

NORTON COMMON

GREENSPACE ACTION PLAN 2020 – 2025

Produced by:

On behalf of:



NORTH HERTFORDSHIRE DISTRICT COUNCIL



OVERVIEW

Greenspace Action Plans

Greenspace Actions Plans (GAPs) are map-based management plans which specify activities that should take place on a site over a stated period; these activities will help to deliver the agreed aspirations which the site managers and stakeholders have identified for that site.

Public Engagement

Engagement with stakeholders is at the centre of effective management planning on any site. An initial engagement period was held for 5 weeks in September 2019, to establish core aims and objectives for the site; these are reflected in Section 4. A second stage of engagement from February 2020 enabled stakeholders to comment on the proposed management actions for the site. An engagement response document, published online as an appendix to this plan, summarises comments received, and any amendments made to the plan as a result.

Version Control

Version	Issue Date	Details	Author	Reviewed	Approved

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1.0 SUMMARY

1.1 Site Summary

Site Name: Norton Common Local Nature Reserve

Site Address: Icknield Way, Letchworth Garden City. SG6 4UF

Grid Reference: TL218333

Size: 29 hectares

Designations: Local Nature Reserve (1475824), Local Wildlife Site (12/007)

Owner: North Hertfordshire District Council

1.2 Vision Statement

Located in the heart of Letchworth, Norton Common Local Nature Reserve provides access to a large area of public greenspace offering formal and informal recreation opportunities and supporting a range of semi-natural habitats including woodland, meadow and marsh.

The site is designated as a Local Wildlife Site in recognition of the site's importance for biodiversity. The site has retained the prestigious Green Flag, awarded annually, throughout the period of the previous plan (2015 - 2020). Green Flag recognises parks and green spaces achieving a high standard of maintenance, accessibility and community engagement.

The vision for the site over the next five years will be to maintain the benchmark standards of Green Flag and identify opportunities to enhance the site's value for people and wildlife.

This document sets out a framework to manage, maintain, and develop the site from 2020 to 2025, building on the successful outcomes of previous greenspace action plans.

The structure of the plan is based on Green Flag criteria, to explore the range of issues that are important for a successful green space. The plan includes annual management maps and a timetabled action-plan, both located towards the end of the document. It will be reviewed annually, so that actions can be revised as necessary over the life of the plan.



Black squirrel photographed in Norton Common

2.0 SITE DESCRIPTION

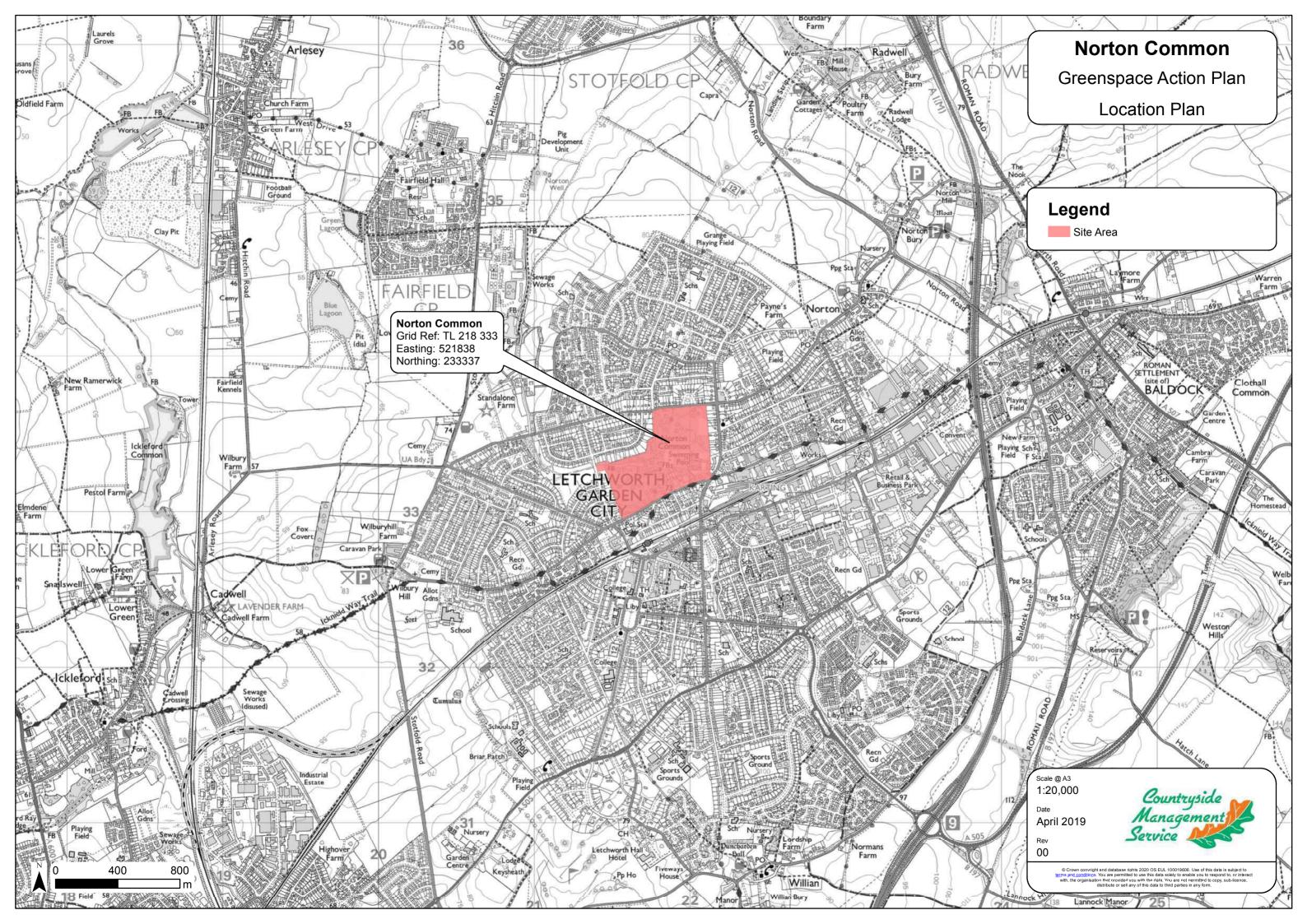
2.1 Introduction

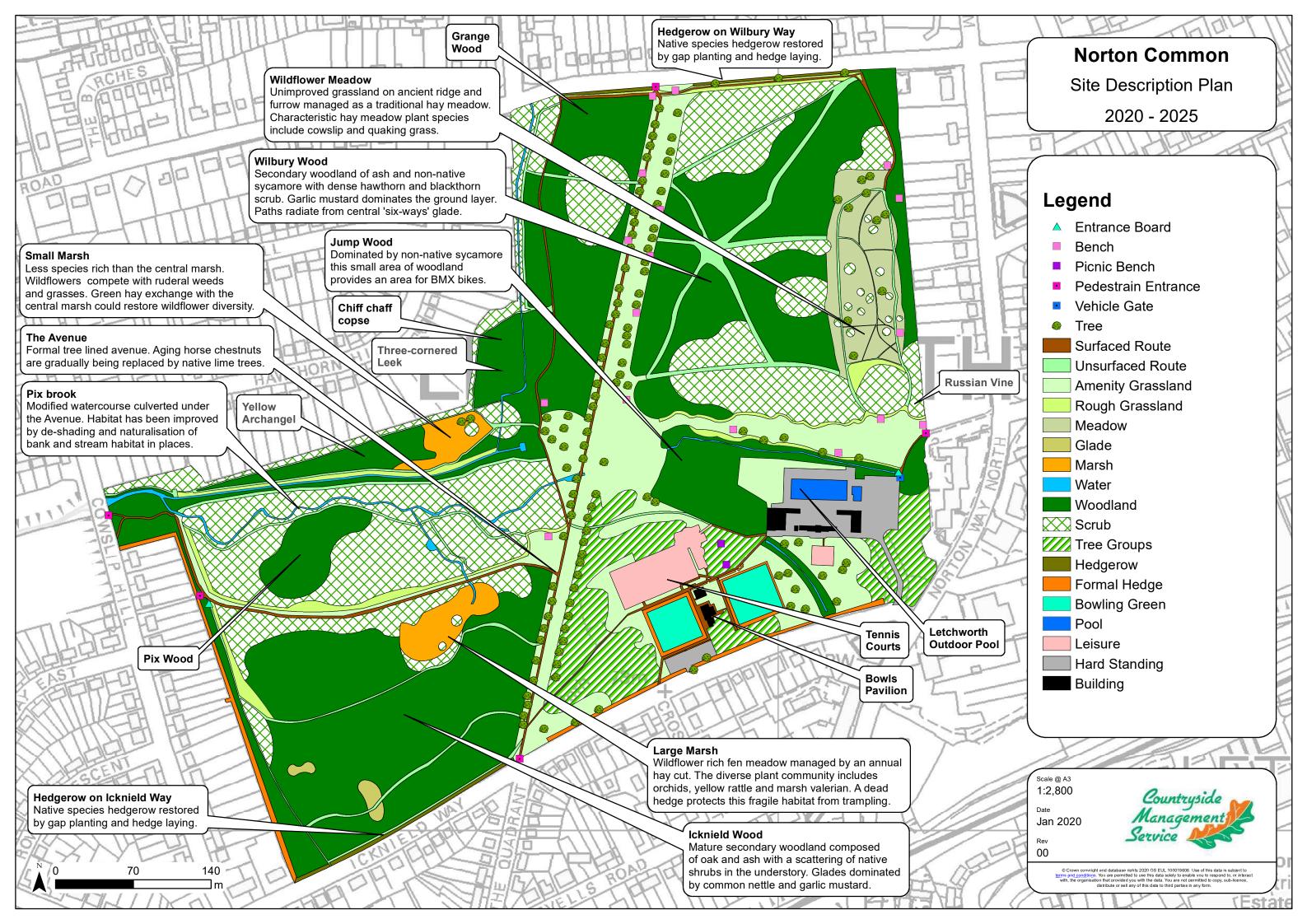
Norton Common is a 29-hectare public greenspace located in a residential area of Letchworth Garden City, to the north of the town centre. The site is part of a green corridor which includes Standalone Farm, Pix Brook Meadows and Letchworth Greenway. North Hertfordshire District Council owns and manages the site in partnership with the Countryside Management Service (CMS), part of Hertfordshire County Council's (HCC) Countryside and Rights of Way Service (CRoW), and the Friends of Norton Common (FoNC).

The site has a complex social history which is reflected in the matrix of semi-natural habitats, ancient field workings, and formal landscape features which provides a valuable habitat for wildlife, including a variety of bird species and a population of black squirrel (a local variant of the grey squirrel). Ridge and furrow patterns from ancient cultivation are prominent across parts of the site and provide a visual link to the past. The most valuable habitats on site for biodiversity are the unimproved meadow and boulder clay marsh. These habitats support a diversity of wildflowers including orchids, cowslips, and a number of plants which are rare or absent across the rest of Hertfordshire (including Sulphur Clover). The meadow and marsh are ancient in origin and the rich plant communities they support are best maintained through traditional management techniques such as hay making. The Pix brook runs through the site in a modified channel which serves a flood alleviation function for surrounding housing. Unmodified tributaries of the Pix brook, and natural springs arising across the site, are important for maintaining the rare marsh habitat. The tree lined Avenue, planted to celebrate the coronation of George V, provides a formal landscape feature.

Under the guidance of the 2015 to 2020 GAP, wildlife habitats in Norton Common have been managed to support native biodiversity. Management interventions included controlling the spread of non-native and competitive plant species, planting young trees and clearing regeneration glades in poorly structured woodland, and an annual cut and collect (hay making) regime for meadow and marsh. Hedgerows along the north and south boundary of the site have previously been managed to plant-up gaps and lay in traditional style. Much of this work was undertaken by the Friends of Norton Common, supported by NHDC, CMS and grounds maintenance (GM).

Sport and play facilities are located on site which serve a wide demography of local residents and the wider community of Letchworth and its surrounds. Facilities include children's play equipment, skateboard park, tennis courts, bowls lawns, and a seasonal outdoor swimming pool. Access across the site is provide by a network of surfaced and unsurfaced routes. A multi-user access route running along the Avenue provides a non-motorised commuting link towards the town centre. Surfacing of informal paths around the site was extended under the previous GAP, increasing options of year-round site access. Most paths remain unsurfaced.







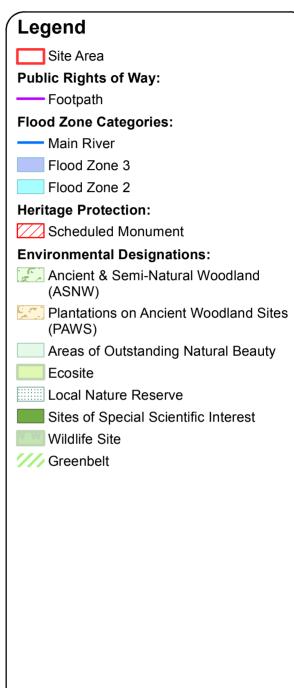




Norton Common

Greenspace Action Plan

Constraints Plan



Scale @ A3 1:10,000

> Date April 2019

Countryside Management Service

Rev 00

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2.2 Geography and Landscape

Norton Common is located in Letchworth Garden City in North Hertfordshire. The geology of the local region is dominated by chalk which is overlain by glacial deposits of base rich loamy clay soils. The soil is fertile and there is evidence of historic ridge and furrow cultivation, the ridges are substantial indicating that soil drainage was required for crop growing.

The hydrology of Norton Common, in combination with underlying soils and geology, create conditions for 'tufa springs'. These mineral rich waters feed the rare boulder clay marsh located in the centre of Norton Common and occurring no-where else in Hertfordshire. This unique habitat supports a rich community of wildflowers which provide a colourful display in spring and summer and include orchids, yellow rattle, and wetland plants such as valerian.

Letchworth Garden City is the world's first garden city with construction beginning in the early 1900s. Norton Common was recognised in the city master plan as an area of beauty which should be preserved for nature and recreation. The tree lined Avenue, created in 1937, follows the axial line of the grade II listed Broadway which provides a formal boulevard approach to the town centre. Norton Common is included in the Letchworth Garden City Conservation Appraisal due to historic land uses and landscape design interest.

2.3 History and Archaeology

The southern boundary of Norton Common follows the route of the Icknield Way, a pre-historic trade route between Wessex and East Anglia. The earliest evidence of settlement in the local area dates from the medieval era when agricultural and pastoral use of the site is likely to have originated. The prominent ridge and furrow system which is visible on the site today is thought to have been created with Tudor era cultivation technology. The site was enclosed in the 1700s, although the exercising of common grazing rights continued until the late 1800s when all rights were acquired by a single owner. Following the cessation of grazing, open marsh and grassland was overtaken by woodland and scrub and the site managed for game birds.

In 1904, the land and freehold of Norton Common were acquired by the First Garden City Ltd. and the site was made more accessible for local residents by cutting access paths through woodland and scrub. In 1922, Letchworth Urban District Council took over management of Norton Common and developed the amenity value of the site by installing leisure facilities, car parks and surfaced paths. The council also recognised the importance of retaining the site's natural character. Today, the site is managed by North Hertfordshire District Council. The assets of the First Garden City Ltd. were transferred to the public sector in 1962, and three years later to Letchworth Garden City Heritage Foundation.

2.4 Habitats and Wildlife

Norton Common is designated as a Local Wildlife Site (LWS), in recognition of the local importance of woodland, grassland and marsh habitat for the conservation of biodiversity. The LWS citation describes the site as supporting a high diversity of plant species indicative of unimproved grassland (neutral, acidic and marshy) and supporting semi-natural woodland with some ancient woodland indicator species. Grassland and marsh represent the most ecologically valuable habitats on site, although they compose just 8% of the total area.

The site was declared as a Local Nature Reserve in 2006, described as former arable and grazing land with wildflower grassland, mineral rich springs, and woodland alive with birds.

2.4.1 Marsh

There are two significant areas of marsh habitat, fed by mineral rich springs, known as the small marsh (0.2 ha) and the large marsh (0.7 ha). The large marsh provides the most intact example of fen meadow, a diverse plant community which develops from a tradition of hay cutting and minimal disturbance. The large marsh is awash with colour during the summer months, supporting meadow and wetland plant species such as yellow rattle, orchids, water mint, and marsh valerian. County rare and notable species are also recorded such as adder's tongue fern and parsley water-dropwort. The fen meadow plant community on the small marsh is less diverse, with competitive grasses and ruderal plants tending to be frequent.

Marsh habitat is managed as conservation grassland, with a single hay cut taken annually in late summer / early autumn and cut arisings lifted off the site. The marshes are surrounded by woodland and scrub, with scattered in-field trees. Work undertaken during the previous GAP, to maintain the area of open marsh habitat, included removing in-field trees and managing encroachment of the woodland edge. A dead hedge constructed around the large marsh protects this fragile habitat from trampling or soil poaching caused by indiscriminate access.

The small and large marsh are connected by a narrow corridor of open habitat within scrub.

Under the previous management plan targeted herbicide treatment was applied to localised patches of Russian comfrey and creeping thistle, to control spread of these competitive plant species into the fen meadow plant community. Use of herbicide as a control method for these undesirable plants will be reviewed under the current plan. Creation of a scrape (bare soil) has previously been considered for the large marsh to increase habitat diversity, however this action risks damaging the sensitive floral community by creating opportunities for ruderal and pernicious weeds to establish.

Bat surveys record a high level of activity over the marsh, indicating a rich insect population.



Large marsh in June with in-field willow scrub and surrounded by woodland



Large marsh plants including yellow rattle, common twayblade, and southern marsh orchid

2.4.2 Grassland

Unimproved grassland located on ridge and furrow in the north east of the site is managed with an annual cut and lift operation. The sward supports wildflowers typical of lowland neutral meadow such as cowslip, ladies' bedstraw, and harebell. The grassland is one of only five sites in the county where sulphur clover has been recorded. Management of in-field scrub and the woodland perimeter is necessary to maintain the extent of open unshaded meadow. A cowslip count is taken every year as a management indicator, this species is sensitive to changing habitat conditions such as such as nutrient enrichment. Cowslip numbers are reduced from five-years ago, however numbers have been stable over the 2015 to 2020 GAP.

Recreational grassland is managed with a varied cutting regime. Areas of grassland with a primarily amenity or landscape function, such as the Avenue, are cut frequently during the growing season to provide a short sward for ease of access and recreation. Margins of the east to west access path are managed on a zonal cutting regime so that vegetation increases in height away from the path and towards the woodland edge. This management regime replicates a woodland ride and is particularly valuable for the sunny south facing margin which can attract butterflies and other invertebrate. Grassy paths through the meadow and woodland are managed as rough grassland, with a cut taken every few weeks and arisings left on site.

2.4.3 Hedgerows

Native species hedgerows line the north and south boundary of the site, along Wilbury Road and Icknield Way. These hedgerows were laid in 2013 / 2014 to restore a traditional site boundary, and the Friends have planted-up hedgerow gaps with shrub and biodiversity species (such as dog rose). The restored hedgerows require on-going management to ensure healthy establishment of new planted hedge plants, and rotational laying of growing branches.

2.4.4 Woodland

Woodland and scrub habitat occupy a large area of the site, offering secluded walking routes for park visitors and shelter for wildlife. Woodland and scrub habitat developed on Norton Common following the cessation of grazing in the late 1800s and is therefore classified as secondary woodland (established after 1600s). Woodland is broadleaved deciduous and

provides habitat for a range of birds species such as wren, great spotted woodpecker, nuthatch, tree creeper, blackcap, chiffchaff, garden warbler, spotted flycatcher, bullfinch, linnet, redpoll, sparrowhawk and tawny owl. The woodland also supports a local population of black squirrel, a genetic variant of the common grey squirrel, and Muntjac deer.

The woodland canopy is composed predominately of ash and oak mixed with field maple and non-natives such as sycamore and Norway maple. The understory is dense in places, particularly in the north of the site, and is composed predominately of blackthorn and hawthorn with stands of young ash and occasional elder. Across much of the woodland the ground flora is relatively poor, dominated by competitive species such as stinging nettle and garlic mustard. Localised areas of woodland are more diverse with ancient woodland indicator species recorded including early dog-violet and three-veined sandwort. Scrub habitat in the west of the site, surrounding the Pix Brook tributaries, supports shrub species which thrive on calcareous, soils such as guelder rose and alder buckthorn, and coarse vegetation including pendulous sedge, creeping thistle and cow parsley. Non-native plants occur in woodland across the site including garden escapes such as cultivated periwinkle, variegated yellow archangel, three-cornered leek, and rose of Sharron, the climbing plant Russian Vine, and invasive non-native shrub plants such as rhododendron and laurel.



Open woodland in south of site with tree planting in cleared glades

Management of woodland under the previous GAP has aimed to introduce improved age structure. The Friends have opened glades, by clearing brash and coarse ground vegetation, to replant with native trees and to encourage natural regeneration. Planted trees are a mix of native species including oak, hawthorn, hazel, birch, hornbeam and field maple, or left open for natural regeneration. Planted trees are protected by guards and dead hedges and some regeneration glades have been fenced to protect seedlings from browsing by deer and rabbits. The Friends tasks have also included coppicing along the woodland edge to reduce shading and nutrient enrichment (from decomposing leaf litter) of the marsh and meadow perimeter, and to provide a graduated woodland edge along rides and water courses.

Ash is a significant component of woodland in Norton Common, in both the canopy and understory. Current research suggests that most of the UK ash is vulnerable to developing

ash dieback disease. This fatal fungal tree disease is spread by windborne spores and is now found across the country. The progression of the disease can be rapid in young trees and it is likely that natural recruitment of the next generation of ash trees from seed is already supressed at the site. In mature trees, the disease progresses more slowly with the result that affected trees may become increasingly unstable due to internal decay over several years. It is reasonable to expect that mature ash trees in Norton Common will demonstrate advanced ash dieback over the course of the current management plan, with implications for woodland management and tree risk. Managing woodland to promote a diversity of trees species and ages, and close monitoring for signs of tree pests and diseases, will support maintenance of a healthy and safe woodland habitat.

An annual butterfly survey report is produced for Norton Common, based on observation recorded from weekly transect walks. Conclusions from the most recent report are that the Avenue is depleted, compared to other areas of the site, in frequency of butterfly sightings. Creating scallops on the margin of scrubby woodland bordering the amenity grassland of the Avenue can enhance this area for butterflies, providing a sunny and sheltered microhabitat.



Dense woodland in north of site

Woodland margin east of the Avenue

2.4.5 Trees

The tree lined Avenue is a designed landscape feature crossing the centre of the site. The Avenue was established in 1937 in celebration of the coronation of George V, and was laid out along the axial line of the Broadway which is central to the town's original master plan.

The Avenue provides a wide uninterrupted view north to south across the site. The historic ridge and furrow pattern is highlighted by the amenity cut applied to grassland across the Avenue. A surfaced path runs along the west edge under the canopy, providing year-round, multi-user access for park visitors and commuters traveling to the centre of Letchworth.

Original tree plantings along the Avenue are horse chestnut, a non-native tree species susceptible to pests and pathogens. Lime has been inter-planted in canopy gaps from 1978. Lime is a native tree suited to site conditions, developing an attractive tree canopy.



Central tree lined avenue running north to south through Norton Common

2.4.6 Water

The Pix Brook runs east to west through the site in a modified channel, the watercourse is culverted under the Avenue and banks are artificially reinforced in places. Natural springs and Pix Brook tributaries occur across the site and are critical for maintaining the rare boulder clay marsh habitat. A second modified channel crosses the site, carrying run-off from the surrounding development. In 2013, a habitat improvement project was delivered for watercourses through Norton Common and included works such as bank re-profiling, deshading and naturalising the channel, and removing redundant in-channel structures. In subsequent years, parts of the re-profiled bank have experienced soil erosion due to revetment collapse with the result that vegetation has failed to establish. The Friends have created a small pond adjacent to the Pix Brook tributary and have rotationally coppiced scrub along the bank to reduce watercourse shading and open a path along the stream bank.

A flood alleviation study of the Pix Brook catchment, published in 2019, assessed options in Norton Common (such as de-culverting) as likely to have a limited impact on flood risk.

2.5 Access, Facilities and Infrastructure

A number of formal leisure facilities are located in Norton Common, catering for a wide range of ages and abilities. These include hard surfaced tennis courts, bowling lawns and club house (Bowls Pavilion), outdoor swimming pool (lido) and skateboard facility. There are also two equipped play areas which are designed for children of different ages, and outdoor adult fitness equipment. Opportunities for informal recreation are provided by areas of short amenity grassland, a network of surfaced and unsurfaced paths, and a sacrificial area of woodland 'Jump Wood' soft landscaped for BMX bikes. There are two site carparks, located at the swimming pool and Bowls Pavilion. Both carparks offer a period of free parking, disabled parking bays at located at the swimming pool. The pavement along the main entrances is extended to meet the highway pavement, with drop down kerbs to provide ease of access for walkers, wheelchair and pushchair users. Entrances are signed in the district corporate style.

Management of the site aims to achieve a balance between providing an amenity resource for the local community and conserving the natural and historic landscape. The only completely surfaced access through the site is the north to south multi-user path running along the Avenue, connecting Icknield Way and Wilbury Way. An east to west surfaced path leads from the Avenue to the Cowslip Hill entrance. Leisure facilities are clustered in the south east of the site and are interconnected by a network of surfaced paths which link to both site carparks. A surfaced path loop leads off the Avenue through woodland in the north west of the site. A network of unsurfaced paths provide access to woodland and meadow and provides views of marsh and brook habitat. Benches are provided at several intervals along the Avenue, and at resting points in recreation grassland. Away from surfaced paths, access can be limited in winter for all visitors to the wet and muddy nature of the site. For disabled users, access throughout the year may be restricted due to limited availability of complete surfaced routes. Site interpretation is placed strategically to limit the impact on the historic feel of the site. Welcome boards are placed at site entrances with annotated maps. Fingerposts provide directions for a cycling route through the site. A Nature Trial for the site has been designed by the Friends and is available as a download from the NHDC and CMS website.

Maintenance of leisure facilities and amenity areas is generally the responsibility of the ground maintenance contract which includes cutting amenity grass, hedge cutting, sweeping hard surfaces, inspecting and maintaining play equipment and maintaining tennis courts and the skate area. The lido is maintained separately by Stevenage Leisure Ltd. Since 2001, the bowling clubs have taken responsibility for maintaining the bowling greens, financed by club membership fees and by an NHDC maintenance grant. Bowling club members have contributed to renovating the interior facilities of the Pavilion. The Pavilion and lido are covered by building preservation orders as typical examples of Letchworth architecture. The Pavilion provides a meeting place for the Friends, and the bowls clubs allow some other community groups to use the facilities.

2.6 Community and Events

The Friends of Norton Common are a voluntary group with their own constitution who work in partnership with NHDC and CMS to implement positive management, and biodiversity monitoring, for semi-natural habitats on site. Over the course of the preceding plan the Friends have undertaken significant woodland enhancement work and have previously helped to implement the marsh cut and lift. The Friends are consulted throughout the management planning processes and are supported by CMS to plan and deliver tasks. The Friends contribution to the site is significant and they are often the first point of contact for members of the public with queries or concerns about the site. CMS volunteer groups also visit the site, supporting the Friends in carrying out significant habitat management tasks. The Friends have arranged events, such as mass tree planting, to engage the wider community in management of the site.

The site is well used by local residents, and the wider community of Letchworth. Visitors range from daily dog walkers utilising the network of informal paths, weekly commuters on foot and bike through the Avenue, and weekend users of the varied leisure facilities. Coordinated community events include North Herts Road Runners, Forest School and Nature Tots. The site may be suitable for low impact commercial events such as cinema and outdoor theatre events in the summer. Any such event would be confined to amenity managed grassland areas and would need to minimise impact on the ridge and furrow.

Letchworth Sport and Tennis Club periodically provide free tennis lessons to the public.

The Friends have produced a Nature Trail leaflet which has previously been available to download on the Friends of Norton Common website. The walk describes several stopping points around the site, and the whole route is designed to provide an approximate 45-minute walk. The Nature Trail is not currently sign posted or waymarked on site. From 2020 the Friends of Norton Common website will be discontinued, and information will be hosted on the NHDC site, including the Nature Trail leaflet and survey reports for the site.

3.0 AIM & OBJECTIVES

The aim and objectives of the GAP are as follows:

Aim

To provide a strategy for the conservation and enhancement of biodiversity and heritage features, maintenance of the site as an accessible, welcoming, and enjoyable place to visit offering a range of recreational and leisure opportunities, and to provide structured opportunities for the local community to contribute to site management and improvement.

Objectives

A. A Welcoming Place

- A1 Review and update interpretation, signage and waymarking around site
- A2 Review site access and implement strategies to improve access for all users
- A3 Review inclusion of Norton Common in HCC's Active Travel Project
- A4 Review options for enhancing the BMX trails and obstacles on Jump Wood

B. Healthy, safe and secure

- B1 Maintain sport and leisure facilities catering to a wide range of user groups
- B2 Carry out three-year tree risk survey and work programme, and reactive tree works
- B3 Check and maintain play equipment to high safety standard

C. Well maintained and clean

- C1 Encourage responsible use of the site and a low incidence of anti-social behaviour
- C2 Site infrastructure is well maintained, including buildings, paths, and benches
- C3 Regularly empty bins and litter pick
- C4 Watercourse is clear of debris and free of pollutants
- C5 Maintain buildings and formal landscaping
- C6 Maintain Green Flag standards of greenspace management

D. Sustainability

- D1 Ensure ongoing management costs are financially sustainable
- D2 Carry out management according to environmental best practice and in response to challenges to the environment (NHDC corporate objectives for 2020-25)
- D3 Identify and apply to external funding sources for capital works where available

E. Conservation and heritage

- E1 Manage conservation cut meadow and marsh habitat to promote wildflower diversity
- E2 Improve connectivity between large and small marsh by opening tributary corridor
- E3 Manage woodland to promote a varied age structure and a mix of native tree species
- E4 Monitor tree health and respond to significant pest and disease impacts
- E5 Control the spread of non-native invasive plants with minimal reliance on herbicide
- E6 Manage trees along the Avenue to secure continuation of this landscape feature
- E7 Manage hedgerows along north and south boundary in the traditional laying style
- E8 Protect historic ridge and furrow by planning access and events to minimise impact
- E9 Restore eroded sections of riverbank to support native vegetation establishment
- E10 Carry out species and habitat monitoring to identify trends and inform management

F. Community involvement

- F1 Support the Friends of Norton Common to make a positive contribution to site management, in particular the monitoring and improvement of sensitive habitats
- F2 Support Forest School and Nature Tots
- F3 Provide an opportunity for stakeholders, including local residents and community groups, to influence the new GAP through a structured engagement process
- F4 Provide opportunities for the wider community to participate in site management, including hosting corporate volunteer days for local businesses
- F5 Support NHDC corporate objectives for 2020-25 to build thriving and resilient communities which are supported by welcoming and inclusive community resources

G. Marketing

- G1 CMS and / or Friends of Norton Common to lead periodic guided walks
- G2 Host site leaflets, wildlife surveys, and management plan on NHDC website

4.0 MANAGEMENT PRESCRIPTIONS

4.1 A Welcoming Place

A1 Interpretation and Signage

Interpretation and signage around the site will be reviewed to assess the condition of existing infrastructure and identify opportunities to update or expand the existing provision. Much of the site's interpretation dates from 2008, including a site leaflet and lectern boards. A revision of the site map illustration would allow new extensions to path surfacing to be included. The design and placing of refreshed signage will be sympathetic to the site's historic landscape.

Waymarked routes around the site are currently restricted to the national cycle network. The Friends have produced a Nature Trail leaflet for the site, available as a download. To promote the Nature Trail to a wider range of site visitors, it is proposed under the current plan to waymark stopping points with low posts which will display a disc with QR code linking to the downloadable leaflet. The Nature Trail route can also be illustrated on a revised map for the interpretation refresh. Waymarking of an orienteering trail, and installing directional path signage, will also be considered as part of the interpretation refresh.







Lectern welcome boards at entrances and cycle path signage at start of the Avenue



Norton Common Nature Trail produced by the Friends of Norton Common

Great Spatted Woodpecker

Southern March Orchid

A2 Access

There are several entrance points located around the site, leading in from site carparks and residential roads. Surfaced paths lead in from both site carparks, and other entrances. A continuously surfaced route connects the north and south site entrances, along the Avenue. There is no completely surfaced route running east to west through the site. Surfaced paths running west from the main swimming pool carpark terminate at the tennis courts, and paths running east from entrances on Cowslip Hill terminate at the Avenue. Opportunities for site visitors using pushchairs or wheelchairs to explore the site is limited by the lack of continuously surfaced routes, circular routes. In winter, access off surfaced paths is limited for all visitors due to the wet and muddy nature of the site.

Installing a short section of path between the tennis courts and the east to west ride leading from Cowslip Hill, connecting at the Avenue, would provide an east to west continuous surfaced route across the site. A desire line is visible along this proposed route where walkers and cyclists take regular shortcuts. The path surface would be an unbound crushed aggregate surface, in keeping with other paths through the interior of the site. The location of an east to west surfaced path extension will be sensitive to the objective to protect the ridge and furrow. Options to improve site access for all users could include a surfaced path loop leading from the Avenue through or around southern woodland, with bench and / or wheelchair resting point. Where parts of the site are not suitable for surfacing, such as stream banks where drainage is poor, short lengths of elevated boardwalks could be installed. Options will be investigated for providing an all-terrain vehicle in summer, to improve accessibility of the wildflower meadow for wheelchair users.

A3 Low impact lighting on the Avenue

Hertfordshire County Council's Active Travel Project aims to encourage and support walking and cycling for recreation, and as a viable option for non-motorised transport.

The Avenue is well used by walkers and cyclist as a shortcut route towards the town centre. There is currently no lighting along the route which may discourage less confident cyclists from using this as a commuting route in winter. The preservation of dark spaces is important for people and wildlife and therefore any lighting strategy for the Norton Common will necessarily seek to minimise light pollution. Bat species are particularly sensitive to excess nocturnal lighting which can disrupt their normal behaviours and lead to avoidance of affected locations. Several bat species utilise Norton Common which provides foraging, commuting, and roosting habitat. Bat sensitive lighting options will allow for periods of darkness, such as motion sensors; low light spill, such as placement and angles which focus illumination to points on the ground; and low illumination levels (e.g. 5 to 2 lux). The Active Travel Project will review environmentally sensitive lighting options for the Avenue in the first year of the plan.

A4 Jump Wood

An area of sycamore woodland on site has been designated as an area for BMX bikes. Obstacles have been created using material available on site, primarily by moving soil. The area has been well used for a number of years and options will be explored in the course of the current plan to maintain / improve the BMX trails.

4.2 Healthy, Safe and Secure

B1 Maintain sport and leisure facilities catering to a wide range of user groups

Norton Common will continue to provide and maintain tennis courts, bowling lawns and club house, skate-park, outdoor swimming pool, and play equipment for different ages. Informal recreation is provided by BMX trails in Jump Wood and recreational grassland.

Facilities are accessible from the main carparks which offer a period of free parking. The sport and leisure facilities operating at Norton Common aim to be inclusive of a wide range of ages and abilities. For example, the recent introduction of half-sized tennis courts for pickleball provides an alternative, more accessible, racquet sport option.

The Grounds Maintenance contract provisions for day to day maintenance of the skate park, tennis courts, and landscaping around the bowling greens. Bowling Club members maintain the bowling greens. The lido is maintained by Stevenage Leisure Ltd.

The tennis court surface will be reviewed in the course of the current management plan to assess condition and identify opportunities for upgrading to a free draining surface.

B1 Tree risk survey and management

Tree risk surveys are undertaken in a three-year cycle, in line with NHDC's Greenspace and Tree Strategies. A programme of planned and reactive tree risk management is carried out by specialist contractors and managed by the NHDC Tree Officer.

Along the Avenue, many of the horse chestnut trees are affected by Leaf Minor Moth and / or Chestnut Bleeding Canker. Canker has led to the death of some trees. Trees are monitored and dealt with according to good arboriculture practice and public safety.

B3 Check and maintain play equipment to a high safety standard

Playground equipment is inspected daily under the grounds maintenance contract and minor issues dealt with. More significant issues that cannot immediately be dealt with are reported to the Contract Manager. Where necessary, equipment will be marked as unsafe until repairs can be made. Monthly maintenance visits are undertaken for each piece of equipment to apply regular upkeep such as lubrication. An annual inspection is undertaken by a national safety organisation to review risk assessments and make recommendations for achieving low injury risk and a reasonable equipment life span.

4.3 Well Maintained and Clean

C1 Low incidence of anti-social behaviour

Vandalism and household waste dumping are dealt with promptly under Grounds Maintenance or external contract. A certain level of graffiti is tolerated in the skate park when it is inoffensive and judged to provide a sense of personalisation. Elsewhere on-site graffiti is removed and offensive graffiti at any location is dealt with as a priority.

The site is well used and well maintained and NHDC have been responsive to requests for new / upgraded amenities, such as installation of the skate park, which has helped to support a sense of collective value and community ownership for the site.

C2 Well maintained site infrastructure

Under the ground maintenance contract tennis courts and hard surfaces, such as the carpark, are swept on a monthly basis, leaves are collected along the main avenue and around the bowling green in the months of November and December.

Benches are maintained and replaced as required. Several new benches were installed under the previous plan to provide more regular stopping and resting points for the access routes and recreational grassland.

C3 Bins and litter picking

A regular litter pick is undertaken around the playground areas as part of daily checks by the ground maintenance team. The Friends also carry out regular litter picks.

Litter bins are maintained daily under the ground maintenance contract, dog bins are not provided at NHDC greenspaces. Dog owners are expected to remove fouling from site, although dog waste can be disposed of in litter bins.

C4 Clean and unobstructed watercourse

In periods of heavy rain localised flooding and contamination run-off can occur on site, although these incidences have been reduced following installation of a holding tank on Cowslip Hill and removal of redundant culvert structures as part of the project to naturalise the Pix Brook on-site. Culverts remain at buried sections of watercourses, such as under the Avenue. Grills are fitted to culverts as a safety consideration. Under conditions of heavy rain debris can be washed into the watercourses becoming trapped at grills and increase the flood risk.

Pollution incidences in Norton Common are reported to the Environment Agency and the appropriate water company. Obstacles in the watercourse, such as debris trapped at culvert grills, are removed promptly under the ground maintenance contract.

C5 Maintain buildings and formal landscaping

The bowling club house and swimming pool building are under a building preservation order and are maintained by NHDC. Landscaping around the bowling greens, including formal hedgerows, are maintained under the ground maintenance contracts.

C6 Maintain Green Flag Standards

Under the previous plan Norton Common has been successful in achieving Green Flag status over consecutive years. Green Flag standards will be maintained under the current plan. Continuing the annual applications for Green Flag accreditation will be reviewed.

4.4 Sustainability

D1 Ensure on-going management costs are financially sustainable

The grounds maintenance contract is reviewed and tendered periodically to ensure the service remains effective and efficient. Environmentally sustainable practices are built into the ground maintenance contract, benefiting biodiversity and reducing cost.

Community groups with an interest in taking responsibility for the management of certain features are supported by NHDC. For example, the Bowling Club members maintain the bowling greens and led the refurbishment of the club house interior. The Friends of Norton

Common have taken on a large degree of independence in providing positive management to semi-natural habitats on site, in particular enhancing the woodland.

D2 Carry out management according to environmental best practice

The majority of Norton Common is composed of semi-natural habitat supporting locally important biodiversity, including plant species occurring nowhere elsewhere in Hertfordshire. It is therefore important that management practices to maintain amenity and recreational areas do not compromise the biodiversity value of the site.

A zoned mowing regime for amenity grassland achieves a balance between regularly mown open space for recreation and less frequently mown path and habitat edges.

Under previous management plans targeted herbicide treatment was applied to Russian Comfrey to control spread of this non-native invasive species. Under the current plan alternative control methods, such as up-rooting and cutting by hand, will be applied to control the spread of non-native and injurious plant species. Pesticide will only be applied when other control methods have been unsuccessful and there is a clear beneficial outcome for biodiversity in eradicating the target species.

Exercising good practice biosecurity measures in woodland and tree management will reduce the risk of spreading pests and diseases and increase the resilience of woodland on site. Simple measures such as cleaning footwear, machines, and tools between sites can reduce the risk of spreading plant material or soil containing plant seeds or pathogens. Safe sourcing of trees for new planting is an important biosecurity measure. Stock propagated from seed in the UK is the most reliable source of disease-free trees.

4.5 Biodiversity, Landscape and Heritage

E1 Manage Meadow and Marsh to enhance wildflower diversity

Conservation cut and collect of neutral meadow

Grassland located in the north east of the site on ridge and furrow is species rich and ancient in origin. Wildflower habitats require careful management to ensure the plant community is not threatened by scrub encroachment, trampling and soil compaction, or nutrient enrichment favouring grasses and ruderals. Management replicating traditional hay making or low intensity grazing will achieve the best results for wildflower diversity.

A biannual cut and collect (timed for mid-July and late September) will achieve the best outcomes for traditional wildflower meadow. A regime of two annual cut and collect operations is more successful in controlling the vigour of competitive grasses, and removing soil nutrients, than a single annual cut, Where only a single cut is feasible, a mid-July cut will be more effective in suppressing coarse grasses than a September cut.

Arisings should be left on site after each cut for a few days to dry and shed wildflower seed. If only a single cut is feasible, a mid-summer cut (July to August) will better deplete the vigour of tall grasses than later cuts. Early cuts (before June) are to be avoided as this will limit seed production of early flowering plants such as cowslip and yellow rattle.

In order to protect the invertebrate community of the meadow, 10% of the meadow can be left uncut with each cut and collect. The uncut grassland should be in strips across the meadow, with locations rotated with each cut to avoid local nutrient build-up.

Conservation cut and collect of marshes

The plant community of the small and large marsh is typical of fen meadow, a habitat which is vulnerable to disturbance and therefore is best managed by a single late summer cut and collect. Arisings should be left to shed seed for a few days before collection. Management must limit trampling, soil poaching, or scarification of the sward.

Yellow rattle seed exchange between large marsh and neutral meadow

Yellow rattle is a native wildflower species, commonly found in ancient and restored hay meadows. The hemi-parasitic lifestyle of yellow rattle suppresses the vigour of grasses so that wildflowers are better able to compete for light and space in the sward. Introducing yellow rattle to the neutral meadow is proposed in the current plan as a strategy to reduce dominance and spread of coarse grasses, allowing slow growing wildflowers to compete.

Yellow rattle seed can be collected from the large marsh or nearby Pix Brook Meadows. To exploitation of local resources, and for increased genetic diversity, supplementary seed can be purchased from UK wildflower suppliers. It is proposed that a summer task for the Friends over the first three years of the plan will be to introduce yellow rattle to the neutral meadow, scattering and treading in seed over bare soil patches and sward gaps following cut and collect operations. Yellow rattle establishment can be unpredictable, and a few attempts may be needed before success. However, once established populations are self-sustaining and the annual hay cut will help to spread seed to new areas.

Wildflower enhancement by green hay exchange

Green hay exchange is a recognised technique for introducing or restoring wildflower diversity to degraded sites. Donor sites will be botanically rich, and receptor sites will be suitable for wildflowers (low soil fertility) with a depleted seed bank. Suitable receptor sites in Norton Common include the small marsh, new butterfly scallops opened along the Avenue, perimeter of the large marsh, and a tributary corridor opened between the marshes. The botanically rich sward of the large marsh is a suitable donor site.

Green hay exchange can be carried out as a volunteer task as the proposed receptor sites are small. Arisings will be collected from the large marsh immediately after cutting, transported to receptor locations, spread over and trodden into the ground which has been prepared by cutting a short sward (marshes) or raking to create patches of bare ground (scallops, tributary bank). Green hay may be easier to spread if cut into shorter lengths.

Controlling scrub and woodland edge encroachment into open meadow and marsh

Patches of bramble and scrub occur throughout the neutral meadow and marshes, and these open habitats are surrounded by woodland. Scrub can be a valuable habitat for birds, invertebrates and small mammals. However, controlling scrub encroachment into the meadow and marsh is important for maintaining the diverse plant communities.

Rotational coppicing / pruning of in-field and perimeter scrub will reduce shading and enrichment of open meadow and marsh habitat and will maintain a matrix of mature and regenerating scrub habitat. Scrub can be rotationally coppiced over an eight to ten cycle, while bramble can be cleared on a three-year cycle. Nesting birds are protected from disturbance, so coppicing should be timed to occur outside of March to August.

Maintain dead hedges to prevent trampling

A dead hedge has been established around the large marsh to reduce trampling of the sensitive floral community. The dead hedge requires regular maintenance as brash degrades. There are opportunities to expand the area of the large marsh by moving back the dead hedge along the southern edge, where the woodland margin is scalloped.

Control spread of competitive species

The diverse plant community of the marshes is sensitive to disturbance. At locations of enrichment or scarification, localised patches of thistle and nettle have established. Russian comfrey, a non-native plant, has invaded marsh and wet areas around the site.

A broad-spectrum herbicide has previously been applied to control ruderal and competitive species in the marshes. Under the current plan, alternative control measures will be applied, such as repeated cutting, up-rooting or digging out, in order to minimise chemical use. These control measures can be applied by hand as a volunteer task. Targeted herbicide application may be considered where competitive species are resistant to repeat mechanical control measures, and native wildflowers are threatened.

E2 Open corridor between small and large marsh along Pix brook tributary

Coppicing scrub along the length of the Pix brook tributary, on the east and west bank, will open a sunny habitat corridor between the small and large marsh. Green hay donated from the large marsh can introduce wildflowers, such as meadow buttercup and marsh valerian, to the opened tributary banks. Coppicing along the south bank of the Pix brook will provide a further continuation of open habitat connected to the marshes.

E3 Management and Enhancement of Woodland

Maintain new tree plantings and replace failed trees

In the first years of establishment new tree plantings may require watering during extended periods of dry weather. Over the first two to three years tree planting areas should be weeded to control competitive grasses and ruderal weeds, including inside the spiral tree guards. Dead twigs should be pruned from young trees in winter and failed trees replanted. Guards should be adjusted, replaced and removed as required.

Rotationally thin / coppice woodland perimeter

The network of paths known as 'six-ways', radiating from the centre of Wilbury Wood in the north-east of the site, are narrow and heavily shaded by the surrounding scrub and dense secondary woodland habitat. Thinning the woodland edge along sections of path, or rotationally coppicing small scallops into scrub, will create a more varied woodland edge and reduce the 'corridor' effect of the six-ways paths. Ash regeneration forms a large component of the woodland perimeter along six-ways, thinning out ash trees will improve growing conditions for retained ash trees which can increase resilience against pests and diseases. Stumps should be cut on a clean angle, low to the ground, to allow for regeneration of multiple stems which can be re-coppiced to maintain low bushy growth.

Annual biodiversity monitoring has identified the Avenue as recording low butterfly counts in comparison to the rest of the site. Coppicing to create a wavy woodland edge on the margin of the Avenue will improve this area for invertebrates, creating warm sheltered scallops which can be further enhanced by green hay donated from the large marsh.

Maintain dead hedges around regeneration / replanted glades

Dead hedges will be maintained around cleared glades to reduce browsing pressure, from Muntjac deer and rabbits, to promote establishment of seedlings and new tree plantings.

Replant glades where natural regeneration is poor

Cleared glades, where restocking by natural regeneration has failed, will be replanted with a native species mix including oak, birch, hornbeam, field maple, wild cherry, hazel, and hawthorn. Trees will be local provenance and British grown. Planted trees will be protected with guards and supports, and aftercare applied for at least three years.

Deadwood

Fallen or standing deadwood will be retained to provide wildlife habitat, where practical and safe to do so. Where appropriate, large fallen wood will be repurposed as site furniture or art (e.g. chainsaw sculpture). Brash from habitat management and tree works will replenish dead hedges or provide habitat piles. Excess wood may be burnt on site.

E4 Monitor tree health and respond to significant pest and disease impacts

Tree risk surveyors and the Friends are aware of the tree health threat from ash dieback disease. Mature ash trees on-site currently appear healthy. The woodland management strategy for Norton Common will be reviewed, as with other NHDC sites such as Weston Hills, in the case that a significant decline in ash tree health is observed. Up-to-date guidance on the management of ash dieback in woodland situations is available from Forestry Commission Operations Note 46, including guidance on planting alternative species. Woodland trees providing some ecological replacement for ash in woodland are oak, beech sycamore, hazel, birch, alder, aspen, hawthorn, field maple & hornbeam.

Oak processionary moth (OPM) is a non-native species whose caterpillars produce microscopic hairs containing a toxin which causes irritation on contact with skin. OPM hairs can be spread on the wind and so irritation can occur without direct contact with caterpillars, for example dispersing hairs can become trapped in clothing. Dogs and other domestic animals are also known to be affected by OPM. The greatest risk for dogs is presented by the communal silken nests which are constructed by OPM caterpillars on host trees. The nests trap toxic hairs and can fall to the ground where dogs may encounter them. OPM outbreaks have been recorded in Hertfordshire and control measures have been applied to these outbreaks to slow spread of the pest, although eradication is unlikely. No OPM outbreak has been reported in Norton Common, however the site contains oak trees and those people working regularly in and around woodland such as the Friends, tree contractors and grounds maintenance team, should be aware of the signs of OPM and report any outbreak to the Forestry Commission. OPM caterpillars can be confused with native hairy caterpillars which are not a health concern. Guidance on identifying OPM is available from Forest Research.

E5 Control non-native invasive plants with minimal reliance on herbicide

Several non-native plant species occur in the woodland environment in Norton Common, some of which can be locally dominating or widely invasive without control. In most cases, sustained efforts to weaken plants through manual control techniques (such as cutting or pulling) will be effective in suppressing and eventually eradicating these species. In certain cases, targeted herbicide is the most effective means of control as manual techniques are ineffective, impractical, or may contribute to the species spread.

Non-native, invasive, plant species on site which can be suppressed by repeated cutting include three-cornered leek and Russian vine. The cultivated variety of yellow archangel, with variegated leaves, can be controlled by up-rooting. Arisings of three-cornered leek are considered controlled waste and therefore any material removed off-site would require licensed disposal. Arisings from other species are not controlled waste and can be composted or disposed of as green waste.

Laurel, a woody shrub, can be controlled by digging up at the roots or cutting stems to ground level and treating stumps with a targeted herbicide. Treatment areas will need to be revisited to monitor and control stump regrowth and pull seedlings. Laurel arisings can be burnt, stacked or chipped on site or disposed off site.

Significant vegetation management at site boundaries should be preceded by notifying local residents in close proximity to the works, explain the reasoning and timing of works.

E6 Maintain tree line along the Avenue

The historic visual line of the Avenue will be conserved. Surviving horse chestnut trees will continue to be managed to prolong health and longevity, and to limit tree risk. It may be beneficial to prune / canopy lift selected horse chestnuts to improve growing conditions for replacement lime trees.

The wide sweep of grassland under the Avenue will continue to be managed under an amenity cut, to retain the open view of the Avenue and to highlight the ridge and furrow.

E7 Maintain laid hedges

Hedgerows along the north and south boundary of the site have been restored by gap fill planting and hedge laying over the last ten years, through an external contract and Friends work parties. Hedge laying is a traditional management technique which promotes dense bushy growth, creating a secure boundary feature which also provides valuable wildlife habitat. To maintain the restored hedgerows in good condition, a suitable volunteer task will be to deliver after-care for newly planted trees (e.g. replace / remove supports etc.) and lay over stems of trees and shrubs as they grow into the existing woven hedge lay.

E8 Protect ridge and furrow

Measures to protect ridge and furrow patterns will include locating events away from the heritage feature and considering erosion and compaction risk in planning access routes.

E9 Restore eroded sections of riverbanks

Sections of the re-profiled drain bank have eroded behind wooden revetments, preventing vegetation establishment. Natural materials can be used to reinforce the eroded surface of the riverbank, such as woven coir matting or willow hurdles, and native wildflower seed or turf can be laid underneath to restore vegetation cover. Coir rolls secured with wooden stakes could provide further stability at the base of the eroded section of riverbank.

E10 Biodiversity monitoring

The Friends coordinate regular wildlife and wildflower surveys across Norton Common including cowslip counts in the meadow, bat surveys, butterfly surveys, and reptile and amphibian surveys. Monitoring results are written up and analysed to provide information on biodiversity trends and to inform recommendations for site management. Recent surveys have recommended introducing a twice annual cut to the neutral meadow to reverse a decline in the cowslip population, and creation of woodland edge scallops along the Avenue to improve habitat for butterflies and other insects.

4.6 Community Involvement

F1 Support the Friends of Norton Common

The "Friends Group" model has been independently assessed and accredited to nationally recognised "Investing in Volunteers" standard. Regular meetings are convened between the Friends, CMS and NHDC, to ensure the group development needs are established and ongoing training provided. An annual task list is drawn up by the Friends, in line with the objectives of the plan, and delivery supported provided by CMS and NHDC as required.

F2 Support Forest School and Nature Tots

Forest School and Nature Tots are supported by the Friends and NHDC. Arrangements have been made with the Bowls Club to allow access to the Pavilion facilities during the Nature Tots sessions.

F3 Provide a structured engagement process for management plan production

Production of a new Greenspace Action Plan (GAP) for Norton Common follows a structured two stage engagement process to enable local residents and the wider stakeholders to feed into the development of achievable and supported objectives for site management and enhancement. In the first stage of engagement, a briefing document is produced which summarises the aspirations and key objectives for the site over the next five years. The briefing document is made publicly available over a one month engagement period. Feedback from the initial consultation phase will inform development of the draft GAP which includes a time-tabled action plan and annual plan maps. A second one month engagement period is held for the draft GAP. Returned comments are summarised in an Engagement Document which is published alongside the final GAP explaining how comments have influenced development of the final plan.

F4 Provide opportunities for wider community to participate in site management

National campaigns such as tree planting week each November provides an opportunity to invite the wider community to participate in site management. Tree planting is an accessible task and the positive impact on the site can immediately be appreciated.

4.7 Marketing and Communication

G1 Guided Walks

Norton Common will be included in the <u>CMS Walks and More</u> programme which promotes guided walks throughout Hertfordshire that aim to provide an opportunity for communities to find out more about the wildlife and history of their local greenspaces.

G2 Promotion

NHDC and CMS produce quarterly e-newsletters which promote planned management activities and achievements across greenspaces. Opportunities to engage with the development of new management plans are promoted online and through site notices.

Significant projects to improve the site and engage the community will be shared with local Councillors and celebrated through press releases.

5.0 ACTION PLANS AND MAPS

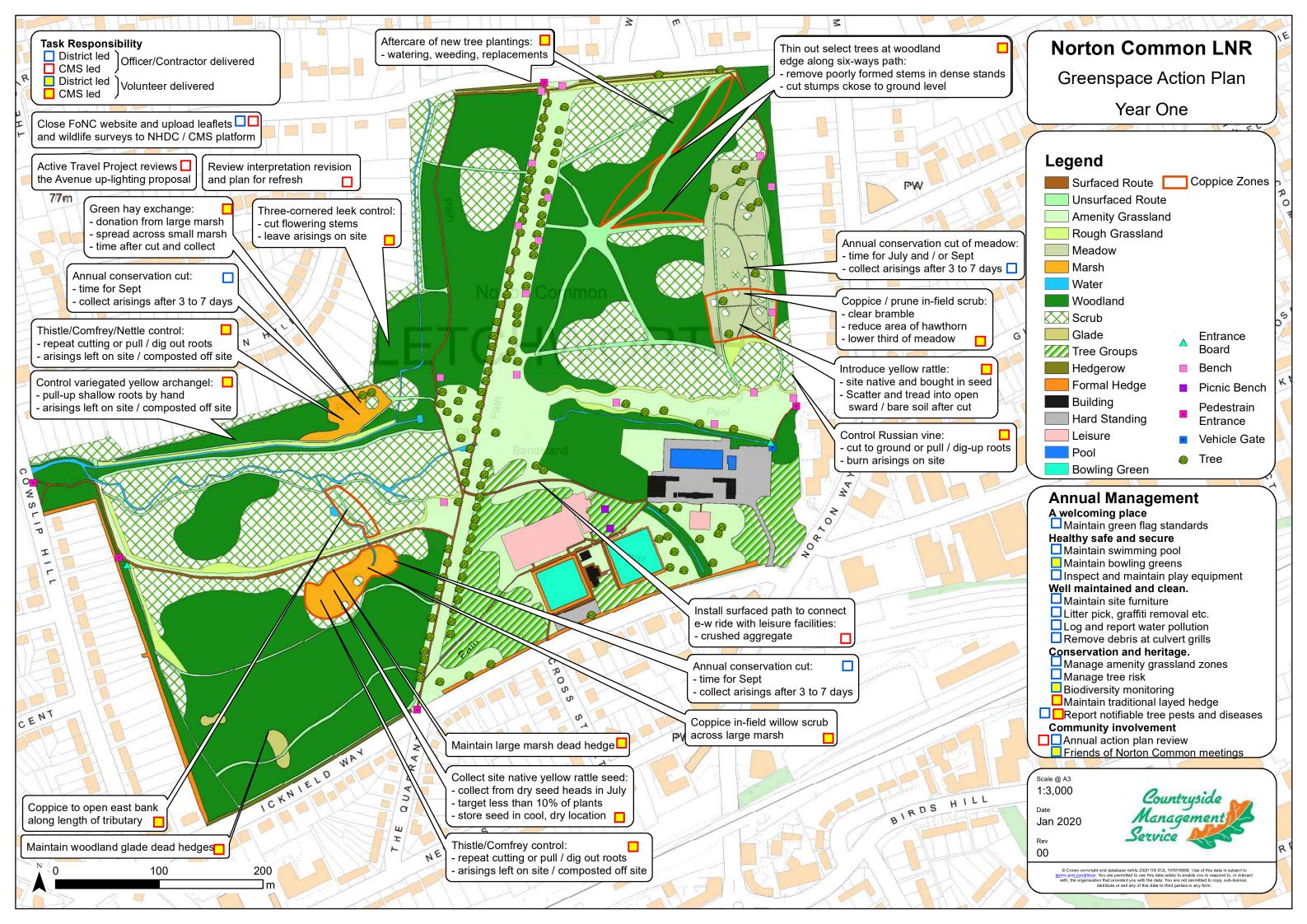
5.1 ANNUAL AND REGULAR ACTIONS

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
0.1	Manage amenity grassland according to mowing zones	D2	Summer	NHDC	GM	GM budget		6.1	
0.2	Annual biodiversity monitoring and dip well reading	E10	Summer	CMS	Friends	Vol time			
0.3	Monitor tree health, report notifiable outbreaks to FC	E4	Summer	NHDC	External Contract	GM budget/ Vol time		6.14	
0.4	Manage the Avenue to promote Lime establishment	E6	Winter	NHDC	External Contract	Revenue			
0.5	Maintain traditional layed hedgerows	E7	Winter	NCMS	Friends	Vol time		6.12	
0.6	Tree risk survey and proportionate management on a three-year cycle	B2	Winter	NHDC	External Contract	Revenue			
0.7	Maintenance of leisure facilities including structures	B1	All year	NHDC	NHDC	Revenue			
0.8	Maintenance of bowling greens	B1	All year	Club members	Club members	Membership fees			
0.9	Safety inspection and maintenance of play equipment	В3	All year	NHDC	GM contract	GM budget			
0.10	Prompt removal of graffiti and fly-tipping, empty bins	C1	All year	NHDC	GM contract	GM budget			
0.11	Maintenance of site furniture, signs and interpretation	C2	All year	NHDC	GM contract	GM budget			
0.12	Log and report watercourse pollution incidences	C4	All year	NHDC	NHDC	Revenue			
0.13	Remove debris at culvert grills to reduce flood risk	C4	All year	NHDC	NHDC	Revenue			
0.14	Maintain standards of Green Flag, review accreditation	C5	All year	NHDC	NHDC	Revenue			

5.2 YEAR 1 2020-21

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
1.1	Migrate wildlife surveys and site leaflets from Friends website to NHDC web platform	G2	April	NHDC	NHDC	Revenue	Officer time		
1.2	Active Travel Project to review lighting proposal for the Avenue	А3	April	NHDC	CMS	HCC / External	Officer time		
1.3	Review interpretation and signage, and plan for update provision	A2	April	NHDC	CMS	Office & vol. time	Officer time	6.15	
1.4	Maintain new tree plantings in woodland and hedgerow	E3	April to Sept	CMS	Friends	Vol time		6.11	
1.5	Pull-up yellow archangel cultivar in woodland, rake off arisings	E5	May	CMS	Friends	Vol time	-	6.6	
1.6	Dig-up / cut stems of Russian vine and stack / burn arisings	E5	June	CMS	Friends	Vol time	-	6.6	
1.7	Control thistles / comfrey / nettle in marsh by cutting / up-rooting	E1	June to August	CMS	Friends	Vol time	-	6.5	
1.9	Collect yellow rattle seed from select areas in large marsh	E1	July	CMS	Friends	Vol time	-	6.3	
1.10	Conservation cut and collect of unimproved meadow	E1	July and / or Sept	NHDC	GM contract	Vol time	£400/ha	6.2	
1.11	Install path surface to connect east to west route from access from Cowslip Hill to the tennis courts (120m approx.)	A2	Sept	CMS	External contract	Revenue	£5000	6.16	
1.12	Introduce yellow rattle seed to meadow following cut and lift	E1	July or Sept	CMS	Friends	Vol time	£5 seed purchase	6.3	
1.13	Conservation cut and collect of large and small marsh	E1	Sept	NHDC	External Contract	Revenue	£400/ha	6.2	
1.14	Translocate green hay (< 20% of cut) from large to small marsh	E1	Sept	CMS	Friends	Vol time		6.4	
1.15	Cut laurel, dig-up roots or treat stump with targeted herbicide	E5	Sept - Oct	CMS	External Contract	Revenue	£1000	6.6	
1.16	Coppice / prune in-field scrub across a third of meadow area	E1	Oct to Feb	CMS	Friends	Vol time		6.7	

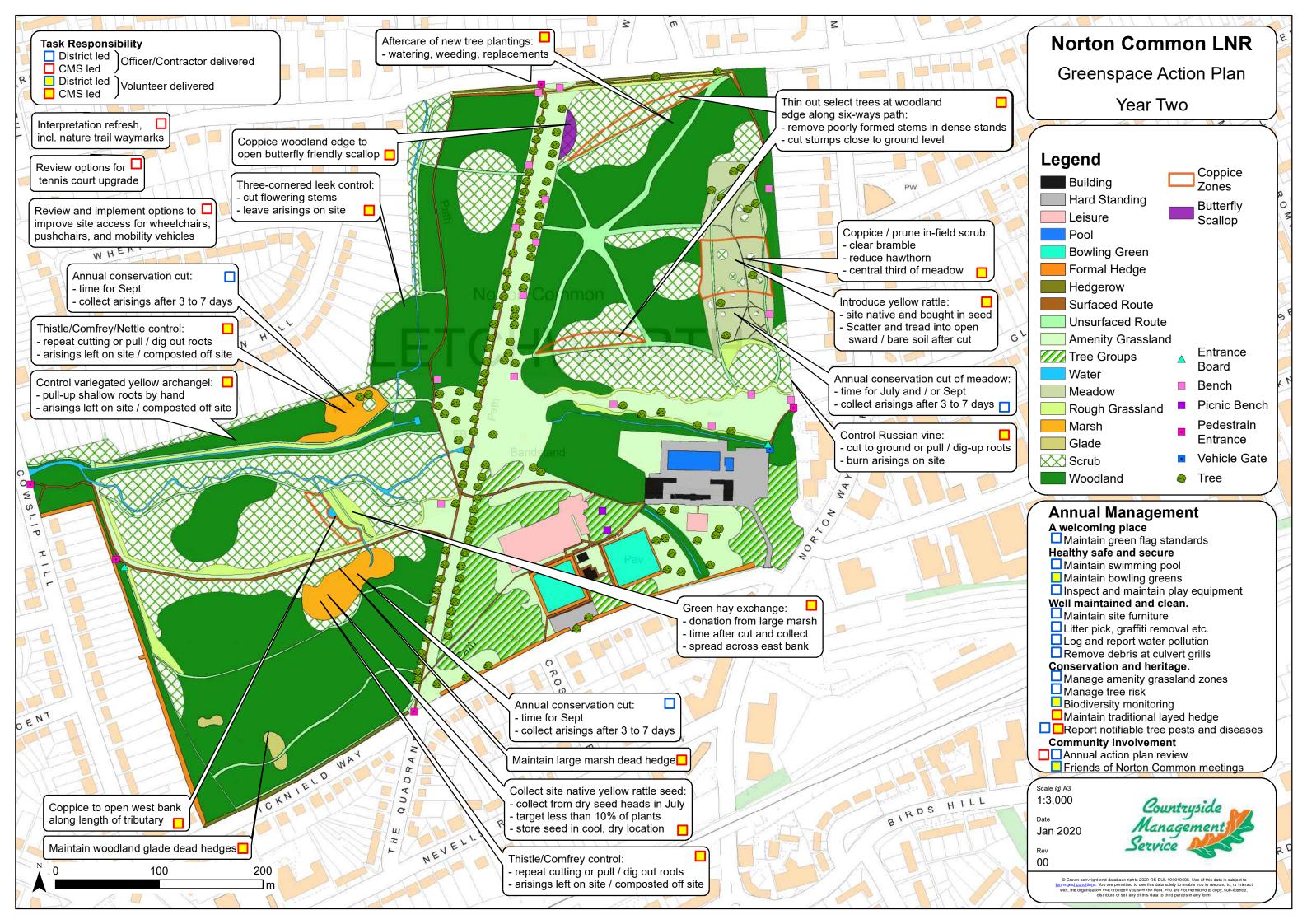
1.17	Coppice in-field willow scrub in large marsh	E1	Oct to Feb	CMS	Friends	Vol time	6.7	
1.18	Coppice tributary east bank to open habitat between marshes	E2	Oct to Feb	CMS	Friends / CMS vols	Vol time	6.7	
1.19	Coppice scallops / thin woodland edge six-ways paths	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time	6.7, 6.8	
1.20	Replace failed tree plantings in woodland and hedgerow	E3	Nov to Dec	CMS	Friends	Vol time	6.10	
1.21	Maintain dead hedge protecting large marsh	E1	Jan - March	CMS	Friends	Vol time	6.9	
1.22	Maintain dead hedge or fencing protecting regeneration glades	E3	Jan - March	CMS	Friends	Vol time	6.9	
1.23	Cut stems of three-cornered leek, leave arisings on site	E5	Feb / March	CMS	Friends	Vol time	6.6	



5.3 YEAR 2 2021-22

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
2.1	Review tennis court surface and identify opportunities for upgrade	B1	April	NHDC	NHDC	External	TBC		
2.2	Maintain new tree plantings in woodland and hedgerow	E3	April to Sept	CMS	Friends	Vol time		6.11	
2.3	Revisit cultivated yellow archangel locations, pull-up regrowth	E5	May	CMS	Friends	Vol time		6.6	
2.4	Revisit Russian vine locations and cut regrowth	E5	June	CMS	Friends	Vol time		6.6	
2.5	Control thistles / comfrey / nettle in marsh by cutting / up-rooting	E1	June to August	CMS	Friends	Vol time		6.5	
2.6	Collect yellow rattle seed from select areas in large marsh	E1	July	CMS	Friends	Vol time		6.3	
2.7	Conservation cut and collect of unimproved meadow	E1	July and / or Sept	NHDC	GM contract	Vol time	£400/ha	6.2	
2.8	Update interpretation and signage, including Nature Trail signs	A1	Sept	NHDC	CMS	External	£1500 / board	6.15	
2.9	Review and implement options for improving all-year accessibility, particularly for wheelchairs, push chairs, and mobility vehicles.	A2	Sept	CMS	External contract	Revenue	ТВС	6.16	
2.10	Scatter yellow rattle seed in third meadow area after cut and lift	E1	July or Sept	CMS	Friends	Vol time	£5 seed purchase	6.3	
2.11	Conservation cut and collect of small and large marsh	E1	Sept	NHDC	External Contract	Revenue	£400/ha	6.2	
2.12	Transfer green hay from large marsh (< 20 % cut) to east bank tributary corridor	E2	Sept	CMS	Friends	Vol time		6.4	
2.13	Revisit laurel and spray regrowth with targeted herbicide	E5	Sept to Oct	CMS	Contract	Vol time		6.6	
2.14	Coppice woodland edge to open butterfly scallop east of Avenue	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7	
2.15	Coppice tributary west bank to open habitat between marshes	E2	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7	

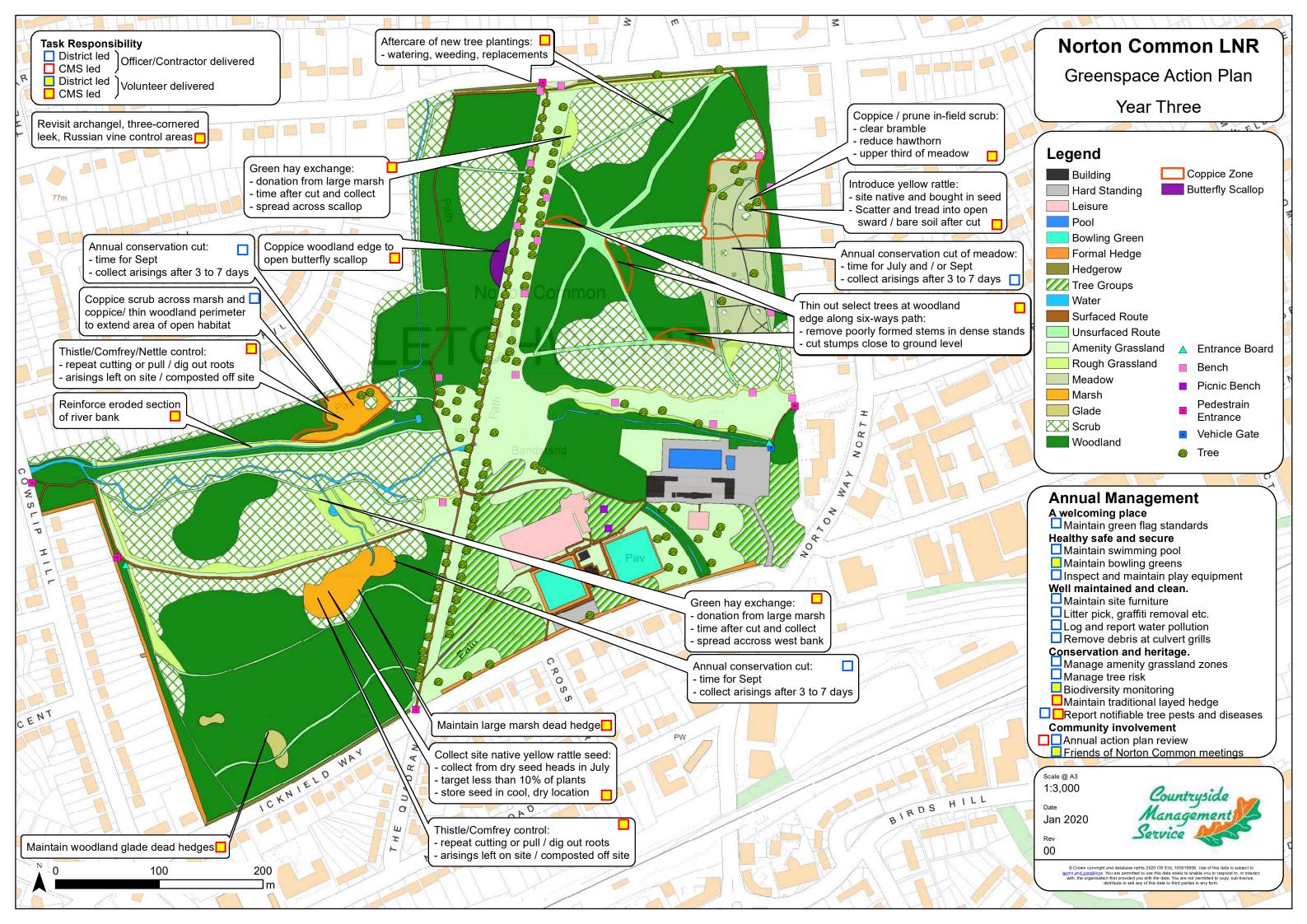
2.16	Coppice scallops / thin woodland edge along six-ways paths	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time	6.7, 6.8	
2.17	Coppice / prune in-field scrub across a third of meadow area	E1	Oct to Feb	CMS	Friends	Vol time	6.7	
2.18	Replace failed tree plantings in woodland and hedgerow	E3	Nov to Dec	CMS	Friends	Vol time	6.10	
2.19	Maintain dead hedge around large marsh	E1	Jan to March	CMS	Friends	Vol time	6.9	
2.20	Maintain dead hedge or fencing around regeneration glades	E3	Jan to March	CMS	Friends	Vol time	6.9	
2.21	Revisit three-cornered leek locations and cut seedlings	E5	Feb/ March	CMS	Friends	Vol time	6.6	



5.4 YEAR 3 2022-23

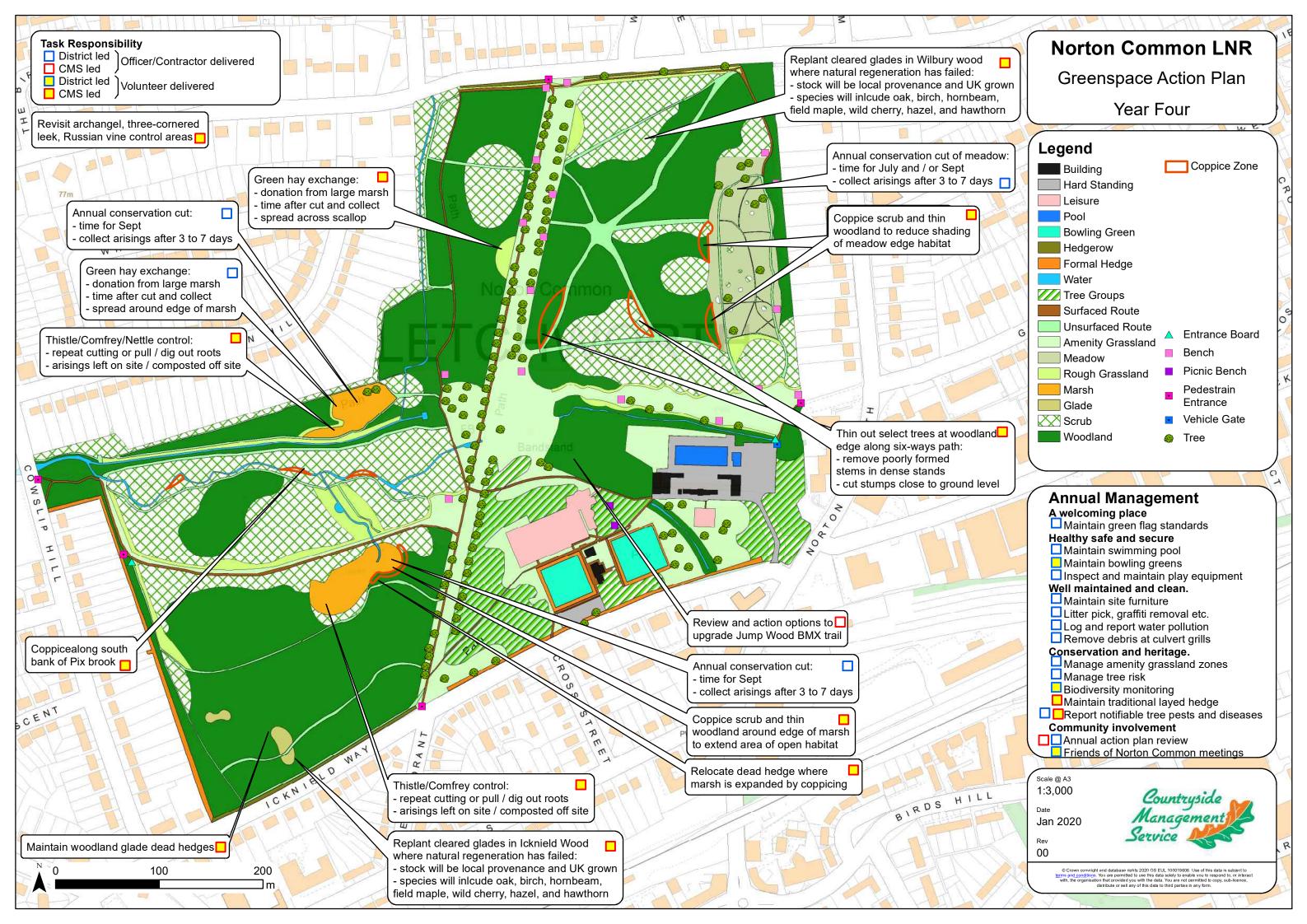
Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
3.1	Revisit archangel, three-cornered leek, Russian vine control areas	E5	March to June	CMS	Friends	Vol time		6.6	
3.2	Control thistles / comfrey / nettle in marsh by cutting / up-rooting	E1	June to August	CMS	Friends	Vol time		6.5	
3.3	Maintain new tree plantings in woodland and hedgerow	E3	April to Sept	CMS	Friends	Vol time		6.11	
3.4	Review biodiversity monitoring for meadow, a low cover of cowslip / yellow rattle should be addressed by shifting cut and lift to July	E1	June	CMS	Friends	Vol time		6.2	
3.5	Collect yellow rattle seed from select areas in large marsh	E1	July	CMS	Friends	Vol time		6.3	
3.6	Conservation cut and collect of unimproved meadow	E1	July and / or Sept	NHDC	GM contract	Vol time	£400/ha	6.2	
3.7	Scatter yellow rattle seed in third meadow area after cut and lift	E1	July or Sept	CMS	Friends	Vol time	£5 seed purchase	6.3	
3.8	Conservation cut and collect of small and large marsh	E1	Sept	NHDC	External Contract	Revenue	£400/ha	6.2	
3.9	Transfer green hay from large marsh (< 20% cut) to west bank tributary corridor and to first butterfly scallop on the Avenue	E2	Sept	CMS	Friends	Vol time		6.4	
3.10	Coppice woodland edge to open 2 nd butterfly scallop on Avenue	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7	
3.12	Coppice scallops / thin woodland edge along six-ways paths	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7, 6.8	
3.12	Coppice scrub / thin woodland perimeter around small marsh	E1	Oct to Feb	CMS	Friends	Vol time		6.7, 6.8	
3.13	Coppice / prune in-field scrub across a third of meadow area	E1	Oct to Feb	CMS	Friends	Vol time		6.7	
3.14	Maintain dead hedge around large marsh	E1	Jan to March	CMS	Friends	Vol time		6.9	

3.15	Maintain dead hedge or fencing around regeneration glades	E3	Jan to March	CMS	Friends	Vol time	6.9	
3.16	Restore eroded section of re-profiled drain bank	E9	Jan to March	CMS	Friends	Vol time	6.13	



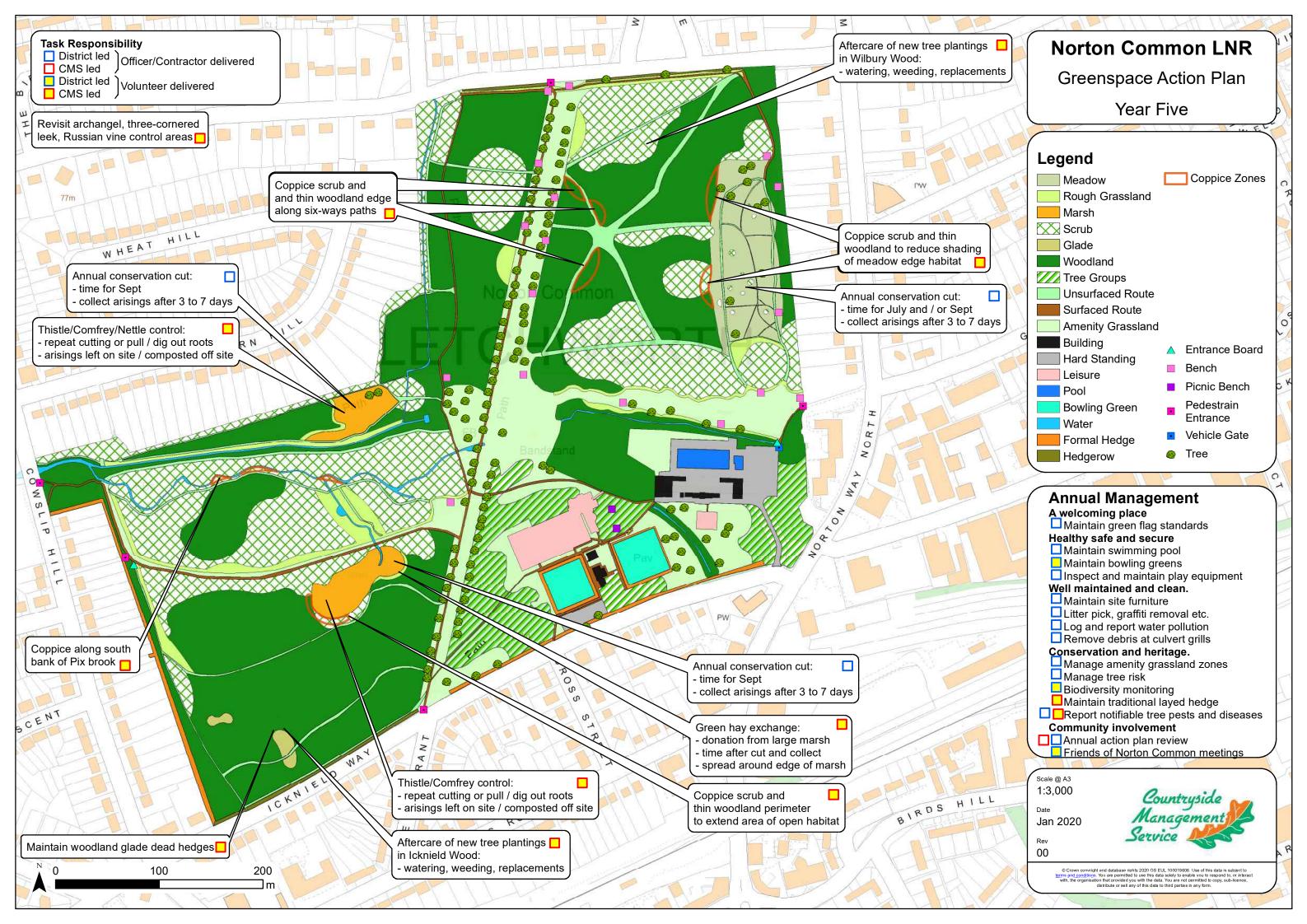
5.5 YEAR 4 2023-24

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
4.1	Revisit archangel, three-cornered leek, Russian control areas	E7	March to June	CMS	Friends	Vol time		6.6	
4.2	Revisit thistle / nettle / comfrey control areas in marshes	E1	June to August	CMS	Friends	Vol time		6.5	
4.3	Conservation cut and collect of meadow	E1	July and / or Sept	NHDC	GM contract	GM budget	£400/ha	6.2	
4.4	Conservation cut and collect of small and large marsh	E1	Sept	NHDC	External Contract	Revenue	£400/ha	6.2	
4.4	Transfer green hay from large marsh (< 20% cut) to second butterfly scallop on the Avenue and coppiced edge of small marsh	E2	Sept	CMS	Friends	Vol time		6.4	
4.5	Coppice scallops / thin woodland edge along six-ways paths	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7, 6.8	
4.6	Coppice scrub / thin woodland perimeter around meadow	E1	Oct to Feb	CMS	Friends	Vol time		6.7, 6.8	
4.7	Coppice scrub / thin woodland perimeter around large marsh	E1	Oct to Feb	CMS	Friends	Vol time		6.7, 6.8	
4.9	Rotational coppice along south bank of Pix brook to open path	E2	Oct to Feb	CMS	Friends	Vol time		6.7	
4.09	Replant glades in southern woodland where regeneration is poor	E3	Nov to Dec	CMS	Friends	Vol time		6.10	
4.10	Relocate dead hedge where marsh is expanded by coppicing	E2	Jan to March	CMS	Friends	Vol time		6.9	
4.11	Review and action options to upgrade Jump Wood BMX trail	E1	Oct to March	NHDC	External Contract	Revenue	ТВС	TBC	
4.12	Relocate dead hedge where marsh is expanded by coppicing	E9	Any time	CMS	Friends	Vol time		6.9	



5.6 YEAR 5 2024-25

Ref no.	Action	Obj. Ref	When	Lead	Delivery	Funding	Est. Cost	Spec. Ref.	Status
5.1	Revisit archangel, three-cornered leek, Russian control areas	E7	March to June	NHDC	GM Contract	GM budget		6.6	
5.2	Revisit thistle / nettle / comfrey control areas in marshes	E1	June to August	CMS	Friends	Vol time		6.5	
5.3	Maintain newly planted trees in woodland glades	E3	April to Sept	CMS	Friends	Vol time		6.10	
4.3	Conservation cut and collect of meadow	E1	July and / or Sept	NHDC	GM contract	GM budget	£400/ha	6.2	
5.5	Conservation cut and collect of small and large marsh	E1	Sept	NHDC	External Contract	Revenue	£400/ha	6.2	
5.6	Spread green hay from large marsh cut out into coppiced margins	E1	Sept	CMS	Friends	Vol time		6.4	
5.7	Coppice scallops / thin woodland edge along six-ways paths	E3	Oct to Feb	CMS	Friends / CMS vols	Vol time		6.7, 6.8	
5.8	Coppice scrub / thin woodland perimeter around large marsh	E1	Oct to Feb	CMS	Friends	Vol time		6.7, 6.8	
5.9	Coppice scrub / thin woodland perimeter around meadow	E1	Oct to Feb	CMS	Friends	Vol time		6.7, 6.8	
5.10	Rotational coppice along south bank of Pix brook to open path	E2	Oct to Feb	CMS	Friends	Vol time		6.7	
5.11	Maintain dead hedge around large marsh	E1	Jan to March	CMS	Friends	Vol time		6.9	
5.12	Create / maintain dead hedges around replanting glades	E1	Jan to March	CMS	Friends	Vol time		6.9	



6.0 SPECIFICATIONS

6.1 Norton Common Amenity Grass Cutting Plan

Fine	a regular 2/3 weekly cut with a collection of the cuttings	
General Amenity	a regular 2/3 weekly cut with no collection of cuttings	
Rough	a regular cut with no collection of cuttings – may be yearly or on a more frequent basis	
Conservation	a cut with specific instructions which are noted separately- typically a yearly cut with collection of cuttings	

Areas of the Common and their type of Cut

Main Avenue	General Amenity cut. Full width of Avenue to the edge of the woods
East /West ride	General Amenity cut. Gradually increasing in height on the north boundary (Red lines on map are butterfly hotspots).
MacFadyen ride	General Amenity cut. Gradually increasing in height on the north boundary (Red lines on map are butterfly hotspots). The southern, swimming pool, side should be mown close to the stream.
Area "A"	General Amenity cut.
Area "B"	General Amenity cut.
Meadow	Conservation cut. One cut in mid-July and another in October, both with clipping collection (simulation of a grazing pattern – to help Cowslips). Bottom south corner (Area "C" – 3 metre strip) to be left wild and not cut at all (Butterfly hotspot). Once every 4 years just an October cut (4-year cycle dates are: 2021, 2025, etc.)
Meadow Paths	Rough cut - Two pathways across (east/west) and two pathways up the sides close to the woods (north/south) on a 4 to 6 week basis
Wilbury Wood Paths	Rough cut – Existing pathways and Six Ways junction to be cut on a 4-6 week basis
Both Marshes	Conservation cut. Once per year in the Autumn with collection of cuttings. To be completed by NHDC contractor.



6.2 Conservation Cut and Collect

Guidance for the most effective management of unimproved neutral meadow is for two annual cut and collects operations to be undertaken, controlling the vigour of grasses and creating good conditions for the dispersal and germination of wildflowers. The first cut should be taken in mid-summer (July), following peak flowering and seed set of wildflowers, and a second cut should be taken in Sept / Oct at the end of the growing season to ensure a short sward in spring creating good conditions for wildflower germination. When only a single cut is feasible a July cut will achieve the best outcome for wildflower diversity. Consistently taking a single meadow cut in September can result in increasing dominance of grasses.

The Grounds Maintenance team undertake the meadow cut and lift, the operation will:

- Take place no earlier than mid-July, in a period of fine weather;
- Achieve a sward height of between 5cm to 10cm;
- Leave arisings to dry and shed seed on the meadow for three to seven days;
- Collect all arisings and take off site no more than a week after cutting;
- Avoid damaging soil structure by ensuring no machinery is used on wet soil.

Options to ensure later flowering plants can set seed include leaving 20% of sward uncut in July under a twice annual cut, or shifting cut and collect to September one year in four under a single annual cut. Leaving strips of sward uncut with each cut and collect operation (no more the 20% of the total area) will also provide a refuge for invertebrates.

The small and large marshes are managed with a September cut and collect under an external contract. This will continue in the current plan in line with guidance for fen meadow.

6.3 Yellow Rattle Introduction

Seed Collection

A mix of locally collected and bought-in seed will be introduced to the neutral meadow. It is important that seed collection does not impact on the condition of the donor site, therefore:

- Seed collection should be confined to just one or two people, minimising trampling;
- Collect seed in July when the plant has turned brown and seeds rattle in their pods;
- Seed collection should take place in sunny conditions when the sward is dry;
- To collect seed most efficiently, cut and take the flowering spike;
- Limit seed collection to 10% of plants or less across the site or any one patch;
- Avoid collecting seeds from the same patch more than one year in three;
- Seed should be removed from seed pods before storing or introducing to a new site;
- Stored seed should be kept in a cool dry place in breathable material such as a cotton bag or paper envelope. Label packet with species, site, and collection date.

Seed Introduction

Yellow rattle will be introduced to the neutral meadow by scattering and treading seed into bare patches of soil or sward gaps, following the mid or late-summer cut and collect.

The best chance of yellow rattle establishment success will be achieved when:

- Freshly collected seed is scattered in July after a mid-summer cut and collect;
- An autumn cut and collect is taken so that seed germinates in a short spring sward;
- No cuts are taken from early spring to mid-summer following seeding.

Alternatively, when only a single cut and collect is taken each year the best result will be achieved by scattering freshly collected seed into the short sward after a July cut and collect. If the annual cut and collect is taken in September, ensure seed is collected in July and stored in a cool dry place. Seed which heats up, e.g. if stored in plastic, will lose viability.

6.4 Green Hay Translocation

The large marsh supports a rich floral community including several orchid species, typical wetland plants such as marsh valerian and typical hay meadow plants such as yellow rattle and meadow buttercup. Green hay exchange between the large marsh and other open areas on site could help to establish new pockets of wildflower habitat.

Success of green hay exchange is dependent on timing and coordination of operations at the donor and recipient sites. It is important that operations are managed sensitively, so that the donor site is not damaged or botanically depleted by collection of green hay.

To minimise impact on the large marsh donor site it is recommended that:

- No more than 20% of large marsh cuttings are donated as green hay in one year;
- No area of the large marsh will donate green hay more than one year in three;
- Green hay is collected with hand tools, e.g. rakes and pitchforks, to avoid soil damage.

To achieve the best chance of success at receptor sites it is recommended that:

- Green hay is collected over an area three times greater than the receptor site;
- Green hay is transferred to receptor site as soon as possible after cutting;
- Green hay exchange takes place over as short a time as possible and hay is not allowed to overheat (for example by wrapping or containing for any length of time)
- Green hay will be spread over the small marsh after the annual cut and collect,
- In the large marsh, some green hay from the annual cut will be pushed into the perimeter of the marsh where coppicing / pruning has opened unshaded scallops;
- Butterfly scallops in the Avenue, and opened habitat along the perimeter of the tributary will be prepared by raking to create at least 50% bare ground;
- Green hay will be spread evenly over the receptor site using forks where necessary;
- Hay will be trodden in after spreading to help seed contact soil;
- Green hay should be raked off receptor sites into piles after one to two weeks.

Green hay exchange is most successful in mid-summer. Therefore, the Friends could cut a small area of the large marsh in July rather than waiting for the contracted September cut.

6.5 Thistle, nettle and comfrey control in marshes

Cut, pull or dig out thistles in small and large marsh through the growing season. Cutting should be timed to take place at peak flowering (June to August), prior to seed set. Alternatively, a weed pulling tool can be used to remove deep tap roots and provide the most effective means of control. Risk of soil disturbance and vegetation trampling will be minimised.

In the small marsh, nettle patches can be controlled by cutting and raking. When digging out or uprooting Comfrey all root fragments should be removed from soil to prevent regeneration.

6.6 Control non-native invasive plants with minimal reliance on herbicide

Yellow archangel

A patch of cultivated yellow archangel is established in woodland in the west of the site. Yellow archangel is shallowly rooted and can be controlled by pulling in the spring. Arisings can be raked off and left on site. The area should be re-visited in subsequent years to keep regenerating plants under control. The native form of yellow archangel, an ancient woodland indicator, lacks the variegated leaf pattern of the cultivated species.

Three-cornered leek

Localised patches of three-cornered leek occur along the Pix Brook and other watercourses. This species is non-native and can become dominating if left uncontrolled. Bulbs should not be dug up as this could cause the plant to spread if they not disposed of correctly as licensable waste. Cutting plant in early spring, at the point of flowering, will weaken plants over a number of years. Cut arisings should be left on site. Three-cornered leek is listed as a schedule 9 species under the Wildlife and Countryside Act, 1981.

Russian vine

A localised patch of Russian Vine is established in the south east corner of the neutral meadow. As a climbing species this plant can smother patches of native vegetation. The area of invasion has been treated with cutting back and burning arisings. Cutting over successive years will continue to weaken the plant; arisings can be burnt or composted.

Laurel

Laurel is an invasive non-native species which can invade native woodland. As an evergreen shrub the plant is densely shading and can suppress native woodland ground flora. Laurel can be dug up at the roots if practical. For mature shrubs, manual control is unlikely to be practical. It is recommended that large shrubs are cut, and stump treated to prevent regrowth. Treatment areas should be revisited to pull seedlings and control regrowth.

6.7 Coppicing

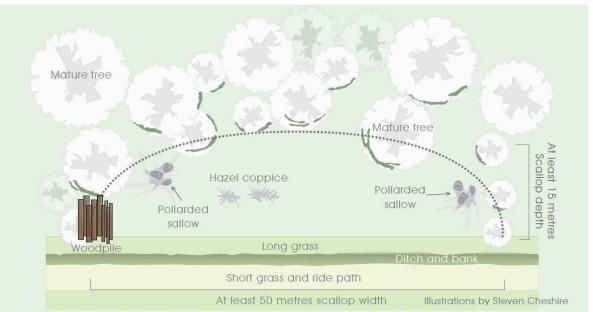
Rotational coppicing of in-field and woodland edge scrub will maintain the area of meadow and marsh and reduce detrimental shading and enrichment of wildflower communities. Coppicing products can be harvested for traditional crafts (e.g. charcoal or hurdle making) or be retained in the woodland as a dead hedge or in deadwood habitat piles. A rotational coppicing strategy should aim to create a wavy woodland edge with scrub in various regrowth stages, contributing to a diverse habitat matrix. Coppicing should proceed by:

- Cutting above the last coppice mark (or close to the ground on first coppice cycle);
- Cutting on an angle to allow water to roll of the stump and prevent rotting;
- Cutting stems cyclically around the stool from the outside into the centre;
- Coppice groups of trees and scrub to create D shaped scallops along the woodland / scrub perimeter of meadow, marsh, six-ways, the Avenue, Pix brook and tributary;

- Butterfly scallops on the Avenue will be wide and deep enough (50m x 15m) to provide a sheltered micro-climate and create opportunities for green hay exchange;
- Coppiced material which is not harvested as woodland product will left on site as deadwood, in habitat piles or incorporated into protective dead hedges.
- Rotational coppicing of woody shrubs (e.g. hawthorn / hazel) will take place over an eight to ten-year cycle / bramble control will take place over a three-year cycle.



Woodland perimeter coppicing to create a 'soft' wavy edge



A "D" shaped scallop on the side of a woodland ride will create more edge habitat than merely cutting the adjacent length of the ride. Cutting scallops on opposite sides will increase the amount of sunlight and warmth reaching the centre of that ride. The warmest and most valuable scallops will be those which are south facing on east-west rides, thus receiving sun for most of the day.

Dimensions for a butterfly friendly woodland edge scallop, 50m long x 15m deep

6.8 Thinning

Thinning two to three meters into the woodland perimeter along the margin of six ways, where ash regeneration is dense, will release developing standards from competition and increase light access to the path / woodland margin. Thinning can be implemented by the Fiends, selecting poorly formed and supressed stems which can be felled with hand tools. Timber can be cut into short lengths and staked in habitat piles to retain deadwood habitat. Woodland perimeter thinning will also be beneficial around the margin of the meadow and marsh habitat, reducing shading an enrichment of sensitive wildflower habitats. Wherever possible, felled timber will be retained on site in dead wood habitat piles or dead hedges.

6.9 Dead Hedging

Dead hedges provide an opportunity to make use of dead wood discarded from woodland management operations to create a temporary boundary feature. Dead wood is an important component of the woodland ecosystem and is often lacking in younger woodlands, therefore dead hedges can also provide a valuable ecological feature. To form an effective barrier, upright stakes are used to contain brash which can be topped up as necessary.

6.10 Procuring Tree Stock

Stock will be produced from seed which has been sourced, propagated and grown until point of sale within the UK. As far as possible, seed will originate from the local seed zone (402) at an Elevation Zone below 300m. To plan for increased genetic diversity and climate change resilience a proportion of trees can be sourced from other UK seed zones, with a preference for neighbouring Seed Zones (405 and 406), below 300m elevation.

For Seed Zone mapping information see:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/701331/FRMGuidelinesRoPmap.pdf

As part of the procurement process, nurseries will be required to:

- Provide a Certificate of Local Provenance;
- Provide assurance of UK propagation from seed through accreditation under the Woodland Trust's 'UK Sourced and Grown' Scheme or equivalent evidence;
- Demonstrate, as far as is possible, that trees are pest and disease free.
- Permit inspection of growing area, and tree stock, prior to purchase;

Following procurement, an audit trail of trees must be maintained by the purchaser, allowing planted trees to be traced back to the nursery source and tree batch.

Stock will conform to BS 3936 (where applicable).

6.11 Aftercare of newly planted trees

To achieve healthy growth, newly planted trees should be checked and maintained regularly in the first few years until whips are well established:

Summer aftercare

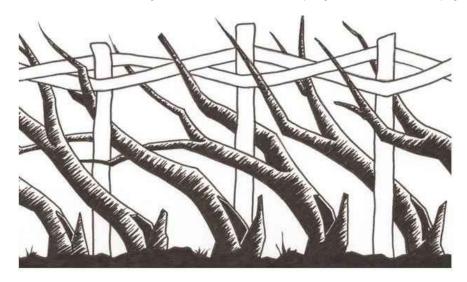
- Check trees in prolonged dry periods and water as required
- Weed 1m² area around trees to control competing grasses and weeds

Winter aftercare

- Thin out and replace dead trees;
- Prune broken or dead branches;
- Fill in any soil gaps in the planting area resulting from swaying;
- Report any signs of pest or disease to the Forestry Commission, http://www.forestry.gov.uk/treealert;
- Loosen or remove any ties / stakes / guards as appropriate.
- If restacking tree after guard removal, tie at the highest stable point (allowing for natural swaying in the wind which strengthens the trunk over time).

6.12 Hedge Laying

Laying is a form of traditional hedgerow management originally intended to create a secure stock proof boundary. Laying has been replaced by fencing in many situations to secure hedgerows. However, the practice continues as a conservation strategy and for continuation of traditional skills. A well layed hedge requires less on-going management than fencing and provides valuable wildlife habitat. Hedgerow networks are increasingly important as habitat connections, especially bats which navigate and forge along linear landscape features. The north and south boundary hedgerows have been restored through gap planting and laying of mature branches, under the previous plan. In the current plan, growing branches in Icknield Way and Wilbury Road hedgerows can be layed to encourage bushy growth. Hedge laying will follow the south of England style. Cut stems are bent at an angle and supported by a single line of hazel stakes woven together with hazel binders. Laying is a winter task, carried out over several seasons. Hedges are trimmed after laying to promote bushy growth.



6.13 Riverbank restoration

Eroded sections of riverbank can be protected by laying over coir matting, staked in place with wooden pegs and secured around the edge with willow hurdles. A native wildflower seed mix, green hay donated from the large marsh, or native wildflower turf, can be laid underneath coir matting to restore vegetation cover. A plant mix for shaded habitats, e.g. hedgerow and woodland, will be the most appropriate for these locations as eroded sections are located high on the bank and are not frequently inundated.

6.14 Tree Health

Signs that ash dieback is affecting tree health is most evident in mid-summer (June to July), when early leaf senescence can be observed. However, stem lesions and epicormics (below diseased branches) are visible throughout the year. In late summer, small white fruiting bodies of the fungus are visible on the rachis of dropped leaves on the woodland floor.

Oak processionary moth is most evident from July to August when caterpillars develop into their final instar stage and begin to pupate. At this stage, large communal silken nests may be seen on the trunk or lower branches of the host tree and feeding damage will be more extensive in tree canopies. In general, small OPM outbreaks are inconspicuous and the first sign may be from woodland visitors (people and dogs) or workers experiencing a mild skin irritation (a result of accidental contact with microscopic toxic hairs which are easily dislodged and dispersed). Any sign of OPM should be reported to the Forestry Commission for confirmation of the outbreak and control instructions. See appendix 7.2 for more details.

Tree risk surveyors should be trained to identify and report OPM and ash dieback signs. Friends and the Grounds Maintenance team working regularly on site should be aware of the potential health and safety risk from tree health issues. For example, diseased ash trees can be unstable and repeat exposure to OPM can result in worsening reactions.

6.15 Interpretation

Panels at site entrances are A2 twin leg lectern style. The interpretation insert is map based, with photographic inserts of representative nature on site. The map is a three dimensional watercolour illustration which depicts entrances, access routes, and habitats. A refresh of site interpretation would provide an opportunity to update access routes, including extension of surfaced paths and the route of the Nature Trail produced by the Friends.

6.16 Path surfacing

An extension of the east to west surfaced ride has been proposed to improve access to the tennis court and bowling lawns from the Cowslip Hill entrance. The path would be a crushed aggregate surface, cambered to allow drainage, and with a geotextile base. The grassland margin will be reseeded at the end of works and any excess spoil will be moved of the site. Additional path surfacing may be installed into woodland to improve access for wheelchair and mobility vehicle users to more areas of the site. Tree roots must not be damaged by path works and protected from compaction. Boardwalk sections could be considered in sections where drainage is poor.

7.0 APPENDICES

7.1 North Hertfordshire District Council Plan 2020-25

The Council Plan is a high-level strategic document setting out our ambitions and aspirations for the district from 2020-2025.

The 2020-25 objectives have been set for at least five years and these will be reviewed at the end of the period, or sooner should external circumstances dictate.

The Council Plan is supported by a five year Medium Term Financial Strategy (MTFS).

7.11 Our vision

The Council has a clear vision for the area, which is making North Hertfordshire a district in which everyone who lives, works or visits is able to flourish. It is clear that the Council must work with its partners, businesses, and urban and rural communities to achieve this vision.

7.12 Our objectives

There are five objectives for the Council for 2020-2025, which are:

Be a more welcoming and inclusive council

We will engage with and welcome the contributions of residents, community groups and businesses; working collaboratively with local people.

Build thriving and resilient communities

We will work on frequent and regular opportunities to improve the partnership and relationship that the Council has with local citizens. Some of this will be achieved by change in culture, tone and communications but more will be done through direct measurable activity, intervention and consultation.

We will develop a range of innovative ways in which local communities, from small groups to whole towns and communities of interest can be encouraged to become more involved in supporting, planning, improving and maintaining local environments.

This work stream will focus particularly on engaging with young residents and those who are disadvantaged or in any way socially excluded, to ensure such innovations are fit for the future and imaginative in concept and delivery.

Respond to challenges to the environment

We will seek to provide a clean and safe environment, in consultation and partnership with local people. We will engage local people and organisations as we progress towards our target of net zero carbon emissions by 2030, whilst taking action to enable and encourage residents to minimise their own carbon impact. We will protect the natural and built environment through our planning policies and an effective green spaces strategy. We will take action against environmental crime and ensure that our approach to waste and recycling promotes the hierarchy of reduce, re-use, recycle. We will complete the elimination of single use plastics from the council and support reductions in their use across the district. We will work to improve the monitoring and management of air quality across the district, prioritising those areas where air quality is most in need of improvement.

Enable an enterprising and co-operative economy

We will aim to become an increasingly innovative and inclusive Council, committed to generating community wealth, by seeking commercial and investment opportunities and through proactive engagement with a wider range of small and medium sized businesses to build a sustainable local economy. We will continue to engage with residents, staff and Councillors to continue to embrace modern working practices through the use of IT and a commitment to working towards a paperless Council whilst increasing the efficiency of services and access to them by residents.

Support the delivery of good quality and affordable homes

We will enable and support the delivery of good quality and affordable housing in the district, ensuring both new and existing housing is fit for purpose, including a commitment to consultation and ensuring communities have the infrastructure they need. We will build more effective relationships with local housing associations and recognise our role in the fight against homelessness. We will continue to support Parishes with Neighbourhood plans

The Council Plan 2020-2025 document explains what each objective means and details specific projects that will help deliver each one. The Overview and Scrutiny Committee will review the progress of these projects midway through and after the end of each financial year.

7.13 Performance management

Performance management helps to ensure that the Council is achieving what it sets out to do and is giving value for money. The Council measures its performance in order to analyse how well it is doing and to identify opportunities for improvement.

Effective performance management requires performance information that is robust and accurate. Regular updates on how the Council is performing are provided to senior managers and to Councillors every three months.

7.2 Processes for dealing with oak processionary moth

7.21 If OPM is suspected on site:

If a potential oak processionary moth (OPM) sighting is identified on site, either through the course of regular inspections, maintenance activities or reported by a third party or member of the public, the following actions will be taken within the first 48 hours:

1. The exact location will be recorded and photographs of observable caterpillars, nests and webbing will be obtained and sent to the Forestry Commission (FC) for official identification.

Email: OPM@forestrycommission.gov.uk

2. Notices will be posted at prominent access points and close to the location of the sighting to alert people accessing the site to the possible presence of OPM.

Link: ../OPMPublicInformationPoster_06APR16_print.pdf

- 3. Relevant partners will be informed to ensure that activities are conducted safely or cancelled where necessary.
- 4. The specific location of the sighting will be assessed with consideration to the typical use of the site. If OPM is identified within close proximity to areas assessed as posing a high risk of public contact then additional precautions such as additional signage or temporary fencing will be taken to reduce the risk of public contact with OPM caterpillars and nests.

7.22 If OPM is suspected on site:

If OPM is confirmed on site by the FC – either a) following submission of photos from a suspected sighting to the FC or b) through the FC issuing a statutory plant health notice following OPM identification as part of the FC's monitoring programme – then appropriate control measures will be determined within five working days of the FC's confirmed identification.

7.23 If OPM is suspected on site:

While this document outlines the intended process for OPM control this may be adjusted in line with additional instructions included in the statutory plant health notice issued by the FC.

The OPM infestation will be assessed using the following criteria:

- If the infestation is found in areas where limited insecticide spraying is considered acceptable and is discovered in time to complete spraying before caterpillar development renders it resistant to the insecticide (late-May), then spraying represents the best control to limit further advancement of the population.
- If the infestation is found in areas where limited insecticide spraying is considered acceptable but is discovered after caterpillar development renders it resistant to the insecticide (late-May), then spraying in the current season does not represent a viable control to limit further advancement of the population. In this case nest removal should be conducted if a) the infestation is discovered prior to moth emergence (late-July to mid-August), or b) if nests are in close proximity to high risk areas. Insecticide spraying should then be conducted within acceptable areas the following season.

Following assessment, if spraying in the current season or nest removal is appropriate
then a suitably qualified and experienced arborist will be instructed to take appropriate
action as soon as possible (typically within five working days). Arborists will be required
to conduct insecticide spraying, nest removals and waste disposal in line with FC
guidance as set out in chapters 6-7 of the OPM Manual.

Chapter 6: https://www.forestresearch.gov.uk/tools-and-resources/pest-and-disease-resources/pest-and-disease-resources/oak-processionary-moth-thaumetopoea-processionea/opm-manual-6-chemical-control-larvae/

Chapter 7: https://www.forestresearch.gov.uk/tools-and-resources/pest-and-disease-resources/oak-processionary-moth-thaumetopoea-processionea/opm-manual-7-manual-removal-nests-and-larvae/

7.24 Subsequent OPM control measures

Based on current FC policy and practice, sites of OPM infestations within the 'control zone' (encompassing the entire county of Hertfordshire) are typically included in the FC's inspection and insecticide spraying programme for two seasons following the initial discovery. The FC informs landowners that are to be included in this programme by February of each year. The FC will be contacted (if no communication has been received) by late-February in the two seasons following the initial discovery to confirm whether the site is to be included in the programme. If the site is not included in the FC's programme then a suitably qualified and experienced arborist will be engaged to conduct insecticide spraying following caterpillar emergence.

Whether insecticide spraying is conducted by the FC or by an appointed arborist the contractors will be required to operate in accordance with FC guidance (outlined above).

Once insecticide spraying has occurred, a suitably qualified and experienced arborist can be instructed to carry out nest removal. This will be conducted only when nests are in close proximity to high risk areas.

Following two seasons of spraying the FC will be consulted to confirm whether OPM has been successfully eradicated from the site. If OPM is still present the FC will be consulted on appropriate future action.