

ROADSIDE VERGE NATURE RESERVES IN WORCESTERSHIRE

Annual Report 2007-2008

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Department of Environmental Infrastructure

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Foreword

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1. INTRODUCTION

Roadside verges have been regarded as important conservation sites by the “more enlightened” for many years and it seems that in recent years the general view of them has finally come into line with this thinking. This will be pleasing to those who campaigned so hard to in the late 1980s and early 1990s for verges to have this recognition. As noted in many previous reports, roadside verges now have their own Habitat Action Plan (HAP) within the Worcestershire Biodiversity Action Plan (BAP) and The Highways Agency has also produced a BAP for the verges that they manage on a national basis.

This importance is of course not just based on botanical interest but on the significance of verges as ecological units. It is not only the verges that are species-rich or support rare and scarce flora and fauna that are important. The word “important” applies to all verges, whether they are RVNRs - and therefore by implication the “cream of the crop” - or merely strips of grass alongside an urban bypass. Clearly some will have limited interest but in general by forming links between other habitats verges provide substantial areas that form part of the wider landscape.

As the move towards Wider Area Conservation grows verges will play a vital part in linking sites not just within this county but across the boundaries into others. The current pressure on the countryside to build new houses with all of the associated infrastructure means that verges can be used to alleviate the effects of fragmentation that will inevitably occur. With this in mind, perhaps it is time to adopt a new attitude

to the often humble verge. It is certainly an opportunity to undertake innovative measures; for example the creation of new, “purpose-built” verges alongside new or re-aligned roads or the deliberate retention of conservation sites. In order to be effective this must be addressed at the highest level, i.e. within the initial planning stages, where all too often ecological interest is the last thing to be considered

2. SUMMARY

2.1 Management of Sites

2.1.1 Liaison

As in all the previous years, liaison was maintained with staff of the HPUs in order to address any specific issues that arose and it is worth reiterating that we are always available for any specialist advice regarding any works that may affect any of the sites. Now that the sites are recorded on the GIS system it is easy to identify them, as well as any issues arising and so with advice close at hand any problems should easily be overcome.

Further liaison with Plantlife, the national plant conservation charity, continued over sitesThese tower mustard (*Arabis glabra*) sites are of national importance for the survival of this critically endangered plant.

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2.1.2 Monitoring

The results of the monitoring programme are summarised in the reports on individual sites. As always, each verge was visited at least three times during the year and this monitoring influenced the specialised management required, adjusting the timing or extent of the cutting as and when required.

2.1.3 New sites

There is one site to be added to the Register this year and one that has been removed. The latter, Site xx, has simply become too fragmented, damaged and degraded to justify its retention.

The addition is not a new site but has been added due to the fact that it is the only site in Worcestershire for Deptford pink (*Dianthus armeria*), a national Biodiversity Priority Species classified as **vulnerable** and protected under Schedule 8 of the Wildlife and Countryside Act 1981. The site on the was formerly managed on behalf of the Highways Agency. Further details can be found in Section 4.

There are two further sites that will be surveyed in 2008 in order to determine whether they meet the criteria for inclusion. Both are calcareous grassland verges in the Teme Valley.

2.2 Maintenance of Sites

2.2.1 Cutting

The summer of 2007 was notable for its almost unprecedented rainfall with severe flooding hitting parts of the county. While this did not directly affect any of the sites it did mean that ground conditions were sometimes unsuitable due to the potential for damage to the sward. The result was that cutting was often delayed or rescheduled, meaning that some sites did not receive their final cut until very late in the season. This will have little if any effect on the overall conservation and it may indeed favour the dropping and subsequent germination of seed, since the weather will have inevitably had a delaying influence on flowering and ripening.

As always, there were incidents of unknown flail mowers ignoring the posts and as always it is difficult to quantify any damage that this may have caused. Logistically the aftermath of flailing causes considerable difficulties in raking and removing the

finely chopped litter.

2.2.2 Posts

Several of the sites are in need of posting or re-posting and these are detailed under the relevant entry in the review of sites. One recurring problem is that on certain sites posts go missing almost as soon as they are replaced, while on others careless or negligent contractors ignore and/or knock over the posts and damage them, meaning that they are difficult to reinstate. This has been an almost constant theme for several reports and it is hoped that this problem will finally be addressed following liaison with the new partnership units.

3. REVIEW OF MANAGEMENT / MAINTENANCE OF SITES IN 2006-07

Site x (Southern)

No problems were encountered and management proceeded as normal with an early cut at the t-junction for visibility purposes and a later complete cut. For no obvious reason flowering was notably less prolific this year, although this may well have been due to the abnormally wet summer.

Site x (Southern)

No problems were encountered with the routine maintenance of this site, although the predominantly wet weather and the nature of the vegetation meant that (apart from the visibility strip) cutting was rescheduled twice in order to avoid churning up the ground.

Site x

As always, few-flowered leek (*Allium paradoxum*) continues to flourish on this, a non-intervention site. Again there was a small problem with the dumping of garden refuse but the resulting damage was relatively minor. There is another minor problem with encroaching ivy (*Hedera helix*) and other plants from the adjacent hedgerow, meaning that some intervention may be required in the near future. This will be monitored and addressed when the need arises.

Site x (Southern)

In accordance with the long-established management prescription the creeping invasion of ivy and bramble was carefully cut back by hand as necessary and the navelwort (*Umbilicus rupestris*) continued to thrive.

Site x (Southern)

Management proceeded as normal on this site with no problems encountered. The elecampane (*Inula helenium*) has never been abundant but continues to flourish.

Site x (Southern)

The woodland flora on the southern slope continues to flourish with toothwort (*Lathraea squamaria*) frequent this year. The northern slope continues to suffer from invasion by coarser plants with nettle (*Urtica dioica*) and bramble (*Rubus fruticosus* agg.) becoming an increasing problem. As always, in the absence of suitable hedgerow management by neighbouring land owners it is difficult to see what can be done to reverse this process, apart from continuing attempts to impede its progress.

Site x(Southern)

As always, this verge gave a spectacular display when flowering with large numbers of butterflies and other insects also noted. There was some problem with litter, mostly from discarded fast food wrappers and drinks cans.

Site x (Southern)

No problems were encountered with the routine management of this site and the alexanders (*Smyrniolum olusatrum*) continued its spread along the lane.

Site x (Southern)

Apart from the continuing (and inevitable) problem of encroachment by hogweed (*Heracleum sphondylium*), blackthorn (*Prunus spinosa*) and bramble no problems were encountered with the routine management of this verge, although some damage was inflicted by vehicles running on it after the cut had been made.

Site x (Southern)

Management proceeded as normal with no major problems encountered, apart from the excessive speed of vehicles exiting and entering the adjacent golf course.

Woodland flora on Site 33 with wood anemone, bluebell and lesser celandine

Site x (Southern)

As usual, the area around car park exit from Nature Reserve was cut regularly for visibility and also as usual litter was a problem during the main cut with drink cans and garden rubbish again abundant. Both of the eastern posts are still missing.

Site x (Southern)

Routine management proceeded as normal with no problems encountered. some of the vegetation is becoming rank as succession inevitably takes hold

Site x (Southern)

Management proceeded as prescribed with no major problems encountered. The perennial problem of invading scrub may have to be tackled with a suitable herbicide.

Site x (Southern)

The constant efforts to control the encroaching bramble have proved only partly successful and it is considered that the small “glade” of species-rich grassland is no longer sustainable. Given that consideration, the site is now notable only for the shortstyled field rose (*Rosa stylosa*) - which appears capable of thriving without intervention – and therefore it is recommended that this site becomes non-intervention unless monitoring dictates otherwise.

A slow-worm encountered on Site x

Site x (Southern)

The maintenance of this calcareous grassland proceeded as prescribed with no problems encountered this year. A slow-worm (*Anguis fragilis*) was observed, confirming that the species is still present on this site.

Site x(Southern)

Despite the efforts of a conventional contractor to flail this verge early in the year, there was sufficient re-growth to require a complete cut in June. Both northern posts were missing.

Site x(Southern)

Management proceeded as prescribed, although with a late and delayed cut due to the weather conditions. Both posts are missing.

Site x (Southern)

This site was comprehensively flailed by a conventional contractor in April and again in late July. Both posts are now missing.

Site x (Southern)

Although delayed by the wet weather management proceeded as prescribed and no problems were encountered.

Site x(Southern)

Management proceeded as prescribed with no problems encountered. Both posts need replacing.

Site x (Southern)

As last year, this site was flailed by a conventional contractor early in the year and again later before we had a chance to undertake our cut. Both posts are missing

Site x(Southern)

This site has been reviewed several times to see whether there were still sufficient remnants of the damp grassland community to justify its retention on the Register. It was decided in 2007 that it would be retained, managed as prescribed and monitored. Further monitoring will be undertaken in 2008, as the indications are that it does appear to retain some botanical interest.

Site 61 (Southern)

As the last remnant of a once extensive RVNR, this verge has always seemed rather ill fated, having been constantly subjected to “illicit” cuts by a local landowner and subsequently damaged by the construction of a track to a fishing pool complex then vehicle damage has occurred and sadly it seems that the final remaining tiny area of this **nationally scarce** MG5 grassland no longer justifies retention on the Register.

Site x (Southern)

No problems were encountered with the routine management, although the autumn crocus (*Crocus nudiflorus*) was somewhat restricted in flowering this year.

Site x (Northern)

No problems were encountered during the routine management this year. The posts are still in need of renewal.

Site x (Southern)

This site was subjected to flailing by a conventional contractor early in the year and then received another partial cut in August, leaving us to pick up the fine litter and cut the remaining section. Both posts are missing.

Site x (Northern)

No problems were encountered during the management of this site, although the cut was somewhat late due to the delays caused by the wet summer.

Site x (Northern)

Management proceeded as normal, including the annual attempt at keeping back the bramble. All of the posts are in need of renewal.

Six-spot burnet moth on Site x

Site x (Southern)

Management this year proceeded as prescribed and no problems were encountered.

Site x (Northern)

This small site was flailed early in the year and there was insufficient re-growth to require a further cut. It is still in need of posts.

Site 82 (Southern)

As has become the norm, this site was flailed early in the year and then again before we were able to take our later cut. The consequent deterioration of the site due to nutrification is becoming evident. Both posts are missing, although experience has shown that even when in place they were ignored and have even been flattened on one occasion.

Site x (Southern)

Management proceeded as prescribed with no problems encountered. Both posts are now missing.

Site x (Southern)

No major problems were encountered during the prescribed management, apart from the amount of litter. This is mostly fast food packaging and no doubt originates within

nearbyxxxxxx.

The eastern post is now partially hidden by encroaching elm suckers and since the area of floristic interest does not reach that far it is considered that a new post could be installed, shortening this site by approximately 15 metres.

Site x(Southern)

No problems were encountered with the management of this verge. The southern post still requires replacement and the northern one requires re-locating approximately 50m to the south.

Site x(Southern)

No problems were encountered this year. It is pleasing to note that the number of common spotted orchids (*Dactylorhiza fuchsii*) was up this year.

Site x(Southern)

The last report noted that this site was to be re-assessed in 2007 in order to ascertain whether it justified remaining on the Register.

Sadly, monitoring revealed a further decrease in its botanical interest and it has therefore been removed from the Register.

Site x (Southern)

No problems were encountered with the routine management of this site. All of the posts need replacing.

Site x(Southern)

No problems were encountered during the management but it is sad to report that after 5 years this site has not recovered from the damage caused by ditching in 2002 and parts of the verge are now completely overgrown by rank, coarse vegetation where once a rich grassland flora grew. Both posts are now missing after being flattened by a flail mower in recent years.

Site x (Southern)

Management proceeded as prescribed with no problems encountered.

Site x (Southern)

No major problems encountered on this site and the amount of grass cuttings dumped by the adjacent house-owners was noticeably less this year.

Site x (Southern)

No problems were encountered on this site, which still requires posts.

Site x ((Southern)

Routine management was completed with no problems encountered, although once again the cut was taken rather later than scheduled due to the wet summer.

Site x (Southern)

The site, which is still not posted, was completely flailed twice and consequently there was no requirement to take a cut at the correct time.

Sites xx & x(Northern)

Due to their distinctive nature these three verges are normally dealt with as a group. As three of only nine sites in Worcestershire - and of only thirty-five sites in the UK - that support the **Nationally Endangered** tower mustard (*Arabis glabra*) they are important on a national scale. All three of the verges are Special Wildlife Sites, based solely on the criteria that they support important colonies of a single species.

Site x

In keeping with the established management regime the site was cut in late December with another attempt to restrict the encroaching bramble. Over a hundred first-year rosettes were counted. There is a need to control the encroachment of suckering English elm (*Ulmus procera*) and this will be undertaken in 2008.

Site x This site is one where tower mustard has always been rare and this year no flowering spikes could be found, although later in the year two first-year rosettes were discovered. It appears that the bank has been subject to nutrification by agricultural run-off and this is almost certainly boosting the growth of coarse weeds such as nettle and bramble. The result is that the tower mustard cannot compete and if it germinates at all it is crowded out. However, as one of only thirty-five sites nationally it is vital that the species maintains a foothold, albeit a precarious one.

Rosy earthstar fruiting body

Site x An interesting record for this site was the rosy earthstar (*Geastrum rufescens*) discovered during cutting in December. This fungus is poorly recorded but appears to have a scattered distribution in Worcestershire and had not been recorded from the area before.

Yet again this verge held good numbers of flowering spikes and equally high numbers of first-year rosettes. There are signs that the bracken (*Pteridium aquilinum*) is increasing and some control measures will be essential. Whether this is in the form of mechanical or chemical control has yet to be established.

Site x (Southern)

No problems were encountered this year and the **very rare** bithynian vetch (*Vicia bithynica*) continues to flourish.

Site x (Southern)

The **very rare** green-flowered helleborines (*Epipactis phyllanthes*) and the **uncommon** broad-leaved helleborines were not found this year but as previously noted both these species can be erratic in their flowering. The site is suffering from vehicle damage as well as scrub and bramble encroachment.

Site x (Southern)

This is a non-intervention verge and it is monitored regularly. The dwarf elder (*Sambucus ebulus*) continues to flourish. The posts on the southern side are not required as this site is only on the northern side of the xx

Site x(Southern)

After our careful attempts to create a mosaic of long and short vegetation, resulting in a chessboard pattern, the posts were ignored and a conventional contractor flailed the entire site early in the year. It is difficult to quantify exactly the effect that this had on the glow-worms but such management is undoubtedly detrimental. In addition, attempts to make night-time counts were hampered by the wet weather during the active season.

Monitoring will therefore be undertaken over the active period during summer 2008.

Male glow-worm displaying at night on Site x

4 ADDITIONS TO THE INVENTORY OF SITES

There is one proposed new site for this year.

This is a site that was previously maintained by the Highways Agency. This is the only site in the county for Deptford pink (*Dianthus armeria*), a national Biodiversity Priority Species classified as **vulnerable** and protected under Schedule 8 of the Wildlife and Countryside Act 1981.

Previous management has seen some potential disasters, including dumping tarmac scalplings on the verge and cutting the Deptford pink flower heads off. Despite this the plant still clings on and given its conservation status it is imperative that this site must be conserved. If accepted this will become **Site xx**. It is included under **a)** of the selection criteria and is clearly a priority site.

A copy of the Highways Agency Species action Plan is included in Appendix 2.

SITE NO. : x

MAP REF. : ROAD NO.

PARISH : DIVISION : SOUTHERN

VERGE LENGTH : 360 METRES

VERGE AREA : 1400 SQUARE METRES approx.

SIDE OF THE CARRIAGEWAY : EASTERN

INTERESTS:

The only county site for Deptford pink (*Dianthus armeria*), classified nationally as **vulnerable**, a national Biodiversity Priority Species and protected under Schedule 8 of the Wildlife and Countryside Act 1981.

MANAGEMENT PRESCRIPTION:

Control scrub, bramble and rank vegetation. Monitor regularly. **Install posts. Inform conventional contractors**

APPENDIX 1

Criteria for selection of Roadside Verges Nature Reserves

- a) It supports a species which is classified as **critically endangered, endangered, vulnerable, near threatened** or **nationally scarce** in the National or County Red Data Book or **very rare, rare, very scarce** or **scarce** (as defined by Day 2001)
- b) It supports a viable population of a plant that is **uncommon** in the county (as defined by Day 2001)
- c) It supports a particularly large and/or attractive colony of a plant(s) which, whilst not rare or uncommon, is distinctive in a county context and/or contributes to the county biodiversity
- d) It supports a good example of a plant community that represents a habitat characteristic of Worcestershire or is a Biodiversity Action Plan Priority Habitat
- e) It supports any animal species protected under European or National legislation or supports a rare animal species or rich community of animals in the context of the county's fauna

The above criteria were re-written in 2002 in order to rationalise and bring up to date the initial criteria from 1995. The sites on the Register include those selected under the old criteria as well as new ones added since the update.

Appendix 2

The Highways Agency Species Action Plan – Deptford Pink