expectations. For example, the pro-active management of registered conservation verges and careful monitoring of pesticides.
- Look at best practice examples, picking out some key options for trial in Gloucestershire to consider their effectiveness, both from an environmental and cost point of view.

1.2. MEMBERSHIP

Councillors Rachel Smith, Lesley Williams, Paul Hodgkinson, Suzanne Williams, Shaun Parsons and Terry Hale.

Councillor Rachel Smith was appointed as chair.

1.3. MEETINGS

At the first meeting of the group, it was decided that the final objective was to set up a public workshop to explore biodiversity in Gloucestershire with other local authorities and ecological groups.

Members met with officers from GCC to understand what the Council already practised to promote biodiversity and to scope what form the workshop would take.

Members agreed that the main focus of the task group's work should be the management of road verges (grass cutting).

2. BACKGROUND

2.1. At the Council meeting in June, it was noted that in 1935 almost 40% of the Cotswolds landscape was covered with wildflower-rich grassland. Since then, unimproved grassland sites have fallen to just 1.5% of the area of the Cotswolds.

It was further noted that:

- That thousands of species are at risk of extinction due to habitat loss.
- That the loss of biodiversity is having serious consequences for the resilience of ecosystem functions on which our communities and countryside depend.
- With the loss of lowland meadows and pastures across the UK, grassy road verges in particular offer vital refuges for plants and wildflowers.

- 2.2. GCC officers advised members that grass cutting falls under the highways maintenance contract. This contract is currently held with Amey but is due to move to Ringway in April this year. In the new contract, Ringway have made a commitment to bring together operational experience and access to international best practise and innovation to robustly manage environmental aspects and introduce forward-thinking initiatives.
- 2.3. As part of the Council's statutory duty to conserve biodiversity under the Natural Environment & Rural Communities Act 2006, a 'Gloucestershire Highways & Biodiversity Guidance' has already been produced but needed some updating.

The objectives of this are as follows:

- To raise awareness of biodiversity matters affecting highways work;
 - to ensure highway activities operate within wildlife law;
 - to reduce the extra costs and delays from not identifying biodiversity issues at the earliest appropriate stage; and
 - to set out practical and realistic activities that will contribute to the protection and enhancement of biodiversity.
- 2.4. Officers advised that grass cutting by the Council is primarily carried out for safety reasons on the highway which includes; visibility at junctions and bends, preventing traffic signs and bollards becoming obscured and to provide safe refuge. In addition, management allows the control of brushwood and scrub as well as preventing the spread of noxious weeds and reducing fire risk.
- 2.5. Verges are currently cut annually in May with a 1.2 metre swathe and will include all visibility swathes. Visibility areas then receive a second cut later in the year (usually September/October), depending on growing conditions.
- 2.6. GCC is partnered with some district, borough, town and parish councils who undertake their own grass cutting, often for aesthetic reasons.
- 2.7. GCC and Gloucestershire Wildlife Trust (GWT) coordinate efforts to identify and protect verges, but only for significant wildlife/community value in the County. Some roadside verges are of botanical significance, supporting remnant wildflower assemblages as well as habitat for butterflies and bees; some of which are nationally scarce. Verges, although mainly grassland, also provide hedgerow and ditch habitats which support other declining species.

2.8. There are currently 108 Designated Conservation Road verges.

3. BIODIVERSITY WORKSHOP

3.1. On 12 January 2019, the task group held a 'Biodiversity Workshop' at GCC to which they invited a selection of local parishes, district councils and ecological groups. The aim of which was to assist the task group in producing recommendations to help the Council better protect and support biodiversity in Gloucestershire and if possible, also save costs in managing verges.

3.2. Attendees were as follows:

- Cllr Lesley Williams (chair) – GCC
- Cllr Suzanne Williams – GCC
- Cllr Paul Hodgkinson – GCC
- Cllr Terry Hale – GCC
- Cllr Shaun Parsons – GCC
- Bob Skillern – Area Highways Manager at GCC
- Gary Kennison – Principal Ecologist at GCC
- Dr Gareth Parry – Gloucestershire Wildlife Trust
- Elin Tattersall – Gloucestershire Rural Community Council
- Cllr Robert Scott – Maisemore Parish Council
- Cathy Beeching – Environment Agency
- Mark Connelly – Cotswold Conservation Board
- Mike Dando – Stroud Town Council
- Val Bourne – Cold Aston
- Diana Ray – Living Green
- Jo Kirby – Cold Aston
- Roger Jones – Cold Aston
- Kate Petty – Plantlife
- Ben McCarthy – Plantlife
- Jenny Phelps – Farming & Wildlife advisory group
- Charlotte Marshall – Farming & Wildlife advisory group
- Dr Phil Sterling – Butterfly Conservation (Ex- Dorset County Council)
- Giles Nicholson – Dorset County Council
- Rik Rolfe – Bioscience team at the University of Gloucestershire
- Cllr Andrew Cooley – Maisemore Parish Council
- Cllr Chris McFarling – Forest of Dean District Council

3.3. The workshop agenda was split into 3 key areas. Each section contained presentations from selected attendees, which were followed by a question and answer sessions.

3.4. SECTION 1: VERGE MANAGEMENT FOR BIODIVERSITY NOW AND ASPIRATIONS FOR THE FUTURE

3.4.1. This section addressed the question; 'Where are we now'?

- 3.4.2. First, GCC's Highways Manager explained the role of the highways authority for biodiversity, followed by the Principal Ecologist who gave an overview of the Council's current biodiversity policy, both as outlined in section 2.
- 3.4.3. Second, the GWT followed to further explained the Council's legal duty to protect biodiversity, why there is a reluctance from the public to engage and started to explore the question, 'what could we do better'.
- 3.4.4. GWT informed the group that the UK is one of the most nature-depleted countries in the world, and there are lots of components involved in making this better, such as:
- a more efficient use of resources and use of sustainable energy in relation to transport and infrastructure;
 - promoting active travel; and
 - embedding green infrastructure into thinking and planning for future development and regeneration.
- 3.4.5. A link was explored between highways and a broader public benefit. GWT suggested that biodiverse verges can significantly increase walking and cycling rates. Whilst verge trees can improve air quality, capture carbon and cool urban areas.

3.5. DISCUSSION POINTS

- 3.5.1. There was a discussion about the timing of cuttings. It was suggested that cutting in May is too late into spring and that this can harm the growth of wildflowers. Most attendees agreed that the later the cut the better, a July/August cut could lead to less of a need for a second cut which may lead to a financial saving. The point was made however that there needs to be a balance with safety needs and maybe a cut in March/April followed by a late summer cut, only for the safety areas, could be a good compromise.
- 3.5.2. Fewer cuts per year will not only be a cost saving for the Council but it allows biodiversity to flourish and can encourage up to 50x the number of butterflies to certain areas.
- 3.5.3. Attendees commended the nationally recognised register of designated conservation road verges but highlighted that out of 3300 miles of highway in Gloucestershire, the 108 registered sites only covered about 1% which is clearly a very small percentage. There will be many high quality verges in the county still to be assessed.
- 3.5.4. Many highlighted this issue of communicating protected verges to sub-contractors. There have been many experiences of contractors not knowing they're in a protected area and cutting anyway. The 'BLUE' campaign was raised; the 'BLUE' heart is now recognised nationally as the symbol for rewilding Britain and could be used as a logo on site to show protected verges and trial areas.

- 3.5.5. GCC advised that the recognised 'wildlife verges' are managed differently to the rest of the network. The default position is to not manage the verge but some cutting at the right time is actually required for most species of interest.
- 3.5.6. The issue of 'cut and collect' was discussed at length. If cuttings aren't collected after the verge is cut, the remaining arisings' rot and the nutrients get recycled into the verge. This results in the grass growing taller and shading out many of the smaller, less common wildflowers.
- 3.5.7. The reason cuttings aren't currently removed by GCC contractors is due to the associated increase in cost, time and effort, but the advantage for biodiversity can be incredible. It was confirmed by GCC that this is a process they want to look at; the main issue is balancing the physical ability to cover the whole network within the allocated time period. GCC are currently carrying out a trial in Andoversford to monitor the cut and collect process.
- 3.5.8. All in attendance appreciated the benefit of delegating verge management to parish/town councils but also noted the very low numbers of areas taking this responsibility on, currently only around 40 out of 250 parishes. The point was made that there usually needs to be a keen interest in biodiversity for the delegation to happen.
- 3.5.9. The Farming & Wildlife Advisory Group emphasised the need for improved local synergy with farmers and local authorities. The management of water should not be underestimated alongside improving biodiversity.
- 3.5.10. Roadside ditches themselves if managed well and sensitively can be of value to biodiversity as well as perform an important drainage function for the road and surrounding land. For example, allowing surface water to run off into and off from verges, grips and ditches.
- 3.5.11. GCC advised that they rely on the public notifying if grips and ditches need maintaining and this may be another positive of delegation to more local authorities.

3.6. OUTCOMES TO CONSIDER:

- 3.6.1. The timing of cuttings;
- 3.6.2. how we can encourage/promote more engagement from parish/town councils to manage their own verges;
- 3.6.3. how to highlight protected verges to contractors;
- 3.6.4. how to effectively communicate biodiversity actions to the public, which is critical to enhance understanding and appreciation; and

3.6.5. the issue of collecting cuttings on verges which can reduce future growth of vigorous grasses and save costs in addition to conserving wildflowers and butterflies etc.

3.7. SECTION 2: WHAT ARE WE DOING NOW TO TRY AND MAKE THINGS BETTER FOR BIODIVERSITY ON VERGES

3.7.1. This section addressed the question, 'Where do we want to get to?'

3.7.2. First, Cold Aston Parish Council gave a presentation about action they have taken in their local area. Cold Aston is an excellent example of delegated responsibility for verges.

The following information was shared:

- Individuals involved in Cold Aston have over 20 years of interest and experience in this area.
- They carried out botanical surveys of the verges to identify the different flowers and grasses and worked with the Parish Council to get two verge areas registered officially for Conservation Verge Status.
- The team generally keep an eye on what's happening, including keeping in contact with mowing contractors – but again reinforced the issue of miscommunications with contractors.
- On the issue of when to cut verges; the team stressed that it's all about timing. Verges should be allowed to seed in as many years as possible, cutting only in September allows the seeds to flourish and only poor visibility areas should need two cuts.
- The importance of positive public messaging that this isn't an impossible task; several years of good management can make a huge difference for biodiversity.

3.7.3. Second, Plantlife gave a presentation on their 'The Good Verge Guide', which formed the basis of the original motion to Council back in June.

The following information was shared:

- Plantlife is a British conservation charity working nationally and internationally to save threatened wild flowers, plants and fungi. The team are keen to offer any support and help they can to local authorities in tackling this issue.
- The status quo isn't working. The quality of road verge is decreasing and the managing costs are increasing – a 'lose / lose' scenario.
- They are currently running a campaign, 'Save Nature on our Road Verges' which they have seen a huge public appetite for, including 350 constituents from Gloucestershire. The campaign is focused on promoting & celebrating good management where it occurs.
- The charity's 'The Good Verge Guide' was created to give a different approach on verge management. It explores basic principles all authorities can implement for significant improvements.

- The four main principles of the guide are; (annual) management is essential on 'most verges' (there are some animal and plant species that will not survive cutting every year); grow, flower, seed, mow and remove the cuttings where possible.
- The timing of cuts was further explored and the following advice was given:
 - Early cutting dates reduce floral diversity over time. It gives no opportunity to set seed and encourages vigorous growth of robust species.
 - Late cutting dates also reduce floral diversity over time. It can cause a thick 'thatch' build up which covers open soil.
 - No clearance of cut vegetation can also cause a thick 'thatch' to build up which suppresses seedlings and increases nutrient levels so only tall grasses benefit.
 - No cutting can be even worse. Species composition changes after only 1 year and correct management helps to maximise species diversity. Not cutting can lead to incredibly expensive and complicated management 5 to 10 years later.
- They will be releasing a new RV technical guide in spring 2019 which explores best practise for highways engineers and contractors as well as innovative road verge management.

3.8. DISCUSSION POINTS

- 3.8.1. A point was made that in order to gain community support, physically planting different, more 'attractive' flowers to the verges could increase the aesthetic appeal to the public.
- 3.8.2. It was suggested that volunteers can be a good source of help when collecting cuttings, but this was disputed as machinery could cover a lot more in a day than a person. It was reiterated that collecting cuttings is doable but the Council needs to consider time and budget constraints.
- 3.8.3. Plantlife advised that information on the best machinery and tools to hire/buy for cut and collect will be available in their new technical guidance.
- 3.8.4. It became clear to the attendees that cost is always found as a barrier in these circumstances. It was suggested that for local authorities, the best way forward is to create an economic case for verge management. If it can be shown there will be a saving to the public purse by a) investing for the long-term with equipment etc., and b) through a reduction of service; it is more likely to be considered.

3.9. OUTCOMES TO CONSIDER

- 3.9.1. The new 'Plantlife' technical guidance due spring 2019;

3.9.2. investment into 'cut and collect' machinery to make savings in the long-term;
and

3.9.3. creating an economic case for changing the verge management strategy.

3.10. **SECTION 3: THINGS THAT COULD BE DONE TO HELP US TO IMPROVE BIODIVERSITY ON LOCAL VERGES.**

3.10.1. This section addressed the question: How do we get there?

3.10.2. The workshop received a presentation from Dorset County Council's (DCC) current and previous ecologists. DCC are well known for their new, ambitious and creative approach to biodiversity management.

3.10.3. The Council representatives outlined their 'journey' as follows:

- DCC had many drivers for reviewing their biodiversity strategy, which included, budget reductions, pressure to reduce their carbon footprint and an increase in complaints due to budget/service reductions.
- In 2014 they adopted the Policy on Highway Vegetation Management which set out:
 - o a long-term strategy of reducing soil fertility;
 - o injection of additional resources;
 - o improving communication and community engagement;
 - and
 - o reforming operational and contractual arrangements.
- By 2017/18, the Council saw a 15% saving to their budget (from £927k 2014/15 to £785k).
- Their team noted one of the main problems with how local authorities currently view verge management is basing success on achieving output.
- For example, if a contract states that 'X' number of cuts must be completed per year, the success of that contract is measured on completion of that number. When what should be offered, is an outcome based model e.g. has the contractor helped to improve biodiversity and reduce the number of cuts needed during this period.
- It was explained that the four main components that control grass growth are: water, light, temperature and soil nutrients. The only one of these that can be controlled is the fertility of the soil.
- It was suggested therefore, that if local authorities switch to using poor/sub-standard soils in landscaping on verges; this would reduce the amount of grass that grows in the first place and thus reduces management needs. Grass growth would be controlled by design not maintenance.
- Infertile soils also happen to be the best for wildflowers to thrive in, and in time verges can become rich in wildlife.

- Reference was made to the Weymouth Relief Road constructed in 2009. The ecological team requested minimal top soil for this project and instead laid wildflower seed within a chalk and limestone design. They let nature do the rest and the result was fantastic.
- In addition the team requested public access for the project to encourage walkers and cyclists.
- The benefits for DCC of taking a different approach for the Relief Road included multiple green infrastructure benefits, a cost saving of £270k from no topsoil and verge management costs are <£500/yr.
- A final point was made that there are alternatives to mechanical mowers to maintain wild verges e.g. sheep.

3.10.4. The second part of their presentation outlined their new approach in practice:

- Business cases were produced to enable investment in cut and collect machines. DCC have now purchased 'Grillo' ride-on mowers.
- Their new practice is 'disposal on-site' which means once the verge has been mowed, the machine will reverse into a bramble patch or hedge line, and dispose of the cuttings out of normal sight.
- The green waste therefore remains on the verge but all in one place. If the cutting is in an urban area, cuttings are sometimes deposited into a trailer for removal.
- The presenters confirmed they have received fewer complaints as the public see a tidier result.
- They highlighted that litter is also picked up alongside the cuttings, meaning the process of clearing litter on verges has become quicker and cheaper. It also makes the process safer for staff as all litter is in one place, away from the highway.
- An example was referenced of when they invested a small amount of capital into an accident black spot area. The verge had grown out of control and was very difficult to manage. They removed the soil, replaced with chalk and now very low growing species have replaced the grass and thus maintenance costs have decreased.

3.11. DISCUSSION POINTS

3.11.1. In response to questioning, DCC have experienced no issues with the disposal onsite method since they started 2 years ago. They informed the group that the cuttings left in one space tend to rot down to almost nothing and there have been records of grass snakes using the 'waste' for breeding.

- 3.11.2. It was highlighted that the gold standard of verge cut and collect would be to then turn the cuttings into biogas, potentially an aspiration for the future.
- 3.11.3. It was confirmed DCC took legal advice on waste management due to the new disposal on site method and because the cuttings aren't actually leaving the verge, they don't count as waste.
- 3.11.4. It was queried that if new machines were purchased by the county, would this discourage parish/town participation.
- 3.11.5. It was advised that the machines purchased by DCC only work on wider, flat verges. There needs to be more investment in additional machinery to be able to do narrow, steeper verges. They confirmed this is their aspiration.

3.12. **OUTCOMES TO CONSIDER**

- 3.12.1. Requesting a percentage of the budget on major highways projects to be allocated for green infrastructure;
- 3.12.2. alternatives to using fertile top soil which saves money;
- 3.12.3. changing the wording of highways maintenance contracts to infer an outcome rather than output based success; and
- 3.12.4. consider a business case for investment in cut-and-collect machinery;

4. RECOMMENDATIONS

In response to the above evidence gathering, the task group have concluded to make the following:

Points to note

- 4.1. To highlight the importance of not littering. If verges are full of litter, it is very difficult for biodiversity to thrive. It causes a hazard to plant flourishing, animal safety and the environment as a whole through pollutants.
- 4.2. As the task group terms of reference committed to look at the use of pesticides, to highlight GCC's current position:

'Gloucestershire County Council use glyphosate to treat noxious weeds and also it may be used when we are undertaking surfacing treatment work to prevent weed germination under a new surface. The spraying programme uses glyphosate, but this is not part of our cyclical programme, and only occurs if County Councillors specifically request it to be funded from their Highways local allocation.'

Recommendations to Gloucestershire Highways

- 4.3. To allocate a sufficient and appropriate budget from within the total costings of every major highways project to protect and enhance green infrastructure, bearing in mind our commitment to the Green Infrastructure Pledge.

Timescale: Immediately

- 4.4. To undertake to create a business case for allowing a greater collection of grass cuttings whilst managing verges through the purchase of suitable machinery.

Timescale: To feedback by 1st July

- 4.5. To commit to using low fertility treatments as an alternative to top soil, where this involves no extra cost.

Members learnt in the workshop that using alternatives such as chalk, limestone or even sand have the potential to save time and money, both on creation and during future management. Not only do low-fertility treatments reduce grass growth but they also allow wildflowers to thrive.

Timescale: Immediately

- 4.6. To commit to reviewing the 'Plantlife' technical guidance when available, to incorporate any practical points into the verge management strategy where possible and feed this back to members.

Timescale: Technical guidance due spring 2019

- 4.7. To consider the best way to mark and identify protected verges 'on the ground' as well as updating the electronic register.

There were examples given during the workshop where sub-contractors managing the verges have accidentally cut on a protected verge. Examples such as marking the beginning and end of a protected verge with a white post were highlighted.

Timescale: To feedback by 1st July

- 4.8. To feedback to Ringway, as the new term maintenance contractors, the Council's view of taking a flexible approach when it comes to the timing and frequency of verge cuts.

The group agreed that the later the cut into the growing season (generally April to early July), the more likely it is to cause a disadvantage to flora, flowering and

seeding. It was noted however that road safety must be the governing factor when considering timing/frequency of cuts throughout the year.

Timescale: Immediately

- 4.9. To write to Highways England to feedback the recommendations and findings of this report.

Timescale: Immediately

- 4.10. To encourage better engagement with parish/town council's regarding the delegation of verge management and awareness of biodiversity.

The group acknowledge that this engagement could also come from members within their own parish/town Council's. Therefore, there would be a request to officers to produce a short information sheet covering the following, for all members to distribute as they wish within their areas:

- How GCC can support parish/town council's to take responsibility for their own verge management.
- Awareness of biodiversity e.g. examples of recommendations from this report and exemplar cases such as Cold Aston Parish Council.
- Litter picking and herbicides use policies.

Cllr Rachel Smith (Chair)

Cllr Lesley Williams

Cllr Paul Hodgkinson

Cllr Suzanne Williams

Cllr Shaun Parsons

Cllr Terry Hale