

ABERDEENSHIRE COUNCIL – INFRASTRUCTURE SERVICES

ROADSIDE VERGE MANAGEMENT – ROADS IN RURAL AREAS

1 Introduction

- 1.1** The following notes explain the methods and reasons for the regime of management of rural roadside verges. The statutory obligations of the Roads Authority are detailed, the nature conservation potential of roadside sites discussed and policies outlined.

2. Background

- 2.1** Aberdeenshire Council Roads Service have for some time recognised that verge management practices can in appropriate locations influence the opportunity for colonisation by native wild flowers.
- 2.2** Reference is made to the November 1989 Transportation and Roads Committee at which it was agreed to adopt a policy of specifying low-growing varieties of grass for the seeding of verges in preference to the vigorous agricultural varieties previously used. This was in order to provide more favourable conditions for the colonisation of wild flowers, to promote species diversity and to reduce the amount of cutting required. Subsequent to this a new specification was introduced which involved reducing the thickness of topsoil, avoiding the use of fertiliser and using low-growing varieties of grasses.
- 2.3** Only a very small proportion of the roadside verges are seeded each year, and the establishment of a low-growing diverse grassland takes many years. Monitoring of the success or otherwise of the policies will therefore be required to be undertaken on a regular basis.

3 The function of a verge

- 3.1** Whilst recognising that the semi-natural habitat offered by roadside verges is an important environmental asset, it is necessary first to understand the function that the verge fulfils in roads terms.
- 3.2** The main purpose of the roadside verge is to provide safe forward visibility, particularly at junctions and bends to provide a refuge for pedestrians and an area on which to stop in an emergency. Verges are also an integral part of the structure of a road and provide an area for drainage, signs and safety fences. In addition utility services are normally installed in verges.

4. Statutory Obligations of the Council

- 4.1** The Council as Roads Authority has a statutory duty under the Roads (Scotland) Act 1984 to maintain roadside verges and could be held liable for

accidents caused by a failure to fulfil this duty. Although roadside trees and hedges are the responsibility of the landowner, the Act also allows the Authority to serve notice on the landowner to cut these back where obstruction may be caused, and to ensure the safety of the road user.

- 4.2** The Weeds Act 1959 required the Roads Authority to control the spread of certain “injurious” weed (ie harmful to livestock or invasive in pasture), namely ragwort, broad leafed dock, curled dock, creeping thistle, and spear thistle.

5. Objectives of Roadside Verge Management Procedures

- 5.1** The objective of Aberdeenshire Council’s verge management policies was firstly to fulfil its statutory duty to maintain the function of the verge effectively and efficiently, and secondly to enhance their nature conservation value where possible. This is felt to be a reasonable approach.

6. The Nature Conservation Value of Roadside Verges

- 6.1** Ancient roadside verges form remnants of the type of grassland and heathland habitat created by the low intensity agricultural methods used prior to World War 2. More recently created verges can reflect these habitats, due to broad similarities between the extensive management regimes of grazing and annual cutting of meadow grassland, and the annual cutting cycles implemented by the Council through its management regime. The success of this, however, depends on factors including the substrate, soil fertility etc.

- 6.2** Management of these transitional semi-natural habitats is essential to ensure their continuation. The Scottish Wildlife Trust in a report stated that “Without management grassland and heathland habitats will soon succumb to scrub invasion” and noted that whilst scrub does have a value in terms of wildlife habitats, its “ecological importance is unlikely to match that of a long established semi-natural grassland or heathland”.

- 6.3** New verges have in the past been sown with vigorous agricultural-type grasses and fertilised for quick effect. This has often resulted in coarse grasses and an environment not ideal for the colonisation by native plants and wild flowers. Tussocky coarse grasses may provide refuge for small mammals and birds, but do not encourage floral species diversity. The change in specification resulting from the earlier reviews tries to redress this trend.

- 6.4** Wildflower seeding is often advocated, but care and advice must be taken. If the seed is not perfectly matched to the growing conditions in that locality, the diversity soon declines. Where possible, the Roads Service have attempted to provide favourable conditions for natural colonisation of species from windblown and nearby seed banks. This has proved to be successful, and the seed is capable of travelling from surprising distances, although patience is required as full cover may take some years to establish.

6.5 Roadside verges, as well as providing habitats for wildlife, may also act as wildlife corridors, enabling passage from one area to another.

7. Policies to Promote Natural Colonisation in New and Altered Verges

7.1 New verge surfaces are created as a result of road schemes involving widening and realignment, and safety schemes involving verge lowering and reprofiling for visibility improvements.

7.2 Several factors affect the development of a species rich grassland/moorland in such area, including altitude, substrate, soil fertility, the surrounding land use and the availability of nearby seed.

7.3 Whilst little can be done to influence altitude and the underlying substrate, the fertility of the soil can be altered. Wild flowers tend to flourish in poor, nutritionally depleted soils where competition from vigorous grasses is curtailed. For this reason, the Service promoted a policy of:

- a) Specifying low-growing grasses for new seeding
- b) Not applying fertiliser
- c) When exposed, leaving sub-soil surfaces free of topsoil where appropriate, and using the minimum thickness of topsoil where it has to be applied
- d) Not importing topsoil- where this cannot be avoided advice should be taken to ensure that the topsoil is from a location with similar characteristics
- e) Restricting the amount of aggressive leguminous plants (eg clover) in seed mixes to prevent soil fertility increasing
- f) Reducing compaction on the new verge to a minimum

7.4 In appropriate locations, particularly in upland moorland areas, when work involving the disruption of verges is undertaken, the peaty topsoil and heather litter, should be stripped off, set aside and replaced when the work is finished

8. Annual Verge Management Procedures

8.1 Following a comprehensive review of service delivery, a proposal to alter the existing verge maintenance regime was approved at the Full Council meeting on 25 November 2010.

The agreed regime will now consist of **one full cut** of the entire network, with a possible second treatment at junctions and some identified visibility splays where this is deemed necessary. The commencement date for the grass cutting has also been adjusted to maximise the control of vegetation height.

The revised maintenance regime and schedule for 2011 was as follows:-

- **1 Full cut (visibility/junction/verge swathe cut) 6th June – 15th July**
- **Further cutting to Junction/Visibility as instructed August – September**
- **The full width verge cutting regime will now be carried out over a 6 year rolling programme in place of the former 3 year programme.**

The new regime is intended to reduce the quantity of cutting, without compromising road safety. An additional benefit is that this will support our ongoing commitment to increase maintenance regimes that improve biodiversity. The impact of the new regime will be closely monitored over the coming months.

The rural roadside areas, including all visibility, sight line and junctions, shall be completed leaving no areas uncut between swathes producing an even height of 75 mm across the whole area. Grass cuttings shall be evenly distributed over the full width of the cut.

On all public roads, excluding trunk routes, a minimum 1 metre and maximum 1.2 metre wide swathe will be cut immediately next to each road edge. Where the verge is less than one metre in width, the verge will be cut as close to the boundary fence or wall as is practical.

Visibility cutting – bends and sight lines

Visibility cutting will be carried out on the **inside of bends only**, visibility splays and sight lines to a maximum of 3 metres or 3 swathes whichever is the greater to provide forward visibility. Cutting is to be limited to the fence line if it falls within the 3m cutting area. If there is an embankment, within the 3 metres of the verge then a single swathe cut of the embankment is required.

Visibility cutting - junctions

Visibility cutting will be required at all public road junctions (excluding private roads) where there is a grass verge along the edge of the major road adjoining the minor road. Tapered visibility cutting shall be carried out for a distance of 100 metres on either side of the junction for either the full width of the verge or 4.5 metres whichever is the lesser. If the junction is on the inside of a bend in which case it will be treated as a visibility and junction cut.

All grass areas specified will be cut once during the season commencing early June, the exact start date will be agreed between the successful tenderer and the local Landscape Services Officer, completion by end of July.

Where required additional cutting will be instructed in August/September.

8.2 Contractors cutting programmes are subject to agreement with Client representatives and performance monitoring and measurement is carried out by Landscape services on behalf of Roads & Landscape Services within an overall ground maintenance agreement.

8.3 Range of Habitats

Ideally each verge, depending on its width, would contain a range of different habitats. Some plants can only survive on the low cut metre strip, and others in longer grass at the rear of the verge. Scottish Natural Heritage (SNH) in their report on verges in Highland Region describe 3 zones – Zone A being that metre closest to the road subject to most frequent cutting, Zone B being adjacent metre strip which would ideally be cut less often, perhaps once a year after the beginning of August, and Zone C at the rear of the verge with longer vegetation of wildlife interest and cut every 2 to 3 years in late August. Zones B and C may be absent on narrow verges.

In Aberdeenshire, most of the verges wide enough to allow such diversity lie in areas cleared for visibility reasons and sight lines must not be obscured.

Elsewhere however, in recognition of SNH advice, and to control the spread of brushwood, scrub and noxious weeds, consideration should be given to introducing a policy of cutting the entire verge width every 1 to 3 years. SNH, report for Highland Region, also recommend that scrub clearance is carried out in early autumn to avoid the nesting (and tourist) season.

8.4 Trees and Hedges

As previously discussed, the Roads Authority is empowered by the Roads (Scotland) Act 1984 to arrange for action to be taken to cut trees and hedges where obstruction may be caused. The cutting of hedges is undertaken using flails, which is the only practicable method. Thicker branches should be pruned by hand.

9. Special Verges

9.1 High level ground in Aberdeenshire was informally recognised as requiring different standards since there is virtually no grass growth in these areas with a preponderance of heaths and heather on verges and embankments.

9.2 Since the original policy was implemented in 1996, the environmental issues surrounding the maintenance of verges have continued to gain importance. There has been a greater move to support Environmental issues in particular Biodiversity of the verges by sensitive management but also preservation of areas that have important flora contained in the verge. The proposals seek to support these.

9.3 Specific areas of special interest were identified during a survey of all Aberdeenshire road verges and a reduced maintenance regime introduced for these verges. The sites are identified with marker signs of a butterfly, making it easier for a tractor driver to identify whilst working on the verge. The provision of the marker posts will be identified on the route maps provided and will assist in identifying these sites.

9.4 In addition to this general policy local managers have discretion to vary treatment where required for safety reasons or to meet road standards.

10. Designations of Surrounding Land

10.1 When planning works which may affect verges and adjacent land, engineers must be aware of any landscape or nature conservation designations in the vicinity. When works border a site of Special Scientific Interest, SNH should first be consulted.

11. Conclusions

11.1 Any revision of policy should ensure that safety aspects are given appropriate status since on minor rural roads grass cutting is a major contribution to road safety.