Paul Stevens Ecological Services

Blue Idol Quaker Burial Ground

Plant survey and Management Report

July 2024

Prepared by:

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Introduction

1. *Purpose of this report*

This report was undertaken to advise the best management prescription of this woodland glade grassland meadow and maximise the flowering plants associated with this type of situation. The burial ground, located a few minutes walk from the Blue Idol Quaker meeting house known as the West Chiltington Burial site was surveyed on the 5th July 2024, TQ 10514 23406.



Methodology

The grassland area was walked over in no particular order and plant species identified on site as much as possible. Other casual recordings of other species were listed as seen, see result tables 1-4.

Results

After carrying out a site survey on 05th July 2024, the following species were recorded, *Tables 1-4.*

Table 1. Flowering plants

Common name	**Latin name**	**Comments**
Crosswort	*Cruciata laevipes*	
Red campion	*Silene dioica*	
Ground Ivy	*Glechoma hederacea*	
Barren Strawberry	*Potentilla sterilis*	
Lesser celandine	*Ficaria verna*	
Bramble sp.	*Rubus fruticosus sp.*	
Common vetch	*Vicia sativa*	
Common nettle	*Urtica dioica*	
Common hogweed	*Heracleum sphondylium*	
Wood avens	*Geum urbanum*	
Common Fleabane	*Pulicaria dysenterica*	
Lesser stitchwort	*Stellaria graminea*	
Meadow vetchling	*Lathyrus pratensis*	
Nipplewort	*Lapsana communis*	
Dovesfoot cranesbill	*Geranium molle*	
Germander speedwell	*Veronica chamaedrys*	
Bristly oxtongue	*Picris echioides*	
Hoary willowherb	*Epilobium parviflorum*	
Hedge woundwort	*Stacys sylvatica*	
Greater birdsfoot trefoil	*Lotus pedunculatus*	
Marsh willowherb	*Epilobium palustre*	
Selfheal	*Prunella vulgaris*	
Broadleaved dock	*Rumex obtusifolius*	
White clover	*Trifolium repens*	

Common Dog violet	*Viola riviniana*	
Spear thistle	*Cirsium vulgare*	
Bluebell	*Hyacinthoides non-scriptus*	
Musk mallow	*Malva moschata*	
Bracken	*Pteridium aquilinum*	
Marsh hawksbeard	*Crepis paludosa*	
St Johns-wort sp.	*Hypericum sp.*	Seen flowering several weeks after survey by Becky Evans. Most likely Perforate St Johns wort.

Table 2. Trees and shrubs

Common name	**Latin name**	**Comments**
Sallow	*Salix*	Scarce
Hawthorn	*Crataegus monogyna*	Common
Blackthorn	*Prunus spinosa*	Frequent
Field maple	*Acer campestre*	Planted in mixed hedge
English oak	*Quercus robur*	Dominant large specimens
Hazel	*Corylus avellana*	Planted in mixed hedge
Spindle	*Euonymus europaeus*	Planted in mixed hedge
Dogwood	*Cornus sanguinea*	Planted in mixed hedge
Ash	*Fraxinus excelsior*	Scarce

Table 3. Grasses

Common name	**Latin name**	**Comments**
False oat-grass	*Arrhenatherum elatius*	Dominant
Meadow foxtail	*Alopecurus pratensis*	Frequent
Yorkshire fog	*Holcus lanatus*	Abundant
Bent sp.	*Agrotis sp.*	Scarce
Sweet vernal	*Anthoxanthum odoratum*	Scarce
False Brome	*Brachypodium sylvaticum*	Scarce
Wood Small-reed	*Calamagrotis epigejos*	One plant

Table 4. Invertebrates

Meadow brown butterfly	*Maniola jurtina*	Several feeding at bramble flowers and most likely breeding in the grassland
European hornet	*Vespo crabro*	One flying through
Harlequin ladybird	*Harmonia axyridis*	One seen in grassland
Nursery web spider	*Pisaura miribilis*	Several nest webs
Ringlet butterfly	*Aphantopus hyperantus*	One seen on bramble
Marbled white butterfly	*Melanargia galathea*	One flying over grassland
Sawfly sp. (larvae)	*Dolerus sp.*	One seen on grass stem

Conclusions

A good range of species were recorded and apart from the grasses which were dominant, flowering plants were limited.

During a previous visit to the site in the Spring many of the typical woodland flowering plants were present. Of note were the presence of five juveniles Great Crested newts *(Triturus cristatus)* under a tarpaulin. This a European protected species along with the habitats it uses. Also present was a female Common toad (Bufo bufo).

Management Recommendations

I have broken down the site into two distinct areas.

To maximise biodiversity by reducing the vigour and dominance of the grass species present, the following recommendations can be used as a guideline.

The regularly cut pathway can be used to define these areas:

- The outer ring of grassland is predominately the best place for spring flowering species such as bluebell and primrose. A late June cut and collect (gathering of the arisings to an area of composting on and/or off site) will benefit the spring flowering species, giving them a chance to set seed and not get too smothered by the dominant grasses. A further cut and collect can be carried out in the autumn and weather permitting in January/February if growth is still persistent and the plants aren't flowering.
  Over the years the late June cut and maybe the early February cut will probably be sufficient.

- The inner area of grassland can be treated more like a traditional hay meadow. The presence of Yellow Rattle dictates the timings of any cut and collects. A mid to late August cut with resulting arisings being removed will allow the Yellow Rattle to set seed. A short period of drying the cut grass before removal will make sure much of the seed is dropped onto the soil surface but is not essential. Two further cuts can be carried out to further reduce the vigour of the grasses in late Autumn (October) and February before the Yellow Rattle has begun to germinate.
  Over subsequent years these cuts can be reduced to late August but seasonal weather conditions will either reduce or increase growth rates in any one year so if grass species are still dominating then extra cuts can be maintained as required.

Other habitat enhancements

Utilising the arisings as a compost pile in a sacrificial corner of the site would provide an alternative habitat for invertebrates, reptiles and amphibians.
Log piles are already on site and if further timber were available then these should be added. They are probably already a great place for the Great crested newts and Common toads to hide in.
Any of the awkward to reach areas of the outer grassland can be left as rough pasture without any further management.
Some hedgerow management will be required to stop encroachment of bramble into the grassland boundary. Cutting the densest areas each Autumn when the blackberries have diminished should keep them at bay.
The new hedgerow planting would benefit from being 'layed' when it is of a suitable size (5-10 years old). This will strengthen and thicken the hedgerow providing good cover for invertebrates, birds and mammals.

Great crested newts

Carrying out management with Great crested newts present should not result in any accidental damage to them if the following guidance is noted:

- Always try to cut the grassland areas when they are dry as newts will tend to find the damper places to hide away during the day. It also makes the job easier!
- Try not to disturb log piles, grass piles etc and don't strim the grass too close to the base of these where newts maybe hiding.
- During the colder months (October-February) the newts will be hibernating under log piles, thick vegetation such as the base of hedgerows and in cracks and holes below the soil surface. This is the best time to carry out habitat maintenance tasks. They will become active as early as February during damp milder conditions when they will move towards their breeding ponds. The adults then remain here until late June. The juveniles will be terrestrial for 2-3 years before they are mature enough to breed.

Further surveys

I would recommend that a similar survey is carried out every 5 years to look at how the management has impacted on the habitat's biodiversity.
Further recommendations can then be made following these.

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