



Bishop's Meadow, Farnham Management Plan - 2018 to 2027

**Part One – Bishop's Meadow 10 year Management Plan
Part Two – Bishop's Meadow References Document**



Version Number: 0.2 January 2018

Written by: Isobel Girvan BSc (Hons) MCIEEM

Prepared for: Bishop's Meadow Trust

Surrey Wildlife Trust, School Lane, Pirbright, Woking, Surrey GU24 0JN

'Bishop's Meadow Trust aim to create and protect a semi-natural wild space for the people of Farnham to enjoy and experience a greater diversity of British wildlife in our town.' **Bishop's Meadow Trust (2017)**

Quality Control

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the ‘*Guidelines for Preliminary Ecological Appraisal*’ and ‘*Code of Professional Conduct*’ issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

Version	Modifications	Author	Document title	Date
0.1	1 st draft	Isobel Girvan	Bishop’s Meadow Management Plan Draft 1	20/11/2017
	Authorisation	Nicky Williamson	Bishop’s Meadow Management Plan Draft 1	30/11/2017
0.2	Final	Isobel Girvan	Bishop’s Meadow Management Plan Final	29/01/2018
	Authorisation	Danial Winchester	Bishop’s Meadow Management Plan Final	01/02/2018

The contents of this report were correct at the time of the site visit. The report is provided for the sole use of the named client and is confidential.

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this. It may not be sold, lent, hired out or divulged to any third party not directly involved in this situation without our written consent.

© (Surrey Wildlife Trust)

Contents

Part One Bishop’s Meadow 10 Year Management Plan.....	5
Vision Statement.....	5
Introduction	6
Background	8
Management Prescriptions	32
Management Prescriptions Table	32
References & Bibliography	45
Part Two – Bishop’s Meadow References Document.....	47
Figures	47
Appendices.....	47

Part One Bishop's Meadow 10 Year Management Plan

Vision Statement

The vision for Bishop's Meadow in 2027 is for:

- **A healthy ecosystem:** An open meadow landscape will continue to be linked areas of marginal scrub, tall vegetation and scattered trees. The grassland will be given a hay cut and partially aftermath graze. The River Wey will comprise a good mosaic of tall ruderal, emergent and marginal vegetation with unpolluted water and pool-glide-riffle habitat. The Tudor Ditch will hold water and have a developing marginal vegetation. Hedges will provide a continuous and linked habitat with a made from a variety of shrub and tree species. The new pond will add diversity to the site. This in turn will continue to provide a wide range of feeding and nesting opportunities for wildlife that the site supports such as birds, bats, invertebrates, mammals, amphibians and reptiles.
- **A beautiful and varied landscape:** Habitat management work will support both the variety and quality of the landscape but we will also look at reducing the impact that surrounding development have on the site and will resist creeping urbanisation.
- **Stunning views:** The aim will be to continue to provide significant views across the meadows.
- **Tranquility and peace:** Bishop's Meadow is located so close to the centre of Farnham, which can be bustling and busy. The meadows provide a much needed peace and quiet, as well as a sense of remoteness.
- **Preservation of a part of the local history:** These floodplain meadows are steeped in history, which is integral part of the story of Bishop's Meadow.
- **Recreation:** The site will continue to be visited by locals and especially local dog walkers and people walking through from south Farnham into the town. Bishop's Meadow is an excellent example of an open green space with unrestricted public access. The plan will be to enable different users to co-exist with the minimum of disruption to the wildlife.
- **Education:** The intention will be to continue to entice people to use the meadows, get constructive feedback, educate users on the biodiversity and encourage volunteers to take part.

1 Introduction

This Management Plan has been created to guide the work of caring for, and managing, Bishop's Meadow and aims to reflect best practice and current views on how the meadows can best be enhanced. The plan is not a rigid document and can be modified and developed in the light of changing circumstances.

Monitoring the condition of, the meadows during the next ten years is vital to future management. Monitoring will enable the success, or otherwise, of management techniques to be reviewed and allow decisions on further management and modifications to the plan to be taken in an informed way.

The two main aims of the Bishop's Meadow Trust are:

The Bishop's Meadow Trust aim to restore the land as meadow land, to ensure that it remains a sustainable green environment for the people of Farnham and to actively protect existing flora and fauna while encouraging further wildlife to colonise the Meadow. Bishop's Meadow Trust is committed to seeking the engagement of the people of Farnham and to work with volunteers (young and old), schools and youth groups. The two main aims being:

- To promote the conservation, protection and biodiversity of the natural environment of the meadow and the creatures which depend upon it.
- To maintain and enhance a semi-natural wild space for all in our town to experience and enjoy a greater diversity of British wildlife.

1.1 Management Structure

Management is guided and supported by the Bishop's Meadow Trust which monitors the progress and overall implementation of the Management Plan, and actively encourages the management of the meadows. Details of the current members of Bishop's Meadow Trust is available.

1.2 Successes

Before going any further this is a good time to reflect and celebrate the past successes. Recent management has been successful in terms of enhanced grassland, tall ruderal, scrub, hedges and water features leading to improving status in the overall biodiversity and an increase in the flora and fauna using and visiting the site.

For example:

- Improvements to the river, including adding baffles, opening up the wier, with a fish ladder and eel ladder.
- Orchard and tree nursery have been set up, and local schools have been helping to manage it.
- Invasive plant species such as Common Ragwort, docks and thistles are hand pulled during the growing season on a regular basis.
- Two Wildlife Protection Areas have been fenced off on the site edges to enhance tussocky grassland, tall ruderal vegetation, scrub and trees as a buffer zone for the river and meadow.

-
- Cattle proof fencing has been installed in preparation for the cattle starting to graze.

There is still great potential for further improvement. Oak Meadow is about to be grazed for the first time in many years, to be followed on by grazing in West Meadow. This is hoped to significantly increase the structure of the grassland and encourage a better diversity of herbs. The tall ruderal and developing scrub areas that have been fenced off require annual management to ensure that they do not scrub up completely and continue to develop an interesting mosaic of habitats. There are opportunities for planting out more hedge shrubs to interplant into the existing hedges and to link and connect them up to further enhance the site. There are also opportunities to bring in wildflower mixes to further enhance the flora whilst also providing the users of the site a colourful display of summer flowers. Additional water features in the form of a pond are also being planned. There are limited financial resources. However the good use of willing volunteer resources will continue to assist the management of the site. Some contractors will be used for the larger, more cumbersome jobs such as a local farmer coming in to undertake the meadows annual hay cut, and a friendly local tree surgeon for the on-going tree maintenance, in close partnership with best practice bat guidelines.

2 Background

2.1 Location

Bishop's Meadow is an open area of lowland floodplain grassland lying to the south west of Farnham town centre in Surrey. The central grid reference is SU 836 463.

2.2 Tenure

Until recently Bishop's Meadow was owned by a local farming family who went on to sell the site in 2009. Sir Ray Tindle bought the land and gave Bishop's Meadow Trust three years to raise the funds to buy back the majority of the site back. The landowners of the site are now Bishop's Meadow Trust who are also responsible for the managing and fundraising for the site. Two white posts mark out the line that denotes Sir Ray Tindle owned Manor Field, which is managed by the BMT.

2.3 Boundaries & Surrounding Area

The site is roughly rectangular in shape and is bounded by the River Wey (Northern Branch) to the south. On the opposite side of the river is the small cul-de-sac of Red Lion Lane and Weydon Mill Lane and beyond this is the A31. The northern boundary moving from east to west is formed by the drainage ditch from West Street running parallel to a public footpath, the rear of the West Street, Bishop's Mead and Crosby Estate properties, Hedway House Offices and Farnham Cemetery. The far west corner of the site adjoins West Street allotment gardens and pasture land forming part of Coxbridge Farm which is connected via a public footpath and a kissing gate. The far eastern boundary is immediately adjacent to the Old Vicarage residential property with associated garden and St. Andrew's Parish Church (Partridge, 2012).

2.4 Access

The nearest car park is Wagon Yard located at SU839 466 located to the north east via a short walk past St. Andrew's Church.

Pedestrian access can be gained from Red Lion Lane over the bridge in the south of the site. On the northern boundary pedestrians can access the meadows via Crosby Gate. Also by foot from St Andrews Church in the north east corner of the site. There is a footpath that enters the site on the western boundary from Coxbridge Farm.

Crosby Gate is the only vehicular access for the site.

There are four Public Rights of Way (PRoW) that cross over the site, Footpaths 125,164, 168 radiate from the River Wey footbridge leading up to the northern footpath 167.

There are a number of informal paths that cross over the site around the periphery of the site, mainly used by dog walkers.

The Environment Agency requires access to the rivers in order to carry out maintenance work and deal with any problems on the river from pollution to the removal of blockages (Partridge, 2012).

Wildlife Protections Areas (two fenced off areas WPA1 & WPA2) are not accessible by the public, dogs or fishermen (other than for research, education or maintenance reasons).

2.5 Polices

Bishop's Meadow is covered by several Waverley Borough Council Local Plan polices.

The main Environment Agency legislation that is relevant is Flood Defence Consents (FDCs). This needs to be applied for if any works under or within 8m of a main river are required. So at Bishop's Meadow this includes all of the watercourse including the main River Wey, the upstream loop and the straight ditch that crossed the site and continues around the northern boundary (Partridge, 2012).

2.6 Utilities

The public utilities that cross the site include a main sewer and overhead pylons. Underground electricity cables are known to run down the side of Central Meadow.

Bishop's Meadow Trust are currently laying a water supply pipe adjacent to the northern boundary for the cattle.

2.7 Site Furniture

Three benches are situated on the site. Two are along the river and the other on the northern boundary, providing suitable respite for walkers and are in keeping with the site. However, care should be taken that furniture is not added too much to the site to urbanise it.

Two waste bins are placed at the key access points i.e. Crosby Gate and Mill Brook footpath.

2.8 History

The Meadow has had a number of names throughout time including Brode Mede and Broadmede, Church Mede, Church Meadow and the present day Bishop's Meadow. Bishop's Meadow Trust has a copy of the earliest Saxon map of the site.

The tithe map of 1839-56 indicates that at the time the Central and Western Meadow were still owned by the Bishops of Winchester and was likely farmed for crops and pigs.

To the west of the former Lion Brewery Site, the land now forms a cemetery which is defined along its southern extent by a substantial stone wall with hand-made bricks forming levelling layers. The wall stands over 2m high and appears to be of late 18th or early 19th Century origin.

It is known that the meadows were used by Canadian troops during World War II.

Bishop's Meadow was ploughed in the 1990s, except for Oak Meadow.

The footbridge across Mill Brook used to be a ford and leads to the remnants of the Weydon Mill, which was demolished in about 1920.

Tudor Ditch was reportedly dug in Tudor times to supply water from the river for local cloth and tanning industries in Farnham, but fell into disrepair and was subsequently re-dug as a drainage ditch. The embankments either side of the Tudor Ditch were raised as part of the Farnham's flood defences when the river was straightened in the 1970s (Green, 2017).

This alignment of the Tudor Ditch between the River Wey and the north east corner of Central Meadow is shown on pre-1960 historic maps to have been routed differently in the past, as the point of departure from the Wey is shown as approximately 30m to the west of the current point. A plan accompanying a channel cross section survey undertaken in 1963 shows the old alignment. It is believed that the realignment, together with the straightening of the River Wey channel along the southern edge of East Meadow, dates from bank and channel improvement works undertaken by the Thames Conservancy in 1974 (Jones et al., 2013).

To the west of Tudor Ditch, approximately overlying the original course, the land form has been heavily built up to form a mound. The material used to create this mound probably derives from the excavation of the new course in the mid 20th century (Jones et al., 2013)

For further information a potted history of Bishop's Meadow is provided in the 2012 Bishop's Meadow Management Plan (Partridge, 2012).

2.9 Landscape

The eastern half of the site is located within the Farnham Conservation Areas. Bishop's Meadow provides an expanse of green space between north of the River Wey, between West Street and Downing Street to the north and Red Lion Lane and Weydon Mill Lane to the south. In fact, the green space formed by Bishop's Meadow makes up around 30% of the Farnham Conservation Area (Jones et al., 2013).

2.10 Geology & Soils

The bedrock geology is Folkstone Formation Sandstone of the Lower Greensand overlain with superficial geology of Alluvium along the water courses with clay, silt, sand and gravel (British Geological Survey, 1986). The soils are typical Argyllic Brown Earth known as Frilsham, which is drift over chalk, mainly fine loamy soils over chalk (Soil Survey of England & Wales, 1983).

2.11 Compartments

Bishop's Meadow conveniently divides into five meadows. The floristic diversity is detailed in full in the Bishop's Meadow Botanical NVC Survey (Girvan, 2017). The following general information was based from the 2012 Management Plan.

2.11.1 Oak Meadow

The most westerly of the meadows with Farnham Cemetery to the north. At the western boundary there is a kissing gate into an adjacent horse grazed field. Curving its way around the edge of this grassland is an old hedgerow, with some gaps and a dry ditch. A public footpath crosses this meadow (east to west).

2.11.2 West Meadow

This meadow nestles in behind Oak Meadow and is bounded both to the west and east by gappy Hawthorn hedges. To the north is a line of Lombardy Poplar trees. The southern boundary is formed by Mill Brook. A public footpath cross the field.

2.11.3 Central Meadow

The middle meadow with public footpaths running through from north to south and east to west culminating at the Mill Brook footbridge. One of these paths runs from the Crosby estate and is the location of the only vehicular access onto the site via a locked gate. This meadow shares the old Hawthorn hedge with West Meadow and to the east the boundary demarcation is Tudor Ditch. Along the edge of which are pollarded Crack Willows.

2.11.4 East Meadow

This open area of grassland seamlessly merges into Manor Field, with two white posts denoting the boundary between them.

2.11.5 Manor Field

This is contiguous with East Meadow. There is a wide margin along the eastern edge of the site where scrub, tall ruderal vegetation and tall grasses proliferate. On the edge in the north is a ditch (part of the Tudor Ditch that loops back onto the site to form part of the boundary). Along the southern edge is the River Wey (Northern Branch).

2.11.6 Wildlife Protection Area 1 (fenced area by Cemetery)

A brick wall or fence separates this area and the adjacent Cemetery. Along this edge is a linear line of Blackthorn thicket, patches of dense Bramble, with a mix of other scrubs, trees, tall vegetation and tussocky grassland.

2.11.7 Orchard (& Tree Nursery)

The brick wall continues along the back edge of this section, but as there is less scrub and trees on the back edge the wall is a little more exposed, providing a warm substrate for reptiles.

2.11.8 Wildlife Protection Area 2 (scrub and tall vegetation by Mill Brook)

This area comprises developing scrub, scattered trees, some of which have been planted in, as well as tall ruderal vegetation and tussocky grassland. This is a no go area for fishing and dogs.

2.11.9 Ditch (& Embankment)

This encompasses a seasonally wet, steep sided ditch. Recently log barriers have been placed along the length of the ditch to help retain water. Either side of the ditch

are embankments which are now covered in tall ruderal vegetation including dominant Common Nettle.

2.11.10 Tall Marginal Vegetation

Along the edge of the water course is a wide marginal band of tall ruderal vegetation and scrub with scattered trees. The width and composition varies along the edge and merges into the meadow on one side and into marginal and emergent bankside vegetation on the other.

2.11.11 Mill Brook, River Wey & Bankside Vegetation

There is approximately 880m of open water habitat, the River Wey (440m) and Mill Brook (540m) to the west that run along the southern edge. Here there is a mix of marginal and emergent vegetation depending on the depth of the water, the speed of the flow and the shading. Himalayan Balsam is a problem species that is pulled from the banks regularly.

The river has meandered naturally across the site over time. However in the 1970's it was straightened and deepened, as well as the weirs being constructed around the same time.

The River Wey is a medium chalk river with a moderate flow, although not a true chalk stream in the sense that it also flows over chalk. It has two branches, the one passing by Bishop's Meadow is the Northern Branch originating near Alton. River Wey Northern Branch forms the northern arm of the upper Wey Catchment (The Wild Trout Trust, 2012). The river has gravel beds, with some silt (Green, 2017). Generally the sides of the river are steep, but there are places where people can gain access.

Within the River Wey, adjacent to the modern footbridge over the river and the site of the former Weydon Mill there are the remains of what appears to be a weir built of brick and heavily eroded probably indicating an 18th or 19th century origin. Just below this where the two channels of the Wey re-join, is a further modern gauging weir.

To the north of this weir, within the meadow there is an existing north-south drainage channel between the town and the River Wey referred to as the Tudor Ditch. This channel marks the boundary between the Central and East Meadow and passes in a loop through private gardens to the north of East Meadow Re-joining the River Wey down stream of Manor Field.

At the straightened modified stretch of the River Wey the pool-glide-riffle sequences observed upstream is no longer obvious and the channel appears to be more or less uniform in terms of depth and width. Despite the relatively homogenous habitat, marginal vegetation growth has helped to introduce some sinuosity into the reach and the overhanging plants provide some good cover for fish. As the water approaches Weydon Mill, water is backed up and slowed by the gauging weir. Past the weir and in places there is shade from overhanging trees and open areas where marginal vegetation spreads (The Wild Trout Trust, 2012).

Reportedly the main fish species are Chub, Brown Trout, Dace, Roach, Carp, Minnows, Bullhead and Stone Loach. Numbers have declined quite severely in recent

years, due to a combination of low water levels, water-flow and pollution. Other factors are predators, an increase in human activity and dogs in the river. (Green 2017).

Measures from Surrey Wildlife Trust and Environment Agency were put in place to assist the recovery of fish numbers. These involved placing pairs of tree trunks on the river bed below the weir to act as flow deflectors. The idea being that the water speeds up as it passes to help to scour the silt off the gravel river bed. Fish then lay their eggs in the gravel. Mats were also secured, made of bundles of small branches, on the river bed to provide safe cover for the fish fry and water invertebrates (Green, 2017).

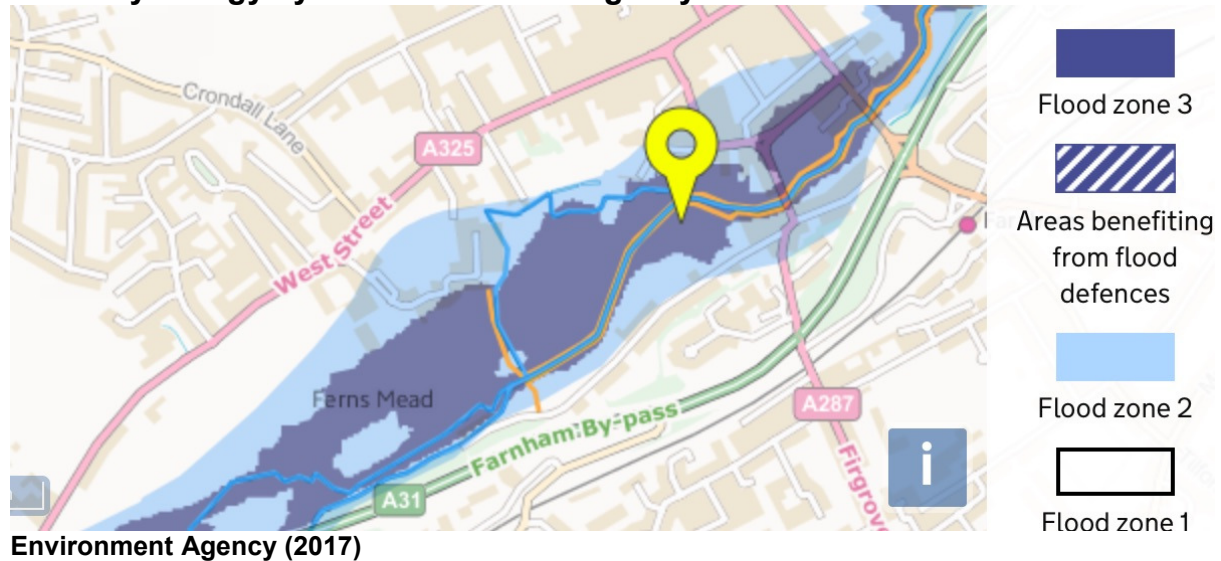
Coarse Woody Debris (CWS) is a vital component of the river ecosystems that provides habitat for aquatic invertebrates, fish, birds and mammals as well as controlling sediment distribution and increases variation in water depth and velocity (The Wild Trout Trust, 2012). However, blockages do cause flooding problems and will need to be cleared away periodically by the Environment Agency and either taken away or left on the edge of the bank for additional decaying wood habitat.

Mill Brook runs along the south western edge of the site and at the confluence it re-joins the River Wey Northern Branch. This branch of the river is a small watercourse which provides a certain amount of flood relief by taking some of the flow from the main river reducing the risk of flooding upstream of the mill. The off take from the main river is at a point near Coxbridge, and the watercourse re-joins the main river, near the gauging weir (Green, 2017). Mill Brook supports some good quality and diverse habitat features including classic pool-glide-riffle sequences, some of which is swept clean by valuable example of large woody debris (The Wild Trout Trust, 2012).

The Environment Agency carried out modification on the main gauging weir. The existing weir created a barrier to the movement of fish that might want to get upstream to find new areas to feed or breed. The Environment Agency developed a method of modifying the profile of the weir, which allows fish to swim up it. They did this by installing plastic planks called baffles along the face of the weir in a special pattern, these slowed down and deepened the water running down the slope of the weir, which allowed fish to swim upstream. At the same time, along one site of the weir they also constructed a special type of pass that allowed eels to move to the upper river.

Also to help counter the decline in fish stocks about 200 young Dace and Roach were released into the River Wey at the gauging weir in 2016 (Green, 2017).

2.12 Hydrology by the Environment Agency



Environment Agency (2017)

Zone 3 covers the majority of the site and is divided into High Probability and The Functional Floodplain (not shown on the map). The first is land having a 1 in 100 or greater annual probability of river flooding, the latter meaning that the zone comprises land where water has to flow or be stored in times of flood.

Zone 2 is amongst the Zone 3 area and is described as Medium Probability meaning that the land has between 1 in 100 and 1 in a 1000 annual probability of river flooding.

Bishop's Meadow is a seasonally naturally flooded grassland by the River Wey. However according to the BMT there is 'also evidence of an old sluice in the smaller water channel known as the Mill Brook' to the west of the site. Which implies that it could have been deliberately flooded when required in the past.

The Meadow still floods, although reportedly not for the last couple of years. 'Most years it is a matter of a few inches of surface water (mainly rain water and snow melt) due partly to the clay sub-soil and partly from flooding water from the water course. About one year in three, the water levels are high enough to cause the Mill Brook to overflow, making sections of the meadow and the footpaths impassable. About one year in five this is more severe and the main river (River Wey North Branch) also overflows, making the meadow impassable, often for several weeks. There has been as much as 2 feet of water or more flowing across the meadows (BMT, 2017).' It tends to collect in the south east of the site.

2.13 Phase I & National Vegetation Classification (NVC)

Bishop's Meadow consists of a mosaic of vegetation types, including lowland floodplain meadow, hedges, scrub, scattered trees, tall ruderal vegetation, marginal vegetation, emergent vegetation, river and a ditch. A more detailed appraisal of the types of habitats present and their importance is included in Bishop's Meadow NVC Survey (Girvan, 2017). Overall 8 Phase I habitats and 11 NVC communities and sub-communities have been ascribed to Bishop's Meadow, see Table 1 below.

Phase I habitats are general and broad in nature, whereas NVC is a system of classifying natural habitat types according to the vegetation communities they contain, they cover all natural, semi-natural and major artificial habitats in Great Britain. NVC data enables the conservation value of the site to be established in greater detail and the up to date survey will reflect broad changes since the last NVC.

The NVC classifications over Bishop’s Meadow have not changed significantly since the 2012 survey, although there has been some refinement of the NVC sub-communities and the greater level of detail in the 2017 map better reflects the habitats on the ground. One small change is the fact that the damp area of grass located in the north east corner of West Meadow was not seen this year, this is probably due to the lack of flooding in the last couple of years allowing coarse grasses from the surrounding area such as False Oat-grass and Cock’s-foot to re-invade.

One of the characteristics to look for in ecological good quality grassland is the high cover of broadleaf herbs. These add structure to the sward providing additional niches for invertebrates and a food source for pollinators. They also often indicate lower fertiliser inputs. The broadleaf to graminoid (grasses, rushes and sedges) ratio is one criterion used to assess species-rich grasslands, with a ratio of around 40% or higher assessed as good. Whilst the number of herbs to grasses may be improving slightly over Bishop’s Meadow, there is some way to go to achieve a herb-rich grassland.

Several species can be described as negative indicator species when they dominate the grassland such as Creeping Thistle, Common Ragwort, White Clover and Perennial Rye-grass. As well as tussocky grass species such as Cock’s-foot, Yorkshire-fog and False Oat-grass, although their presence is more likely to be due to under-management and abandonment of grasslands. The grazing in Oak and West Meadows will be a key factor in achieving better grassland structure and more diversity. It is anticipated that the introduction of cattle will change the grass and herb composition over the next few with a more short, tight sward composed of the varying mixtures of common pasture grasses, but less False Oat-grass and more obvious Perennial Rye-grass and Crested Dog’s-tail, similar to that found on the path edges. Time will tell if the overall herb composition increases. Meadow Buttercup is still likely to be frequent, with White Clover, Common Mouse-ear, Dandelion and Ribwort Plantain.

Table 1: Phase I & NVC Summary

Phase I Habitat	NVC Classification
Semi-improved Neutral Grassland	MG1a <i>Arrhenatherum elatius</i> – <i>Festuca rubra</i> sub-community MG1b <i>Arrhenatherum elatius</i> – <i>Urtica dioica</i> sub-community MG7b <i>Lolium perenne</i> – <i>Poa trivialis</i> / MG6 <i>Lolium perenne</i> – <i>Cynosurus cristatus</i> sub-community
Tall Ruderal Vegetation	OV24 <i>Urtica dioica</i> – <i>Galium aparine</i> OV24a <i>Urtica dioica</i> – <i>Galium aparine</i> typical sub-community OV25 <i>Urtica dioica</i> – <i>Cirsium arvense</i> community OV26 <i>Epilobium hirsutum</i> community OV26e <i>Epilobium hirsutum Urtica dioica</i> – <i>Cirsium arvense</i> sub-community
Dense Scrub	W21a <i>Crataegus monogyna</i> – <i>Hedera helix</i> typical sub-community underscrub

	W22 <i>Prunus spinosa</i> – <i>Rubus fruticosus</i> underscrub W25 <i>Rubus fruticosus</i> – <i>Holcus lanatus</i> underscrub
Scattered Broad-leaved Trees	NVC not assigned
Running Water	NVC not assigned
Intact Species-poor Hedge	NVC not assigned
Dry Ditch	NVC not assigned
Hard Standing	NVC not assigned

2.14 UK BAP Priority Habitat / Habitats of Principal Importance (HPI)

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. Fifty-six Habitats of Principal Importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework.

The following UK BAP Priority Habitat / HPI are present on Bishop's Meadow:

Table 2: UK BAP Priority Habitat / Habitats of Principal Importance Summary

* UK Biodiversity Steering Group, 1995 Updated 1998 ** Maddox, 2008

Broad BAP Classification*	National Priority Habitats**
Grazing Marsh	<p>Floodplain Grazing Marsh: Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing fresh water. The ditches are especially rich in plants and invertebrates. Almost all areas are grazed and some are cut for hay or silage. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities.</p> <p>The exact extent of grazing marsh in the UK is not known but England holds the largest proportion with an estimate in 1994 of 200,000 ha. However, only a small proportion of this grassland is semi-natural supporting a high diversity of native plant species (estimated 5,000 ha in England) (Maddock, 2008).</p>
Boundary & Linear Features	<p>Hedgerows: A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m wide (Bickmore, 2002). Any herbaceous vegetation or tree within 2m of the centre of the hedgerow are included. All hedgerows consisting predominantly (i.e. 80% or more cover) of at least one woody UK native species are covered by this priority habitat. It is estimated that 84% of countryside hedgerows in UK would be included.</p>
Standing open waters and canals	<p>Ponds: UK BAP Priority Habitat Pond classification are defined as permanent and seasonal standing water bodies up to 2 ha in extent which meet one or more of the criteria detailed in the <i>UK Biodiversity Action Plan Priority Habitat Descriptions</i> (Maddock, 2008) and includes Ponds supporting UK BAP species (such as Common Toad), a Nationally Scarce wetland plant species, or three Nationally Scarce aquatic invertebrate species.</p>
Rivers & Streams	<p>Rivers: This habitat type includes a very wide range of types, encompassing all natural and near-natural running waters in the UK <i>UK Biodiversity Action Plan Priority Habitat Descriptions</i> (Maddock, 2008, updated 2011) and includes rivers with</p>

	UK BAP Priority Species / Species of Principal Importance (such as Brown Trout).
Broad-leaved, mixed & Yew Woodland (Lowland Wood Pasture & Parkland)	Traditional Orchards: Traditional orchards, as distinct from non-traditional orchards are defined for priority habitat purposes as orchards managed in a low intensity way. There will be a mix of fruit and some nut trees present, with rough grassland, possibly hedges and no fertilisers or pesticides are used.

2.15 Flora

174 vascular plant species were recorded in 2017 and in total 213 species have been recorded from Bishop's Meadow, see Bishop's Meadow Species List. When comparing the 2010 – 2012 Bishop's Meadow species lists to the 2017 species list from SWT Ecology Services, Surrey Botanical Society and Alton Natural History Society the following overview can be given. During the period of 2010 - 2012 a total of 142 plants were recorded and a slightly higher number were recorded in 2017 of 174.

Of those species not re-recorded in 2017 both the Grey and Leer's Sedges were looked for at the place they were seen before, but the habitat had become a little overgrown with tall ruderal species.

Several aquatic plants were not re-seen for example Gipsywort, Yellow Loosestrife, Water Mint, Water-cress, River Crowfoot and Horned Pondwort. Possibly as the surveyors did not enter the water during the 2017 surveys and / or signals too much shading of the marginal edges by tall ruderal vegetation.

Unfortunately the Pepper-saxifrage was also not re-found, this is associated with damp old grasslands.

Some of the plants newly recorded in 2017 have been planted on the site such as Crab Apple, Wild Plum and Wild Cherry.

Pyramidal Orchid was a treat to see this year.

Astonishingly Daisy was first recorded in 2017, perhaps an oversight as it is a very common grassland plants.

Three interesting grass species were recorded for the first time this year Crested Dog's-tail and Smooth Meadow grass, which could be down to oversight or signalling a change in the habitat due to management. Meadow Brome was also recorded for the first time this year.

A summary of the Conservation Status is provided below and see Table 3:

2.16 Species

These are species that are listed on the Surrey Rare Plant Register (draft, 2016). Four are VC17 Scarce species have been recorded on Bishop's Meadow. These are plants that occur in 4 to 10 sites since 2000, or more if seriously thought to be declining, in the Vice-county of Surrey. Two were recorded this year – Spike Water-milfoil and Blue Water-speedwell. Whilst one was recorded in 2010, by someone who

had been in the river with waders therefore had good access, namely Horned Pondweed. Finally Chris Hall recorded Corky-fruited Water-dropwort in 1991.

One is a VC17 Rare species and occurs in 1 to 3 sites since 2000 in the Vice-county of Surrey, this is River Water-crowfoot and was last recorded in 2010 again directly from the river.

The following sections provide additional information on these species taken from the Surrey Rare Plant Register, Draft no 3 Version 11 (2017):

2.16.1 Spiked Water-milfoil

This is a perennial of lowland calcareous and eutrophic water bodies throughout the British Isles. Many Surrey records are for the Basingstoke Canal, with a scattering elsewhere. It is likely to be under-recorded because of the difficulties of access and identification associated with aquatic plants.

2.16.2 Corky-fruited Water-dropwort

Despite its name, this Water-dropwort is mainly found in neutral soils that are not especially wet. It grows in old grassland, banks and roadsides where it is able to withstand intensive management such as mowing. The concentration of records in the British Isles is distinctly southern, but always rare in Surrey. Cattle-grazing of sites seems to favour it, perhaps creating bare ground and trampling seed into it. There are some other sites that need.

2.16.3 River Water-foot

River Water-crowfoot is a robust perennial that is very similar to *R. penicillatus* subsp. *pseudofluitans* Stream Water-crowfoot with which it can sometimes be found. River Water-crowfoot grows in base-rich fast flowing rivers with a firm substrate. The first Surrey record "Plentiful in the Wey at Godalming" was in 1853. It is still present in this river and may well be under-recorded.

2.16.4 Blue Water-speedwell

This Water-speedwell is usually an annual species that grows by rivers, streams, ditches and ponds. Substrates may be acidic or calcareous and are usually base-rich. It is a lowland species and has been recorded in most of the British Isles but there are many areas where the maps show no new records. Lousley states that Surrey records are mainly from ponds, with some records from the Wey and Mole.

2.16.5 Horned Pondweed

Horned Pondweed is a rhizomatous aquatic perennial and it can spread to form large, clonal patches. This species grows in ponds and slow-moving streams and rivers, especially those that are calcareous or nutrient rich. Once frequent in mainly the southern part of the British Isles, current maps suggest a dramatic decline in records. In Surrey, in addition to numerous ponds, it has been recorded sparingly in the chalk rivers Wey and Hogsmill but only once in the Wandle. Although able to withstand the ravages of waterfowl, there has been a serious reduction in recently recorded sites. This may in part be due to lack of recording but in others, whilst the pond may remain, the habitat has become unsuitable.

2.17 Axiophytes

These are 'worthy plants' that indicate good quality habitat and are taken from Surrey's list and automatically includes all Ancient Woodland Indicators. A total of 27 have been recorded in Bishop's Meadow, of which 18 were seen in 2017.

2.18 Grassland Indicators

These are taken from the list of 'Species typical of grassland of conservation interest in Surrey' taken from the Guidance for the Selection of Sites of Nature Conservation Importance in Surrey (Gibbs, 2008). A total of 26 have been recorded across the site, of which only 5 were not re-recorded, i.e. 21 were recorded in 2017. To put this into context a site that is worthy of being selected at Site of Nature Conservation Importance (SNCI) will usually have 15 or more Grassland Indicator species. Two notable absentees were Corky-fruited Water-dropwort and Pepper-saxifrage, perhaps indicating a gradual drying out of the meadow and increase in rough grasses. However the Pyramidal Orchid was a notable inclusion for the first time on the meadows.

2.19 BOA RO4 Further Important Species of Interest

From the BOA RO4 list the only species of relevance for Bishop's Meadow is River Water-crowfoot recorded in 2010.

Table 3: Plants with Conservation Status Summary

Plants with unknown status or planted have not been included such as Corncockle (wildflower mix), Crab Apple and Wild Cherry (planted trees).

Common Name	Scientific Name	Date Last Recorded	Surrey Rare Plant Register	Axiophytes	Grassland Indicators	Ancient Woodland Indicators (AWI)
Barren Strawberry	<i>Potentilla sterilis</i>	25/06/17		*	*	*
Blue Water-speedwell	<i>Veronica anagallis-aquatica</i>	25/06/17	VC17 Scarce	*	*	
Branched Bur-reed	<i>Sparganium erectum</i>	25/06/17		*		
Brooklime	<i>Veronica beccabunga</i>	25/06/17		*		
Buck's-horn Plantain	<i>Plantago coronopus</i>	25/06/17		*	*	
Bulbous Buttercup	<i>Ranunculus bulbosus</i>	25/06/17		*	*	
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	25/06/17			*	
Common Sorrel	<i>Rumex acetosa</i>	25/06/17		*	*	
Corky-fruited Water-dropwort	<i>Oenanthe pimpinelloides</i>	25/06/91	VC17 Scarce	*	*	
Cowslip	<i>Primula veris</i>	25/06/17			*	
Field Maple	<i>Acer campestre</i>	25/06/17				*
Goat's Beard	<i>Tragopodon pratensis</i>	25/06/17			*	
Hairy Tare	<i>Vicia hirsute</i>	25/06/17			*	
Hawkweed sp.	<i>Hieracium sp.</i>	2012		*	*	
Holly	<i>Ilex aquifolium</i>	25/06/17		*		*
Horned Pondweed	<i>Zannichellia palustris</i>	24/08/10	VC17 Scarce	*		
Lesser Stitchwort	<i>Stellaria graminea</i>	25/06/17			*	
Marsh Woundwort	<i>Stachys palustris</i>	25/06/17		*	*	
Meadow Barley	<i>Hordeum secalinum</i>	25/06/17		*	*	
Meadow Fescue	<i>Schedonorus pratensis</i>	25/06/17		*	*	
Meadowsweet	<i>Filipendula ulmaria</i>	25/06/17		*	*	
Oxeye Daisy	<i>Leucanthemum vulgare</i>	25/06/17			*	

Common Name	Scientific Name	Date Last Recorded	Surrey Rare Plant Register	Axiophytes	Grassland Indicators	Ancient Woodland Indicators (AWI)
Pendulous Sedge	<i>Carex pendula</i>	25/06/17		*	*	*
Pepper-saxifrage	<i>Silau silaus</i>	24/08/10		*	*	
Pyramidal Orchid	<i>Anacamptis pyramidalis</i>	25/06/17			*	
River Water-crowfoot	<i>Ranunculus fluitans</i>	24/08/10	VC17 Scarce	*		
Rue-leaved Saxifrage	<i>Saxifraga tridactylites</i>	1994		*		
Smooth Meadow-grass	<i>Poa pratensis</i>	25/06/17		*		
Spiked Water-milfoil	<i>Myriophyllum spicatum</i>	25/06/17	VC17 Scarce	*		
Square-stalked Willowherb	<i>Epilobium tetragonum</i>	25/06/17			*	
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	25/06/17			*	
Timothy	<i>Phleum pratense</i>	25/06/17			*	
Toothwort	<i>Lathraea squarmaria</i>	May 74		*		*
Un-branched Bur-reed	<i>Sparganium emersum</i>	2010		*		
Water Chickweed	<i>Myosoton aquaticum</i>	25/06/17		*	*	
Water Forget-me-not	<i>Myosotis scropioides</i>	25/06/17		*		
Winter-ress	<i>Barbarea vulgaris</i>	24/08/10			*	
Yellow Iris	<i>Iris pseudocorus</i>	23/06/17		*		
Yellow Loosestrife	<i>Lysimachia vulgaris</i>	2012		*	*	

2.20 Bryophytes (mosses & liverworts)

No bryophyte data has been collected for the site. It is recommended that British Bryological Society (local contact is June Chatfield) are invited to record here. The bryoflora is likely to be relatively common, however there are a number of different microhabitats for them to thrive such as scattered trees, brickwork, water, open grassland, bare soil microhabitats and decaying wood.

2.21 Lichen

No lichen data has been collected for the site.

2.22 Fungi

Very little fungi records are known for the site.

2.23 Fauna

The next section provides summary information on the wide variety of fauna found across the meadows.

2.24 UK BAP Priority Species / Species of Principal Importance (SPI)

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. Table 3 below lists those species relevant to Bishop's Meadow because they have either been recorded there or there is future potential. However, Small Blue and Grey Partridge have not been included as they are records that are unverified and / or unlikely.

Table 4 also includes the BOA RO4 Species of Principal Importance (Priority species), BOA RO4 Further Important Species of Interest and BOA RO/04 Priority Species for Recovery. From the Recovery list of seven, three may be enticed onto the meadows, Otter and Water Vole, should they return to Surrey and Harvest Mice as there is good potential habitat for them to survive in the tall ruderal and bankside vegetation.

Table 4: UK BAP Priority Species / Species of Principal Importance (SPI) Relevant for Bishop's Meadow

Common Name	Year Last Recorded	UK BAP Priority Species / SPI	On BOA RO4 List Priority Species	BOA RO4 Further Important Species of Interest	BOA RO4 Priority Species for Recovery	Comment/s
Stag Beetle	2017	*				Requires decaying wood as standing or lying wood.
Blood-vein Moth	2017	*				The key pressures are habitat fragmentation as well as inappropriate and inconsistent management, i.e. excessive tidying such as hedge flailing, excessive use of pesticides, herbicides and fertilisers and possibly light pollution.
Grey Dagger Moth	2012	*				
Rosy Minor Moth	2012	*				
Ear Moth	2012	*				
Lapwing	2010	*				These arable nesting birds prefer wet grassland with bare ground or short vegetation, may visit the site in winter.
House Sparrow	2017	*				Generally use building in which to nest, but do use Ivy.
Skylark	2017					Skylarks breed from April to July and nest on the ground. Their main food items are insects and other invertebrates in summer, seeds and green plant parts in winter and they prefer wide open grassy spaces.
Dunnock	2017					This little bird eats small insects worms and seeds and are found in hedges and shrubs.
Song Thrush	2017					The Song Thrush occurs in woodlands, hedgerows with abundant trees, parks and gardens. Earthworms and snails are important components of its diet.
Brown Trout	2017	*	*			They live in fast-flowing, stony and gravelly rivers and are feed on insect larvae, small fish and flying insects such as mayflies and damselflies.
Slow-worm	2017	*				Slow-worms hunt after dusk or following rainfall and they concentrate on slow-moving prey invertebrate prey such as slugs and snails, and are eaten by Hedgehogs, Badgers and domestic cats. They are found under stones, wood, sheets of metal, and in compost heaps and hibernate during the winter underground in a variety of countryside and urban habitats. Slow-worms hibernate throughout the winter months, sometimes sharing hibernacula with other reptile species.
Grass Snake	2017	*	*			Grass Snake is typically closely associated with water, with marsh and wetland habitats. Adults eat mainly frogs and toads. Compost and manure heaps are favoured nest sites, as they provide suitable egg incubation temperatures. They hibernate from October to March, often communally, under tree roots, in old rabbit burrows, or in piles of manure and can live for up to 15 years.

Common Name	Year Last Recorded	UK BAP Priority Species / SPI	On BOA RO4 List Priority Species	BOA RO4 Further Important Species of Interest	BOA RO4 Priority Species for Recovery	Comment/s
Common Lizard	2017	*				They prefer a mosaic of different levels of undergrowth with a variety of basking sites to allow body temperature control by moving in and out of sunnier or shadier spots. At night they hide in burrows or crevices. Preferred prey items include earthworms, snails, various insects and spiders.
Common Toad	2010	*	*			Favouring woodlands and damp areas with plenty of cover, the Common Toad is generally more tolerant of dry habitat than the Common Frog. They breed in ponds between February and March, spending their days in hollows in the ground, coming out after dark on warm damp evenings to feed on ants, slugs and earthworms.
Hedgehog	2017	*				As the name suggests they are often found near hedgerows, which provide ideal locations for nest sites, a good supply of invertebrates on which they feed, protection from predators and important movement corridors. They can roam an average distance of 2km on a single night.
Soprano Pipistrelle Bat	2017	*	*			Soprano pipistrelles usually feed on midges and other insects in wetland habitats, for example over lakes and rivers, and also around woodland edge, tree lines or hedgerows, and in suburban gardens and parks. Summer roosts of both common and soprano pipistrelles are usually found in crevices around the outside of often newer buildings, such as behind hanging tiles, soffit and barge or eaves boarding, between roofing felt and roof tiles or in cavity walls.
Noctule Bat	2017	*	*			The Noctule is our largest bat and feeds on midges, moths and other flying insects. Noctules roost in holes in trees and hibernate over the winter, between November and April.
Water Vole	Future potential on the meadows	*	*		*	The Water Vole is a species of streams, rivers, wet ditches and water courses. It was once very common and found throughout the UK but has recently suffered dramatic declines in its abundance and distribution as a result of predation by Mink and habitat loss and degradation.
Otter		*	*		*	Otters have been recorded on still waters as well as rivers and streams of all sizes. Evidence from studies show that otters will use tiny streams and ditches including dry watercourses as regular routes.
Harvest Mouse		*	*		*	Harvest mice are extremely active climbers and feed in the stalk zone of long grasses and reeds, particularly around dusk and dawn. The small tennis ball sized breeding nests above ground in grasses, rushes, grassy hedgerows, ditches and Bramble are the most obvious sign indicating the presence of Harvest Mice. Harvest mice have many predators including Weasels, Stoats, Foxes, Cats, Owls and Crows.
Brown Long-eared Bat		*	*			Summer roosts are usually located in older buildings, barns, churches and trees. Their foraging habitat is open deciduous woodland,

Common Name	Year Last Recorded	UK BAP Priority Species / SPI	On BOA RO4 List Priority Species	BOA RO4 Further Important Species of Interest	BOA RO4 Priority Species for Recovery	Comment/s
						parkland and orchards. They emerge from their roosts up to an hour after sunset and often follow linear features such as hedges, streams or fences to and from feeding sites. They fly comparatively slowly, either catching flying insects or picking them off leaves or tree bark.
Scarce Chaser Dragonfly	2011			*		Scarce Chaser found on the edge of the Cemetery by a member of the British Dragonfly Society in 2011. Potentially could still be in the area. See the Management Fact File in the link: https://british-dragonflies.org.uk/species/scarce-chaser
Barn Owl	2017			*		Barn Owls require rough grassland, field edges, and edges of water courses in which to hunt for small mammals such as Field Voles.
Kingfisher	2017			*		Found near slow moving, shallow streams or rivers, they will use overhanging branches in which to perch to look for fish prey.
Bullhead	2017			*		Bullheads predominantly occur in stony streams and rivers where the flow is moderate and the water is cool and oxygen-rich it includes chalk streams and rivers of southern England.
Water Shrew	Future potential			*		Water Shrews inhabit burrows close to water. Their main food source is freshwater shrimps, water skaters and caddis larvae which they obtain by diving and hunting underwater. Occasionally frogs, newts and small fish are eaten. They also feed on many terrestrial invertebrates such as earthworms, snails and beetles.

2.25 Invertebrates

The summary of Bishop's Meadow Invertebrate Survey (Dodd, 2017) show that a total of 294 invertebrate species were recorded during the 2017 survey. Sixteen species with a recognised conservation designation (e.g. Red Data Book, Nationally Scarce etc.) were recorded. A further 34 species are considered to be nationally Local in their distribution due to their restricted geographic range and/or habitat fidelity.

The 16 Red Data Book Species and Nationally Scarce Species and an additional 4 flies and a moth from other surveys from the site are listed in Table 5 with the location found on Bishop's Meadow if known and shows that the invertebrates with Conservation Status are found across the site, using a variety of habitats. .

Typically of many hay cut grasslands, the survey found a good number of highly mobile, generalist species, e.g. bees, hoverflies and the rather off course *Drilus* beetle, utilizing the meadow areas; which although not particularly botanically rich in the 'classic' hay meadow sense, do provide a high-density of flowering plants for pollinators.

Table 5: Bishop's Meadow Invertebrate Status with Location

Scientific Name	Species Type	Status	Location
<i>Gymnosoma rotundatum</i>	a parasitic fly	RDB3	Orchard Meadow grassland

Scientific Name	Species Type	Status	Location
<i>Cantharis fusca</i>	a soldier beetle	NS	East Meadow in damper scrub / grassland
<i>Orellia falcata</i>	a picture wing fly	N	Oak Meadow on Goat's-beard
<i>Drilus flavescens</i>	a beetle	Na	Central Meadow, associated with Chalky habitats
<i>Andrena bucephala</i>	a mining bee	Na	WPA1 Cemetery Tall Vegetation associated with Chalky habitats
<i>Andrena fulvago</i>	a mining bee	Na	Across the Meadows on Yellow composites associated with Chalky habitats
<i>Lasius brunneus</i>	an ant	Na	By River Wey of decaying Ash
<i>Zilla diodia</i>	a spider	Nb	WPA1 in trees / shrubs
<i>Theridiosoma gemmosum</i>	a spider	Nb	WPA2 by River Wey at base of emergent / marginal plants
<i>Anthribus nebulosus</i>	a weevil	Nb	Range of trees across the site
<i>Oxystoma cerdo</i>	a weevil	Nb	WPA1 on vetches
<i>Longitarsus anchusae</i>	Comfrey Flea Beetle	Nb	WPA2 on Common Comfrey
<i>Coeliodes ruber</i>	a weevil	Nb	Oak Meadow grassland
<i>Microplontus campestris</i>	a weevil	Nb	Across Meadows on Oxeye Daisy
<i>Philodromus albidus</i>	a crab spider	[Nb]	WPA1 trees
<i>Lygus pratensis</i>	a mirid bug	[RDB3]	Tudor Ditch / across the Meadows
<i>Homoneura tesquae</i>	a fly	N	Location not given
<i>Pipizella maculipennis</i>	a fly	RBD3	Location not given
<i>Acanthophilus helianthi</i>	a fly	N	Location not given
<i>Terellia winthemi</i>	a fly	N	Location not given
<i>Kent Black Arches</i>	Moth	Nb	Associated with Dewberry

2.26 Riverfly Count

A Riverfly count was undertaken at Bishop's Meadow on the morning of 30th May 2017 at Grid Reference SU 83773 46325 by Libby Ralph from Riverfly Partnership. Riverfly Count is part of the Riverfly Monitoring initiative by the Riverfly Partnership which ensures that angling and conservation groups can take action to conserve the river environment by monitoring water quality. Eight invertebrate target groups are sampled for and if identified, then abundance is counted and from that a score is given, see below at Table 6 and Table 7. These invertebrates are used as they are generally present throughout the year and are pollution sensitive and therefore are associated with good quality water. Bishop's Meadow is not normally included in the count for this part of the River Wey, but was carried out for interest and comparison with downstream at South Street Bridge. The results for Bishop's Meadow were as follows:

Table 6: Riverfly Scoring System

Abundance Range	Riverfly Score
-----------------	----------------

1-9	1
10-99	2
100-999	3
Over 1000	4

Table 7: Riverfly Count at Bishop's Meadow May 2017

Species	Abundance	Score
Olives (<i>Baetidae</i>)	372	3
Blue-wing olives (<i>Ephemerellidae</i>)	42	2
Mayfly (<i>Ephemeroidea</i>)	12	2
Freshwater shrimp (<i>Gammarus</i>)	758	3
Uncased caddis	12	2
Cased caddis	37	2
Total		14

This gives Bishop's Meadow a Riverfly index/score of 14. This is a good score for the River Wey main river. Especially when compared with the South Street Bridge scores during 2016 which ranged from 8-13 over the years monitoring. The best score along this River Wey main stream was further downstream at Elstead Somerset Bridge with a score of 18. Bishop's Meadow scores favourably probably because of the sandy/gravelly substrate in the river, compared with mainly pebbles/silt at South Street Bridge and cased caddis are hard to find at South Street.

2.27 Reptiles

Slow-worm, Common Lizard and Grass Snake were all recorded on the site. Slow-worm was categorised as having a good population (i.e. between 5-20). Table 8 provides the summary results from the Bishop's Meadow Reptile Survey (Geunioui, 2017).

Table 8 Reptile Survey Results

Species	Peak adult number	Population estimate
Adder	Not recorded	N/A
Common Lizard	1	Low population
Grass Snake	1	Low population
Slow-worm	8	Good population

2.28 Birds

Thirty one species of bird were recorded during the 2017 survey. Table 9 below shows those species with a conservation status. Overall Bishop's Meadow supports a fairly typical bird community for the wider area, including many common garden bird species, such as Robin, Blue Tit and Blackbird, but also species connected to habitats on site such as scrub, such as Whitethroat and Hedgerows, such as Dunnock and the River Wey, such as Mallard.

It is clear that certain areas seem to be more important than others for birds using the site. Generally, the majority of birds recorded were in or close to areas of trees, hedgerows and areas of scrub. Birds were also utilising the adjoining garden habitats to the north of the site and also south of the River Wey. West Street Cemetery adjoining the site on its north-west boundary along with the mature trees and scrub close to this boundary also provide important breeding, sheltering and foraging habitats for birds.

The areas of scrub and hedgerows with their associated patches of Bramble in particular are very good for breeding, sheltering and foraging Wren, Blackcap, Dunnock, Bullfinch, Blackbird, Song Thrush, Robin and Whitethroat.

Table 9: Summary of Birds with Conservation Status for Bishop’s Meadow

Common Name	UK BAP Priority Species / SPI	BOCC4 Red or Amber
Mute Swan		A
Mallard		A
Kestrel		A
Lapwing	*	R
Snipe		A
Herring Gull		R
Black-headed Gull		A
Tawny Owl		A
Swift		A
Kingfisher		A
Willow Warbler		R
Skylark	*	R
House Martin		A
Meadow Pipit		A
Grey Wagtail		R
Dunnock	*	A
Fieldfare		R
Song Thrush	*	R
Redwing		R
Mistle Thrush		R
Starling		R
House Sparrow	*	R
Bullfinch		A

2.29 Bats

During the walked transect survey three types of bat were recorded using the bat detector:

- **Common Pipistrelle** – Recorded frequently throughout the evening.
- **Soprano Pipistrelle** – Recorded several times in the evening.
- **Noctule** – Recorded during the first hour only.

In addition the following have been recorded on the site, see Bishop’s Meadow Species List.

- **Serotine**
- **Daubenton’s**

There is also potential for other bats including:

- **Brown Long-eared Bat**

Other bats within the Farnham area could potentially use Bishop’s Meadow space. Bats are known to be roosting in close proximity to the site for example, in the barn to the south of the site on the other side of the River Wey. There may be further roosts

located on or adjacent to the site. In order to determine the likelihood of this, a preliminary roost assessment would be required on any buildings on or adjacent to the site.

2.30 Mammals

Table 10: Mammals (except bats) Recorded at Bishop’s Meadow

Common Name	Year Last Recorded
Fox	2010
Hedgehog	2017
Common Shrew	2010
Mole	2010
Roe Deer	2010
Grey Squirrel	2010
Bank Vole	2014
Field Vole	2017
Wood Mouse	2017
House Mouse	2010
Brown Rat	2010
Rabbit	2010
Weasel	2017 Not on overall species list reported from BMT (Green, 2017)
Badger	Not on overall species list reported from BMT (Green, date unknown)

2.31 Non-native, Invasive Species

Himalayan Balsam is a Schedule 9 non-native invasive species. Eradication is the end goal, but more realistically control.

Signal Crayfish are also on the Schedule 9 non-native invasive species list and are found in great numbers along the River Wey and especially congregating around the brickwork of the gauging weir. They prey on young fish and aquatic invertebrates and are almost impossible to eradicate.

Mink, also a Schedule 9 non-native invasive species, is known on this stretch of the River Wey and will prey on Water Voles. As a result Water Voles across Surrey are now functionally extinct.

2.32 Habitat Status

2.33 The State of Nature 2016 & The State of Surrey’s Nature (Waite, 2017)

The State of Nature 2016 report pools data and expertise from more than 50 nature conservation and research organisations to give an overview of the state of nature in the UK.

The State of Surrey’s Nature (Waite, 2017) is a useful representation of how habitat categories relate to the conservation status of species. This document helps to focus the mind on what should be driving management decisions for the meadows, and the continued duty to support UK Biodiversity Action Plan Priority Habitats / Habitats of Principal Importance of Lowland Floodplain Meadows, Rivers and Hedges as well as Ponds.

The analysis of the Species of Conservation Concern by the priority habitat associations indicates a 31% proportion of locally extinct, a clear majority of 40.3% of threatened and 52% of near-threatened and 34.7% of declining species are those of open semi-natural habitat (calcareous & acid grassland meadows or heathland) (Waite 2017).

2.34 Conservation Status

The meadows are a Site of Nature Conservation Importance (SNCI), this was based on the species data collected and the Bishop's Meadow NVC Survey (Girvan & O'Hara, 2013).

Sites of Nature Conservation Importance (SNCIs) are non-statutory designated sites identified on account of the habitats and flora/fauna they support, and are of County or regional wildlife importance. They are selected by a panel of ecologists who together comprise the Surrey Local Sites Partnership (formerly the Surrey Nature Conservation Liaison Group or SNCLG), which is made up of representatives from Surrey County Council, district and borough councils, Natural England, Environment Agency, Surrey Wildlife Trust, County Recorders and representatives from Surrey's specialist species recording and conservation groups.

Each SNCI has been selected according to criteria outlined in Criteria for SNCI Selection in Surrey published by the SNCLG in July 1997, subsequently revised and updated in Guidelines for the selection of Sites of Nature Conservation Importance (SNCIs) in Surrey (Gibbs, 2008).

The designation of SNCIs in no way diminishes the importance of other areas of semi-natural habitat in Surrey, and it is recognised that all semi-natural habitat is important for wildlife and of potential education value. The assessment and designation of SNCIs is a continual process and new sites will be identified as scientific knowledge of individual sites and of the total resource increases.

Bishop's Meadow was selected as an SNCI for the following reasons:

2.35 Bishop's Meadow SNCI - 'Selected on the 1st February 2013 for its species rich grassland habitat supporting 17 plant species typical of grassland of conservation interest in Surrey. The site is well used by the local community.'

In addition the River Wey along the southern edge of the site is an SNCI for the following reasons:

River Wey North SNCI – This branch of the River Wey does not currently fall in to the top 10% of UK Waterways on the grounds of the number of macro-invertebrate species present but it is still of significant interest as it contains a rich diversity of aquatic and marginal flora. There is also a dense in stream fauna which includes the only Surrey site for a notable species of Odonata as well as other species which appear in Annex II of E.C Directive 92/43/EEC. The SNCI refers only to the channel and not the bankside vegetation.

2.36 Position within an Ecological Unit

Bishop's Meadow should not be seen in isolation, rather how it sits within the surrounding countryside. Bishop's Meadow covers a total of 13ha. Immediately surrounding that is semi-natural habitat including the back of Farnham Library, St. Andrew's Churchyard, private gardens, woodland, field west of Coxbridge Roundabout, allotments and the cemetery, this adds approximately a further 21ha repository of potential wildlife that could be attracted to Bishop's Meadow. In addition the following are close by:

Farnham Park SNCI – This historic park is 630m north of Bishop's Meadow. It is designated as a Local Nature Reserve and Site of Nature Conservation Importance.

Weydon Mill Lane Woodland Ancient Wood – There is a small linear sliver of ancient woodland along the edge of the lane and is located 50m to the south of the site. This is marked on the Revision of the Ancient Woodland Inventory for Surrey (Davies, 2011). These are woodlands that are at least 400 years old and normally have a number of Ancient Woodland Indicator plant species associated with them.

2.37 Biodiversity Opportunity Areas (BOAs)

Bishop's Meadow is covered by Biodiversity Opportunity Area RO4: River Wey (& tributaries). This BOA includes the River Wey, its major tributaries and associated Flood Zone 3 (see Hydrology).

The aim of Biodiversity Opportunity Areas (BOAs) is to establish a strategic framework for conserving and enhancing biodiversity at a landscape-scale, making our wildlife more robust to changing climate and socio-economic pressures. BOAs are those areas where targeted maintenance, restoration and creation of Natural Environment and Rural Communities (NERC) Act 'Habitats of Principal Importance', i.e. Priority habitats will have the greatest benefits towards achieving this aim.

Recognition of BOAs directly meets National Planning Policy Framework policy for the planning system to contribute to international commitments for halting the overall decline in biodiversity, by establishing coherent ecological networks that are more resilient to current and future pressures. Designation of BOAs in local plans will also fulfil NPPF requirements to plan for biodiversity at a landscape-scale across local authority boundaries and identify and map components of the local ecological networks.

BOAs identify the most important areas for wildlife conservation remaining in Surrey and each include a variety of habitats, providing for an 'ecosystem approach' to nature conservation across and beyond the county. By working with larger, more dynamic ecosystems, it will be possible to create a wider range of habitats and their variants, which will in turn increase the ability of the landscape to support the largest variety of species.

There are several UK BAP Priority Habitats and Species / Habitats and Species of Principal Importance listed for this BOA that are or have been recorded in Bishop's Meadow and are discussed in the relevant habitats or species sections.

2.38 BOA Objectives & Targets relevant to Bishop's Meadow:

RO4/02: SNCIs protected by planning policy and in positive management.

RO4/03: Priority habitat restoration & creation:

- Floodplain grazing marsh T3a: 35.25ha by 2020.
- Rivers (in-channel / bankside habitat creation T3c: 10km by 2020
- Meadows T3d: 11.75ha by 2020

RO4/04: Priority Species for Recovery:

- Marsh Stitchwort, White-clawed Crayfish, Lapwing, Harvest Mouse, Otter, Water Vole and European Eel. However there are no recent records for Bishop's Meadow.

2.39 Landscape

Bishop's Meadow comes under and contributes to the Upper Wey River Floodplain Landscape Character Assessment for Surrey, which is a comprehensive assessment of the landscape character of the county. The floodplain of the Upper Wey extends south from Guildford where it passes through Godalming and Elstead before splitting at Tilford, and leaving the county to the south and west of Farnham. Boundaries are defined by the rising ground at the edge of the floodplain where the geology changes from alluvium to gravel or greensand.

Key Characteristics are as follows:

- Flat, low lying flood plain of the River Wey based on varying solid geology along its length, including Weald Clay Formation Mudstone, Atherfield Clay Formation Mudstone, Hythe Formation Sandstone, Bargate Sandstone Member Sandstone, Sandgate Formation Sandstone and Mudstone, and Folkestone Formation Sandstone, with Alluvium superficial deposits.
- Presence of the River Wey in multiple channels, streams and open water bodies and the historic River Wey Navigation with its locks and towpath.
- Pastoral land use with small and medium irregular fields grazed by cattle and horses.
- Fields are enclosed by ditches lined by willows, by hedgerows or by rural fences.
- Small scale blocks and belts of alder and oak woods within the area and woodlands lying just outside
- The floodplain gives a semi-enclosed feel.
- High biodiversity value in the varied habitats.

2.40 Health & Wellbeing

Bishop's Meadow is of particular importance for the delivery of biodiversity and nature conservation at a local level, helping to make Farnham a better place to live.

There is now a substantial body of research, which quantifies the benefits which open space can provide. These benefits include significant contributions to physical and mental health and wellbeing, to biodiversity and nature conservation, to flood control, air quality, carbon storage and mitigating climate change, to recreation and to education, to community cohesion, to regeneration and economic prosperity.

2.41 Recreation

Informal use is largely for walking and exercising of dogs and represent a wide cross section of the local public who enjoy the experience of an open space. Detailed long term data on patterns and frequency of use are not available.

Most walkers stay on clearly delineated paths, but there is the temptation to wander across open areas of grassland, or to allow dogs to do so. Trampling, therefore, is a significant factor. Path management helps stave this off. Path surfaces vary from bare soil to total vegetation cover, or imported surfacing materials, but no systematic data is available on erosion or changes in path widths.

Many walkers are accompanied by dogs and dog mess is a significant problem, both in terms of health and safety issues and enrichment of the meadow habitat.

However, conservation and recreation do not always work well together and there can be conflicts. Too many dog walkers who do not pick up after the dogs will locally enrich the site, negatively effecting the local flora and fauna. Walking in the winter, rainy season may lead to excessive trampling with bare ground resulting. It should be noted, however, that some localised erosion can be beneficial by creating bare ground habitats for species such as solitary bees and wasps.

2.42 Education & Interpretation

Bishop's Meadow is recognised as a potentially valuable educational resource. As yet, no formal assessment and development of this potential has been carried.

Guided walks have taken place on the meadows and this could be looked at again for the future.

The work task days also provide invaluable education on meadow conservation techniques and ecology, to local users who are interested.

The three noticeboards carry details of events on the meadows, information on any impending management work, and an informative map of Bishop's Meadow. Interpretations panels could be created and installed on the site at key entry points to help educate users. However, they are costly and emphasise should be on keeping urban clutter down to a minimum. This could be a future discussion point.

Schools are being encouraged to visit and use the open semi-natural habitats to explore.

2.43 Fixed Point Photography

A photograph replaces a thousand words. Photographs should be taken from the same vantage point and the same time of year over several years to provide an interesting selection of evidence on how the meadow is developing over the years.

3 Management Prescriptions

The following Management Prescriptions Table starts by listing the overall management objectives for that particular feature. Each individual feature has a separate number.

Reference	Unique Reference Number
Feature/Task	Identifies the Feature section in bold, followed by the list of tasks (not in bold) relating to that feature.
Objective/s	Details the objectives that will be achieved relating to the specific task.
Prescription/Notes	Provides details of what is to be done and additional notes, see also Figure 2.
Location	Identifies the area or compartment on the meadows where the work is to be carried out. See Figure 1 for compartments.
Who	Identifies the work force(s) normally responsible. BMT Bishop’s Meadow Trust EA Environment Agency C Contractors SWT Surrey Wildlife Trust
Target/ performance Indicator	Provides targets or performance indicators by which successful completion can be judged.
HLS Priority	Indicates the priority of the task using High or Low.
Timing	Gives the year in which the work should be carried out, where possible the month or dates (to be filled in when used as an Annual Work Programme) or TBC (to be confirmed).

3.1 Annual Work Programme

Annual work programmed for Bishop’s Meadow should be carried out as a properly managed process. Work should be carried out in accordance with the following guidelines:

- An annual work programme should be prepared based on the Bishop’s Meadow Management Plan Management Prescriptions Table.
- The annual work programme should provide a description of work involved and specifications.

3.2 Management Prescriptions Table

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27	
1	Meadows	Continue to take an annual hay cut to enhance the meadows habitat biodiversity to ensure notable species and lowland grassland indicators are managed appropriately. The number and abundance of the forbs will increase and be enhanced by wildflower meadow seed mixes. Further information on meadow restoration can be found at the following link: http://www.floodplainmeadows.org.uk/about-meadows/restoration/how-to-restore-meadows				Meadows should have a range of structure from short turf to tussocky grassland. There should be an increase in herbs in the sward so that they appear occasionally to frequent throughout. Undesirable species (Common Ragwort, Creeping Thistle, docks etc.) should be no more than occasional across the meadows. Bare ground should be between 1 and 5% of area.													
1.1	Annual Hay Cut	Enhance the diversity of the grasses and herbs in order to maximise potential for wildlife.	Take a crop between beginning of July and the end of August depending on the weather. Central Meadow to be cut in spring as an option. Meadowsweet is an accepted meadow herb as long as it does not dominate the sward. See also undesirable species section.	All Meadows	Contractor	Increase of herbs, aiming for 60:40 grasses to herbs, increase in grassland indicator species (see Gibbs, 2008), less coarse grasses and rare undesirable species (Common Ragwort, docks & thistles).	H	Annually	*	*	*	*	*	*	*	*	*	*	*
1.2	After Math Grazing.	Enhance the diversity and structure of the grasses and herbs in order to maximise potential for wildlife.	Grazing for the first time in Spring 2018. The light poaching/disturbance and herbivore dung will deliver a different resource for specialist invertebrates, whilst also reducing coarse grasses and enhancing overall grass structure.	Oak & West Meadows	WBC/BMT	Increase of herbs, less coarse grasses, less undesirable species and diverse structure, see above.	H	Annually Spring	*	*	*	*	*	*	*	*	*	*	*
1.3	Management of Arisings	To prevent enrichment and thatching of the meadows.	Where practicable clippings should be taken off site from trimmed or mown paths. Some to be used for Grass Snake Heaps, see separate section.	Across the site	BMT	No arisings left on the site.	H	On-going	*	*	*	*	*	*	*	*	*	*	*

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
1.4	Wildflower Creation	Create a more diverse range of species across the meadow.	<p>Lack of seed of desirable species and natural colonisation from the seed bank and seed rain within Bishop's Meadow will be the key limiting factor in the assembly of diverse grassland community. Therefore sowing a species-rich seed mixture of ecologically adapted grassland plants will be an effective means of overcoming this limitation.</p> <p>Use local provenance native species mix to sow into East Meadow. Chain or rough harrow prior to adding wildflower mix. Use Yellow-rattle in the mix to reduce coarse grasses. Establishing Yellow-rattle before other wildflower species are introduced is particularly suited to situations like Bishop's Meadow where the site has a significant cover of competitive species such as Perennial Rye- grass, Yorkshire-fog and White Clover and is very productive. Before introducing Yellow-rattle seed in late summer/early autumn it helps to create a short sward with frequent patches of bare ground at least 10cm in diameter. The recommended sowing rate for Yellow Rattle is between 0.5 - 2.5 kg per ha with the target of establishing a density of between 100 to 200 Yellow Rattle plants per m². At this density there should be a significant reduction in the competitiveness and productivity of the sward. (see also Technical Information Note TIN064 - Sward enhancement: diversifying grassland by over sowing and slot seeding) and Technical Information Note TIN060 – The Use of Yellow-rattle to facilitate grassland diversification.</p> <p>Sown strip results indicate that, in appropriate situations, they can provide a lower cost but slower and longer-term alternative to field scale sowing of regional seed mixtures for recreation of hay meadow vegetation. Could use green hay from Farnham Park, but fraught with difficulties.</p>	Central Meadow	BMT	Successful wildflower mosaic in the meadows. Overall increase and spread of the number of local provenance native grassland indicator species.	H	Late summer	*	*		*	*		*	*		
1.5	Undesirable Species	Reduce the number of undesirable species such as Common Ragwort, Canadian Goldenrod, docks and thistles. Remove Hemlock from the meadow areas. Remove Pedunculate Oak from Oak Meadow. Meadowsweet is not an undesirable species, although should not be abundant in the hay.	<p>Spot treat and pull the undesirable species. Docks seem to be on the increase, whereas the thistles seem to come and go seasonally.</p> <p>Common Ragwort is a problem on the site.</p> <p>Hemlock is generally avoided by Cattle as it is poisonous. However, it should be removed from the hay cut areas so as not to spoil the hay and not allowed to spread into the grazed meadows. It can be retained in the tall ruderal vegetation on the edge of the River as it is an important component of this habitat and used by a variety of insects.</p> <p>Pedunculate Oak leaves and acorns are toxic (the tannin) to cattle and there has been a sustained effort to reduce the amount of saplings in the meadow. Further pulls may be needed or the use of herbicide. If possible some could be saved and planted up in the Tree Nursery in the Orchard for later use.</p>	Across the site	BMT	Undesirable species rare across the site.	H	Summer	*	*	*	*	*					

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
1.6	Garden Species	Reduce the impact of non-native garden species on the site.	There are several non-native garden species along the edges of the site either having been deliberately planted or have arrived from peripheral gardens. They should not be allowed to spread into the semi-natural space of Bishop's Meadow.	Margins	BMT	No spreading of garden species into the meadows.	L	Summer			*			*			*	
2	Dense Scrub	Stands of scrub, with varying structure, cover and food source, are desirable to enhance the meadow diversity. Take care that Bramble, Hawthorn, Elder and Dog Rose are cut back but not removed, as thick scrub is a very valuable habitat for a variety of wildlife.				Scrub element around the marginal edged to cover between 10% and 25%.	H											
2.1	Scrub Management	Aim to leave a mosaic of managed habitat. Control Bramble.	Strim back scrub regularly. Cutting back of shrubs and trees should be scheduled between mid September and mid February.	Marginal areas	BMT	Good mosaic with a range of structure and ages present.	H	Mid Sep to mid Feb	*	*	*	*	*	*	*	*	*	*
2.2	Scrub Management	Improve access.	Trim back scrub on edge of paths for better access.	Oak Meadow as it crosses ditch & north end of West Meadow	BMT	Easy access for all users.	H	Mid Sep to mid Feb	*	*	*	*	*	*	*	*	*	*
2.3	Screening	Screening from potential future development.	Weeping Willow and Bird Cherry suggested to be planted along the edge of the River Wey opposite potential area of development to help provide a screen, however they are not in keeping with the rest of the meadow. Instead native scrub should be used. Local provenance and native species i.e. Rusty (Grey) Willow, Goat Willow, Hawthorn, Blackthorn and so on in other words a similar composition to that of the suggested hedge shrubs as well as Crack Willow and Alder.	River Wey Margin	BMT	Native local provenance scrub screen developing and maturing.	L	Mid Sep to mid Feb	*									
3	Tall Ruderal Vegetation	Tall ruderal vegetation will co-exist with rough tussocky grassland and scrub around the margins of the meadows and along the hedge and Tudor Ditch edges in order to further enhance the meadows. The fenced off area along the River Wey will also be subject to occasional strimming back so that the dense scrub and tall vegetation does not detract from the importance marginal and emergent vegetation along the banks of the River Wey.				A stable expanse of tall vegetation will be present.												

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
3.1	Tall Vegetation Management	Create mosaic of tall vegetation, scrub and grass.	Annually cut back 10 to 20% tall margin vegetation to ensure that it does not encroach into the meadow. Retain tall vegetation on the upper part of the river bank as it is an important component of the river habitat. The strimming of the tall vegetation and scrub in the fenced areas should be limited to outside the bird nesting season (BNS is between 1 st March to the end of August) and within the hibernation times of reptiles especially Slow-worm (hibernation November through to February). Therefore there is a small gap between end of October after first frost to February which is suitable. These margin areas will ensure that a proportion of the invertebrate species associated with the aerial parts of the plants will always be able to complete their life-cycle in the tall vegetation the margins provide. In addition grassy tussocks in wet areas can be excellent places to find Common Lizard. To diversify the stream edge vegetation some light cattle grazing would be optimal (although likely to be impractical). The regimented plantings of ornamental crab apples are not particularly in-keeping with the wild area theme but will ultimately provide a good spring nectar source.	Margins including WPA2 & WPA1	BMT	Good structure and mix of tall vegetation with scrub and grassland.	H	Oct frost to Feb	*	*	*	*	*	*	*	*	*	*
3.2	Tall Vegetation Management	Create a varied ecotone between grassland and marginal edge vegetation.	Strim back the edge occasionally to create sinuous edges.	Edges	BMT	Uneven, wavy edges created.	H	Summer	*	*	*	*	*	*	*	*	*	*
3.3	Marginal Edge Management	Provide structure to the edge of the grassland.	Bramble is very dense in WPA1 and is in need of some brush-cutter management, to scallop and create warm microclimate 'bays' within the clumps, would be an improvement for invertebrates. The shattered ends left by brush-cutting are less desirable and at least a proportion, where practical, could be cut clean with loppers/secateurs to make them more appealing to stem-nesting hymenopterans (bees, wasps & ants). Alternatively, using hand tools, such as shears, slashers and the like, to create/maintain the scallops would also have the desired effect. To be undertaken outside the bird nesting season.	WPA1 WPA2	BMT	Good structure and mix of tall vegetation with scrub and grassland.	H	Sep to Feb	*	*	*	*	*	*	*	*	*	*
3.4	Marginal Edge Management	Provide structure to the edge of the grassland.	Strim along the meadow/tall ruderal edge in a wavy line to provide a varied mix of long and short vegetation. Arisings to be removed. This is a useful corridor for reptiles and small mammals.	Marginal edges, hedge edges.	BMT	Good grassland structure.	H	Summer annually	*	*	*	*	*	*	*	*	*	*
3.5	Tall Vegetation Management	Create a varied ecotone between grassland and tall vegetation.	Grazing would also potentially improve the rank sides of Tudor Ditch, although would likely be impractical. Some strimming back would ensure that it does not encroach too much in the meadows. The ditch should be cleared gradually over a number of years, rather than all in one go in order to ensure the continuity of this range of habitats. Avoid vegetation clearance between 1 st March and the 31 st August in order to avoid main bird nesting season, and active seasons for other species, such as small mammals, invertebrates, amphibians and reptiles.	Tudor Ditch	BMT			Sep to Feb	*	*	*	*	*	*	*	*	*	*

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
4	Scattered Broad-leaved Trees		Continue to manage scattered trees for biodiversity as an valuable element in the local landscape. Tree surgeon and Bat Ecologist at Surrey Wildlife Trust to help guide project work. Continue to use the Orchard as a Tree Nursery with young trees being planted and left for a couple of years before being taken out and planted up in the meadow, according to the work programme. Plant out only native species of trees and shrubs.			Over period of management plan, retain scattered trees at current extent except as required for native hedgerow creation and bankside enhancement along the River Wey.												
4.1	Tree Retention	Visual Landscape.	Scattered trees across the site to be retained for wildlife and aesthetic purposes.	Trees across the site	BMT	Trees retained.	H	On-going										
4.2	Tree Inspection	Ensure the protection of protected species.	All trees to be felled or have surgery performed must be assessed by a licensed experienced Bat Ecologist, such as Surrey Wildlife Trust Ecology Services. It is recommended that works affecting trees with bat roost potential should be avoided. Where this is not possible, surveys to confirm the presence or likely absence of bats should be undertaken between May and September to confirm the requirement for further mitigation. All surveys should be undertaken in accordance with best practice. Similarly works on trees and scrub should be undertaken outside the bird nesting season. If this is not possible then the trees and shrubs should be checked by a bird ecologist for e.g. Surrey Wildlife Trust Ecology Services.	Mature trees	BMT/ Tree surgeon / SWT Bat & Bird Ecologist	Management plan updated as required. Project led by recommendations provided by Bat Ecologist.	H	TBC										
4.3	Oak Haloing	Extend life of open grown mature Pedunculate Oak trees. Improve visual landscape.	Cut back or remove trees either side of the mature Pedunculate Oaks to not shade them out to ensure future longevity. Whilst the mature Pedunculate Oak trees were not assessed for bat roosts, they do potentially provide roosting opportunities for bats if suitable roosting features are present within these trees. A ground level tree assessment would be required in order to make a full assessment of their roosting potential, see above 4.2.	Mature trees on edge of cemetery	BMT	Mature healthy trees.	L	TBC										
4.4	Bankside Enhancement	Create a mosaic of shade and open bankside environment.	Plant up groups of Crack Willow and Alder on the edge of River Wey (Mill Brook). This will not only provides shade for fish, but also helps to vary the temperature along the water.	Fenced off Wildlife Protection Areas (WPA2)	BMT	Good mosaic of habitats achieved with improving wildlife populations.	H	TBC										
4.5	Bankside Enhancement	Pollard Willows for longevity.	Pollard willows on the edge of River Wey on Manor Field. Work with EAWork on the River Wey should avoid the critical bird nesting season (BNS is beginning of March to the end of August), particularly for Kingfisher.	River Wey	Tree Surgeon EA	Mature healthy trees part of a varied mosaic of habitat with improving wildlife populations.	L	Sep to Feb, avoid BNS TBC										
4.6	Visual Enhancement	Pollard Willows for longevity.	Re-pollard Crack Willows when necessary to ensure longevity. Last done 2014/5, therefore due in 2025.	Tudor Ditch	Tree Surgeon	Mature healthy trees.	L	Sep to Feb, avoid BNS TBC										
4.7	Visual Enhancement	Lop Poplars for longevity.	Cut back Lombardy Poplars on a 10 year rotation. Use some brash and logs to create habitat piles.	North of West Meadow	Tree Surgeon	Mature healthy trees.	L	Sep to Feb, avoid BNS TBC										

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
4.8	Visual Appeal	Reduce artificial trees & urbanisation.	Care should be taken over the tendency to urbanise the meadows which detract from the main aims of the Trust. For example the planted trees as you come onto the meadows from St Andrews Church are planted ornamental trees donated by John Durham.	Across the site	BMT	No more planting of non-native trees or shrubs.	L	On-going										
4.9	Management of Brash	Enhance the species richness of grassland habitat.	Ensure all brash resulting from management operations are disposed of sustainably (e.g. habitat piles within woodland). Brash to be disposed of promptly and preferably at the end of the working day.	Across the site	BMT	All arising disposed of sustainably and within set time scale.	H	On-going	*	*	*	*	*	*	*	*	*	*
4.10	Decaying Wood Regime	Provide a varied amount of decaying wood throughout the woodland.	Decaying wood in all cases should be left in situ, unless there is a compelling reason for its removal or cutting up. H&S issues will need to be carefully balanced with the importance of decaying wood. This provides habitat for a range of invertebrates, which in turn provide food for insectivorous birds.	Margins / Hedges	BMT	All types of decaying wood to be present from standing to lying, large trees through to small twigs. Log habitat piles are also included.	H	Annually	*	*	*	*	*	*	*	*	*	*
4.11	Tree Nursery	Provide local provenance native sourced trees & shrubs to be planted out for projects.	Some Pedunculate Oak pulled from Oak Meadow can be planted up for use in hedges. Hawthorns cuttings from the site could also be grown on for hedges. Other trees and shrubs to be used only if native local provenance sourced.	Tree Nursery	BMT	Local provenance trees & shrubs provided for the site.	H	On-going TBC										
5	Hedges	Create intact species-rich linked hedges with good buffer zones of tall vegetation to support a range of birds, small mammals and reptiles. Take care not to undertake management in bird nesting season or to take too much back. A wide hedge is a host to a great number of mammals, birds and reptiles. Use a wide range of thorny and fruit bearing shrubs to provide a wide range of food for wildlife over the season.				Existing and newly created hedges will link hedgerow habitat across the site.												
5.1	Interplant Existing Hedges	Create intact, wide, varied species-rich hedges.	Gap up with local provenance native species such as Grey Willow, Goat Willow, Blackthorn, Hazel, Hawthorn, Elder, Dog Rose, Field Rose and Field Maple planted into the existing hedge (rather than more Crab Apple or non-native trees such as Bird Cherry). For greater establishment success and hence cost benefits in hedge planting, as well as for greater environmental benefits, there should be closer matching of Hawthorn (and other species) of local provenance to the planting site. These areas provide breeding, sheltering and foraging areas for bird species such as Whitethroat.	Across the site	BMT	Create intact, wide, varied species-rich hedges.	H	Oct to Feb	*	*			*	*				
5.2	Hedge Maintenance	Create intact, wide, varied species-rich hedges.	Ideally the hedges should be managed by cutting to a height of not less than 1.5m on a three to five year cycle to maintain the density of the hedge and the best possible shape for wildlife. A minimum of a 1m buffer zone to be left uncut bordering the hedge, although occasional cutting would be required as part of the scrub maintenance and to maintain footpaths free of obstruction.	Across the site	BMT	Create intact, wide, varied species-rich hedges.	H				*		*				*	

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
6	Water Features	Wetland areas can be maintained by ensuring sufficient water quantity and quality, although the hydrology system is not under the control of one management group. Liaise with Environment Agency and Surrey Wildlife Trust and other relevant bodies. Ditches and ponds can provide extremely valuable aquatic and semi-aquatic habitats and future projects will be considered.				A healthy population of wetland plants will be present. Fenced off pond with good marginal and emergent vegetation present. Future scrape projects will be discussed.												
6.1	River Wey Maintenance	Maintain a variety of wetland plants on the banks.	Ensure that any overgrown emergent vegetation in the water is identified and managed via scythe. Generally, the best policy is to cut weed lightly on a number of occasions from mid-June to September and not to do it all in one year. http://www.wildtrout.org/sites/default/files/library/Instream_Veg_Station_Apr2012_WEB_0.pdf	River Wey	BMT	The watercourse to function properly and water to flow through, with a high variety of wetland plants still present.	H	mid-June to Sep			*			*			*	
6.2	Pond Creation	Enhance the mosaic of habitats available to the wildlife.	Pond requirements i.e. variable depth to 1.5m slopes and shelves. Absence of shading on the south side to maximise sun located within close proximity to hedgerows, rough grassland scrub to facilitate amphibian dispersals and foraging. Undertake the work in May for the works and digging out the soil in order not to disturb the Slow-worm habitat. At this time they will be out of hibernation and on the move. In order not to disturb any potential ground nesting birds the grassland should be strimmed/mown back in a circular pattern. This will also move mobile invertebrates and small mammals into the rest of the meadow and away from the works area. The pond will probably need to be planted up with local provenance, native, wetland species including Yellow Flag, Water Mint, Purple Loosestrife, Crowfoot sp., Brooklime, Water Figwort and floating oxygenators.	Oak Meadow	BMT	A permanent pond, holding water all year, with a healthy number of aquatic invertebrates, wetland plants thriving and no disturbance.		Late May to June	*									
6.3	Future Project - Scrape Creation	Encourage wet flush.	Two shallow scrapes would be created in East Meadow to improve the diversity of the wet grassland habitat and provide seasonally wet or ephemeral ponds. The scrapes would be formed by removing the existing topsoil to approximately 300mm depth and excavating a shallow depression of varied horizontal and vertical profile in the underlying clay soil horizon, which extends to approximately 750mm below existing ground level (Jones, McNaught & Simpson, 2013). Arisings and top soil to be used to create a small south facing lip for Hymenoptera. To be fenced off to deter dogs. The scrapes would be seeded with a suitable grass mix and open, low growing sward and broad range of pond edge species of UK provenance. Encourage build up Bramble and tall vegetation to encourage wildlife.	East Meadow	BMT	Scrapes with winter water and developing wetland plants.		Spring TBC										

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
7	Other Maintenance Operations																	
7.1	Bench maintenance	Keep the on site bench furniture in good order.	Monitor.	Benches	BMT	Bench furniture in good condition.	L	On-going	*	*	*	*	*	*	*	*	*	*
7.2	Update noticeboard	Keep noticeboard information up to date.	Put up new and relevant information, sitings, events and so on. Remove out of date information or that which is not relevant.	Noticeboards	BMT	Up to date and relevant information for users.		On-going	*	*	*	*	*	*	*	*	*	*
7.3	Clean Litter / Dog Bins	Keep the meadows tidy and litter free.	Pick up litter and make sure the dog bins are cleared as regularly as possible. Whole site to be regularly checked too. Fly tipping to be dealt with on a reactive basis.	Bins	BMT WBC	No full bins. No litter present on the meadow.	H	On-going		*	*	*	*	*	*	*	*	*
7.4	Use of Chemical Additives	Ensure infrequent use of chemicals on the meadows.	Review all annual maintenance programmes to ensure chemical pesticides, fertilisers and other additives are only used if feasible alternative is not available. Where used, ensure lowest environmental impact chemical is used at all times. All chemicals in current use to be recorded and updated annually. Use selective herbicide on problem species.	Across the site	BMT	Review and records complete.	H	On-going		*	*	*	*	*	*	*	*	*
7.5	Fertilisers		No fertilizers, the site does not require any more additional nutrients.	Across the site	BMT	Not fertilizers used.		On-going										
7.6	Habitat Piles	Retain left over brash habitat piles for wildlife.	Add to the 10+ existing log piles across the site in discrete locations in amongst the developing dense scrub by continuing to use left over brash from tree surgery operations.	Fenced off Wildlife Protection Areas 1 & 2, Orchard	BMT	Brash piles created, when material is available from tree work.	H	On-going TBC										
7.7	Reptile Hibernacula	Create additional artificial homes to enhance the site for reptiles.	Locate them well drained areas i.e. north of the site with less flooding risk on south facing site. Approximately 1.5m tall with half m in the ground by 2m wide. Fill with brash and branches piled on top with soil, vegetation. Artificial reptile hibernacula examples can be found using this link http://www.herefordhart.org/downloads/Reptile%20Habitat%20Management.pdf	Northern edge / Orchard / Tall vegetation in Manor Field	BMT	Several hibernacula available for a good population of reptiles.	H	On-going	*			*			*			*
7.8	Grass Snake Heaps	Create artificial home for Grass Snakes.	In a well drained area to the north of the site, preferably south facing. On top of the soil place brash and branches overtopped with grass, leaves, vegetation, wood chips, horse manure to a height of approximately 1m.	Northern edge/ Orchard / Manor Field	BMT	Good population of Grass Snakes present across the site.		On-going	*		*			*				*
7.9	Partnership Working	Working with local landowners.	Work in partnership with other local landowners for example try to encourage the cemetery to enhance the biodiversity of the grassland by also leaving a late cut on the southern edge of the cemetery, leaving areas long over winter and encouraging a range of wildflowers.	Across the site	BMT	Linking Bishop's Meadow with other areas of semi-natural habitat.		On-going										

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
7.10	Fly Tipping Removal	Clear the site of fly tipping.	To be dealt with on a reactive basis.		BMT	No fly-tipping present.		TBC										
7.11	Maintenance Access	Avoid, where possible, use of vehicles on the meadows.	Avoid using vehicles where possible. If required then use the least damaging. The reason for use to be recorded in work programme.	All	BMT	Least number of vehicles using the meadows, no vehicle damage.		On-going										
7.12	Hedgehog Home	Install a hedgehog home.	Hedgehogs given that a hedgehog was seen at the back of the Old Vicarage, this would suggest that Hedgehogs potentially use Bishop's Meadow. With regards to extra Hedgehog Homes being installed, it is suggested that they will have plenty of natural habitat in which to forage in. However, they may use the home and it could help to attract them. An ideal location for the placement of a home would be on the edge of Manor Field. Additional food should not be necessary as there will be plenty of natural food for them such as slugs.	Edge of Manor Field	BMT	Healthy Hedgehog population.	H		*									
7.13	Bird Boxes		Lack of suitable nesting areas can be a limiting factor for the presence of certain bird species on a site and can limit the increase in numbers of others, particularly hole nesting species such as Starling. There are opportunities at Bishop's Meadow to install a variety of boxes to encourage more birds to use the site for breeding, particularly on some of the mature trees close to the housing and industrial / office areas along the north boundary of the site. See Bird Survey Report 2017 for more detailed information.	See report	BMT	Healthy varied bird population, good use of the bird boxes.		See report										
8	Non-native / Invasive Species	To be free from all non-native invasive species and native invasive species.				All non-native invasive species to be rare across the site. Native invasive species to be rare or only very locally frequent.												
8.1	Non-native invasive species removal	Eradication of non-native species.	Continue to pull Himalayan Balsam (Schedule 9 Invasive Species). In order to prevent the spread of the highly invasive and non-native Himalayan Balsam it is recommended that it continue to be pulled prior to the flowering period to help prevent the spread of seed. Pulling efforts need to be coordinated with up-stream otherwise the problem keeps coming back. No soil from the contaminated areas should be moved to anywhere else on the site.	River Wey edge.	BMT	Himalayan Balsam rare to not present. In reality, it is very difficult to eradicate this species, but keeping it under control is the best outcome.	H	June	*	*	*	*	*	*	*	*	*	*
8.2	Invasive Species Removal	Eradication of non-native species.	Consider how to best manage the unwanted Signal Crayfish problem (Schedule 9 Invasive Species).	River Wey	BMT	Signal Crayfish not present.	H	TBC										
9	Monitoring	A greater knowledge through surveys and monitoring will provide much needed information on some aspects of biodiversity and will help to ascertain whether targets are being achieved and adjust management accordingly.				Monitoring documented and management to reflect new information.												
9.1	Monitor Problem Species	Ensure that problem and undesirable species are only rare to	Visually monitor.	Across the meadows	BMT	Management plan updated as required.	H	Summer	*	*	*	*	*	*	*	*	*	*

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
		occasional across the site.																
9.2	Monitor Diversity of Meadows	Gain a better more comprehensive account of the diversity of the meadows.	Cutting regime effects to be monitored to ensure changes are positive for all grassland indicators and grassland species with conservation status.	Across the meadows	BMT	Data collected, management plan updated, management to reflect results.	H	Summer	*	*	*	*	*	*	*	*	*	*
9.3	Monitor Hydrology	Gain a better more comprehensive account of the local hydrology.	Document rainfall, number of floods and duration and locations.	Across the meadows / local gardens	BMT	Data collected. Management plan updated as required to reflect hydrology requirements.		On-going	*	*	*	*	*	*	*	*	*	*
9.4	Monitor Tudor Ditch	Create a habitat with permanent water.	Visually monitor retention of water, survival of froglets, colonisation of wetland plants.	Tudor Ditch	BMT	Data collected. Water is present most of the year, aquatic wildlife survival is better and there is a varied plants present.	H	On-going	*	*	*	*	*	*	*	*	*	*
9.5	Bare Ground Monitoring	Collect data on wear and tear, over use and erosion.	Visually monitor site for inappropriate bare ground, erosion & other areas of concern.	Across the site	BMT	Management plan updated as required to reflect specialist habitat requirements.		On-going	*	*	*	*	*	*	*	*	*	*
9.6	Reptile Monitoring	Continue to update knowledge of protected species.	Regularly monitor reptile tins during March – June and September using the 20 corrugated iron tins left after the 2017 SWT reptile survey. This has been incorporated into a SARG Transect. Ask SARG for data annually.	See Reptile Tin map	BMT	Database updated. Management plan updated as required. SARG data provided.	H	On-going	*	*	*	*	*	*	*	*	*	*
9.7	Butterfly Transect	Continue to update knowledge of the sites invertebrates.	Possibly Butterfly Transect Route for the future. The nearest one is in Farnham Park.	Across the site	BMT / Butterfly Conservation	Data collected.		On-going TBC										
9.8	Grassland Survey		Once the cattle have grazed consistently over a five year period, another survey of the site is recommended. In the Bishop's Meadow NVC survey (Girvan, 2017) it was suggested that the introduction of the cattle is likely to change the composition of the grassland. Whilst it is anticipated that there will be an increase in herbs, a diversity between the overall meadow and distinctive change to the grassland structure there is an aspect that will probably not be favoured and that is the possibly increase in tall growing nitrophilous weeds, particular Common Nettle, Creeping Thistle, Spear Thistle, Common Ragwort and Broad-leaved Dock. If they do increase to more than just occasional in the sward then hand pulling or spot spraying may be required. The idea is to keep them rare to occasional in the sward and not outright eradication as they are a valuable asset to the site for a wide range of invertebrates including butterflies, moths and hoverflies.	Across the meadows	SWT	Report completed, recommendations incorporated and management plan updated to reflect new information.		Summer				*						
9.9	Monitor Non-native Invasive Species	Stop spread and / or eradicate non-native invasive species.	Monitor populations of Himalayan Balsam. Add others to the list. Treat as and when appropriate, add as prescriptions.	Across the site	BMT	Management plan updated as required.		On-going	*	*	*	*	*	*	*	*	*	*
9.10	Bat Research	Continue research.	There is potential for funding for an bat detector for BMT to then collect additional bat data.	Across the site	BMT	Database updated.		On-going	*	*	*	*	*	*	*	*	*	*

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
9.11	Bird Survey	Continue research.	Further bird surveys could include wintering bird surveys, which would pick up species such as gulls, waterfowl and wintering thrushes such as Fieldfare and Redwings. Volunteers / members of the Bishop's Meadow Trust and members of the public can be encouraged to regularly submit bird sightings from the site, which along with the previously mentioned further bird surveys, such as breeding bird surveys and wintering bird surveys can contribute to the monitoring of bird species across the site and inform future appropriate management.	Across the site	SWT	Report completed, recommendations incorporated and management plan updated to reflect new information.		Summer TBC										
9.12	Database	Catalogue existing database to make data more accessible.	Catalogue database. Update to include all survey / monitoring results.		BMT	Database updated.	L	On-going	*	*	*	*	*	*	*	*	*	*
9.13	Plans, Photographs & Documents	Catalogue information.	Ensure relevant photographs and data inserted in database.		BMT	Plans and photographs collected.	H	On-going	*	*	*	*	*	*	*	*	*	*
10	Health & Safety	All national and local H&S requirements, including provision of risk assessments, must be complied with when carrying out work on any site. Consider the H&S of users on the site and act accordingly.				100% H&S record.												
10.1	General H&S	Maintain safety for all users.	Suitable warning signs must be used when working on the meadows, for instance when spraying or carrying out tree work.	Across the site	BMT	No H&S issues during programmed work.		On-going	*	*	*	*	*	*	*	*	*	*
10.2	Dog Issues	Maintain safety for all users.	Dog fouling is a key health concern. Bins are provided.	Across the site	BMT	Minimal dog fouling present.		On-going	*	*	*	*	*	*	*	*	*	*
10.3	Monitor Infectious Disease	Reduce effects of Ash Die-back.	Monitor for infected trees. Thin out early when in full leaf. Remove leaf litter. Employ biosecurity (plant hygiene).	Scattered trees	BMT	Reduced effects of Ash Die-back.		On-going	*	*	*	*	*	*	*	*	*	*
11	Landscape & Visual Quality	Enhance the special visual qualities and landscape character of Bishop's Meadow, with particular regard to the sense of openness, variety and setting that it brings.				Minimise visual clutter												
11.1	Site Furniture	Avoid too much urban clutter.	Avoid unnecessary furniture such as information signs, park furniture, litter bins, dog bins and benches. Where present they are to enhance the users experience and compliment the meadow.	All	BMT	No urban clutter.		On-going	*	*	*	*	*	*	*	*	*	*
12	Recreation & Infrastructure	Manage recreation to prevent damage to ecological, historical and landscape qualities. Prevent unlicensed use of recreation such as drone use. Manage paths for the benefit of users.				Create a unique balance between conservation of the heath and users needs.												
12.1	Maintain Rights of Way	Keep safe access routes.	Manage vegetation adjacent to paths, permissive horse rides and bridleways, with regard to safety issues.	Permissive rides & ROW	BMT	No overhanging vegetation left longer than 6 months. H&S concerns responded to within appropriate time scales. Urgent deal with immediately. Non-urgent deal with within 5 working days.	H	On-going	*	*	*	*	*	*	*	*	*	*

Ref	Feature / Task	Objective/s	Prescription / Notes	Location	Who	Target/Performance Indicator	High / Low Priority	Timing	18	19	20	21	22	23	24	25	26	27
12.2	Re-install Damaged Posts	Maintain site furniture.	Post to be re-installed.		BMT	Task complete.		Jun-17										
13	Education & Interpretation	Continue to promote awareness of the management of Bishop's Meadow to a wide range of people from users, locals and a wider audience through a variety of mediums such as information on noticeboards, newspaper articles and internet.				Improved awareness of the meadows.	H											
13.1	Role of Management Plan	Raise awareness of the meadows.	Raise awareness of management plan with general public.		BMT / SWT	Increase and improve level of information on website.												
13.2	Review of Management Plan	Update management.	Commission new management plan.		BMT / SWT	New management plan complete.												*
13.3	Interpretation & Education Policy	Continue to review interpretation.	Update text information for leaflets, interpretation boards, website etc in light of new management plan and recent surveys.		BMT	Information updated		On-going		*	*	*	*	*	*	*	*	*
13.4	Annual Work Programme	Prepare annual work programme.	Annual work programme to be agreed with BMT, with feedback agreed and updated.		BMT	Work programmes produced and agreed.		Annual		*	*	*	*	*	*	*	*	*
13.5	Guided Walks	Raise awareness of the meadows.	Raise awareness of the site with general public, engage locals and young people.		BMT / SWT	Successful walks completed.		Summer TBC										
13.6	Interpretation Boards	Raise awareness of the meadows.	Key entry points, Crosby Gate and footbridge on River Wey, possible third one as you come onto the site from St. Andrews Church.		BMT	Interpretation boards with useful relevant easy to digest information erected on site.		TBC										
14	Funding	Seek new funding sources.				Monitoring undertaken and administration completed.												
14.1	New Funding Sources	Seek new funding sources.			BMT	Discuss funding opportunities.	H	TBC										

References & Bibliography

- Bishop's Meadow Trust** (2017) <http://www.bishopsmeadowtrust.org> accessed 14/11/17
- Cheffings C & Farrell L** (2005) *The Vascular Plant Red Data List for Great Britain*. JNCC
- Cope T & Gray A** (2009) *Grasses of the British Isles*. BSBI
- Dodd S** (2017) *Bishop's Meadow, Farnham Invertebrate Survey*. Surrey Wildlife Trust Ecology Services
- Environment Agency** (2017) *Flood Map of Bishop's Meadow* [<https://flood-map-for-planning.service.gov.uk/summary/483561/146291>] accessed 15/11/2017
- Geuniou J** (2017) *Reptile Survey Report*. SWT ES
- Girvan I & O'Hara R** (2013) *Bishop's Meadow NVC Survey*. SWT
- Girvan I** (2017) *Bishop's Meadow NVC Survey*. SWT ES
- Green V** (2017) *Bishop's Meadow: Meadow Walks*. BMT
- Guenioui J** (2017) *Bishop's Meadow, Farnham Reptile Survey*. Surrey Wildlife Trust Ecology Services
- Hankinson, Duckett Associates** (2015) *Surrey Landscape Character Assessment*. HAD
- Hayhow D, Burns F, Eaton M, Al Fulaij N, August T, Babey L, Bacon L, Bingham C, Boswell J, Boughey K, Brereton T, Brookman E, Brooks D, Bullock D, Burke O, Collis M, Corbet L, Cornish N, De Massimi S, Densham J, Dunn E, Elliott S, Gent T, Godber J, Hamilton S, Harvey S, Hawkins S, Henney J, Holmes K, Hutchinson N, Isaac N, Johns D, Macadam C, Matthews F, Nicolet P, Noble D, Outwaite C, Powney G, Richardson P, Roy D, Sims D, Smart S, Stevenson K, Stroud R, Walker K, Webb J, Webb T, Wynde R & Gregory R** (2016) *State of Nature 2016*. The State of Nature Partnership
- Headley A** (2010) *Vegetation Survey of Skimmington Pasture and Western Alder Woods at Reigate Heath SSSI*. Unpublished.
- Jones D, McNaught R & Simpson A** (2013) *Bishop's Meadow Farnham Sketch Proposal Supplementary Notes* Jacobs & Environment Agency
- Jones D, McNaught R & Simpson A** (2013) *Bishop's Meadow, Farnham Initial Appraisal Sketch Proposal Masterplan*. Jacobs/Environment Agency
- Jones D, McNaught R & Simpson A** (2013) *Bishop's Meadow, Farnham Initial Appraisal Environmental Background Appraisal* Jacobs & Environment Agency
- Jones D, McNaught R & Simpson A** (2013) *Bishop's Meadow, Farnham Initial Appraisal Environmental Background Appraisal* Jacobs & Environment Agency
- Kelly J, Maguire C & Cosgrove P** (2008) *'Invasive Species Ireland, Best Practice Management Guidelines: Himalayan balsam (Impatiens glandulifera)*. Envirocentre & Quercus*
- Lousley J** (1954) *BSBI Reigate Heath*. Unpublished
- Maddock A ed.** (2008) *UK Biodiversity Action Plan Priority Habitat Descriptions*. BRIG (updated 2011)
- Magic Maps** <http://surreymaps.surreycc.gov.uk/public/viewer.asp> Accessed 15/11/2017
- Nature on the Map**
<http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx> Accessed 15/11/2017

-
- Partridge E** (2012) *The Bishop's Meadow Trust Land Management Plan*. The Bishop's Meadow Trust
- Surrey Botanical Society (2017)** *Surrey Rare Plant Register, Draft no 3 Version 11*. Surrey Botanical Society
- The Wild Trout Trust** (2012) *River Wey – Bishop's Meadow Trust*. The Wild Trout Trust
- Walker K.J., Stevens P.A., Stevens D.P., Mountford J.O., Manchester S.J. & Pywell R.F.** (2004) *The restoration and re-creation of species-rich lowland grassland on land formerly managed for intensive agriculture in the UK*. Biological Conservation, 119, 1-18
- Wey Landscape Partnership** (2014) *River Wey Catchment Vision Consultation Draft V5*. Wey Landscape Partnership
- Winchester D** (2017) *Bishop's Meadow, Breeding Bird Survey*. Surrey Wildlife Trust Ecology Services

Part Two – Bishop’s Meadow References Document

Figures

Figure 1 Location, Boundary, Compartments & Habitats

Figure 2 Management Prescriptions

Appendices

Appendix 1 2017 National Vegetation Classification Survey Report

Appendix 2 2013 National Vegetation Classification Survey Report

Appendix 3 2017 Invertebrate Survey Report

Appendix 4 2017 Reptile Survey Report

Appendix 5 2017 Bird Survey Report

Appendix 6 2017 Bat Transect & Day Assessment Report

Appendix 7 2017 Species List