





OUGHTONHEAD COMMON LOCAL NATURE RESERVE HITCHIN

GREENSPACE ACTION PLAN

2017 - 2022





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AMENDMENT DATE	SECTION UPDATED	DETAILS	OFFICER

Purpose of This Document

The purpose of this document is to be a guide to the people maintaining and developing Oughtonhead Common. It is intended to be a document that is used on a regular basis and is based on annual management maps. The maps show actions planned for each year with the resulting change represented on the following year's map. The plan will be reviewed annually to ensure it is effective and relevant.

This document also aims to link together the various strategies and objectives of North Herts District Council (NHDC), who own and manage the site.

These include the District Council's Corporate Core Values which are:

- Attractive and Thriving
- Prosper and Protect
- Responsive and Efficient

The Vision for North Hertfordshire is:

Making North Herts a vibrant place to live, work and prosper

The following documents have also influenced this Greenspace Action Plan:

- Oughtonhead Common Greenspace Action Plan 2011-2017 and previous managements plans
- Greenspace Strategy & associated action plans
- Tree Strategy
- Grounds Maintenance Contract
- Local Plan (2016)
- Hertfordshire Biodiversity Action Plan
- Local Wildlife Site Survey 2016 (Appendix 8)

Introduction

Oughtonhead Common is an area of approximately 16 hectares of wetland, grassland, woodland and scrub habitats situated along the northwest edge of Hitchin, North Hertfordshire. The River Oughton, a chalk stream, forms the northern boundary. The site is well used for informal recreation including walking, dogwalking, jogging, horse riding, mountain biking and picnicking. Oughtonhead Common is one of the premier wetland sites in Hertfordshire. It is the largest baserich marsh on chalk in Hertfordshire and many of its features are priority habitat types in the Hertfordshire Biodiversity Action Plan (BAP). The site has long been a magnet for naturalists and much has been recorded and written about the site since the early nineteenth century.

Tenure / Ownership

The site is owned by North Hertfordshire District Council (NHDC).

Previous Plans

This is the latest in a series of management plans for Oughtonhead Common since 1974 and replaces the Greenspace Action Plan 2011 - 2017. Under these plans the site has seen a range of enhancements. These include improved access and information through hard surfacing of paths, installation of interpretation panels and production of a site leaflet. Some of the most recent work involved wetland restoration and creation, with ponds and ditches created and restored and a viewing platform and boardwalks installed to enable visitors to look over and walk through these new habitats.

Steps have also been taken to improve the river for the wildlife it supports. Upstream of the mill, where the river is deep, very slow and silted, reeds have been removed to provide a channel for the water and enhance flow. Downstream, where the river is shallower, narrower and heavily shaded, trees and scrub have been felled, coppiced and pollarded to let more light into the river. Brash structures have been built to narrow the channel in places and increase the flow velocity. The faster moving water has created areas of clean gravel bed for fish to spawn and other river life to thrive. This work is ongoing but to date the results have been very positive and fish numbers in this section of the river are rising.

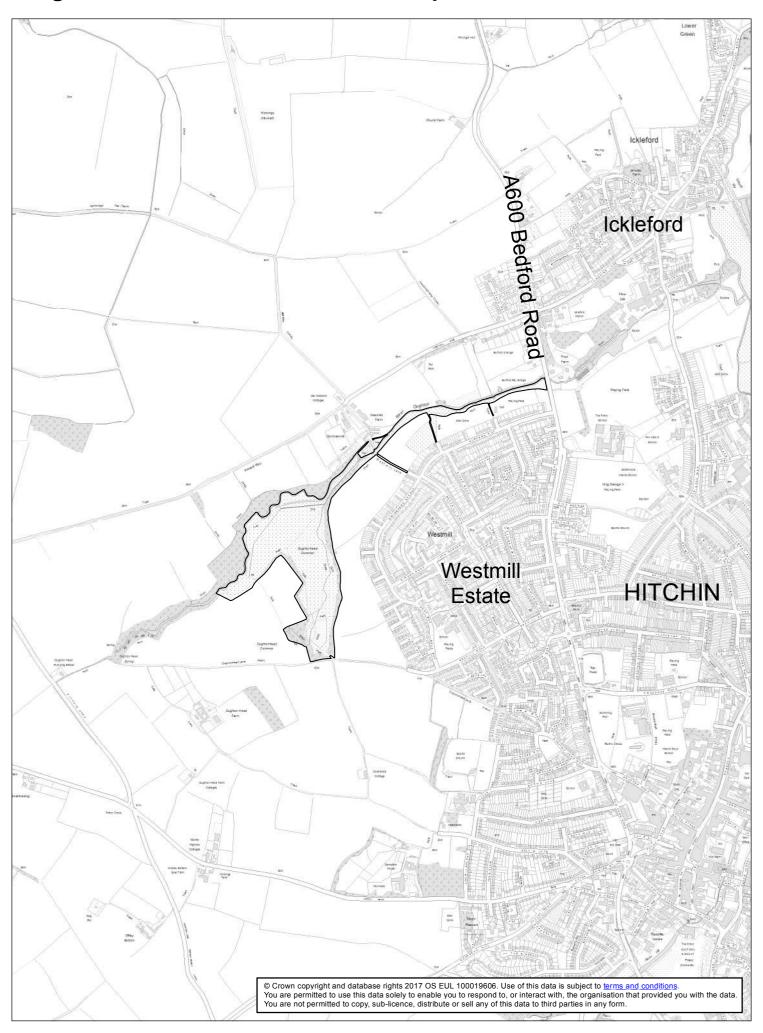
In addition, the livestock fencing has been replaced and the grazing areas extended to enable a larger area of the species-rich grassland to be managed through cattle grazing.

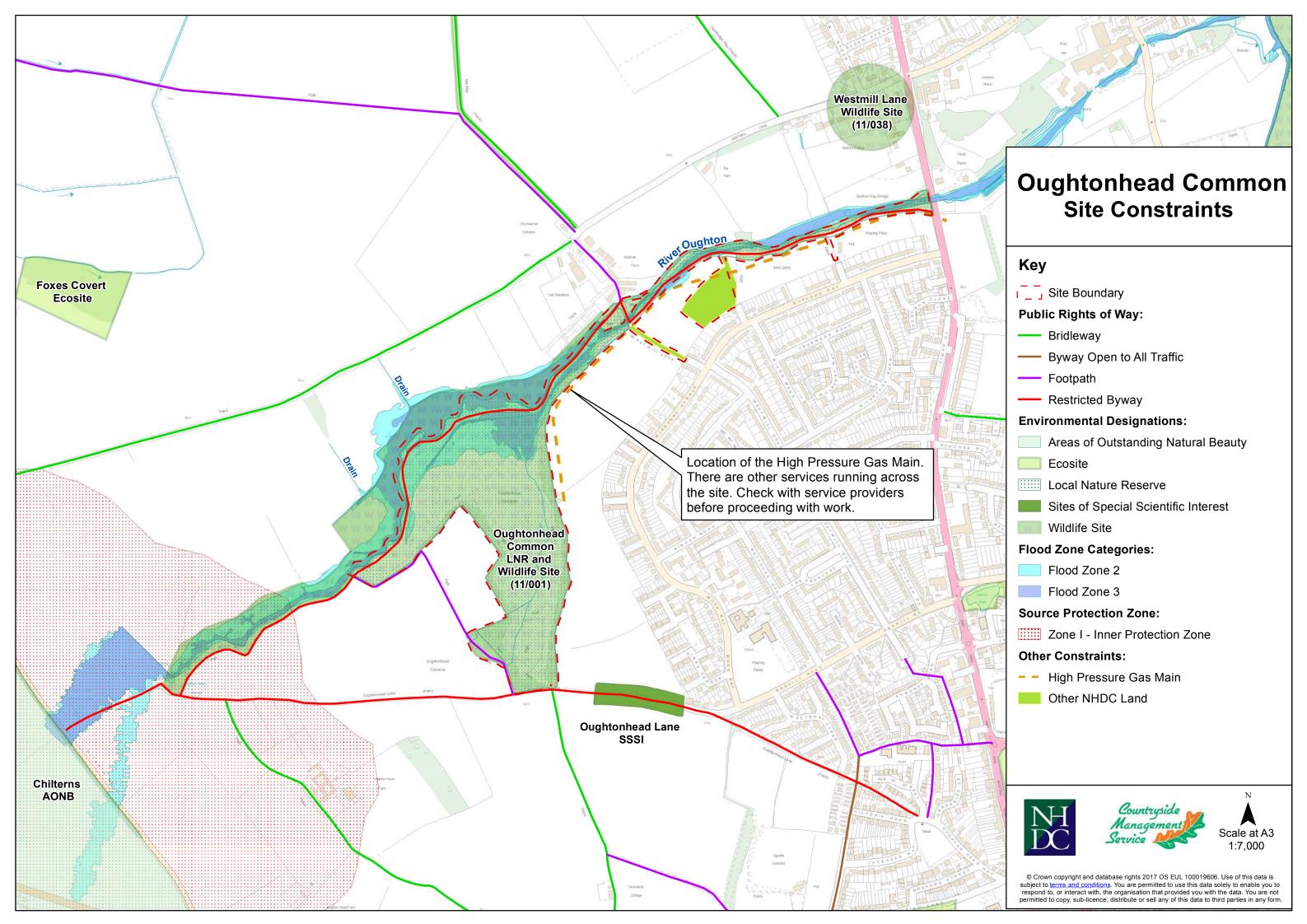
All this work has been achieved through funding from a range of sources, including NHDC itself, Hertfordshire County Council, the Environment Agency, Defra's Environmental Stewardship Scheme and a bequest in memory of the late Phil Lumley, the site's honorary volunteer warden from 2003 to 2011. In the last 5 years this has amounted to more than £70,000 of capital investment in the site.

Legislation / Status / Restrictions

- Part of the extended Metropolitan Green Belt
- Public Open Space
- Common Land (reference number CL051)
- Local Wildlife Site (reference number 11/001)
- Local Nature Reserve
- Invertebrate Site Register
- Protected Species Site. Pipistrelle Bats are found on site and Water Voles have also been recorded in the past
- Part of the site (the grazing compartments) are entered into the Environmental Stewardship Scheme (agreement started 2012 – expires 2022) which dictates the way the grassland and ditches are managed
- Strategic Green Infrastructure (NHDC Green Infrastructure Plan)
- Covered by local bye-laws (see Appendix 7).

Oughtonhead Common Location Map





Site History

A more detailed description of the site history can be found in previous management plans.

Oughtonhead Common has a long history of human use. In size, the site remains very much as it was in the 1800s. Probably because of the inherent wetness of the soils, the Common itself escaped any significant cultivation. Since medieval times it was primarily used for the grazing of livestock, once being an important part of the Common field system of Hitchin. In addition to grazing, the economic importance of the river and Common lay in the grain mill built in the late 16th century at Westmill and the growing of willow to provide "withies" for basket making and reed and sedges for thatching.

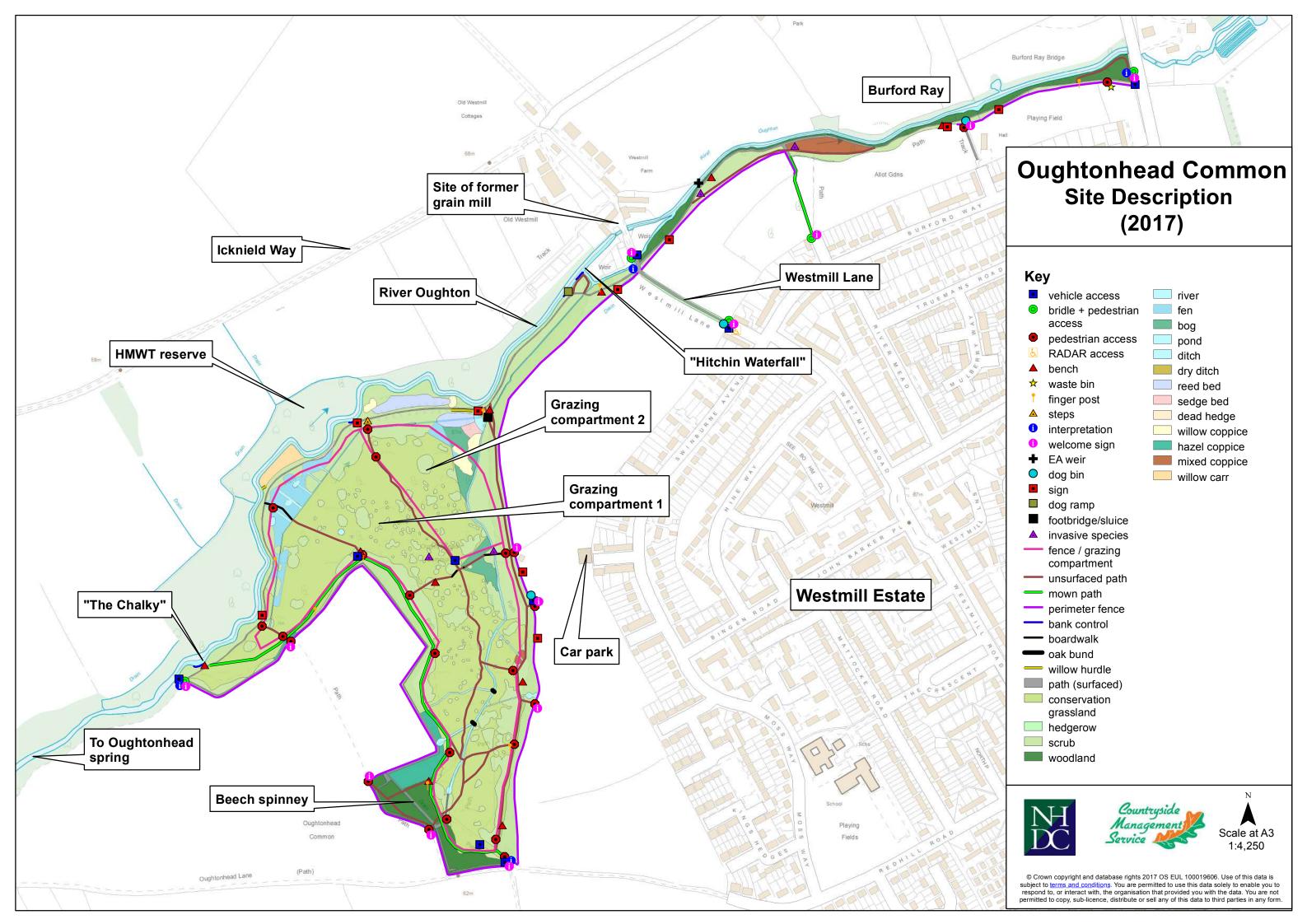
Under the Commons Act of 1899 the Common was declared available for public recreation and possibly this, coupled with changes in farming practice, led in c1914 to the end of grazing on the site. In the 1920s the growing of willow on the north bank of the river was also abandoned and the trees were allowed to encroach to improve shooting. By 1922, increasing recreational use of the Common prompted the local authority to issue a set of bye-laws (see Appendix 7).

The expansion of Hitchin saw urban development move ever closer to the eastern boundary of the site. In 1953 the Common, springs, river and associated woods were listed by the then Nature Conservancy Council (NCC) as a Site of Special Scientific Interest (SSSI) because of its wildlife richness and diversity. In 1967 under the new Commons Act the site was re-registered under Hitchin Urban District Council and, since no Commoner registered Common rights at that time, all rights except those pertaining to public rights of way, were rescinded. The SSSI was de-designated in 1970 because of the deterioration of the site due to drying out of the peat marsh and lack of water flow from the springs.

Although the botanical diversity of the site had undoubtedly diminished, positive steps since 1974 have, to some extent, helped reverse the decline. These include the installation of a sluice gate to increase water levels on the site and the reintroduction of grazing (see below). The area is recorded as a grade A site by the Herts Biological Records Centre.

In 1996, part of the common was fenced and cattle grazing reintroduced to enable conservation management of the main part of the grassland. In 2016, the fencing was renewed and extended so that today the vast majority of the grassland on the site is under conservation grazing.

In 2001, in conjunction with English Nature the site was registered as a Local Nature Reserve (LNR). Local Nature Reserves are sites that are important for wildlife, geology, education or public enjoyment. Oughtonhead Common was declared in recognition of its wildlife value and the dedication of the local community to its continued positive management.



Site Description and Analysis

Oughtonhead Common (TL168304 centre) lies to the northwest of Hitchin in the county of Hertfordshire, approximately 60m above sea level. The main site is roughly triangular in shape and covers approximately 16 hectares. It contains a variety of habitats including a chalk river, ditches, springs, swamp, tall herb fen, fen meadow, dry grassland, dry and wet woodland and scrub. The geology of the site is quite unusual and varied, resulting in the very diverse flora and fauna that it supports.

At its northern boundary the site abuts the River Oughton, which arises at Oughtonhead Springs. The Common is bounded to the east by a mixture of arable land and playing fields that adjoin the Westmill estate of Hitchin, and to the west by arable farmland. Further to the west (2-3km) lies the beginning of the Chilterns Area of Outstanding Natural Beauty.

To the north of the river, running the length of the main body of the Common, is a densely wooded, thin strip of marshy ground (~6.4ha) that is currently managed as a nature reserve by the Herts & Middlesex Wildlife Trust. Beyond this is arable land. Adjoining the south-western tip of the site is a small beech copse, known as the beech spinney, which is continuous with the site but not part of the LNR. Other sections of land that form part of this Greenspace Action Plan but are not part of the LNR include 3 paths connecting Burford Ray and the Riverside Path with Burford Way.

A summary of the different habitats and features of interest follows. This is informed by a survey of the Local Wildlife Site (including the Wildlife Trust nature reserve) undertaken in 2016 by surveyors on behalf of the Hertfordshire Wildlife Sites Partnership. This report can be found in full in the appendices.

River and wetland

The River Oughton rises from a series of springs in the chalk aquifer, approximately 1km to the west of the common. The river flows northeast, past the main common and the adjacent Westmill Farm, site of a 17th century grain mill. It then runs through Burford Ray, a thin strip of woodland, to eventually join the River Hiz at Ickleford and thence the River Ivel.

Chalk rivers like the River Oughton are a characteristic and attractive feature of the Hertfordshire landscape, but they are rare in global terms. There are less than 200 such rivers in the world, most of them occurring in south east England. Emanating from aquifers that lie deep in the chalk, their waters are alkaline with an even temperature and, typically, a lively flow. A special community of flora and fauna has evolved to take advantage of these conditions. Areas of bare gravel in the river bed provide spawning grounds for trout and other fish species; overhanging or fallen trees provide refuges for young fish and invertebrates; and vegetated river banks, allow shelter for insects, amphibians and small mammals.

The River Oughton provides an important habitat for iconic species like brown trout, kingfishers and water crowfoot. Water voles have also been recorded here in the last 10 years.

Like many of Hertfordshire's rivers, the Oughton has been extensively modified in the past and is still affected by man's activities. Low flows brought about by water abstraction have been a problem, although the river is now augmented by direct pumping from the aquifer during times of low flow.

Above the mill, the river was historically realigned to provide a head of water to power the mill. Here, the channel is wide and straight and the flow is very slow. This leads to a build-up of silt across the bottom of the river, smothering the gravel bed. Dense stands of reed also build up along the river, further slowing the water. In 2014 some of the reed was removed from the channel in a trial to enhance the flow. This has delivered some short-term gain and will need to be monitored to assess the longer term gains and benefit of repeating the process periodically.

A bypass channel feeds off the main river upstream of the mill, via a tall sluice. The resultant fall in water is known locally as the Hitchin Waterfall. The stream below it provides good quality river habitat, with a small pool formed by the waterfall, a clear gravel bed and aquatic vegetation including watercress. It is a favoured location for the kingfisher.

Downstream of the mill, although straightened, the river channel is more natural, the water faster flowing with areas of gravel found amongst the silt. This has more potential for habitat restoration, and in the last few years a series of measures have been initiated to undertake this. Trees and scrub have been removed to let more light into the river and this de-shading has allowed aquatic plants to establish and thrive. With consent from HCC, the local flood authority, tree trunks and brash have been pinned to the river bed at various points. This narrows the channel and diverts the flow, creating more speed and variety and leading to scouring of silt and exposure of gravels. This work is already seeing results, with a large increase in trout and other fish numbers being recorded by the Environment Agency in their 2016 survey.

Building on the earlier tree works, more of this will be undertaken during the course of this plan until the entire stretch downstream of the mill is restored (see Appendix 6). The impact on the river substrate and quantity of revealed gravel of the establishing and extending vegetation will be assessed. Where this is not achieving sufficient diversity of water speed, the installation of in-channel deflectors and build-outs will be considered.

In addition to the river, a range of wetland habitats are found here. Springs feed several ditches across the site and these are ecologically rich. Species include several rush and sedge species, water mint, meadow vetchling, angelica, pond sedge, watercress, brooklime, field horsetail, water figwort and fen bedstraw. They are managed through a careful conservation management regime to ensure they do not become silted up and overgrown. In 2014, the ditch running parallel with and to the south of the river was desilted and de-shaded, with much of the thick blackthorn and willow scrub lining its banks removed to let in light and encourage aquatic

vegetation. This will provide potential habitat for water vole and other aquatic species.

The ditches feed into an area of open water, retained by a sluice, with thick fringing sedge and reed at the north-eastern corner, just to the south of the main path, of the main common. Historically this area has been good for amphibians, with large numbers of frogs spawning in the shallows. However, it was becoming choked with sedge and reed and so some of this material was removed during the 2014 restoration works. This has provided more open water and shallow water habitat. The northern end has become choked with silt and will need to be cleared in the life of the plan.

In addition to the sedge and reeds mentioned above, a small reed bed is located nearby, to the north of the path. Although small, it provides a valuable addition to the habitats on site and is particularly good for migrant birds such as reed and sedge warbler. It is at risk of invasion by scrub and drying out through build-up of dead vegetation if not managed. A rotational cutting regime was re-introduced under the previous plan and this will be continued under this plan. A programme will also be initiated to manage adjacent scrub through a coppice cycle and, where necessary, removal of encroaching individual shrubs.

An area of restored fen is found further west, to the south of the path. New ditches and a pond were created here in 2014 to provide an increased range of wetland habitats in an area of degraded fen and responding to the decreased water table levels on site. The area has established well but will need ongoing management to keep rank vegetation and scrub at bay. This will be achieved through cattle grazing and, when required, scrub removal.

Invasive species in the wetland areas include *Azolla filiculoides*, known as fairy fern or floating water fern, which has been a problem along one of the ditches and currently along the river. Attempts have been made to control this highly invasive non-native plant with biological control agents in the form of a weevil. This has been successful along the ditch but less so along the river. Advice from specialists suggests that this is because the Azolla on the river was too dispersed and that weevil application would be more effective once it has formed a thicker mat. The river should therefore be closely monitored and steps taken when the weed reaches a suitable stage. This is important, not only to protect the habitat on the common but also the river habitat downstream.

Himalayan balsam is also found along the river and in the adjacent marshy areas. This invasive alien plant has successfully been kept under control by annual removal, all undertaken by hand by volunteers. This will be continued under this plan, to protect the site and also reduce the risk of spread downstream.

Grassland

The varied underlying geology has led to the development of a range of grassland habitats at the Common. Areas of marshy grassland support species including

southern marsh orchid, rush and sedge species, watermint, hemp agrimony and meadowsweet.

Areas of drier, neutral grassland support species including silverweed, ribwort plantain, St John's wort, agrimony, glaucus sedge, ladies bedstraw, vetch species, meadow vetchling, hard rush, watermint, hairy sedge, creeping buttercup, lesser catstail, creeping cinquefoil, red fescue, cocksfoot, Yorkshire fog and fleabane.

Ant hills, of the yellow meadow ant, are scattered across the site and are evidence of the ancient nature of the grassland. They often support a variety of herbs and also provide a food-source for green woodpeckers.

Wet areas along the ditch lines are described above.

The grassland is largely managed by grazing small numbers of Longhorn cows, which were reintroduced in 1996 and are present all year round. In 2016 the area grazed was extended to incorporate the majority of the grassland on site as well as the restored fen area. This was undertaken following significant public consultation and after gaining consent from the Secretary of State for the Environment. To maintain current grazing pressure the number of cows on site will need to increase.

The main problem weeds and invasive species in the grassland areas are thistles, mainly creeping thistle, and ragwort. Both need controlling; in the case of the thistles, to prevent them encroaching on the species rich grassland and, in the case of ragwort, because it is poisonous to livestock. Removal is currently undertaken by hand-pulling / digging, which will continue. The alternative is chemical treatment, which is undesirable in such an area of species-rich grassland and should be undertaken only as a last resort.

Woodland and scrub

Forming the south-western tip of the site is a small beech copse, known as the Beech Spinney, which adds variety to the range of habitats here. A thick band of scrub with some mature trees, predominantly of ash and oak, marks the west and eastern boundaries, with thickets of blackthorn and hawthorn. In places there are areas of hazel coppice, which are under active rotational management by volunteers.

A strip of trees and scrub border both sides of the river as it runs eastwards to the far edge of the common by the Bedford Road. The northern bank is in various, private ownership. As described above, a programme of selective felling and scrub removal has been undertaken along the south bank to open up the river and let in more light. Further work, in particular management and removal of some of the scrub along the river both up and downstream of the mill, would be beneficial. This should include the ditch that runs from the sluice at the edge of the main common to the by-pass channel.

Along the north bank of the river, where it borders the main part of the common, runs a belt of wet woodland of varying width. This site is a nature reserve managed by the Herts and Middlesex Wildlife Trust. Although not part of the Common and not

forming part of this plan, the area is an important habitat in the Oughtonhead complex. It is one of the larger fen woodlands in Hertfordshire and has a long history of being managed as a fen. The western sections are dominated by mature alder carr, which is an unusual habitat in Hertfordshire.

Scattered scrub can be found throughout much of the site, as individuals or groups. Species include hawthorn, blackthorn and privet, with occasional hazel and, in the wetter areas, willow. It provides an important habitat on the common but needs to be controlled to ensure the valuable grassland is conserved. This is done through an ongoing programme of cutting by volunteers. This work has been guided by the previous plan following a review of the scrub coverage across the site. The progress towards scrub reduction as a result of grazing over the past 5 years will be reviewed in the spring of 2017. A programme of scrub management will be established to begin Autumn 2017, which will initially focus on the newly fenced areas which have been incorporated within the extended grazing compartments.

Currently brash is stockpiled, then chipped and spread on boundary paths. This is a large undertaking and proving increasingly difficult to maintain. An alternative is needed. Controlled burning is used effectively at other North Herts sites and will be introduced here. The number and location of fire sites will be strictly limited and agreed in advance by the CMS officer in conjunction with NHDC and the Friends. Means to limit damage and nitrification will be implemented e.g. burning platform provision.

Chalara Ash Dieback, which arrived in the UK in 2012, has not yet been confirmed to be present on site. This fungal disease weakens and kills ash trees. The diversity of the genetic stock and age of ash in any location may mean that some trees will be more resilient than others with older trees often surviving for years with the infection. Ash is a small component of the woodland and hedgerow trees on site and there are a variety of other species present across the common.

When found on site, trees exhibiting symptoms of Chalara will be notified to the Forestry Commission via Tree Alert. Trees with Chalara may survive for many years. Trees exhibiting symptoms will be monitored as part of the normal tree management routine and works undertaken where a tree poses a risk to people or property. Government guidelines are that trees should be retained wherever possible and not felled unless for reasons of public safety.

In the longer term management will be planned to allow for the loss of ash but maximising persistence of ash related biodiversity.

Access

Oughtonhead Common is a Public Open Space with open access on foot. Easily accessed from the Westmill Estate and other parts of Hitchin, the site is well used by the general public for a range of leisure activities. These include dog walking, walking, jogging, mountain bike riding, picnicking and horse riding. Public access into the grazing compartments is provided for people on foot via kissing gates and a series of informal paths crisscross the site. There are sections of boardwalk through

the wetter areas. Vehicle access for management purposes is possible from Bedford Road, Westmill Lane, Swinburne Playing Fields and Oughtonhead Lane.

A Restricted Byway (Hitchin Restricted Byway 1) runs from the A600 at Burford Ray in the east along the southern bank of the river to the springs at Oughton Head to the west. Known as the 'Riverside Path', this provides access for walkers, riders and cyclists. The rest of the site is open to walkers only. Motorbike and motor vehicle access are prohibited from the whole site including this path.

The Riverside Path is surfaced from the Bedford Road to the site access gate on the western boundary, near the Chalky (see below). Three other surfaced paths link onto this from Burford Way and the Westmill Estate and offer easy access routes onto the common. All these paths have easy-access kissing gates to allow wheelchair and buggy access whilst preventing motorbike access. One entrance, from Westmill Lane, has RADAR key access to allow access with a motorised mobility vehicle. At the Bedford Road entrance, the pavement has been extended from the bus stop to the gateway to allow safe access at this point. This also now allows walkers to complete a series of circular walks at the Burford Ray end of the site. It has been a number of years since the surfaced paths were laid and these would benefit from top dressing and deeper patching where required. Funding will be sought to carry out this work as part of this plan. In other locations, in particular to the south of the site, the perimeter path and entrance from Oughtonhead Lane will require attention and potentially, surfacing. Furthermore, a short section of path, on the Swimbourne playing fields and behind the pavilion will require surfacing to regularise the path at this location.

The Chalky is found in the north-western corner. It is a pool in the river where the public come to enjoy a paddle and is also well used by dogs. As a consequence it suffers from significant erosion, which was tackled under the last plan through a range of measures including the installation of pre-planted coir rolls to retain and stabilise the banks, temporary fencing to keep the dogs off and provision of a stone-filled mesh access ramp. This has required ongoing maintenance, with regular fencing repairs and topping up of the stone. A more permanent fence, in keeping with the nature of the site, is required to ensure the dogs are kept off. The durability of the stone also needs monitoring to enable timely replenishing.

The Common is well connected to the wider countryside through the Public Rights of Way network (see map pg. 8). This includes the Icknield Way, an ancient green lane, which runs just to the north of the site and parallel to the Riverside Path.

A car park at the adjacent Swinburne Avenue playing fields is used by visitors to the Common.

Thanks to significant investment from NHDC and funding secured from Biffa Award, the site has been well sign-posted, with several interpretation panels and a site information leaflet providing educative material. Two walks are promoted on the leaflet, one of which – the River Walk - is suitable for all users. In addition, a new interpretation panel, viewing platform and boardwalk were installed as part of the fenland restoration plan, funded by HCC, the Environment Agency and a legacy from the estate of the late volunteer warden Phil Lumley, extending access further.

However, there are no notice boards on site, nor information panel or signs to direct visitors from the car park to the site. Considerable work has been undertaken across the site since the original panels were installed leaving them out of date. The site would therefore benefit from a review of signage and interpretation, which will be undertaken and actions delivered during this plan period.

Vision, Aims and Objectives

Mission Statement

North Hertfordshire District Council's Mission Statement for Oughtonhead Common is as follows:

- To maintain a vibrant community-based open space that focuses on maintaining the diverse flora and fauna that can be found at Oughtonhead Common
- To link with at least one of the Council's Strategic Priorities (see page 4). To promote the economic, environmental and social well-being of the district

Corporate Vision for Parks and Open Spaces

North Hertfordshire District Council's manages parks and open spaces throughout the four towns in the District. These form an integral element of the environment and appropriate provision and management is essential to meet the Council's vision to:

- Provide high quality services which put people first
- Provide value for money by running our services more efficiently
- Promote the economic, environmental and social well-being of the district

Green space forms a vital element in any urban environment. It provides a sense of natural calm in a man-made environment. This has a direct effect on the social well-being of residents and helps to support the ecology and bio-diversity of the urban environment.

Corporate Objectives

- To work with our partners to provide an attractive and safe environment for our residents, where diversity is welcomed and the disadvantaged are supported
- To promote sustainable growth within our district to ensure economic and social opportunities exit for our communities, whilst remaining mindful of our cultural and physical heritage
- To ensure that the Council delivers cost effective and necessary services to our residents that are responsive to developing need and financial constraints

Green Flag

Oughtonhead Common currently holds the Green Flag Award. This scheme is the benchmark national standard for parks and green spaces in the UK. To be eligible, sites must be freely accessible to the public and perform well against the following eight criteria:

- A welcoming place
- Healthy, safe and secure
- · Clean and well maintained
- Sustainability
- Conservation and heritage
- Community involvement
- Marketing
- Management

The Award scheme is run on an annual basis, with annual application rounds and judging each summer. During the course of this plan NHDC and its partners will work to retain the award.

Management Objectives, Maintenance and Development Arrangements

The long term aim is to maintain Oughtonhead Common as one of the premier wetland sites in Hertfordshire and, through the management of its wildlife-rich habitat, secure its long-term future as a place for the enjoyment of nature for generations to come.

To this end the **site objectives** are:

- 1 To maintain and enhance the recreational value of the whole site and increase enjoyment and understanding of it by visitors
- 2 To protect and enhance the biodiversity and heritage of the site
- 3 To support and encourage community involvement at Oughtonhead Common
- 4 To ensure the standard of maintenance is maintained and relevant
- 5 To ensure ongoing costs are sustainable

These objectives will be achieved through a range of actions described in this plan including:

1 To maintain and enhance the recreational value of the whole site and increase enjoyment and understanding of it by visitors

- Provide clear and welcoming access into and throughout the site
- Maintain and where necessary improve access infrastructure to the site
- Carry out reactive tree works to address safety issues
- Respond proactively to any misuse of the site
- Review existing interpretation and signage and add / update / renew to provide more detailed promotion and interpretation of the site and its features

2 To protect and enhance the biodiversity and heritage of the site

- Continue to improve the quality of the unimproved grassland whilst diversifying the scrub habitat
- Maintain and improve river, ditch and bank-side habitat, to encourage water vole, brown trout, kingfisher and support the features they require to survive
- Maintain other wetland habitats and increase biodiversity
- Retain a balance between use of the site by visitors and wildlife, particularly by encouraging appropriate use of the site
- Maintain and where possible extend the coppicing regime for hazel and willow shrubs across the site
- Control alien and invasive species

3 To support and encourage community involvement at the Common

- Provide opportunities for involvement of the local community in the management of the site and ensure all involved operate towards achievement of the GAP
- Promote events and volunteer activity at Oughtonhead Common

4 To ensure the standard of maintenance is maintained and relevant

- Maintain the paths and site furniture
- Manage litter and dog waste

5 To ensure ongoing costs are sustainable

- Ensure ongoing maintenance costs are financially sustainable including through implementation of capital works that help reduce running costs
- Secure external funding to support the viability of capital works

Management

Site management is directed by the Grounds Team and Countryside Management Service (CMS), with tasks and operations undertaken by the Friends of Oughtonhead Common volunteers, John O'Conner Grounds Maintenance Ltd and other specialist contractors. The grazing is managed by Maydencroft Farm. Whilst the cattle are owned by the district council, Maydencroft maintain the fencing and water source and are responsible for all husbandry relating to the cattle. They also maintain some of the paths around the grazing area. Volunteers also participate as Stock Checkers.

In 2012 the site was entered into Defra's Environmental Stewardship Higher Level Scheme (HLS), superseding the Countryside Stewardship scheme that had been operating for the previous 10 years. The HLS provides financial support for the conservation maintenance and restoration works including that for the grassland and scrub.

Grounds Maintenance Contract

The grounds maintenance service for the North Herts District is externalised and is currently undertaken by John O'Conner's Grounds Maintenance Ltd.

At Oughtonhead Common, the grounds contract currently covers the maintenance of the following items:

- Dog bins
- Litter picking and collection from litter bins

Conservation/Biodiversity Management

NHDC works with CMS to maintain and enhance the biodiversity of the site. CMS is part of Hertfordshire County Council and its work is co-funded by the majority of District and Borough Councils within the County, including NHDC. In return the Districts receive advice and technical expertise that would not otherwise be available. Additionally CMS are experienced in managing volunteer task groups, liaising with local interest groups and developing 'friends of' groups with the District Council involved as a key element throughout.

The Friends of Oughtonhead Common, supported by NHDC and CMS, are actively involved with the site's management. CMS volunteers and the Friends are currently involved in undertaking the following activities:

- Path maintenance
- Site furniture maintenance
- Litter clearance
- Hedge management
- Scrub management
- Pond maintenance and improvement
- Management of invasive species
- River and bank-side habitat work

Where actions in this Greenspace Action Plan are outside the scope of what can be achieved by volunteers or the grounds maintenance team, they will be carried out by specialist contractors following specification, under the supervision of CMS Officers.

Issues

The main issues relating to the site are:

- Drying out of the site, due to a decrease in rainfall and abstraction of underground water
- Invasive species including Mink, Signal Crayfish, Sycamore, Himalayan Balsam, Ragwort, Thistles, Water Fern
- Litter, although many visitors take a bag of litter home with them
- Uncontrolled dog behaviour, dog mess and erosion of the river bank at dog entry points
- Unauthorised use by off-road motorbikes and quad bikes. This has been less of an issue since the site was fenced and access points improved in 2007, although there are still places where they can enter the site
- Inaccessible paths during very wet weather
- Natural decline of the grassland and scrub encroachment

Consents

Work in the river requires consent under the Land Drainage Act 1991. It is not classified as a Main River and so does not come under the jurisdiction of the Environment Agency. Under the Floods and Water Management Act 2010 Hertfordshire County Council is the lead local flood authority of Ordinary Watercourses in the county. Consent has been granted from the HCC's Environmental Resource Planning Group for the proposed work on the river and other water courses and covers a period of 5 years (July 2014 - July 2019; see Appendix 3 and 6). For any further works additional consent will need to be sought. Contact details can be found in appendix 2.

As the site is registered common land, certain works require consent from the Secretary of State for the Environment.

Parts of the Common lies within the flood zone and work affecting this may require consent from the Environment Agency.

Community Involvement

The site enjoys the active involvement of the Friends of Oughtonhead Common, who were established in 2003.

Working with NHDC and CMS, the Friends group takes part in:

- Twice-yearly meetings to agree work programmes and an annual meeting to discuss and shape the Greenspace Action Plan.
- Ad hoc site meetings as required
- Regular practical tasks on site, led by members of the Friends group, trained in leadership and first aid.

Support for the Friends group has included a range of training to enable them to work in safety with increased independence. This has included Task Planning and Leadership, First Aid, Publicity, Stock Checking and Leading Guided Walks.

Marketing

Oughtonhead Common is already a popular resource for the residents of Hitchin. Various media are used to further promote the site. On-site signage and map-based interpretation is supported by a widely distributed site leaflet. Guided walks, including dawn chorus, butterfly and bat walks take place throughout the year. These events, Friends group activities and major site projects are promoted through the NHDC and CMS websites, on social media and through the local newspaper.

Walks that form part of the Hertfordshire Health Walks scheme are regularly held here. This is a programme of free, volunteer led walks aiming to help people get outdoors and get more active. Two thousand programmes promoting these are distributed across North Herts every 4 months and the walks are advertised on CMS and national web sites. Posters are also provided at local venues including doctors' surgeries, pharmacies and community buildings.

The Common also features on the Hitchin Outer Orbital Path, a 12 mile circular route around the town of Hitchin and promoted through a leaflet.

Monitoring and Review

All activities on the Common are monitored by NHDC's in house Grounds Monitoring Team. The monitoring is undertaken as part of the Grounds Contract Performance Monitoring System which is flexible enough to highlight any areas of deficiency.

Oughtonhead Common is formally inspected at least once a month which is reported at each monthly contract meeting. Any contract failures are discussed at each meeting with agreements reached with regards remedial actions.

The Grounds Maintenance Contract also includes the development of partnership arrangements between NHDC and John O'Conner's which are discussed at quarterly review meetings.

Oughtonhead Common is identified within Officers' own annual work programs and also in the Grounds Teams' work programme which is also reviewed as part of individual one to one meetings and the annual appraisal process.

The GAP is reviewed at least once annually with a representative from CMS, NHDC and the Friends Group. This meeting has minutes taken and agreement is reached regarding any alterations to the plan contained within this document.

Action Plan

Annual Management

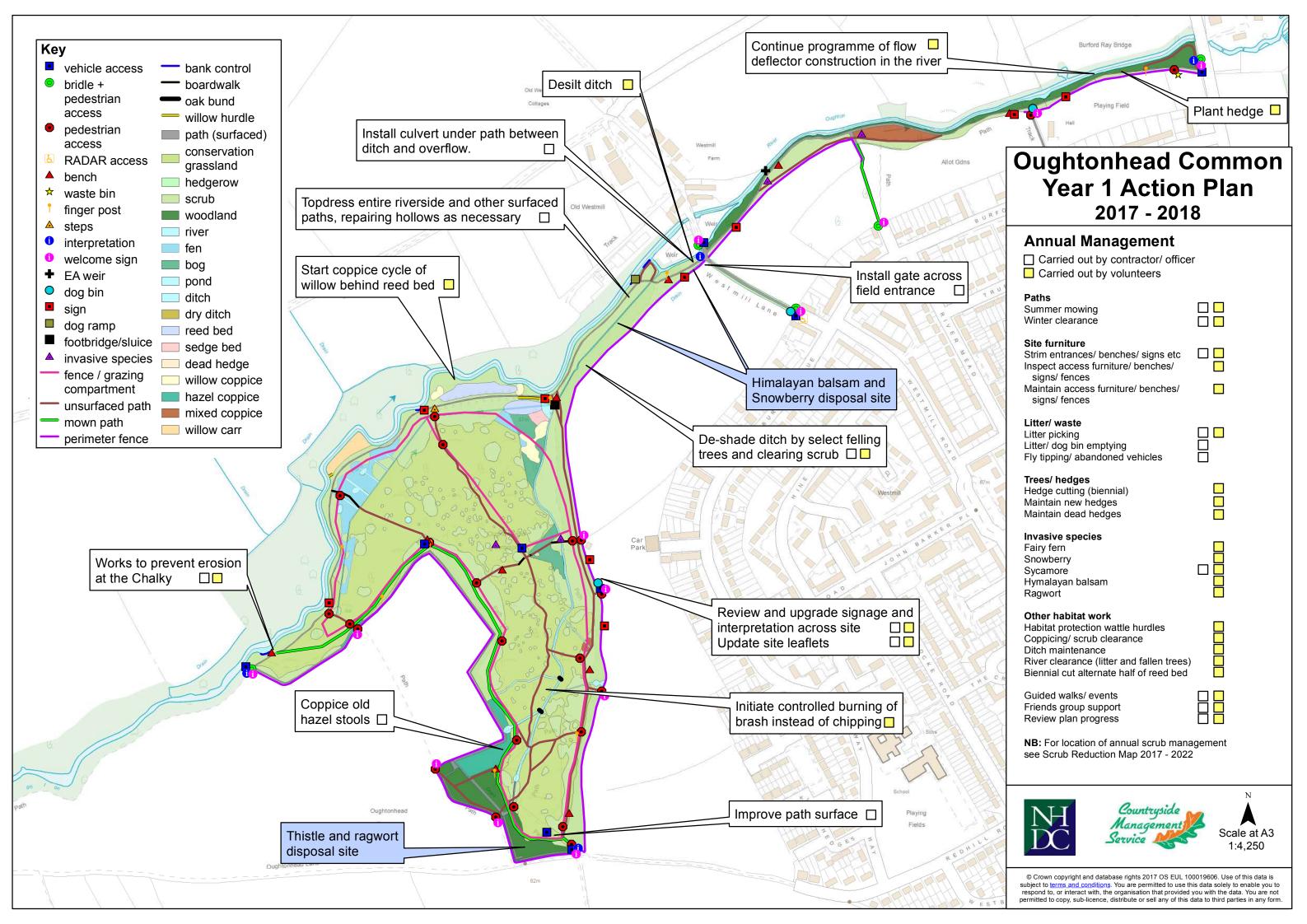
Action	When	Frequency	Responsibility	Funding	Est. Cost	Status
Path clearance across site	Winter	Annual	FoOHC	NHDC	CMS/Vol time	
Mow Riverside Path	Summer	Biannual	RoW	HCC	£500	
Mow Westmill Lane	Summer	Biannual	RoW	HCC	CMS/Vol time	
Mow paths around grazing area	Summer	Every 6 weeks in summer	Grazier	NHDC		
Strim all other paths across site	Summer	Annual	FoOHC	NHDC	CMS/Vol time	
Inspect all paths	Summer	Annual	FoOHC	NHDC	CMS/Vol time	
Maintain all paths	Summer	Annual	FoOHC	NHDC	CMS/Vol time	
Litter picking across whole site	All year	Ad hoc	O'Conners/ FoOHC	NHDC	Within JO'C contract/Vol time	
Litter/dog bin emptying of bins adjacent to site	All year	Weekly	O'Conners	NHDC	Within JO'C contract	
Fly tipping/ abandoned vehicles	As required	As required	NHDC	NHDC	Reactive	
Hedge cutting either side of Westmill Lane	Winter	One side in alternating years	FoOHC	NHDC	CMS/Vol time	
Himalayan Balsam in / adj to river	July	Annual / as required	FoOHC	NHDC	CMS/Vol time	

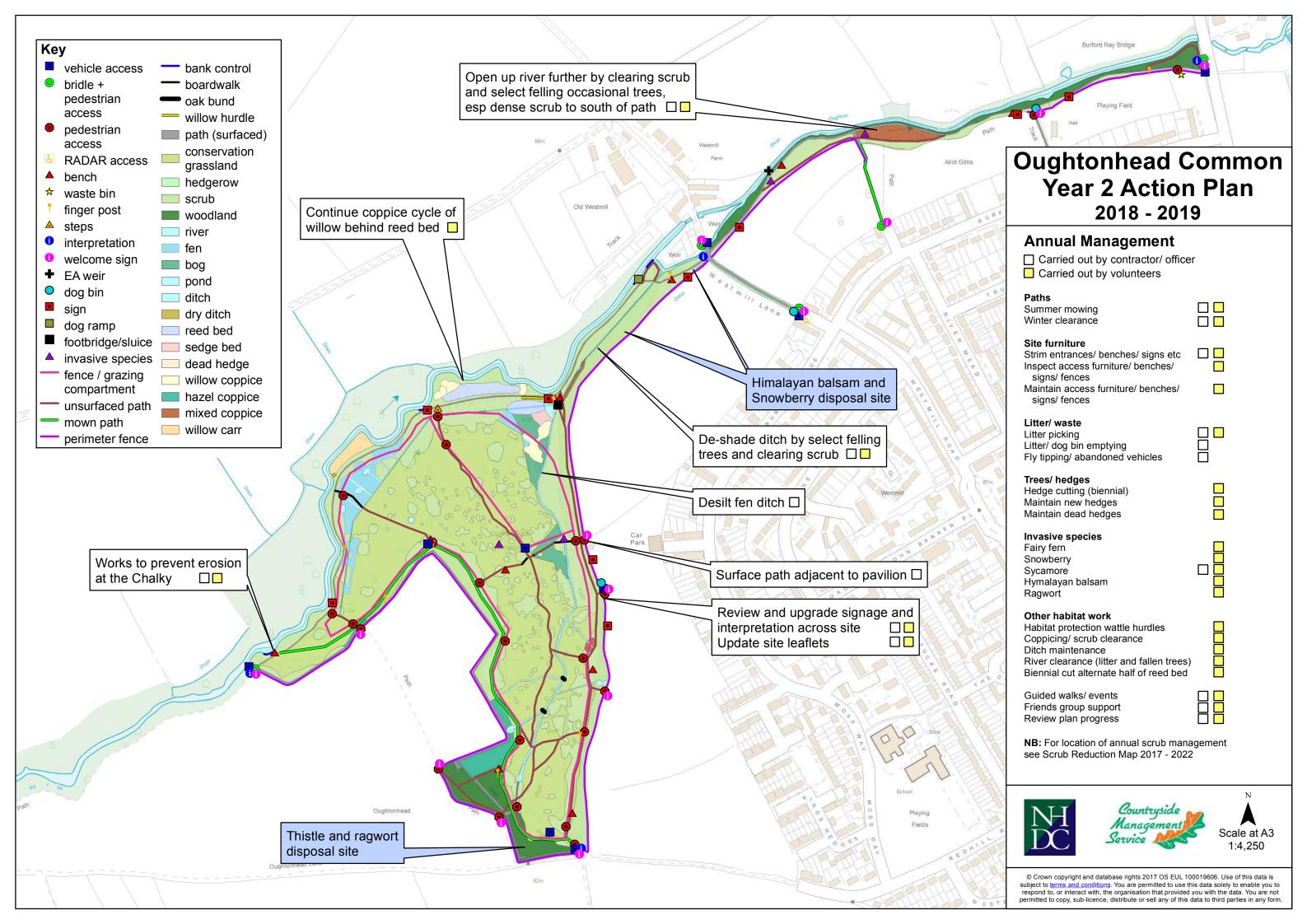
Ragwort removal in grazing compartments	July	Annual	FoOHC	NHDC	CMS/Vol time
Thistle control in grazing compartments	July	Annual	FoOHC	NHDC	CMS/Vol time
Ditch maintenance across site	Winter	As required	FoOHC	NHDC	CMS/Vol time
River clearance – litter and fallen trees (see guidance on large woody debris)	As required	As required	FoOHC	NHDC	CMS/Vol time
Habitat protection with wattle hurdles, various locations	Winter	As required	FoOHC	NHDC	CMS/Vol time
Scrub clearance across grassland as per programme	Winter	On going	FoOHC	NHDC	CMS/Vol time
Guided walks / events	As appropriate	On-going	CMS/ FoOHC	NHDC	CMS/Vol time
Support of Friends group including training	No constraints	As necessary	CMS/ FoOHC/ NHDC	NHDC	NHDC/CMS/Vol time
Review annual programme		Annual	CMS/ FoOHC/ NHDC	NHDC	NHDC/CMS/Vol time

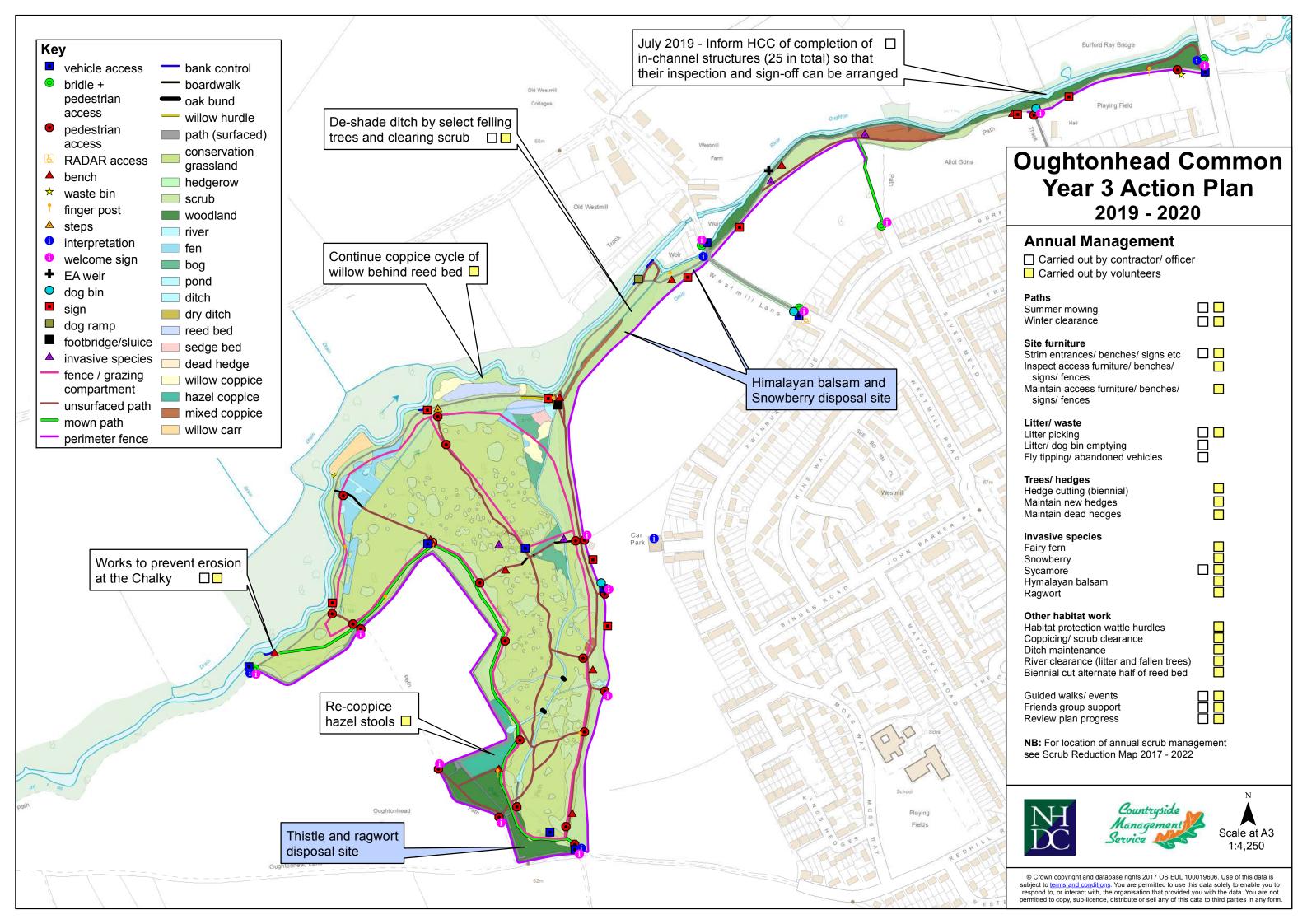
Proposals 2017 – 2022

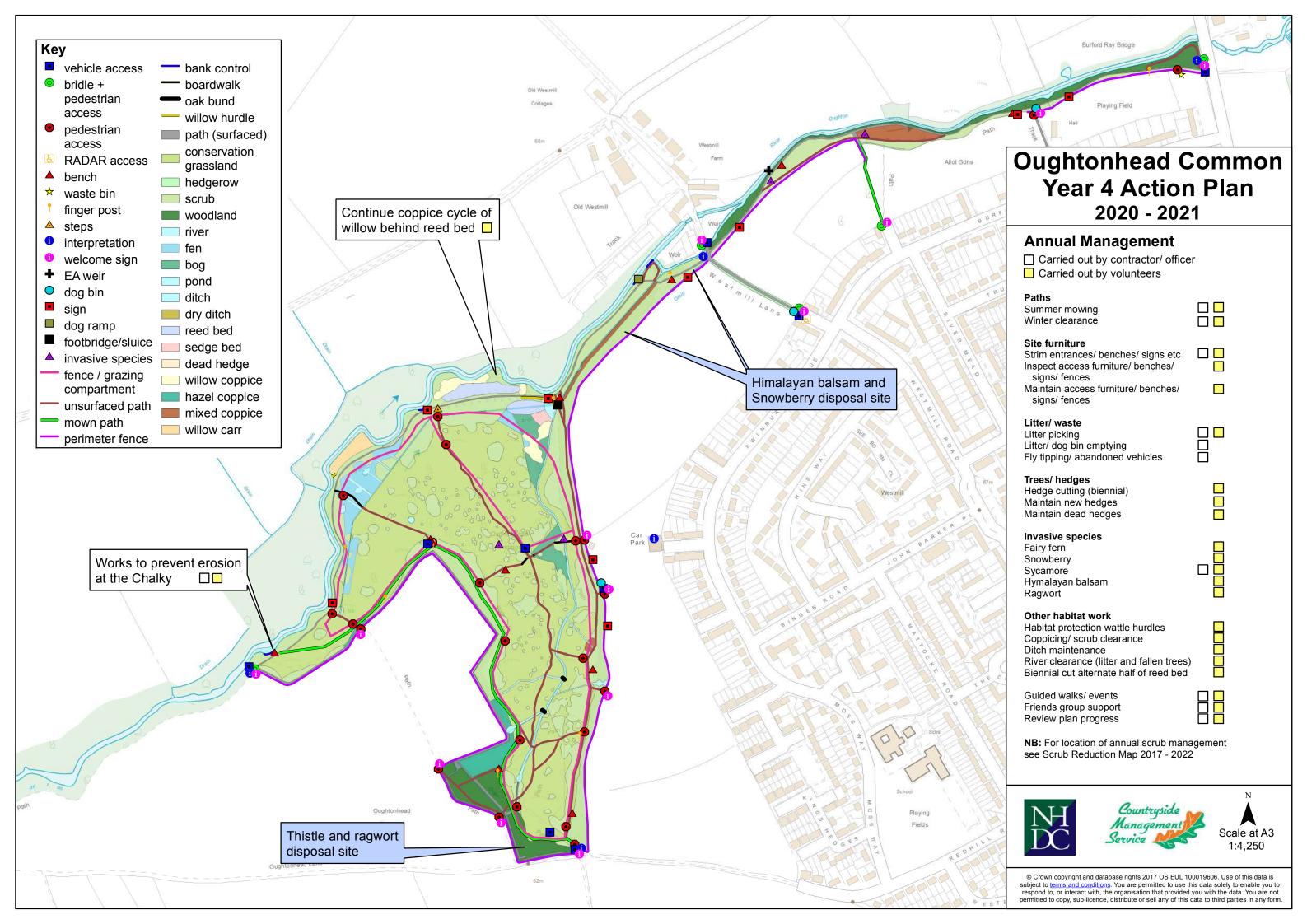
Action	When	Frequency	Responsibility	Funding	Est. Cost	Status
Azolla control in river	Summer	As required	CMS	NHDC	£400 each time	
Coppicing south bank of river between the mill and Bedford Road. Select-fell occasional trees to allow more light to the path and river.	Winter	7 year cycle	FoOHC / Contractor	NHDC	CMS/Vol time	
Coppicing willow between reed bed and river	Winter	1/5 th a year	FoOHC / Contractor	NHDC	CMS/Vol time	
Initiate controlled burning of brash. Remove fire ash from site	Winter	Annual as required	FoOHC / contractor	NHDC		
Review and upgrade signage and interpretation across site	No constraints 2017/18	One-off	NHDC / CMS	NHDC	TBC in the light of review.	
Flow change measures (deflectors and build- outs) between the mill and Bedford Road	Spring 2017	One-off	FoOHC	NHDC	CMS/Vol time	
Install culvert under path between ditch and overflow channel to take water away from path. De silt boundary ditch	Autumn 2017	One-off	NHDC / CMS	NHDC	£2,000	
Improve perimeter path surface (southern end of site)	Summer 2017	One-off	NHDC / CMS	NHDC	TBC	
Ditch desilting of Fen ditch at Northern end	Summer 2017	One-off	CMS / Contractor	NHDC	£1200	
Top-dress entire riverside path and other surfaced paths, repairing hollows as necessary	Summer/ Autumn 2017	One-off	NHDC / CMS	NHDC	£15,000	

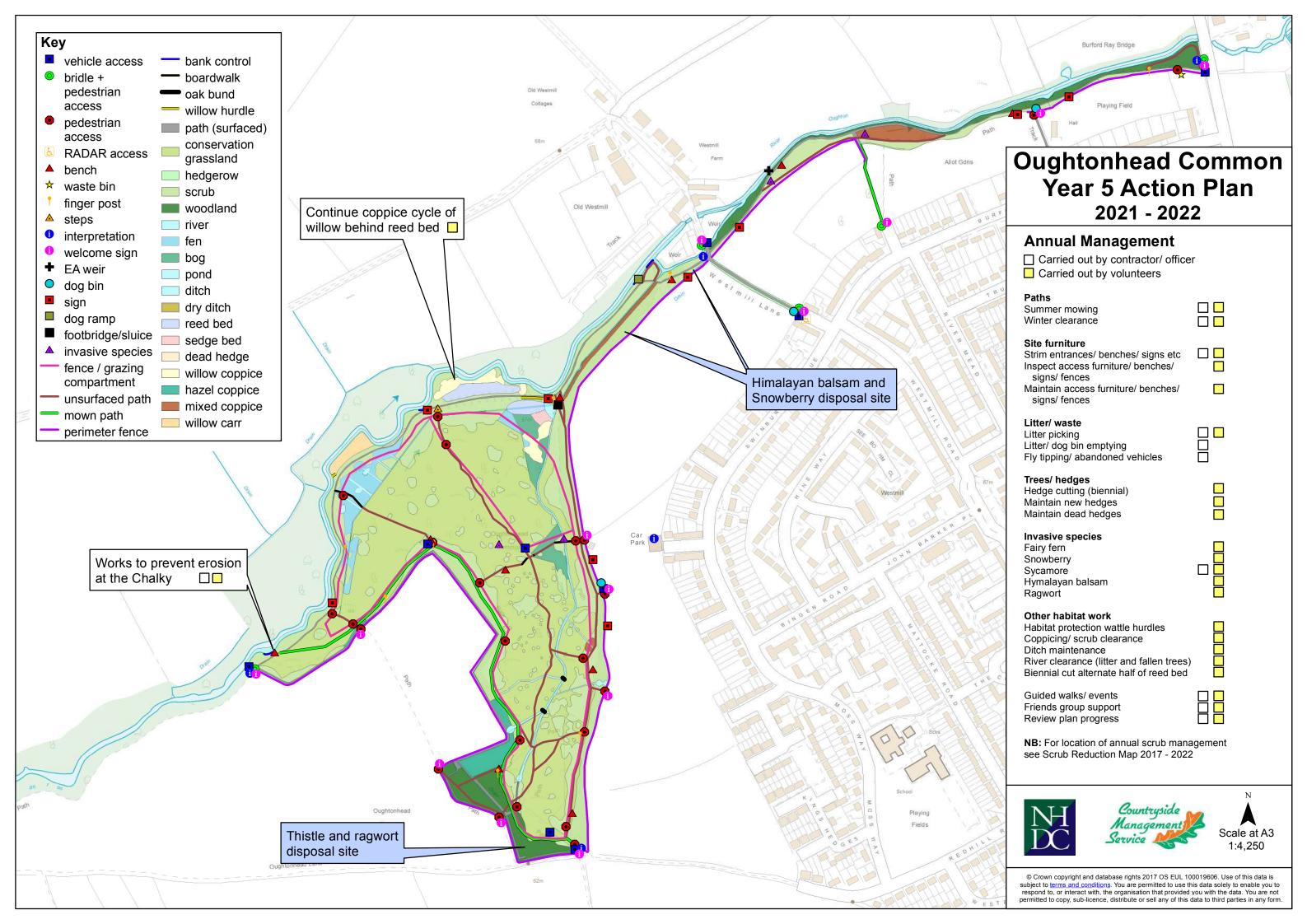
De-shade ditch between sedge bed pool and overflow channel by selectively felling trees and clearing scrub, to let light in to channel and provide habitat for species such as water vole	Winter 2017/18/19	Over 3 years	FoOHC / Contractor	NHDC	£1,000
Coppice/re-coppice hazel stools to north of Beech Spinney	Winter 2017/2019	One-off x 2	CMS / Contractor	NHDC	£400
Surface path adjacent to Swimbourne Pavilion	Summer 2018	One-off	CMS / Contractor	NHDC	£1,200
Select-fell occasional trees along river between the mill and Bedford Road, to allow more light to reach river.	Winter 2018	One-off	NHDC / Contractor	NHDC	£3,000
Arrange for inspection by HCC flood team of in- river structures at end of 5-year consent.	July 2019	One-off	CMS / NHDC	NHDC	Nil
Apply for consent for additional in-channel structures if required, once current 5-year plan complete.	July 2019	One-off	CMS / NHDC	NHDC	£50
Assess sedge bed succession and plan clearance work as required	Spring 2020	One-off	CMS	NHDC	CMS time

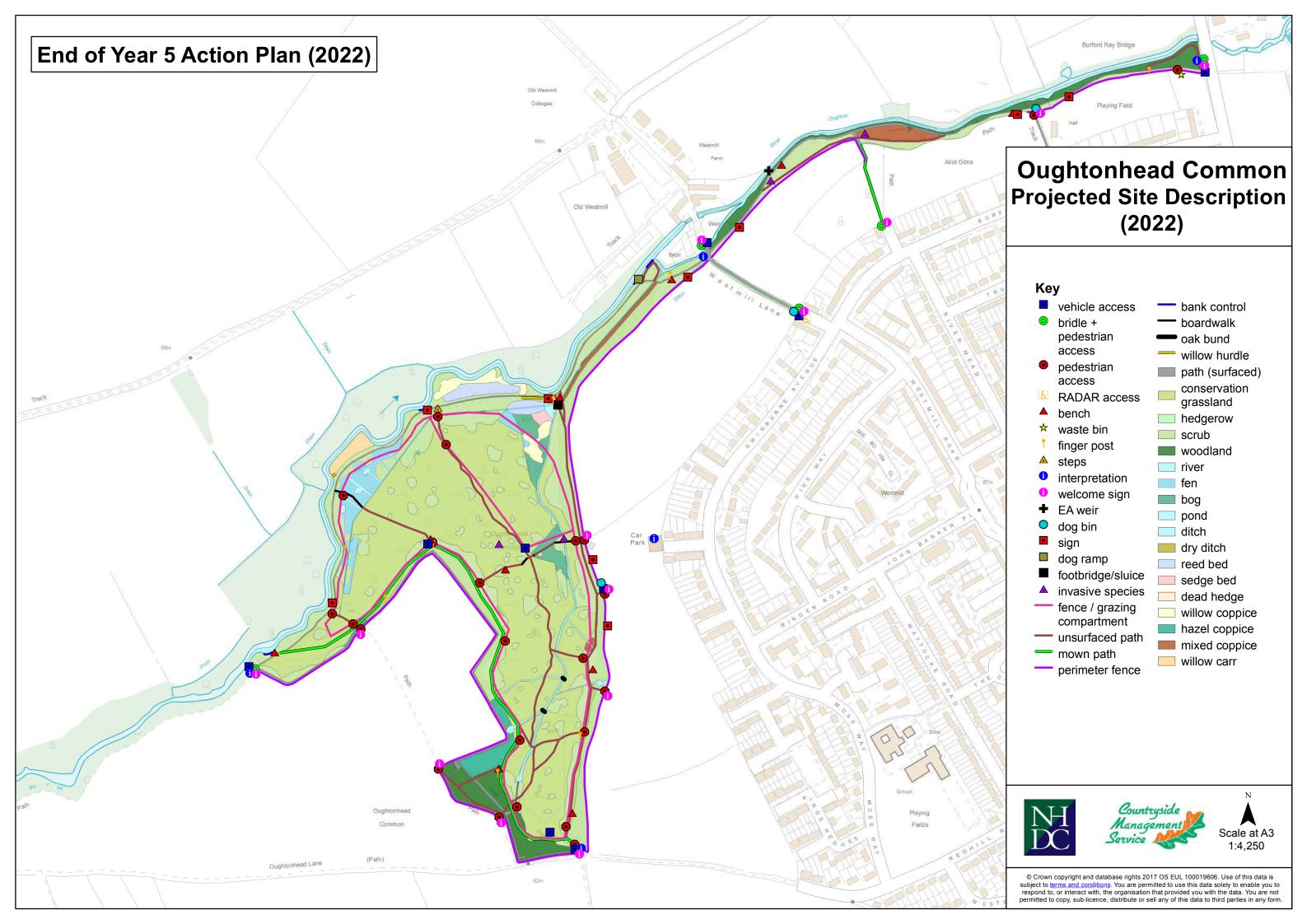


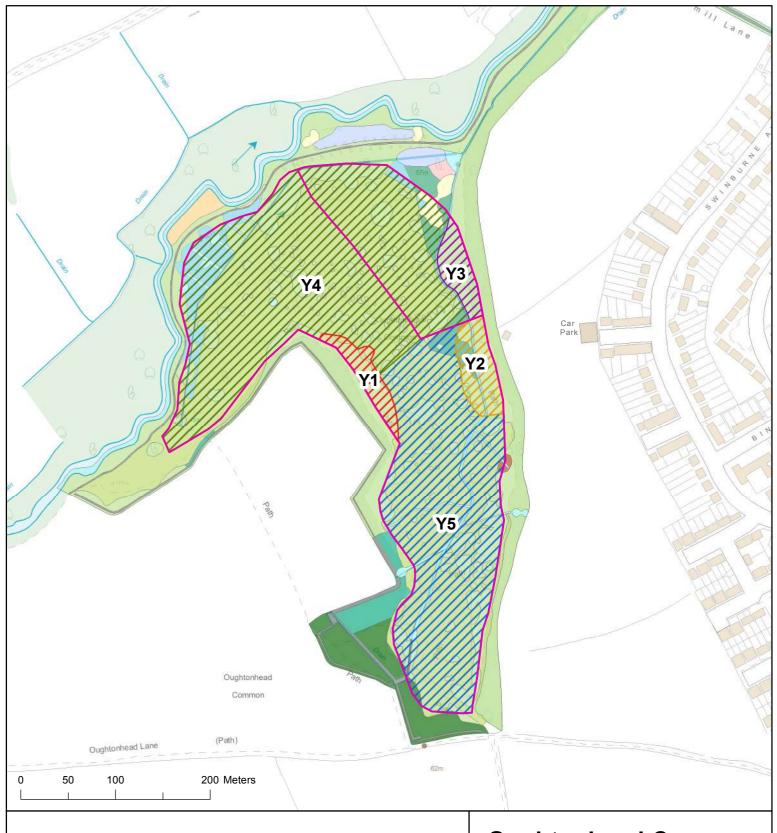












Legend



Oughtonhead Common Scrub Reduction 2017 - 2022







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Appendices

Appendix 1: Abbreviations

BAP	Biodiversity Action Plan
CMS	Countryside Management Service
CSS	Countryside Stewardship Scheme
DC	District Council
Defra	Department of Environment, Food and Rural Affairs
EA	Environment Agency
FoOHC	Friends of Oughtonhead Common
GAP	Greenspace Action Plan
HBRC	Hertfordshire Biological Records Centre
HCC	Hertfordshire County Council
HLS	Higher Level Scheme
HMWT	Herts and Middlesex Wildlife Trust
J'OC	John O'Conner Grounds Maintenance Ltd
LA	Local Authority
LNR	Local Nature Reserve
LWS	Local Wildlife Site
NE	Natural England
NHDC	North Herts District Council
OHC	Oughtonhead Common
RB	Restricted Byway
RoW	Rights of Way
Vol	Volunteers

Appendix 2: Contacts

Name/ Title	Organisation	Tel	Email	Address
CMS Projects Officer	Countryside Management Service	01992 588433	Northeast.cms@hertfords hire.gov.uk	CMS Office (Car Park H), County Hall, Pegs Lane, Hertford, SG13 8DN
Andrew Mills, Service Manager Grounds	NHDC	01462 474272	Andrew.mills@north- herts.gov.uk	Council Offices, Gernon Road, Letchworth, SG6 3JF
Tom Ayres, Area Monitoring Officer	NHDC	01462 474575	Thomas.ayres@north- herts.gov.uk	66
Karl Wilkins, Tree Strategy Officer	NHDC	01462 474837	Karl.wilkins@north- herts.gov.uk	и
Steve Geach, Parks & Countryside Development Manager	NHDC	01462 474553	Steve.geach@north- herts.gov.uk	14
David Cannon, Task Leader	Friends of Oughtonhead Common		djc.rmc@btinternet.com	
Safer Neighbourhood Team	Hertfordshire Constabulary	999 (Emergency) 101 (non emergency incidents) 0845 3300222 (general enquiries)		
Fire Station Manager	Hertfordshire Fire and Rescue	999 (Emergency) 0300 1234046 (Fire Safety and advice)		
(Common Water Levels)	Environment Agency	01480 483938		Environment Agency Bromholme Lane Brampton Huntingdon Cambs PE28 4NE
Julie Barker River Oughton Levels	Environment Agency	01480 483825	julie.barker@environment- agency.gov.uk	14
Land Drainage consent	Environment Agency	01480 483885		"

Name/ Title	Organisation	Tel	Email	Address
Ana Neves Land Drainage Consent	Hertfordshire County Council	01992 556348	Ana.Neves@hertfordshire. gov.uk	Environmental Resource Planning, County Hall, Pegs Lane, Hertford, SG13 8DN
John O'Conner Ground maintenance	John O'Conner	01438 717175		Head Office, 2 Great North Road, Welwyn, AL6 0PL
Nick Kiddy Grazier	Maydencroft Manor	01462 420851	info@maydencroft.com	Maydencroft Manor, Maydencroft Lane, Gosmore, Hitchin, SG4 7QA
Andrew Mills Environmental Stewardship HLS	Natural England	07768 658357	Andrew.mills@naturalengl and.org.uk	
Nicholas Maddex Countryside Access Officer	Rights of Way Unit HCC	01992 555243	Nicholas.maddex@hertfor dshire.gov.uk	RoW Unit, County Hall, Pegs Lane, Hertford, SG13 8DN
Chris Perks Agent	Savills, agent for Pilkington Farms	01462 768814	cperks@savills.com	The Estate Office Offley Hoo, Great Offley, Hitchin, SG5 3ED
Phillip Lawton Farmer	Ashcroft Farm	01462 712267		Ashcroft Farm, Holwell, Hitchin, SG5 3SG

Environment Agency Incident Hotline 0800 807060 (regarding pollution and other incidents)

The web site for North Hertfordshire District Council can be found at: www.north-herts.gov.uk

The web site for the Countryside Management Service can be found at: http://www.hertfordshire.org/cms/

Appendix 3: Specifications

Detail regarding timing, frequency, cost and which organisation is responsible for each action can be found in the Action Plan (pages 25 – 35).

Path Maintenance

Hitchin Restricted Byway 1 or Riverside Path:

- Path mown to a width of 4m twice a year with a minimum height clearance of 3m
- All path improvements to be carried out in accordance with RoW Good Practice Guide
- Finished width of surface path to be 2 m, with exception to entrance points. For the path sections which are well consolidated re-use the base layer as the sub-base and surface dress with a 50 mm layer of well graded recycled aggregate dust fines (20 mm to dust).
- For soft spots excavate to a minimum of 100 mm or firm ground and fill subbase layer with recycled aggregate (MOT Type 1) to a finished depth of 150 mm, surface dress with a 50 mm layer of well graded recycled aggregate dust fines (20 mm to dust).

Grass paths and new paths adjacent to grazing compartments:

Mown as required during growing season

Un-surfaced paths adjacent to grazing compartments:

- Paths maintained to a width of 2m and height clearance of 3m through Friends of Oughtonhead Common volunteer programme
- All path improvements to be carried out in accordance with RoW Good Practice Guide.
- Path surfacing to include laying 150 mm sub-base layer of recycled aggregate (MOT type 1). Surface dress with a 50 mm layer of well graded recycled aggregate dust fines (20 mm to dust). Geo-textile/ geo grid to be employed where surface conditions require.

Interpretation

- Existing structures are to be re-used. The GRP interpretation panels are to be updated and replaced.
- New interpretation to be installed in the car park will consist of A1 Bowman design C with GRP panel.
- Replace welcome signs wherever necessary (same design).

Access Furniture

- Kissing gates will be made of metal to match the existing gates in the perimeter of the grazing compartments. Gates to be compliant with dimensions required to meet BS5709:2006. Surfacing within chamber of kissing gates to be assessed if level of use over winter period requires it
- Board walks will be a minimum width of 1.2m, but 2m where the terrain allows. Posts to be recycled plastic. Treads to be non-slip, Hi-Grip or similar.
- Benches are in Oak: Seat and back (3) 2m x 150mm x 50mm (planed).
 Posts (2) 1.7m x 150mm x 100mm. Seat bearers (2) no. 550mm x 150mm x 100mm.

Waste / Litter

- Litter picks are carried out on an ad-hoc basis when required.
- The FoOHC also carry out a litter pick at the end of the school summer holidays. Collection of the rubbish from this pick is arranged with NHDC.
- Dog Bins These are emptied on a once a week frequency.
- Litter Bins These are emptied on a once a week frequency.

Hedge Maintenance

- All hedge planting will be carried out in accordance with CMS hedge planting guidelines (see appendix 4). A basic species composition of 75% Hawthorn, 10% Field Maple, 10% Hazel and 5% Dog Rose can be used. Species of local provenance should be sourced.
- Hedge Laying: As required. Stakes and binders will be harvested on site and stakes installed at 1m intervals (max).
- Hedge cutting/trimming: 140m along both sides of Westmill Lane. This is in the volunteer programme to be carried out by hand. The aim is to maintain an A shaped hedge approximately 2.5m in height.

Invasive Species

- Azolla or water fern currently being controlled biologically by the Azolla weevil.
 See Appendix 5
- Snowberry is largely under control. Where needed it should be controlled by hand, followed up by strimming during the growing season for the duration of this plan.
- Sycamore trees across the site to be identified and controlled by selective felling, of some but not all trees, and stump treatment. The resulting material can be stacked into habitat piles on site.
- Himalayan Balsam to be controlled by pulling by hand. Plants can be disposed of at an agreed location on site. The location will be outside the grazing area on dry land where it can rot down with minimal chance of being able to set seed.
- Ragwort to be controlled by pulling by hand. Plants can be disposed of at an agreed location on site. The location will be outside the grazing area where it can rot down with minimal chance of being able to set seed.
- Thistles to be controlled by pulling/digging (spear thistle) and cutting (creeping thistle) by hand in July. Plants to be disposed of at an agreed location on site. The location will be outside the grazing area where it can rot down with minimal chance of being able to set seed.
- Invasive species composting site to be monitored and waste removed off site if colonisation occurs

Grazing

- Usually grazed at low density by 5 6 cattle all year round (this is an increase in number from previous years, following extension of the grazing area in 2016). Some of the cattle are owned by the DC and are supplied and managed by Maydencroft Farm, Gosmore.
- Cattle are grazed in compartment 2 from the start of March until the end of April. The cows can then be kept out of compartment 2 until the orchids have

finished flowering, usually by the end of July. The cows will return to compartment 2 at the start of August and continue grazing until the end of September. They will then graze from October to the end of February in Compartment 1 (see table below).

- The wet compartment to be grazed for a minimum of 4 months, depending on the seasonal conditions
- Continue to exclude the use of all natural and artificial fertilisers and chemical control of weeds within the grazing area (see above).

Comp 2	Comp 1	Comp 2	Comp 1
Start of March –	Start of May –	Start of August –	Start of October –
end of April	end of July	end of September	end of February

Scrub

- The aim of scrub management will be to reduce scrub in the newly enclosed grazing areas by up to 60% and elsewhere in the grazing compartment by up to 20%. It should also keep scrub in other areas under control, to keep paths open to light and air, and to maintain a range of age and structure to the scrub habitat on site. Across the whole of the Common, this will be a reduction of no more than 5% in any given year. Scrub will be marked up on site before being removed.
- Volunteer tasks will reduce scrub levels encroaching on the grassland.
- Scrub will be cut with hand tools and occasionally supported by a chainsaw used by an appropriately qualified member of CMS staff.
- Stumps will be cut to ground level if being removed or to knee height if being retained.
- Generally, arisings will be burnt on site, at a small number of locations to be decided by the CMS officer or using a platform. Ash will be removed from site.
- Work is carried out between the end of September and the beginning of March, outside bird nesting season.

River Restoration

See Appendix 6 for the location of proposed channel restoration works.

River clearance - fallen trees

Also known as 'Large Woody Debris (LWD)'. In the past, human intervention has meant LWD is now largely absent from many river systems. This stems from concerns that it looks untidy, collects debris around it and could pose a risk of flooding. However, recently research has shown that it can be beneficial to river processes and wildlife. Useful guidance on the retention of LWD in river channels, based on West Country Rivers Trust guide can be found in the Chalkstream Habitat Manual, written by the Wild Trout Trust. This guidance should be followed where possible when LWD finds its way into the River Oughton. Most options for retaining LWD can be carried out through the volunteer work programme.

River bank erosion control

At certain sections along the river the bank is becoming eroded. The problem is exacerbated by dogs entering the river and by Signal crayfish burrowing holes into the river bank, leaving it weak. Volunteers have reinforced some sections by using stakes and pre-planted coir rolls. On other sections, including the area known as 'the chalky', a contractor has been employed to stabilise the bank and access areas using naturalised engineering techniques including installation of pre-vegetated coir fibre rolls.

Deflectors - Downstream of the Mill

- Materials will be sourced from the Common, either from scrub clearance work, trees adjacent to the river along the Burford Ray or relocating material already in the river.
- Logs will be dug into the bank and partially across the river, secured by tying to posts with natural-coloured polypropylene twine.
- Logs should be submerged over the normal range of flow.
- Face upstream as this will create a scour in the middle of the river and create areas of silt deposition immediately up and downstream which can be planted up. Use sedge from sedge bed.
- Ensure that location of deflector does not encourage silt deposition to a gravel area that may already be used as a trout spawning site.
- Ensure that the top and outside edge of the log you use are squared off so that the water flows over and off the log rather than around the surface. This will help stop the log from being undercut.

Build-outs - Downstream of the Mill

- Materials will be sourced from the Common, either from scrub clearance work, trees adjacent to the river along the Burford Ray or relocating material already in the river.
- Logs will be secured by tying to posts with natural-coloured polypropylene twine.
- Logs should be submerged over the normal range of flow.
- Build-out to be filled with brash, secured with cross-poles tied to the posts
- Ensure that location of build-out does not encourage silt deposition to a gravel area that may already be used as a trout spawning site.

Wetland Restoration

Reed management

The northern reed bed between the River Oughton and the riverside path is to be cut ½ every other year. Material produced to be removed from site by contractor to an appropriate waste site.

Fen restoration

The area of fenland that was restored in 2014 is to be maintained by cattle grazing. This has been enabled through the installation of fencing as part of the fencing extension project in 2016. Monitor impact of grazing. Where grazing proves to be inadequate and where the scrub regenerates, the vegetation is to be controlled by mechanical means, either by volunteers (if the work is suitable) or by contractors.

Appendix 4: Hedge Planting Guidance Notes



Hedge Planting

Guidance Notes

Hertfordshire Countryside Management Service

For further information on this or any matter concerned with countryside conservation contact the CMS office.

Phone 01462 459395 northeast.cms@hertscc.gov.uk

or browse the web site at www.hertslink.org/cms/

Planting a new hedge is a long term commitment and should be considered carefully. This leaflet aims to out line the main points that will ensure success.

Site Preparation

To aid establishment the site should be prepared prior to planting. Plough, rotovate or dig a strip 60cm wide by 30cm deep and create a weed free strip about 1m wide, either by cultivation or herbicide.

Plant Selection

Bare root transplants of 30cm to 60cm should be used, of a species mix which matches surrounding hedges. For further advice on suitable species contact your local CMS officer.

As a basic guide the species mix should be predominantly hawthorn. You may use blackthorn but be aware that it suckers vigorously and you may therefore wish to leave it out. To this a small proportion of shrubs indicative of the local area could be included, but when doing this avoid regular spacing as this may create a striped unnatural effect.

Planting Out

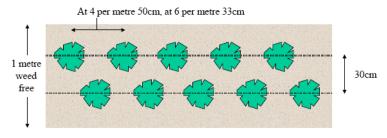
Plant as soon as possible after obtaining the plants. All roots should be protected while exposed to prevent drying out or frost damage. This includes during planting out when a slight breeze can soon dry the roots.

Plant during the Winter, or ideally late Autumn or early Spring to avoid heavy frosts, but while the soil is moist.

If the ground is very soft or has been cultivated then slot planting maybe an option otherwise pit planting is better.

The plants should be spaced in a staggered double row with 4 to 6 plants per metre.

Planting Layout



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Protection

Wild animals such as rabbits, voles or deer can decimate a newly planted hedge so protection of new plants is essential. Individual guards are generally the easiest way though fencing maybe an option.

Types of Guards

Spiral guards – These expand with the growing plant and protect from browsing animals. Clear guards are generally preferable.

Plastic mesh guards – These can be used where branching is a problem such as with holly.

Tree shelters—While protecting the plant these also aid the trees early development by providing a sheltered environment, but will restrict lateral growth.

Guards should be removed once the plants are well established, say in 3 to 5 years, though caution may be needed where large numbers of rabbits are present.

Domestic Animals

Cattle, sheep and horses may all browse and damage new hedge plants. If they are present then a fence will be required. This should be at least 1m from the hedge and ideally 2m to allow maintenance and prevention of browsing.

Weed Problems

This is perhaps the most important operation when establishing a new hedge and is often over looked. The main way in which weeds harm new trees is by competing for water and nutrients from the soil. Certain weeds can also smother new plants depriving them of light.

Weed competition not only reduces the survival rate of a new planting, it also dramatically reduces their subsequent growth rate. This can mean the difference between a first year growth rate of 30-40cm and a first year growth rate of just 1-2cm. In extreme cases plants may even experience first year die back. This is more common where standard sized trees are planted.

Weed Control

To prevent weed competition an area 1 metre across should be cleared of vegetation in line with the new hedge. This will require maintenance for the first three years or until the plants become established.

A variety of methods can be used to control weeds as detailed:

Cutting – This will help to control some plants such as nettles and brambles, but will invigorate many others such as grasses and rosette forming herbs, stimulating greater root growth and competition. Where these weeds predominate cutting will be counter productive.

Hoeing – Can be effective but is labour intensive, and great care will be needed around newly established plants in order to not excessively disturb their roots or damage the bark.

Herbicide – This is cheaper than most alternatives, but requires specialist knowledge and equipment. Advice can only be given by a suitably qualified practitioner.

Mulch mats – These are effective but may occasionally harbour small mammals and invertebrate nests

Organic mulch – An environmental alternative which suppresses weeds before rotting into the soil. The following can be used: wood chips, bark, coconut fibre, grass cuttings, well rotted horse manure or farm yard manure. A layer about 4" deep will be required to be effective. Some light weeding and topping up of the layer will be needed in following years.

Losses

If all the precautions listed on this sheet are followed then losses should be minimal, however during extreme weather losses maybe unavoidable and should be replaced the following year.

Hedge Profiles

An early trim at the end of the first growing season will help to produce a thicker hedge. After this the aim should be to produce a hedge 2 metres tall by about 1.5 metres wide, with an A-shaped profile. If a more vertical profile is needed then chamfered top comers will help to produce a similar effect.

Hedgerow Trees

If hedgerow trees are to be included these should be spaced at least 30m apart to prevent them overshadowing the hedge. To establish trees, they can be planted in the line of the new hedge along with the hedge plants, but use tree shelters to allow their identification during maintenance.

Planting Checklist

- 3 Ground preparation
- 3 Plant selection and species
- 3 Time of year
- 3 Pest protection
- 3 Weed control



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Appendix 5: Technical note - Stenopelmus rufinasus

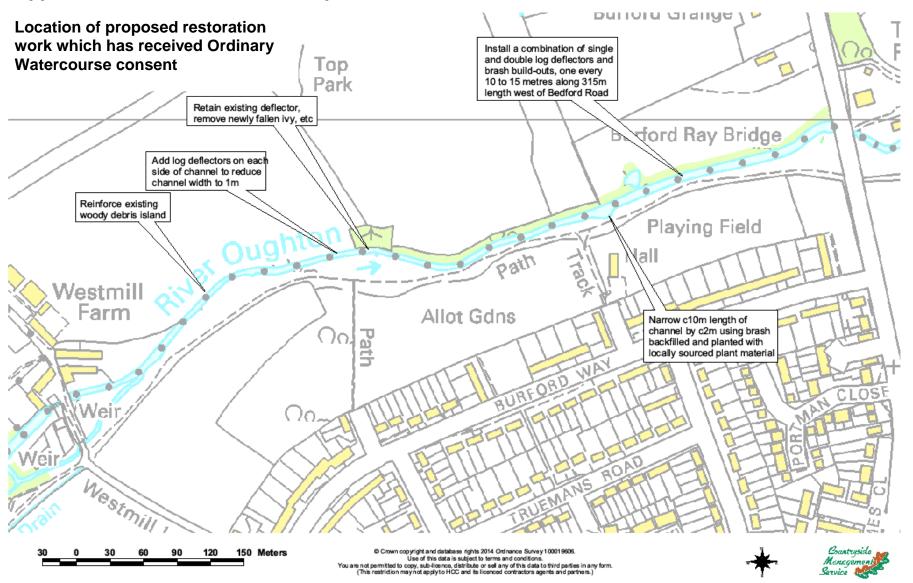
Fairy fern or floating water fern Azolla filiculoides is a problem on site. It was originally found in the ditch that runs from south to north across the Common near the area known as Piccadilly Circus and is now found in the river.

Azolla was introduced into this country from America in the 1800's. It is one of the most invasive plants in the UK today. None of our native insects feed on Azolla, so it rapidly colonises our watercourses. It then shades out native plants and reduces the oxygen levels in the water, harming wildlife and causing the water to smell.

Previous efforts to control Azolla mechanically with the use of nets proved unsuccessful. It can be controlled chemically with glyphosate, but this is a non-selective contact herbicide, meaning it will kill any plant that it comes into contact with. This is not a viable option at the Common.

An alternative was sought. Stenopelmus rufinasus is a weevil that feeds exclusively on Azolla. It is already living in the UK and, once the weevil has eaten all the Azolla, it dies off. This was successfully used to deal with the Azolla in the Piccadilly Circus area. It has also been tried, with less success, along the river. Its use, including quantity or weevils introduced, and density of the plant mass needs to be reviewed to see if a more successful attempt at control along the river can be made.

Appendix 6: River Restoration Proposals Plan



Appendix 7: Copy of Local Bye-Laws

BYE-LAWS

MADE BY THE



Urban District Council of Hitchin.

IN THE COUNTY OF HERTFORD,

In pursuance of Schemes made by them and approved by the

Minister of Agriculture and Fisheries,

Under the provisions of the Commons Act 1899,

WITH RESPECT TO

Butt's Close, Oughton Head,

AND

Walsworth Commons, In the Parish of Hitchin.

HITCHIE

J. M. COUEROUGH, THE RANCROFT PRESS,
1922.

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BYE-LAWS

MADE BY THE

Urban District Council of Ditchin,

IN THE COUNTY OF HERTFORD,

In pursuance of Schemes made by them and approved by the Minister of Agriculture and Fisheries under the provisions of the Commons Act 1899, with respect to BUTT'S CLOSE, OUGHTON HEAD, AND WALSWORTH COMMONS,

In the PARISH OF HITCHIN.

^{1.} In these Bye-laws the expression, "The Council," means the Urban District Control of Hitchin; the expression, "The Commons," means the pieces of land with the ponds, paths and roads thereon commonly known as Butt's Close. Oughton Head, and Walsworth. Commons, in the parish of Hitchin, in the County of Hertford, and reflected to as "the Commons "in the Schemes for the regulation and management of such Commons approved under the Commons Act 1899 by the Minister of Agriculture and Fisheries on the sixth day of May, One Thousand Nine Hundred and Twenty-one and the thirteenth day of June, One Thousand Nine Hundred and Twenty-two respectively; and the expression, "the Scheme," means the Schemes for the regulation and management of the Commons herein before referred to.

No person shall on any part of the Commons daposit any road-and, dung, rabbieh, wood, or any other matter whatsoever, except materials for the repair of the roads.

- 3. No person shall define or remove, or carelessly or negligently injure any seat, fence or notice board, or any other thing put up or maintained by the Council on the Counces.
- 4. No person shall disfigure any fance, tree or notice board on the Commons by the posting or pointing thereon of any bill, placard advertisement or notice.
- 6. No person shall without lawful authority set any trap or not, or lime any tree, or lay any mare of any description whatsoever for birds or animals, or take any birds' aggs or nests on the Commons No person shall without lawful authority shoot or chase game or niker animals on the Commons.
- 6. No person shall without lawful authority draw upon the Commons any carriage, cart, caravan, truck or other vehicle, except bath chairs and parambulators, or erect or parabit to remain on the Commons without the consent of the Council or other lawful authority, any building, shed, tent, faces, post, railing or other structure, whether used in connection with the playing of games or not, and it shall be lawful for any officer of the Council to remove from the Commons any vehicle drawn upon the Commons and any structure erected thereon in contravention of this Bye-law.
- 7. No person shall, except in the case of a fair lawfully held, or without the permission of the Council, place on the Commons any photographic carb or any abow, exhibition, swing, roundabout or other like thing, and it shall be lawful for any officer of the Council to remove from the Commons anything placed thereon in contravention of this Bye-law.
- 8. No person not having a legal right so to do, shall light any fire on the Commons without first obtaining the canotion of the Council to light such fire,
- 9. We person shall throw any lighted match or burning tobarco on any part of the Commons during dry weather which may cause or be likely to cause damage by fire to any green, hedges or fences.
- 10. No person shall without lawful authority, turn out or permit to remain on the Commons, any cattle, sleep or other animals, and it shall be lawful for any officer of the Council to remove from the Commons any cattle, sheep, or other animal being thereon in contravention of this Bye-law.

q_d,

I.I. Hvery person resorting to the Commons for the purpose of playing, or taking, part in any game of football, quoits, bowls hookey, ericket or any other game which by reason of the rules or, manner of playing, or for the prevention of damage, danger, or discomfort to any person on the Commons, may necessitate at any time during the continuance of the game the exclusive use by the player or players of any mann in the Commons, shall correctly with the following of players of any space in the Commons, shell comply with the following?"

- (1). He shall in making preparation for the playing of such game and in the manner of playing, use reasonable and proper care to prevent under interference with the reasonable and proper use of any space by any other playing therein or thereafter resorting to such space for the purpose of making preparation for playing or of playing or of the purpose of making preparation for playing or of playing therein,
- (2) He shall not at any time in any part of a space which is already occupied by other players, begin to play without the permission of such other players.
- (8). Except in any case where the exclusive use of any space may have been granted by the Council for the playing of any match of which the occasion and character shall be such as to render expedient an extension of the time hereinafter specified, a player or company of players shall not in making preparation for and playing any game use any part of such space for a longer time than two bours continuously, if at the expiration of that time any other player or company of players, for whose use no other suitable part of the Commons may be available, shall make known to such first mentioned player or company of players an intention to use for the purposes of playing such space as shall have been previously used by such player or company of players.
- (4). No cricket stumpe or goal posts shall be placed, nor any game be played otherwise them at a reasonable distance from a public road or footpath.

- 12. No person shall on the Commons throw or displays any stone or other missile to the injury or anuoyance of any person, or without lawful authority, discharge any firearm thereon.
- 18. No person shall on the Commons use any indecent or obscene language to the annoyance of any other person.
- 14. No person shall bathe in any water on the Commons at any other place than within the limits defined by Notice Boards. Buezy person so bathing shall wear a suitable costume to prevent indecent exposure of the person.
- 16. No groom or other person shall without lawful authority exercise or break in my horse on the Commons, nor shall any person ride a horse other than along recognized bridal paths.

- 16. No person shall climb any tree or any post on the Commons in each a manner as to injure or defect the tree or post.
- 17. No person shall hinder or obstruct an officer of the Council in the exercise of his powers or duties under the Scheme or under the foregoing or any other Bye-laws made thereunder.

PRNATATES

18. Every person who shall offend against any of the foregoing. Bye-laws shall be liable for every such offense to a penalty of 40.—Provided nevertheless the Justices or Court before whom any complaint may be made or any proceedings may be taken in respect of any such offence may if they think fit adjudge the payment as a panalty of any sum less than the full amount of the penalty imposed by this Bye-law,

19. It shall be lawful for any officer of the Conneil, after due warning, to remove or exclude from the Commons any person who within his view, commits, or whom he reasonably suspects of committing an offence against any of the foregoing Sye-laws, or against the Vagrancy Act 1624.

The Common Seal of the Urban District Council of Hitchin was becount affired pursuant to Resolution at a Meeting of the said Council held on the thirteenth day of September One thousand nine bundred and twenty two, by

G. W. RUSSELL,

Chairman of the Council
In the presence of
WM. ONSLOW TIMES,
Olerk to the Council.

Allowed by the Minister of Health this twenty-eventh day of October, 1929,

F. L. TURNER, Assistant Secretary, Ministry of Health,





Appendix 8. Local Wildlife Site Survey 2016

Wildlife Site Survey Report for: Oughton Head

LWS Site Ref:	11/001	Site size (ha):	25.26
Local Authority:	North Herts	Central Grid Ref:	TL166304

Dat	e1 of survey:	1/9/16	Weather:	Sunny and hot	Duration on site:	5 hours
Sur	veyors:	ors: CL, RG, JWill, JE, ME, AB, LT				
	Spp list by:	AB	Form by:	CL	Map by:	CL/JE

Dat	te2 of survey:	8/9/16	Weather:	Sunny and hot	Duration on site:	5 hours
Sui	rveyors:	MH, RG, CL, AB, GP, SM, ME, JE				
	Spp list by:	GP/AB	Form by:	CL	Map by:	MH/CL

Geology:	Bedrock:	[WSO provides]
	Superficial	Peat
	Deposits:	

Onlaria al anticati	110041100-	I labitat	Common tell famous set offers
Original criteria:	H.2.2d, H.2.2e	Habitat:	Swamp: tall fen vegetation,
			Grassland: neutral,
			unimproved, Marsh, Alder
			woodland, Woodland:
			broadleaved, semi-natural,
			Scrub, Open water: running
Criteria met:	H 2 2h Neutral (13): H 2 2a (Calcareous (11):	H.2.2d Wet (12): H.5.3 Fen (12);
Ontona met.	H.2.2e Mixed (25)	Jaioaroodo (11),	11.2.20 *****(12). 11.0.0 1 011 (12),
Recommended	none		
	none		
changes to			
boundary			
Original Site			ommon in the south-east and the
Description:	Wildlife Trust nature reserve	to the north. The	common supports marshy
	grassland with fen but with d	rier areas of neut	tral grassland, scrub and
	woodland. An unusual geolog	gy has resulted in	n a very diverse flora. Mixed wet
	woodland forms a belt of vary	ving width along	the north bank of the River
	•		end. The site is one of the larger
	fen woodlands in Hertfordshire and has a long history of being managed as a fen. The western sections are dominated by mature Alder (<i>Alnus glutinosa</i>)		
	carr (an unusual habitat in Hertfordshire). The river itself supports aquatic		
	plants of note, the remnant fen components are notable within the county and		
	the area is important for a range of invertebrates, amphibians, reptiles, birds		
	and mammals, with Grass Snake (Natrix natrix), Harvest Mouse (Micromys		
	minutus), European Hare (Le	epus europaeus)	and Water Voles (Arvicola
	amphibius) recorded. Wildlife	Site criteria: Gra	assland indicators; fen & swamp
	indicators.		•
Overall General		es of the site: le	ocation, slope, aspect, surrounding
Site			pportant sites, and give an overall
Description:	statement describing the main e		
Description.			ommon in the south-east and the
	Wildlife Trust nature reserve		
			• • •
	grassland with fen but with drier areas of neutral grassland, scrub and woodland. An unusual geology has resulted in a very diverse flora. Mixed wet		
		<i>-</i>	
	woodland forms a belt of vary	•	
	Oughton which has its source	e at the western	end. The site is one of the larger

fen woodlands in Hertfordshire and has a long history of being managed as a fen.

A number of plant associations have developed on the gently undulating ground. Some of the richer areas on the site show similarities to the National Vegetation Classification M22b *Juncus subnodulosus-Cirsium palustre* fenmeadow; *Briza media-Trifolium* spp. sub-community. This sub-community occurs where there is a transition from fen to drier ground.

At Oughton Head Common, the fen elements of this community occur in hollows where Hard Rush (*Juncus inflexus*), Brown Sedge (*Carex disticha*) Meadowsweet (*Filipendula ulmaria*) and Lesser Pond Sedge (*Carex acutiformis*) are variously located often as localised dense patches. Water Mint (*Mentha aquatica*) is well represented, while Blunt-flowered Rush (*Juncus subnodulosus*) and Marsh Thistle (*Cirsium palustre*) occur in smaller numbers.

Preferentials of the M22b occurring in the surrounding pasture such as Knapweed (*Centaurea nigra* agg), Ribwort Plantain (*Plantago lanceolata*) and native Red Clover (*Trifolium pratense* var. *pratense*) also suggest some overlap of species with MG5 (possibly because the grazing is of low intensity). Among a number of other species found, Glaucous Sedge (*Carex flacca*), Smaller Cat's-tail (*Phleum bertolonii*), Lady's Bedstraw (*Galium verum*) and Common Fleabane (*Pulicaria dysenterica*) are well represented and Devil's-bit Scabious (*Succisa pratensis*) and Meadow Vetchling (*Lathyrus pratensis*), Bird's-foot Trefoil (*Lotus corniculatus*) also occur. In places anthills are a significant feature of the grassland. The grassland communities show a transition towards MG1 where grazing is low or absent with False Oat-grass (*Arrhenatherum elatius*) well represented.

In wetter areas there is also an element of S25 *Phragmites australis- Eupatoria cannabinum* tall herb-fen fen. Common Reed (*Phragmites australis*) and Hemp Agrimony (*Eupatoria cannabinum*) are well represented, with Great Willowherb (*Epilobium hirsutum*) and Wild Angelica (*Angelica sylvestris*) also present. This community also has some overlap with M22 in its composition.

Some scrub (W21) and wet woodland (W6) is also occurs giving structural variety to the site

Compartment 1:

(grazed grassland area – dry grassland parts)

6-fig central Grid Ref:

Link to map

Description:

Dryer grassland area in south and central, with scattered scrub and many anthills distributed all over. Fenced and grazed. Includes a branched ditch from north-south (Comp 3) and discreet wet patches throughout, which are not necessarily always directly adjacent to the ditch, but are also in the Comp 3 ditch compartment.

40-50% forbs, with Silverweed (*Potentilla anserina*), Ribwort Plantain (*Plantago lanceolata*), Thistles (*Sonchus sp.*), St John's Wort (*Hypericum tetrapterum*), Agrimony (*Agrimonia eupatoria*), Glaucous Sedge (*Carex flacca*), Ladies Bedstraw (*Galium verum*), Vetch sp. (*Vicia sp.*), Meadow Vetchling (*Lathyrus pratensis*), Hard Rush (*Juncus inflexus*), Water Mint (*Mentha aquatica*), Hairy Sedge (*Carex hirta*), Creeping Buttercup (*Ranunculus repens*), Smaller Catstail (*Phleum bertolonii*), Creeping Cinquefoil (*Potentilla reptans*), Red Fescue (*Festuca rubra agg.*), Cocksfoot (*Dactylis glomerata*), Yorkshire Fog (*Holcus lanatus*), False Oat-grass (Arrhenatherum elatius), Common Fleabane (*Pulicaria dysenterica*). Many of the anthills are more herb-rich, with some covered in Ladies Bedstraw (*Galium verum*), also Red Fescue (*Festuca rubra agg.*), low-grazed Common Knapweed (*Centaurea nigra agg.*) and Silverweed (*Potentilla anserina*) etc.

Scrub – scattered, usually individuals, mostly Hawthorn (*Crataegus monogyna*), some Blackthorn (*Prunus spinosa*) and Wild Privet (*Ligustrum vulgare*), Buckthorn (*Rhamnus cathartica*) Ivy (*Hedera helix*), Ash (*Fraxinus excelsior*) and White Poplar (*Populus alba*).

NVC assessment – drier areas MG5, transitioning to MG10 (Rush Pasture) and MG11 in wetter areas.

Current Management:

Being grazed by Longhorn cows, although not there during visit it looks like this area is grazed the most heavily and early in the summer, which is helping to control the more vigorous grasses and encouraging the herbs.

Management prescription:

Continue managing as is. Possibly more cows to graze a bit more heavily, but alright to continue as is. Ensure grazing is not reduced.

Compartment 2: (surrounding rough

grassland margins)
6-fig central Grid

Link to map

Ref:

Description:

Ungrazed rough grassland round the outside of the fenced compartment – all around the edges of the main body (middle and south large area) of the site. False Oat-grass (*Arrhenatherum elatius*), Stinging Nettle (*Urtica dioica*), Cocksfoot (*Dactylis glomerata*), Yorkshire Fog (*Holcus lanatus*), Hemp Agrimony (*Eupatorium cannabinum*), Common Knapweed (*Centaurea nigra agg.*), Thistles (*Sonchus sp.*), Silverweed (*Potentilla anserina*), Creeping Buttercup (*Ranunculus repens*), Meadow Vetchling (*Lathyrus pratensis*), Germander Speedwell (*Veronica chamaedrys*), Hairy Sedge (*Carex hirta*), Great Willowherb (*Epilobium hirsutum*), Garlic Mustard (*Alliaria petiolate*). With denser scrub becoming secondary woodland in denser areas off the more open path zone, of Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), Hazel (*Corylus avellana*), Field Rose (*Rosa arvensis*), Blackthorn (*Prunus spinosa*), Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*).

NVC assessment: MG1

Current Management:

Path area kept cut short, unmanaged surrounding this possibly.

Management prescription:

Cut back into the scrub – initially with a winter scrub-bash back (cut the stumps right down low so as not to damage the blades of the strimmer the next summer), and then with a summer early July cut with a strimmer and mower.

Compartment 3:

(wet areas – ditch and wet patches)

6-fig central Grid Ref:

Link to map

Description:

Ditch line and wet patches in the Comp 1 grassland area – are sufficiently distinct and different in their spp. composition to warrant a new compartment. Hard Rush (Juncus inflexus), Hemp Agrimony (Eupatorium cannabinum), Hairy Sedge (Carex hirta), Water Mint (Mentha aquatica), Common Nettle (Urtica dioica), Meadow Vetchling (Lathyrus pratensis), Tufted Hair-grass (Deschampsia cespitosa), Bramble (Rubus fruticosus agg.), Great Willowherb (Epilobium hirsutum), Angelica (Angelica sylvestris), Lesser Pond Sedge (Carex acutiformis), Blunt-flowered Rush (Juncus subnodulosus), Marsh Thistle (Cirsium palustre), False Fox Sedge (Carex otrubae), Watercress (Rorippa nasturtium-aquaticum), Fool's Watercress (Apium nodiflorum), Wild Teasel (Dipsacus fullonum), Square-stemmed Willowherb (Epilobium tetragonum), Brooklime Speedwell (Veronica beccabunga), Field Horsetail (Equisetum arvense), Sharp-flowered Rush (Juncus acutiflorus), Common Duckweed (Lemna minor), Water Figwort (Scrophularia auriculata), Giant Fescue (Schedonorus giganteus), Fen Bedstraw (Galium uliginosum), Bittersweet (Solanum dulcamara).

In patches the Brambles (*Rubus fruticosus agg.*) and scrub get a chance to take over on these patches as they are not being grazed.

Current Management:

Possibly nothing. Not being grazed as species probably not very palatable for the cattle

Management prescription:

Needs to be cut to control the scrub taking over in places. Cut and remove the Bramble (*Rubus fruticosus agg.*) and young scrub in places over early winter.

Compartment 4:

(Riverside)

6-fig central Grid Ref:

Link to map

Description:

River channel and bankside open areas contain Watercress (*Rorippa nasturtium-aquaticum*), Water-starwort sp. (*Callitriche sp.*) Least Lesser Pond Sedge (*Carex acutiformis*), Greater Pond Sedge (*Carex riparia*), Reedmace (*Typha latifolia*) and Yellow Flag Iris (*Iris pseudacorus*). The aquatic plants are most abundant where the river is not shaded and access is restricted. **Water Fern** (*Azolla filiculoides*) with Duckweed (*Lemna minuta*), (see map) occurs at the northern end of the river.

Much of the river banks is W21 Crataegus monogyna – Hedera Helix scrub with Bramble, (Rubus fruticosus), but becoming secondary woodland (W6 Alnus glutinosa-Urtica dioica) in character with Common Alder (Alnus glutinosa), Goat Willow (Salix caprea), Elder (Sambucus nigra), and Ash (Fraxinus excelsior). The field layer includes Stinging Nettle (Urtica dioica), Pendulous Sedge (Carex pendula), Wood Sedge (Carex sylvatica), Cleavers (Galium aparine), Herb Robert (Geranium robertianum), Wood Avens (Geum urbanum), Ground Ivy (Glechoma hederacea), Ivy (Hedera helix), Hogweed (Heracleum sphondylium), Black Currant (Ribes nigrum), Raspberry (Rubus idaeus), Wood Dock (Rumex sanguineus), Bittersweet (Solanum dulcamara) Hedge Woundwort (Stachys sylvatica), and Hedge Bindweed (Calystegia sepium).

The reedswamp is dominated by Common Reed (*Phragmites australis*), with (in rough order of frequency) Hemp Agrimony (*Eupatorium cannabinum*, Great Willowherb (*Epilobium hirsutum*), Angelica (*Angelica sylvestris*), Meadowsweet (*Filipendula ulmaria*), Hard Rush (*Juncus inflexus*); Sharp Flowered Rush (*Juncus acutiflorus*) and Blunt-flowered Rush (*Juncus subnodulosus*) and Common Fleabane (*Pulicaria dysenterica*) (S25 *Phragmites australis - Eupatorium cannabinum* tall-herb fen National Vegetation Community). There is much Goat Willow scrub throughout the fen.

On the fen margins, Tufted Hair-grass (Deschampsia cespitosa), Marsh Thistle (Cirsium palustre), Gipsywort (Lycopus europaeus), Purple Loosestrife (Lythrum salicaria), Water Mint (Mentha aquatic), Water Figwort (Scrophularia auriculata), Greater Tussock Sedge (Carex paniculata), Guelder-rose (Viburnum opulus) and Rough Meadow-grass (Poa trivialis). There is also some **Ground Elder** (Aegopodium podagraria) and **Himalayan Balsam** (*Impatiens glandulifera*) close to the path but no evidence of significant spread. Beside the path is a more ruderal grassland strip containing Creeping Bent (Agrostis stolonifera), Cow Parsley (Anthriscus sylvestris), Lesser Burdock (Arctium minus), Horse-radish (Armoracia rusticana), Mugwort (Artemisia vulgaris), Hairy Brome (Bromopsis ramosa), Creeping Thistle (Cirsium arvense), Common Couch (Elytrigia repens), Field Horsetail (Equisetum arvense), , Yorkshire Fog (Holcus lanatus), Squarestalked St John's Wort (Hypericum tetrapterum White Dead Nettle (Lamium album), Perennial Rye-grass (Lolium perenne), Greater Plantain (Plantago major), Silverweed (Potentilla anserine), Creeping Buttercup (Ranunculus repens), Perennial Sow-thistle (Sonchus arvensis), Spear Thistle (Cirsium vulgare), Figwort (Scrophularia nodosa), and Tufted Vetch (Vicia cracca).

Current Management:

Unknown – possibly some areas are cut to keep them open

Management prescription:

Cut and clear outside bird-breeding season (Oct/Nov) where areas are already open or beginning to scrub over. Where areas are shaded by mature trees then leave these but control scrub invasion if necessary.

Compartment 1B:

(fenced NW dry grassland area)

6-fig central Grid Ref:

Link to map

Description:

Fenced off and grazed. NW grassland, rougher and less grazed than Comp

Species in order of frequency: Hard Rush (Juncus inflexus), False Oat-grass (Arrhenatherum elatius), Common Knapweed (Centaurea nigra agg.), Meadowsweet (Filipendula ulmaria), Cocksfoot (Dactylis glomerata), Hairy Sedge (Carex hirta), Glaucous Sedge (Carex flacca), Hemp Agrimony (Eupatorium cannabinum), Water Mint (Mentha aguatica), Bramble (Rubus fruticosus agg.) & Dewberry (Rubus caesius), Tufted Hair-grass (Deschampsia cespitosa), Great Willowherb (Epilobium hirsutum), Silverweed (Potentilla anserina), Curled Dock (Rumex crispus), Hoary Ragwort (Senecio erucifolius), Common Fleabane (Pulicaria dysenterica), Square-stalked St John's Wort (*Hypericum tetrapterum*), Meadow Vetchling (Lathyrus pratensis), Perennial Rye-grass (Lolium perenne), Red Bartsia (Lolium perenne), Smaller Catstail (Phleum bertolonii), Timothy (Phleum pratense), Common Reed (Phragmites australis), Brown Sedge (Carex disticha), Creeping Thistle (Cirsium arvense), Marsh Thistle (Cirsium palustre), Early Marsh Orchid (Dactylorhiza incarnate) & Southern Marsh Orchid (Dactylorhiza praetermissa).

The more vigorous grasses: False Oat-grass (*Arrhenatherum elatius*), Cocksfoot (*Dactylis glomerata*) and Hemp Agrimony (*Eupatorium cannabinum*) and Hard Rush (*Juncus inflexus*) are dominating this area and so more and earlier grazing would help to control these. Overall however, it is otherwise surviving well.

Current Management:

Grazed by 3 Longhorns on day of visit.

Management prescription: The area is not being grazed heavily and so could do with more grazing earlier in the summer, particularly to control the more vigorous grasses taking over.

Compartment 1C:

(not accessed or recorded – ungrazed grassland compartment in NE)

6-fig central Grid Ref:

Link to map

Description:

Not accessed or recorded - fenced compartment but looks ungrazed. Very like Comp 2, tall ruderal – large patches of Hemp Agrimony (*Eupatorium cannabinum*), grasses dominated by False Oat-grass (*Arrhenatherum elatius*).

Current Management:

Possibly no management at present – may not have been cut for some time but not yet scrubbing over.

Management prescription:

Will scrub over if left unmanaged – needs more grazing ideally – but cut and clear in July if grazing is not possible, and ideally again in Sept and/or April as the vegetation is fairly vigorous and nutrients need lifting off constantly for a while. The most important cut is the July cut before the vigorous grasses set seed – and lift the cuttings.

Invasive species:	List:
	Water Fern (Azolla filiculoides)
	Himalayan Balsam (Impatiens glandulifera)

Surrounding	We didn't have time to survey around the outside edges so this is not
landuse (briefly	commented on at this time.
describe):	

TABLE 2: Grassland habitat condition assessment - fo	or information			
This is broadly based on Natural England's Common Standards assess the condition of the main habitats present on Sites of Spe				
To help with the identification of grassland-type habitats an following list of Negative Condition Indicators (species) for Hertfordshire. They are divided in to three different ecolog	the typical open habitats found in			
Agricultural weeds (indicating increased soil nutrient	Including these herbs: Creeping and			
levels in previously low-nutrient swards, and high levels of	Spear Thistle, Broad-leaved and Curled			
disturbance)	Dock, Common Ragwort, Nettle, Greater			
These species are particularly negative from both the	Plantain, Cleavers, Cow Parsley and Field			
agricultural and ecological perspectives, and usually indicate	Horsetail, Daisy, Common Mouse-ear,			
both disturbance and increased nutrient levels.	Rosebay Willowherb, Sow Thistles.			
Agriculturally favoured species (indicating increased	Including herbs: White Clover, Creeping			
eutrophication)	Buttercup;			
These species are positive from the agricultural perspective.	Grasses: Perennial Rye-grass, Yorkshire			
Ecologically however these species represent high soil nutrient	Fog, Soft Brome, Timothy, Floating			
levels, but not disturbance. While a few of these species are a	Sweet-grass, Rough Meadow-grass			
normal component of ecologically valuable communities, a				
high frequency of these species indicates negative condition.				
Rank grasses, rushes and sedges	Including False Oat-grass, Cock's-foot,			
if very abundant, these species indicate lack of appropriate	Tufted Hair-grass, Perennial Rye-grass,			
management and/or waterlogging.	large-leaved sedge species, Reed Sweet-			
	grass			

Plant Species List:

Oughtonhead Common 2016 (11001). AB 1&3, 1 Sept (& 8 Sept where noted)		WS inds (*/a/n/c/w/f	date of record	Comp1 Dry Grasslan d (1/9/16)	Comp2 Rough grasslan d outside fence (1&8/9)	Comp3 Ditch (1/9/16	Comp4 River- edge (8/9/16	Comp 1B north grasslan d (8/9/16)
Scientific Name	Common Name) & neg inds ('-')	(if > 1 day)	DAFOR	DAFOR	DAFO R	DAFO R	DAFOR
Acer campestre	Maple, Field	*			R			
Acer pseudoplatanus	Sycamore		Comp 2 8/9/16	R	R+			
Aegopodium podagraria	Ground Elder						R	
Agrimonia eupatoria	Agrimony	c/n		R				R-
Agrostis capillaris	Bent, Common	a/n		R				
Agrostis stolonifera	Bent, Creeping			R			R	
Alliaria petiolata	Mustard, Garlic				R			
Alnus glutinosa	Alder, Common						R	
Angelica sylvestris	Angelica	f/w	Comp 2 8/9/16		R	R	R	
Anthriscus sylvestris	Parsley, Cow	- c/n/w	0/0/10				R	
Apium nodiflorum	Watercress, Fool's					R		
Arctium minus	Burdock, Lesser			R			R	
Armoracia rusticana	Horse-radish*						R	
Arrhenatherum elatius	Oat-grass, False	- a/c/n/w		О	R			0
Artemisia vulgaris	Mugwort		Comp 2		R		R	
Avena fatua	Oat, Wild		8/9/16		R			
Azolla filiculoides	Fern, Water						R	
Brachypodium sylvaticum	Brome, False			R	R			
Bromopsis ramosa	Brome, Hairy	*					R	
Bryonia dioica	Bryony, White		Comp 2		R			
Callitriche sp.	Water-starwort, sp.		8/9/16				R+	
Calystegia sepium	Bindweed, Hedge						R+	
Campanula rotundifolia	Harebell	c/a		R-				
Carduus crispus	Thistle, Welted			R	R			
Carex acutiformis	Sedge, Lesser Pond	f		(R)			R+	
Carex disticha	Sedge, Brown	f/w						R
Carex flacca	Sedge, Glaucous	c/n/w		0				R+
Carex hirta	Sedge, Hairy		Comp 2	0	R+	R+		R+
Carex paniculata	Sedge, Greater Tussock	f	8/9/16				R-	
Carex pendula	Sedge, Pendulous	*					R	
Carex riparia	Sedge, Greater Pond						R	
Carex sylvatica	Sedge, Wood	*					R	
Centaurea nigra agg.	Knapweed, Black/Com'n/Chalk	c/n		О	O-	R		0
Cerastium fontanum	Mouse-ear, Common	- a		R	R			
Cirsium arvense	Thistle, Creeping	- a/c/n/w		R	R+		R	R
Cirsium palustre	Thistle, Marsh	f/w		R			R	R
Cirsium vulgare	Thistle, Spear	- a/c/n/w		R	R		R-	
Corylus avellana	Hazel	*	Comp 2		R+			
Crataegus monogyna	Hawthorn		8/9/16	О	О	R-	R	F
Crepis capillaris	Hawk's-beard, Smooth			R				
r r	i iawk 5-beatu, 311100tii							

Oughtonhead Common 2016 (11001). AB 1&3, 1 Sept (& 8 Sept where noted)		WS inds	date of record	Comp1 Dry Grasslan d (1/9/16)	Comp2 Rough grasslan d outside fence (1&8/9)	Comp3 Ditch (1/9/16	Comp4 River- edge (8/9/16	Comp 1B north grasslan d (8/9/16)
Scientific Name	Common Name) & neg inds ('-')	(if > 1 day)	DAFOR	DAFOR	DAFO R	DAFO R	DAFOR
Dactylis glomerata	Cocksfoot	- a/c/n/w	,	O-	О			
Dactylorhiza incarnata	Orchid, Early Marsh~	W						R
Dactylorhiza praetermissa	Orchid, Southern Marsh	w						R
Deschampsia cespitosa	Hair-grass, Tufted	- n/w	Comp 2 8/9/16	R	R	R	R	R
Dipsacus fullonum	Teasel, Wild			R-		R		
Elytrigia repens	Couch, Common						R	
Epilobium hirsutum	Willowherb, Great			R	R+	R+	O-	R
Epilobium tetragonum	Willowherb, Sq-stemmed			R		R-		
Epilobium sp.	Willowherb, unknown sp.					R-		
Equisetum arvense	Horsetail, Field	- n	Comp 2 8/9/16	R	R	R	R	
Eupatorium cannabinum	Agrimony, Hemp	f	0,0,10	R+	O/F	F	0	R+
Festuca rubra agg.	Fescue, Red (family)			О	R			R
Filipendula ulmaria	Meadowsweet	f/w	Comp 2 8/9/16		R		R	О
Fraxinus excelsior	Ash		0/0/10	R-	R	R-	R	
Galium aparine	Cleavers	- c/n					R	
Galium mollugo	Bedstraw, Hedge			R-				
Galium palustre	Bedstraw, Marsh	f		R				
Galium uliginosum	Bedstraw, Fen~	f/w	Comp 2 8/9/16		R			
Galium verum	Bedstraw, Lady's	c/n	Comp 2 8/9/16	O-	R			
Geranium robertianum	Herb Robert		0/3/10	R-			R	
Geum urbanum	Wood Avens						R	
Glechoma hederacea	Ground Ivy			R	O-		R	
Hedera helix	lvy			R	R		R	
Heracleum sphondylium	Hogweed			R	R		R	
Holcus lanatus	Yorkshire Fog	- a/c/n/w		O-	О		R	О
Hypericum tetrapterum	St John's-wort, Sq-stalked	w					R	R
Impatiens glandulifera	Balsam, Indian/Himalayan*	- w/f					R	
Iris pseudacorus	Iris, Yellow flag						R	
Juncus acutiflorus	Rush, Sharp Flowered~			R			R	
Juncus inflexus	Rush, Hard		Comp 2 8/9/16	O-	R+	O-	R	F
Juncus subnodulosus	Rush, Blunt-flowered~	f/w	0/9/10	R			R	
Lamium album	Dead Nettle, White			R-	R		R	
Lathyrus pratensis	Vetchling, Meadow	n		R+		R		R
Lemna minor	Duckweed, Common					(R)		
Lemna minuta	Duckweed, Least*~						R	
Ligustrum vulgare	Privet, Wild					R-		
Linaria vulgaris	Toadflax, Common		Comp 2	R-	R			
Lolium perenne	Rye-grass, Perennial	- a/c/n/w	8/9/16	R	R		R	R
Lonicera periclymenum	Honeysuckle			R-				
Lotus corniculatus	Bird's-foot-trefoil, Com'n	c/n		R				R-
Lycopus europaeus	Gipsywort						R	
Lythrum salicaria	Loosestrife, Purple	f					R	

Oughtonhead Common 2016 (11001). AB 1&3, 1 Sept (& 8 Sept where noted)		WS inds	date of record	Comp1 Dry Grasslan d (1/9/16)	Comp2 Rough grasslan d outside fence (1&8/9)	Comp3 Ditch (1/9/16	Comp4 River- edge (8/9/16	Comp 1B north grasslan d (8/9/16)
Scientific Name	Common Name) & neg inds ('-')	(if > 1 day)	DAFOR	DAFOR	DAFO R	DAFO R	DAFOR
Malus pumila	Apple, domestic*			R-				
Medicago lupulina	Medick, Black					R-		
Mentha aquatica	Mint, Water			R+		R+	R	R+
Lolium perenne	Bartsia, Red			R	R			R
Ononis spinosa	Restharrow, Spiny~	c	Comp 2 8/9/16		R			
Phleum bertolonii	Catstail, Smaller		Comp 2 8/9/16	R	R			R
Phleum pratense	Timothy	- a/n/w	Comp 2 8/9/16	R	R			R
Phragmites australis	Reed, Common	f	3,0,10				D	R
Plantago lanceolata	Plantain, Ribwort			R+	R			
Plantago major	Plantain, Greater	- a/c/n	Comp 2 8/9/16	R	R		R	
Poa annua	Meadow-grass, Annual		5,3/10		R			
Poa pratensis	Meadow-grass, Smooth			R				
Poa trivialis	Meadow-grass, Rough	- w		R			R	
Populus alba	Poplar, White*			R	R			
Potentilla anserina	Silverweed			O-	R+		R	R
Potentilla reptans	Cinquefoil, Creeping			О	R			
Prunella vulgaris	Selfheal			R				
Prunus spinosa	Blackthorn			R	R			
Pulicaria dysenterica	Fleabane, Common	W		R	R		R	R
Ranunculus acris	Buttercup, Meadow	n		R-				
Ranunculus repens	Buttercup, Creeping	- w		R	R		R	
Rhamnus cathartica	Buckthorn		Comp 2	R	R			
Ribes nigrum	Currant, Black	*	8/9/16				R	
Rorippa nasturtium-						O-	R+	
aquaticum	Watercress							
Rosa arvensis	Rose, Field	*		R				
Rosa canina agg.	Rose, Dog, agg.		Comp 2 8/9/16	_	R	R-		_
Rubus caesius	Dewberry			R				R+
Rubus fruticosus agg.	Bramble			R+			R+	R
Rubus idaeus	Raspberry						R	
Rumex acetosa	Sorrel, Common	n	Comp 2 8/9/16	R-	R			
Rumex conglomeratus	Dock, Clustered			R	R			
Rumex crispus	Dock, Curled	- c/n/w						R
Rumex sanguineus	Dock, Wood					R-	R	
Salix caprea	Willow, Goat			R			О	
Salix cinerea	Willow, Grey		Comp 2 8/9/16		R			
Sambucus nigra	Elder			R-	R+		R	
Schedonorus giganteus	Fescue, Giant	*				R		
Scrophularia auriculata	Figwort, Water					R	R	
Scrophularia nodosa	Figwort	*					R-	
Senecio erucifolius	Ragwort, Hoary		Comp 2 8/9/16	R	R			R
Senecio jacobaea	Ragwort, Common	- a/c/n		R	R			
Silene latifolia	Campion, White			R				

Oughtonhead Common 2016 (11001). AB 1&3, 1 Sept (& 8 Sept where noted)		WS inds	date of record	Comp1 Dry Grasslan d (1/9/16)	Comp2 Rough grasslan d outside fence (1&8/9)	Comp3 Ditch (1/9/16	Comp4 River- edge (8/9/16	Comp 1B north grasslan d (8/9/16)
Scientific Name	Common Name	(*/a/n/c/w/f) & neg inds ('-')	(if > 1 day)	DAFOR	DAFOR	DAFO R	DAFO R	DAFOR
Solanum dulcamara	Bittersweet			R		R	R	
Sonchus arvensis	Sow-thistle, Perennial		Comp 2 8/9/16		R	R-	R	
Sonchus asper	Sow-thistle, Prickly			R-				
Stachys sylvatica	Woundwort, Hedge						R	
Succisa pratensis	Scabious, Devil's-bit	c/n/w		R				
Taraxacum officinale agg.	Dandelion family			R-				R
Trifolium pratense var. pratense	Clover, Red (native)	c/n		R				R
Typha latifolia	Bulrush						R+	
Ulmus sp.	Elm sp.			R				
Urtica dioica	Nettle, Stinging	- a/c/n/w		R	R	R	R	
Veronica beccabunga	Speedwell, Brooklime					R+		
Veronica chamaedrys	Speedwell, Germander	c/n		R	R			
Viburnum opulus	Guelder-rose^	*					R-	
Vicia cracca	Vetch, Tufted	c/n	Comp 2 8/9/16	R	R-		R-	
Vicia sp.	Vetch, sp		Comp 2 8/9/16		R-			
*=planted/introduced/escap e	per compartment totals:			82	61	28	69	35
^=note whether planted	GR ₁ =8 fig grid ref required							

Total species (all comp.s)	139	total indicators 41					
Comp1 Dry Grassland (1/9/16)		Neut (H.2.2b)	Acid (H.2.2c)	Calc (H.2.2a)	Wet (H.2.2d)	Fen (H.5.3)	c/a/n/w (H.2.2e)
	1	13	2	10	5	5	17
Comp2 Rough grassland outside fence (1&8/9)	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	2	5	0	5	4	4	10
Comp3 Ditch (1/9/16)	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	1	2	0	1	1	2	3
Comp4 River-edge (8/9/16)	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	6	1	0	1	6	9	7
Comp 1B north grassland (8/9/16)	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	0	6	0	5	8	5	13
All Compartments:	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
	10	13	2	11	12	12	25
	AWI	Neut	Acid	Calc	Wet	Fen	c/a/n/w
Threshholds:							
min size (ha)	1	0.25	0.25	0.25	0.25	0.25	0.25
min indicators	10	8	5	8	5	5	12
Criteria met	Met	Met		Met	Met	Met	Met

Faunal Species List:

Date of Records: Common Name	Qualifier (state if sighting, sound or	Recorder: no. observed (if relevant)	Date if >1 day
	sign)	·	
Swallow	Sighting		1/9/2016
Black Bird	Sighting		1/9/2016
Buzzard	Sighting		1&8/9/2016
Common Crow	Sighting		1/9/2016
Great Tit	Sighting		1/9/2016
Blue Tit	Sighting		1/9/2016
Wren	Sighting		1/9/2016
Green Woodpecker	Sighting		1/9/2016
Robin	Sighting		1/9/2016
Goldfinch	Sighting		1/9/2016
Magpie	Sighting		8/9/2016
Wood Pigeon	Sighting		8/9/2016
Kestrel	Sighting		8/9/2016
Chiffchaff	Sighting		8/9/2016
Long-tailed Tit	Sighting		8/9/2016
Honey Bees	Sighting		1/9/2016
Meadow Brown	Sighting		1/9/2016
Gatekeeper	Sighting		1/9/2016
Small Tortoiseshell	Sighting	4	1&8/9/2016
Large White	Sighting		1&8/9/2016
Red Admiral	Sighting	5	8/9/2016
Speckled Wood	Sighting		8/9/2016
Comma	Sighting	2	8/9/2016
Frog	Sighting	1	8/9/2016
Mallard	Sighting		8/9/2016
Moorhen	Sighting		8/9/2016
Dragonfly - red	Sighting	10+	8/9/2016

Survey Map

