

OUR APPROACH TO MANAGING HIGHWAY VERGES







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1. NEW APPROACH TO MANAGING DORSET'S HIGHWAY VERGES

Management of road verges is the responsibility of the Highway Authority i.e. Dorset Council. The Highway authority needs to ensure the Highway is safe to use and its structural integrity is not adversely affected by vegetation growth.

A new approach to managing highway verges was approved by the Council's Cabinet and has been expanded across Dorset. It involves three principles:

- lowering fertility of roadside verges where possible to reduce vegetation growth
- reforming operational and contractual arrangements we have for both urban and rural cutting regimes so that we reduce both the amount and frequency of cutting where we view it is not necessary
- working with local communities to provide information on the service they can
 expect, to gather information from them on our performance, and to identify
 opportunities where together we may be able to deliver a more effective service

We need to reduce substantially the cost of managing our verges while at the same time maintaining high standards to allow safe passage along the highway, and to look after the wildlife and landscape values of the roadsides that contribute so much to the character of the Dorset countryside.

How the grass verge ecosystem works

The need to cut verges is linked to the underlying fertility of the soils in which the grass grows. With the squeeze on public finance we have much less money available to satisfy

this demand, and with milder autumns and springs leading to extended growing seasons, there is greater public pressure on us to cut more rather than less often.

In Dorset we are taking a different approach to these problems, and we start from the principle that if we can reduce the amount that grass grows in the first place, we will have less to cut, and this should cost us less. We look on a grass verge as an ecosystem to understand what makes grass grow and how we might put measures in place to limit that growth, while improving its environmental quality.

Of the 4 main components of the ecosystem that make grass grow – light, water, temperature and soil nutrients – it is only the fourth, soil nutrients, over which we have some control.

The new approach to verge maintenance provides the means to reduce the nutrients available to make the grass grow less, so we can change from a system where we 'cut when we need to' to one where we 'reduce the amount we ever have to cut in the first place'. Soil nutrients largely come from the intrinsic 'goodness' in the soil (based on its geology), natural breakdown of grass we cut and leave behind (nutrients get recycled when the cut grass rots down), and dissolved nutrients in rainfall.

There are two main ways we can reduce soil fertility:

- On existing road verges, where possible, we can collect the grass cuttings and remove them, gradually reducing the amount of nutrient which fuels new grass growth. We can also add
 - plant species such as Yellow Rattle which naturally parasitises grasses by sucking the life out of grass roots, reducing the amount the grass grows.
- When designing a new road scheme, or as part of works to existing roads, make sure the finishing layer of soil is as low nutrient as possible - or leave it as bare mineral - and add some wildflower seed. The ecosystem established will never require high levels of maintenance.

Cut and collect ride on mower — removing arisings and soil fertility



Yellow Rattle parasitises vigorous grasses providing a biological control measure



2. THE BENEFITS

2.1 Cost savings

Is the new approach saving us any money? Yes it is. Through a combination of reviewing contract spend, our targeted efforts to reduce soil fertility, cutting only when needed and

working with communities to create wildflower verges, we have reduced annual spend by over £200k p.a. There are also hidden dividends from this approach as we are able to redeploy our in-house verge teams to other highway tasks such as maintaining Rights of Way.

2.2 Improved environment

As soil nutrients decrease in a grassland ecosystem, the number of plant species that can survive increases, and the dominance of coarse grasses and 'weeds' like docks, ragwort and thistles declines. Subsequently a more diverse roadside environment for wildlife and adds to the biodiversity and landscape quality of the area.

The most extensive example in Dorset is the creation of 6ha of wildflower verges as part of construction of the Weymouth Relief Road. No topsoil was applied to the steep banks in the road cuttings and since the road opened in 2011 there has been a profusion of wildflowers all summer. 23 species of butterfly have been recorded on the banks, including two Dorset specialities, Small Blue and Adonis Blue, together with an abundance of the Marbled White. It is currently costing DCC almost nothing to maintain the 6ha of banks — the long term maintenance liability was deliberately designed out to create the wildflower banks we now enjoy. We are planning to extend the ecological approach to the remainder of the verges on the Relief Road, and to encourage wildflower verges throughout.

2.3 Reduced maintenance

The verges of the Blandford Bypass are a good example of how to reduce the amount of maintenance we do through the cut-and-collect approach. These verges, created in 1992, used to be cut at least twice a year and the splays around the junctions 6 times a year. The combination of cutand-collect, and abundance of Yellow Rattle established following its sowing, now means we need only cut these areas once or twice a year, saving us money. The verges have now been recognised as a Site of Nature Conservation Importance (SNCI) by the Dorset Wildlife Trust, and the grassland supports a beautiful showing of Pyramidal Orchids in summer along with abundant Ox-eye Daisy and Knapweeds.

We are expanding cut and collect system onto verges in urban areas, as opposed to cutting and leaving the arisings in situ 6 /7 or more times a year. Under our new approach, cutting frequency has been reduced sometimes to just twice per year. These verges are cut and arisings collected, leaving them much neater than before but this method also helps to reduce soil fertility and increases the diversity of flowers in the following years. Sometimes the local community has offered to buy the wildflower seed to help fast track the benefits. Verges being cut and collected has proved to be very popular with residents. They are much neater when cut and create low growing wildflowers between cuts.

Our approach provides significantly better habitat for pollinators, species of insects including bees, hoverflies, butterflies and moths, which are essential for helping plants and crops to grow. Our work on verges is helping DC to deliver its commitments made in our 'Action Plan for Polliantors'

2.4 Dorset's Conservation Verges

Dorset Council has a long-established partnership with the Dorset Wildlife Trust to maintain a suite of roadside verges which are particularly important for wildflowers. Currently there are over 120 spread across the county, marked at either end with Blue Posts. The Conservation Verge scheme continues, but we have made significant modifications to our methodology intended to improve the management of all verges for their wildlife value. Most Conservation Verges are on the C and D network, these now will receive just one cut in late summer, allowing species to flower and set seed. Conservation verges on A and B's will also just receive the one cut in late summer.

Where possible we will cut and collect the Conservation verges.

The Weymouth Relief Road slopes below Ridgeway



3. WHO MANAGES THE VERGES?

Management of road verges is the responsibility of the Highway Authority i.e. Dorset Council. The Highway authority needs to ensure the Highway is safe to use and its structural integrity is not adversely affected by vegetation.

Verge cutting is split into two workstreams in Dorset, with distinct programmes for cutting in rural and in urban areas.

3.1 Rural areas (higher speed roads – 40 mph and above)

The rural cutting programme covers all verges outside towns, villages and built-up areas.

The total length of rural roads being cut in Dorset is 2691km (1672 miles):

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A roads – 319 km (198 miles)

B roads – 289 km (180 miles)

C roads – 1025 km (637 miles)

D roads – 1058 km (657 miles)
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Cutting is being undertaken according to an agreed programme – please see Appendix B.

Cutting is undertaken by a contractor on behalf of DC, in 2020 there is one contractor managing the county:

James Rose Contractors

There is two cuts of the A and B class roads, including the dual carriageways, and one cut of the C and D class roads. The junctions and visibility splays are cut by the contractors and also regularly throughout the year on an 'as needs' basis by our in-house staff, and we will undertake additional cutting anywhere on the network later in the season where this is required to maintain safe passage along the highway.

3.2 **Urban areas** (lower speed roads, 30 mph and below)

Boughton Parish Council (parishclerk@bourtondorset.org)

The urban areas, defined as those within the 30mph zones, are cut in a combination of ways, both by in -house teams and with local agreements with mainly Parish and Town Councils. Currently we have the agency agreements in place with the following organisations:

Bridport Town Council (enquiries@bridport-tc.gov.uk 01308 456722)

Dorchester Town Council (admin@dorchester-tc.gov.uk 01305 266861)

Gillingham Town Council (GTC@gillinghamdorset-tc.gov.uk 01747 823588 / 01305 221215)

Shaftesbury Town Council (enquiries@shaftesburytowncouncil.co.uk 01747 852420)

Sherborne Town Council (t.savage@sherborne-tc.gov.uk 01935 812807)

Sturminster Newton Town Council (admin@sturminsternewton-tc.gov.uk 01258 475136)

Our partners receive payment from Dorset Council via a Service Level Agreement which sets out the standard, frequency and geographical area of cutting we expect. Dorset Council encourages all our agency agreements to cut and collect where possible – currently only Bridport TC does this. Most partners currently cut and leave and prefer a more frequent cutting regime and add extra cuts to the standard 6-7 per year using their own financial resources.

The remainder of cutting within urban areas outside of agency agreements is undertaken by our inhouse staff. There are 5 teams, each led by a Senior Ranger, geographically based across Dorset. See Appendix 1. In some areas the urban cutting cycle is 7 cuts per year between March and September. However, increasingly where we have the right machines, we are moving to less frequent, cut and collect methodology in many more areas - North, Weymouth, Portland, West and Purbeck.

In Blandford, where the cut-and-collect approach has been trialled for the past three years, the number of cuts has been reduced to 2 per year, increasing wildflower populations and maintaining acceptably neat low growing verges.

4. WORKING WITH COMMUNITIES

As part of the Council's 'Working Together – Highways: Local Communities, Local Priorities, Local Choices' initiative, we are keen to hear from any local community about how they think they can help us with the ecological approach to verge management in their area. We ask you to let us know if:

- We, our contractors or agents have missed a particular verge in the cutting round
- Where you think an area would benefit from less cutting or where cutting is unnecessary
- If your community would like to take on management of the verges in line with the ecological approach
- If you would like to volunteer to help us look after one of the special Conservation Verges
- You know of areas in your community that we currently mow regularly that would be suitable to establish a Wildflower Verge

We have very limited financial resources for establishing new Service Level Agreements with communities, but we are keen to hear from you with your ideas on how we can work in partnership. **Wildflower Verge Trial**



5. WEED MANAGEMENT IN THE SEALED SURFACE

In 2023 DC will be undertaking a single weed spray on the sealed highway surfaces across the county in late summer.

We use a glyphosate-based herbicide.

Depending on weather conditions the county will be completed within eight to ten weeks.

There is both a need and a desire to keep the surfaces of highway land free from weeds.

The primary need is to protect hard surfaces, such as tarmac, kerbing, paving and concrete structures from deterioration which may result from weed growth, in particular, the effects of perennial weeds which can establish and expand, and cause cracking in surfaces and water ingress. Without treatment of weeds, the lifespan of the sealed surfaces could be reduced.

There is also a secondary desire to ensure that the sealed surfaces are clean and tidy and we recognise the contribution that well-managed public space makes to a sense of pride that the community holds in an area.

The Greenspace team is engaging more with Dorset Waste to encourage more road sweeping in areas of high weed growth as the detritus in gutter is major factor in enabling vigorous weed growth.

6. INJURIOUS WEEDS

There are five weeds classified as injurious under the Weeds Act 1959:

- Common ragwort (*Senecio jacobae*) the most dangerous injurious weed, and the most commonly reported.
- Spear thistle (*Cirsium vulgare*) occurs widely on lowland and upland, grassland
 and waste places. This produces large numbers of seeds which can be blown
 across farm and field boundaries. It can be cut each year before mid-July to
 prevent shedding of viable seed. It is also possible to remove by digging, and longterm control is possible using herbicide treatment.
- Creeping or field thistle (*Cirsium arvense*) can quickly dominate vegetation in grassland or waste ground, often by spread of underground root systems. A range of herbicides can control it on arable land, depending on field crop grown.
 Repeated cutting at the same growth stage over several years may 'wear down' an infestation. Cultivation is not effective as it increases the number of root pieces which can throw up new shoots.
- Broad-leaved dock (*Rumex obtusifolius*) thrives in high-nitrogen environments, open swards and where there is heavy treading by stock.
- Curled dock (Rumex crispus) occurs more commonly on arable and waste land.

Both dock species produce many seeds which can remain viable in soil for decades. They look similar but their leaf shapes differ, as reflected in their names. Hybrids are also common, which can hinder identification. Both species flower from late June until early autumn.

It is not an offence to have these injurious weeds growing on Council land. In fact, they all have significant conservation benefits. However, the Council will control their spread to agricultural land, particularly grazing areas or land used to produce conserved forage when we become aware of a specific issue. Any land manager concerned about these weeds on Council land should contact the Council's Greenspace Service.

The Council will choose the most appropriate control method for the specific circumstances of the site, particularly if it is of special conservational interest and there could be a risk of damaging rare or valuable flora and fauna.

RAGWORT CONTROL

Dorset Council closely follows the advice given by the Department for Environment, Food and Rural Affairs (DEFRA) for managing Ragwort. Their guidance does not seek to eradicate ragwort, as a native plant it is important for some wildlife in the UK. It supports a wide variety of invertebrates and is a major nectar source for many insects. In many situations ragwort poses no threat to horses and other livestock. However, it is necessary to prevent its spread where there is a high risk of poisoning horses and livestock or spreading to fields used for the production of forage.

Any landowner who is concerned that ragwort from land owned by Dorset Council, is posing a risk to livestock should contact Dorset Council's Greenspace Service to determine whether action is needed to control it. Action will only be taken where the Council has identified that ragwort on its land is causing a high risk to livestock.

7. INVASIVE WEEDS

There are many, mainly non-native, plants not covered by the Weeds Act 1959 which are still considered to be invasive. The following are perhaps the most widespread:

- Japanese knotweed
- Giant hogweed
- Himalayan balsam (a particular problem for river bank erosion)
- Rhododendron
- New Zealand Pigmyweed

It is not necessarily an offence to have these plants growing on Council land, however the Council will look to control and where possible eradicate those species listed in Schedule 9 of the Wildlife and Countryside Act 1981 that are growing on Council land when we become aware of them.

8. LITTER ON ROAD VERGES

Dorset Waste Partnership (DW) is responsible for the removal of litter from highway verges in Dorset, apart from roads such as the A35 Bere Regis westbound to the Devon county border and the A 31 which are the responsibility of Highways England.

DW and the Coast & Countryside Service co-ordinate our work to ensure that when possible litter picking and verge cutting works are combined. Weymouth and Dorchester areas are a particular focus at the moment and we share dates, Traffic management when appropriate, times and contacts and provide advance notice to each other of verge cutting and litter picking dates.

Along the Weymouth Relief Road we will be looking to see how much litter we are able to pick up as we implement the grass cut-and-collect along these verges. It is hoped that we will be able to gather up mechanically most litter as we cut these verges, thereby allowing DWP to sort the litter from the verge arisings in designated safe areas away from the carriageway. This should reduce the cost of litter picking, and the inconvenience to motorists from traffic restrictions we currently must put in place to protect the workforce while working near the road edge.

Dorset Waste is developing with the Coast & Countryside Service a strategy to reduce littering across

Dorset, known as Litter Free Dorset (LFD). DW is funding a community officer to support the vision of Litter Free Dorset to work together as an independent partnership effecting positive behavioural change to reduce litter across Dorset's towns, villages and open spaces. We are all concerned about the levels of littering along highways and elsewhere and, through education and communications, we can all try to improve the situation through the LFD project.

9. COMPLAINTS & COMPLIMENTS

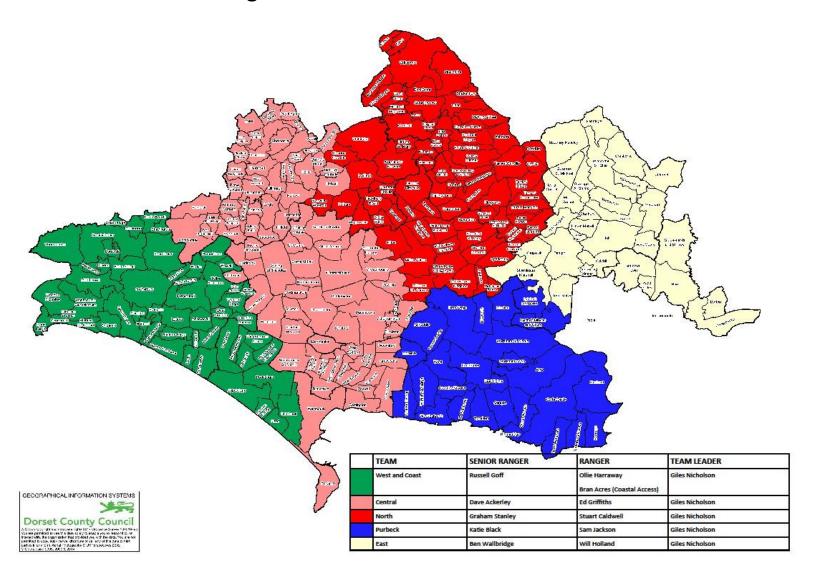
We receive varying numbers of complaints each year from the public dissatisfied with the amount or timing of grass verge maintenance we undertake. Analysis of the complaints received suggested that verge management is something of a no-win situation as they reflect conflicting demands. The majority of complaints are of the view that the grass was cut too little, but others suggested the grass was cut too early for wildflowers to set seed, or was not cut early enough in the season, or the grass had been cut satisfactorily, but the arisings left behind caused a mess.

By contrast, our wildflower verge trials have also proved exceptionally popular with the public. In summer 2016 this was the first year when numbers of compliments outweighed the number of complaints. It is hoped that cut and collect offers the best of all options, it promotes wildflowers reduces costs, but when the verge it is cut it is completed to a very neat and tidy standard. In 2019 onwards, Weymouth, Portland, North and Purbeck will all start to benefit from more cut and collect.

10. CONTACTING US

To ensure you get to the right person please contact us via Dorset For You (https://www.dorsetforyou.gov.uk/contactus)

APPENDIX A - Senior Ranger Teams



APPENDIX B – annual vegetation management plan

HIGHWAY PLANNED/ROUTINE VEGETATION MANAGEMENT PROGRAMME 2019

ALL DATES SUBJECT TO CHANGE	Mar (wk begin) 2 9 16 23 30	April (wk begin) 6 13 20 27	May (wk begin) 4 11 18 25	June (wk begin) 1 8 15 22 29	July (wk begin) 6 13 20 27	Aug (wk begin) 3 10 17 24 31	Sept (wk begin) Oct (wk 7 14 21 28 5 12 19	(begin) Nov (wk begin) 19 26 2 9 16 23	31 DE	C JA	N FEB
URBAN VERGE CUTTING		CUT 1	CUT 2	CUT 3	CUT 4	CUT 5	CUT 6	CUT 7			
CUT and COLLECT where Appropriate	l	CUT 1					CUT 2				
URBAN BARGE BACK											
URBAN WEED CONTROL			herb	icide spray			herbicide spray			_	
RURAL GRASS CUTTING										\top	\top
A & B full cut			CUT 1			CUT	2				
Accident black spots sites. * Cut on a monthly basis Dual carriageway full cut **	IN HOUSE STAFF		CL	JT 1			CUT 2				
C & D full cut No schedule for narrow lanes requiring flailing with a small machine. But endeavoured to be completed by end of phase 2.				CUT 1 →					j		
Non scheduled / reactive work CONFIRM SYSTEM											

All proposed works may be altered to adapt to weather and growing conditions

External contractor - Proposed time table Rural grass cutting

Dual Carriageways End of May 2018 and end Sept / early October 2018

Phase 1 A + B Full Cut May 2018

Phase 2 C + D Full Cut early June start, to finish August

Phase 3 A + B Full Cut likely to be August following review of growing season

Accident black spots sites. *

- The junction between Toller Hill and the A356.
- 2. C54/C128 Chalky Road junction with Coombe Valley Road, Bincombe.
- C79 junction with C7 (Wareham) at Lower Woodbury Farm.
- B3163 junction with C66 Hooke Road, Mapperton.
- A352 junction with B3145 New Road, Dancing Hill, Sherborne (Splitter

Island). 6 Dogdean, junction with Smugglers Lane, Colehill

Dual carriageway full cut **

A30 SHERBORNE, OWERMOIGNE, CHRISTCHURCH A338, UPTON

C Roads cut as per A and B's i.e 2 cuts

C2 Horton Rd, C12 Old Sherborne Rd, C 13 Higher Shafts

Traffic Free Cycle Tracks adjacent to the Highway i.e. part of the highway but physically separated from the carriageway by a kerb.

Needing regular management of encroaching vegetation on the verge:

NCN 2 Dorchester - Cycle track on the West Stafford bypass between Max Gate and West Stafford access road -1.4km.

NCN 26 Dorchester - B3147 & A37 cycle track between Dorchester and Grimstone - 5.2km.

NCN 26 Weymouth - A354 Weymouth Relief Road Cycle track between Dorchester and Manor Roundabout - 8km.

NCN 26 Weymouth - Mount pleasant Avenue South cycle track - 0.2km.

NCN 26 Weymouth - Radipole Park Drive cycle track, Weymouth - 1.5km.

 ${\sf NCN\,26\ Weymouth\ -\ Ferry\ Bridge\ to\ Fortuneswell\ on\ Portland\ Beach\ Road\ Cycle\ Track\ -\ 3km.}$

Weymouth - Granby Way cycle track (Chafeys rdbt to Chickerell Road - 2.3km.

Weymouth - Littlemoor cycle track on Littlemoor Road - 1.7km.

Weymouth - Preston Road cycle track (househould recycling centre to Overcombe) -1km.

Traffic Free Cycle Tracks not adjacent to / within the Highway Corridor:

NCN 26 Weymouth - Swannery car park to Westham Bridge cycle track - 0.5km.

NCN 26 Weymouth - Rodwell Trail cycle track (Westham Bridge to Ferry Bridge) - 3.5km.

NCN 26 Maiden Newton - Muckleford to Frampton - 0.7km.

NCN 26 Maiden Newton - Cruxton to Southover - 2.1km.

NCN 2 Purbeck - Rempstone Ride bridleways - 7km.

Weymouth - Radipole Lake Cycle Track (Westham Bridge to Chafey's Roundabout) -1.2km.

Weymouth - Redlands route (Mount Pleasant P&R to Lodmoor Country Park) - 2km.

Dorchester - Cycle track between NCN 2 Maiden Castle Road and Coburg Road (adjacent to Thomas Hardye School) - 0.6km.

East Dorset - Castleman Trailway