

The Lawns, Bishopsteignton Landscape & Ecological Management Plan

January 2020

1.0 INTRODUCTION

This Management Plan has been prepared by Matt Neale (ecologist), Kate Yeo (Sustainable Bishop), James Day (Bishopsteignton Parish Council) and John Parkes (Bishopsteignton Parish Council) for the land at The Lawns Recreation Ground.

This Management Plan should be read in conjunction with Figure 1 in Appendix 1, which shows the location of the existing site and the position of new habitats, which will be created at the Lawns.

This Management Plan will be used to deliver biodiversity enhancements in accordance with the Climate Emergency, declared by Bishopsteignton Parish Council in May 2019. It is intended for use by a qualified contractor and as a guide to assist with the planting of trees by members of the public.

Woods are our allies in the fight against a changing climate, yet just 13% of the UK's land area is covered by trees (compared with an EU average of 37%). The bottom line is, we need more trees and we need to protect the ones we already have. Mature trees can capture over 400 tonnes of carbon per hectare. They can also mitigate the effects of a changing climate. In addition, trees can help to:

- Prevent flooding;
- Reduce pollution;
- Keep soil nutrient-rich

Climate change is only half the battle. We are also facing a biodiversity crisis. The UK is ecologically damaged. We have lost 13% of our native species abundance since 1970 and this will only get worse if things go on unchanged. By restoring precious habitats and planting new native woodland and hedgerows with UK-grown trees, we can extend and create havens for wildlife, boosting biodiversity. This goes hand in hand with our planting to mitigate climate change.

Any planting on the Lawns will be done to a plan designed to improve the aesthetic appearance of the area and in the interests of improving biodiversity. The Lawns will still be available to all the current users and in fact over time will become a much more interesting and peaceful place to spend time improving health and well-being.

1.1 Landscape Operations

The following sets out the landscape components that are considered in detail in this management plan:

- Litter and debris removal;

- Amenity grassland cutting;
- Tree and hedgerow planting and maintenance; and
- Orchard maintenance;

2.0 Litter Removal

The entire site will be kept free of litter and other debris through a regular programme of monitoring, collection and disposal, coinciding with his normal maintenance visits.

Particular care will be taken to remove all broken bottles, glass, tins, sharp objects and other items likely to constitute a hazard to the public.

All litter and debris shall be removed off site to an authorised facility approved by the Local Authority and or Environment Agency.

3.0 Amenity Grassland Cutting

3.1 Management of Existing Amenity Grassland (Short Sward)

Prior to cutting all areas will be cleared of litter and debris in accordance with the section detailed above.

All operations will be carried out using machinery appropriate to the task, cylinder, rotary or mulch mowers. Mowing operation will only be carried out during appropriate weather conditions avoiding sustained periods of rain, or heavy frost, snow, and waterlogging.

Operations will be suspended where ground conditions prevent the use of machinery without damage to the ground surface. Where operations are suspended due to unsuitable conditions additional maintenance visits will be agreed in order to maintain the sward within acceptable growth limits.

During each maintenance visit a cut adjacent to fences, walls, kerbs, paths, trees and other boundaries or obstacles will be undertaken using equipment suitable to the task. Strimmers will not be used around the base of trees. The frequency of cuts shall remain flexible in order to accommodate growth rates and weather conditions.

As a general guide cutting is likely to be required every two weeks in high maintenance areas, ensuring that the sward height does not exceed 75mm. The Contractor is required to assess growing conditions and adjust maintenance schedules as necessary, taking into account bulb planting where it occurs.

All cuttings are to be evenly dispersed over the ground. Following cutting, all grass clippings and other debris shall be swept from adjacent areas of hard standing and removed from site to an authorised tip, or dispersed over the plot.

3.2 Management of Existing Amenity Grassland (Long Sward)

Certain areas of grassland will be left uncut each season to create a long sward, see Figure 1 (Appendix 1). This is to improve the ecological value of these areas for amphibians, invertebrates and small mammals (and the predators that prey on them, such as bats and barn owl), by promoting the growth of long grasses and wildflowers.

Areas of long sward grassland will be mown in Mid-April and again in September or October, subject to weather conditions. Mowing will be undertaken with consideration for wildlife that might be active on the site and therefore the sward height would not be reduced to below 150 mm. Cut vegetation will be raked up and placed in compost heaps. Removing cut vegetation will limit nutrient enrichment and reduce competition to wildflowers. This will also prevent thatch from smothering germinating seeds.

Management will ensure areas of grassland do not become inundated by scrub. Areas of dense scrub will be periodically cut back. Any scrub that establishes would be removed, preferably pulled up by the roots at an early stage.

4.0 Tree and Hedgerow Planting and Maintenance

New hedgerows will be planted at the Lawns (see Figure 1, Appendix 1). After 15 years, the desired condition of the hedgerows would include a dense row of native species with an absence of non-native species. Standard trees will be allowed to grow along the length of the of the hedgerow to create height. The established hedgerows will provide nesting habitat for birds, habitat for invertebrates and a flight line for commuting and foraging bats.

Four packs of 105 sapling have been provided by the Woodland Trust. These will create a double staggered row hedgerow of 15 to 20 m.

Packs which contain hazel, hawthorn, elder, crab apple, rowan and blackthorn are good for making hedgerows as they happily produce multiple stems and make a good, thick hedge.

The saplings are 20-60 cm tall. Saplings this size also establish very quickly and can reach an adult's head height in around eight years. The saplings can also be self-supporting so they don't need increasingly large stakes to keep them secure.

4.1 Planting

To create the hedgerows, saplings will be planted at a density of six plants per metre in a double staggered row (0.5 m spacing) across the width of the new hedgerow.

Planting would be avoided during droughts, hard frosts or particularly cold, windy periods.

Trees will be provided with adequate guards to protect them from animal damage.

It is anticipated that the planting sites will not require fertiliser as they will be fertile enough.

4.2 Maintenance Years 1-3

Native tree planting will be attended to three times during the growing season (April-September) and once during the dormant season (October-March inclusive). At each visit the following operations are to be carried out.

Weeding

Weeding is the most important step in giving trees the right start. A 1 m diameter will be maintained around the tree clear of weeds and grass for the first 2-3 years to reduce competition for moisture and nutrients.

Weeds will be suppressed with mulch, such as bark chips or straw bales. This will be applied to a depth of around 10cm to prevent it being blown away or dispersed and top it up annually. The purchase of mulch mats that can be pegged into the ground to keep them in place, will be considered.

The use of chemicals will be avoided within a 5 m radius of trees.

Watering

Trees will adapt to natural conditions so should not need watering, especially as it encourages roots to grow up towards the soil surface rather than down towards groundwater. If there is a particularly long dry spell and watering is necessary, the ground will be saturated to ensure water soaks deep into the soil.

Mowing

Regular grass cutting around the base of the new trees is not advised as it invigorates grass growth and increases competition for moisture. If mowing is necessary care will be taken to avoid damaging the trees and guards.

Check tree guards

Strong winds can blow trees over. Check guards are upright and pushed firmly into the soil. Pull up any grass growing inside the guard and carefully replace the guard.

4.3 Maintenance Years 3-10

Remove tree guards

Remove guards as soon as they split and before they start to disintegrate (usually after 5-10 years). They have now done their job and may hamper growth. Dispose of the plastics responsibly. The tubes are made from polypropylene (PP) and the spirals are PVC. Both can be recycled where facilities exist.

Pruning and Training of Standard Trees

The pruning of trees designated to be standard trees is not essential but will encourage trees to grow upwards rather than outwards once established and help to create a diverse canopy structure.

The cut should be square to the branch and preserve the bulge at its base, known as the branch collar. To prevent disease and decay, be sure not to damage the tree's bark and never cut the branch flush with the main stem as this creates a larger wound.

Most native trees are best pruned in winter when dormant. However, species such as

cherry and walnut need pruning in summer to reduce risk of disease and sap bleeding. If unsure, always seek expert advice.

Works to established trees should be undertaken where possible outside of the bird breeding season. The bird breeding season is dependent on weather conditions and varies from year to year, but is usually taken as 1st March to 31st August. If this is not possible, vegetation should be checked for the presence of nesting birds by an experienced ecologist within 48 hours prior to removal. If nests are identified, work will need to be delayed in the immediate area until nestlings have fledged and an appropriate protective buffer maintained around the nest.

Pruning and Training of Hedgerow Trees

Once established, after approximately three to four years, and thereafter, new and existing hedgerows will be maintained at approximately 2 m in height. The width will generally be restrained at 1.5 m although this can vary dependant on the general vitality of growth. Over-pruning can remove the flowering limbs from the plant and would reduce the plants wildlife value. If possible, flails will not be used to manage hedgerows. Pruning will be carried out using sharp secateurs, or mechanical cutters according to the type of hedge. Unless otherwise stated, current growth will be removed back to a regular line and shape with the width at the top edge less than at the base.

Sections of flowering hedgerows will be allowed to flower on a rotational basis before being pruned in January or February, whereby 50% of hedgerows are pruned in year one and 50% of hedgerows are pruned in year two. This is to maximise their wildlife value, including for birds and invertebrates as well as bats.

To reduce the likelihood of harm to breeding birds, hedgerow management operations would be undertaken outside the bird breeding season. If this is unavoidable, a careful detailed check for active birds' nest by a competent ecologist immediately prior to any vegetation clearance will be undertaken to identify whether any nests are present and the appropriate action to be taken.

If during maintenance dead sections of hedgerow are identified then these will either be: cleared and additional hedgerow planting implemented; or, if the dead wood sections are substantial and are considered to comprise biodiversity benefit to certain species, then these sections will be retained (subject to ongoing inspection).

Thinning

Thinning is usually done around year 10, or when trees are about 7m tall, However, as the trees planted at the Lawns will form a dense hedgerow, it is not proposed to undertake thinning.

5.0 Orchard Maintenance

The following guidance for the management of the existing orchard at the Lawns follows the good practice advice set out Natural England's Technical Information Note TIN014¹.

The grassland sward will be allowed to grow up to the trunk of the orchard trees. Tall weeds, bramble and ivy will be removed from around the trees. Strimmers or mowers will take care to avoid damaging trees.

Orchard trees will be pruned to promote fruit production, by creating a glass or goblet shaped tree. Rubbing branches and dead and diseased branches will be removed as the trees grow.

The desired condition of the orchard should include productive fruit trees growing above a sward of grassland. There should be an absence of non-native species or competing tree and scrub growth.

¹ <http://publications.naturalengland.org.uk/publication/26001>

Appendix 1: Figures

The Lawns

Existing Habitats and Location of New Habitats

Legend

- Long Grassland Sward
- New Hedgerow
- Orchard

