



**POST WOOD & PRESDALES RECREATION GROUND**

# **GREENSPACE ACTION PLAN**

**2019 – 2024**



Produced by:



On behalf of:

## 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 of time; 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 during August 2018, to establish core aims and objectives for the site; these are reflected in Section 3. A second stage of engagement completed during Winter 2018 enabled stakeholders to comment on the proposed management actions for the site. An associated 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
v0	21/02/19	Draft GAP for public engagement	ND		

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## **1.0 SUMMARY**

### **1.1 Site Summary**

Site Name:	Post Wood and Presdales Recreation Ground
Site Address:	Walnut Tree Walk Ware SG12 9PD
Grid Reference:	TL 361161 (centralised)
Size:	19 hectares (Post Wood: 11.5 ha; Presdales: 7.5 ha)
Designations:	Local Wildlife Site (60/021) Metropolitan Green Belt
Owner:	East Herts Council

### **1.2 Vision Statement**

Post Wood and Presdales Recreation Ground are attractive and popular greenspaces, where high standards of management reflect the value of these sites to wildlife and the local community. As one of the primary Ancient Semi-Natural Woodlands in the east Hertfordshire landscape, the conservation of Post Wood's habitats will be central to its future management.

High quality and durable footpaths provide year-round access around Post Wood's circular walking trails, which can be joined from any of the site's entrances. Presdales recreation ground will continue to provide a valuable area of unconfined open space. Information about the sites' heritage and biodiversity will be communicated through high quality interpretation boards.

The ancient semi-natural woodland habitat of Post Wood will be managed using traditional and best practice techniques that promote regeneration, protect mature and veteran trees, and remove threats to woodland health. Further habitats associated with the woodland including glades, rides, boundary hedgerows and connected linear woodlands will be enhanced to increase their conservation value

## 2.0 SITE DESCRIPTION

### 2.1 Introduction

Post Wood is an oak-hornbeam ancient woodland on the outskirts of Ware, Hertfordshire. It is adjoined by Presdales Recreation Ground, a popular open space surrounded by tree-lined boundaries. The sites are owned and managed by East Herts Council.

As an Ancient Semi-Natural Woodland (ASNW), **Post Wood** has been in existence since before the beginning of the 17<sup>th</sup> Century. Tree species reminiscent of its ancient heritage are mature oak and hornbeam, with hazel, crab apple and rowan in the understorey; more recent species additions include sweet chestnut and sycamore. Many of the hornbeam trees were coppiced historically, prolonging their life and creating the gnarly forms that exist today.

The ground flora contains remnants of ancient woodland habitat, including butchers broom, wood anemone and yellow archangel, whilst tracts of bluebells are a highlight each spring. Overall, however, the diversity of woodland plants is low for an ancient woodland, and regeneration of native shrubs and trees is poor.

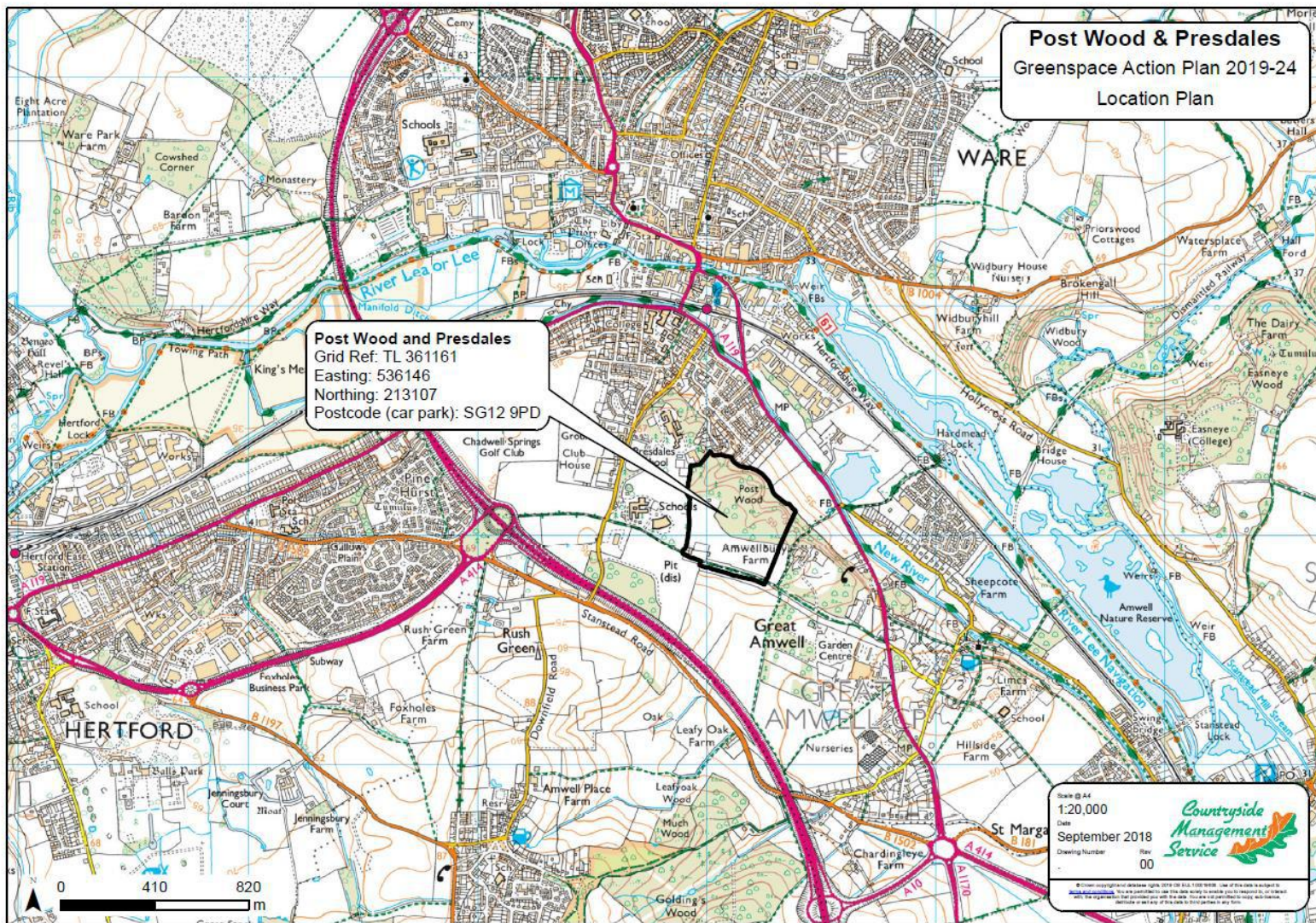
**Presdales** provides a large area of open space which is used for a range of recreational activities, including football, exercise groups and dog walking. With recreation being its main function, there is not a requirement to alter management of the grassland, but to ensure it is maintained as valuable open space for the community. The boundaries of Presdales are marked with mature hedgerows and linear woodland, providing landscape connectivity for woodland habitats and creating attractive views across the field.

The only public Right of Way on the site is the tree-lined bridleway Walnut Tree Walk, which runs along the southern boundary of Presdales. A network of permissive footpaths throughout Post Wood provide good coverage of the woodland. A project was undertaken in early 2018 to resurface the footpaths, aiming to facilitate access for less able visitors, reduce path deterioration during winter months, and reduce visitor footfall off the footpaths which is resulting in soil compaction.

Situated within the catchment of Ware, the woodland and recreation ground are popular sites for the local community. Owing to the value and scarcity of ancient woodlands, management of Post Wood for conservation is a high priority to ensure it is a protected and thriving habitat into the future.

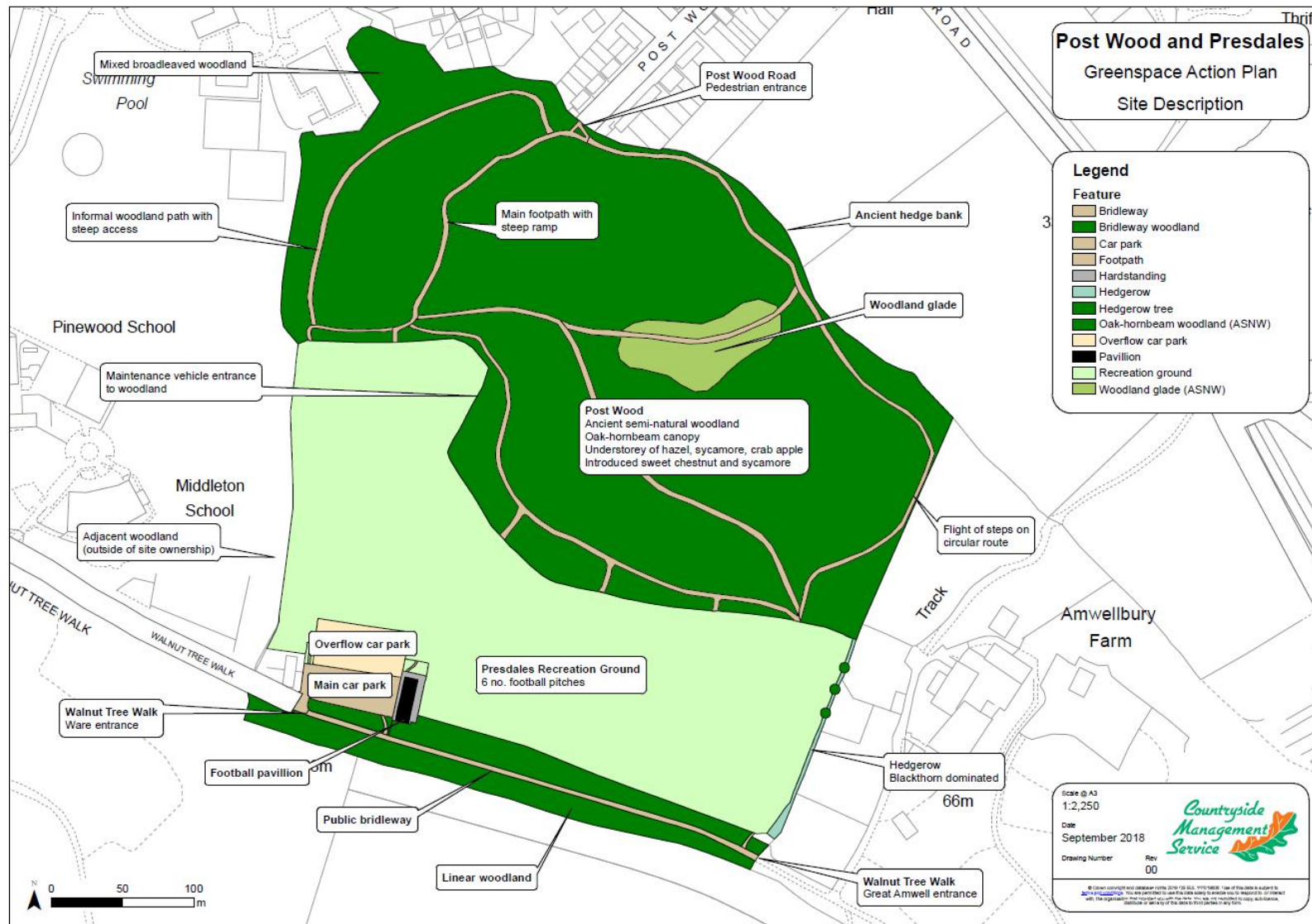


## Location Map

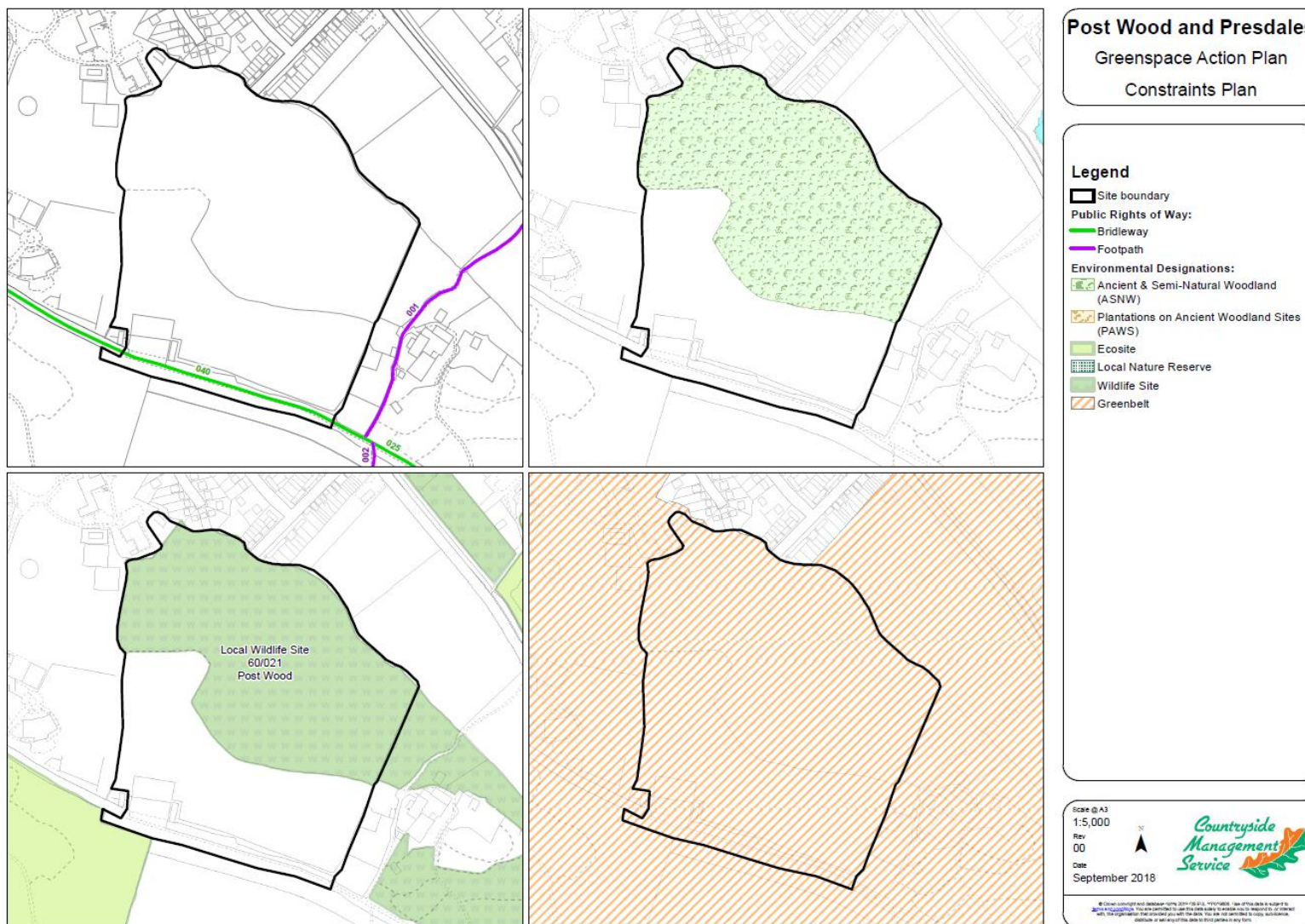




## Site Description Map



## Constraints Map





## **2.2 Geography and Landscape**

The site is at the western extent of the east of England claylands, a geological landscape of chalky boulder clays interspersed with gravel deposits in meandering river valleys. Post Wood sits on a reasonably steep slope of the River Lea valley, an area characterised by undulating ground with scattered lowland meadows and mixed farming. Ancient woodlands are a notable feature in the local landscape and a conservation priority for the region. Whilst local towns are relatively small, the transport network is a dominant feature, and urban development and population growth provides increasing pressure on both infrastructure and wildlife habitats.

A significant proportion of open grassland and heathland habitats in the area have been lost or influenced by urban development and intensive farming during the last century; Presdales is an example of the fate of much of the urban-fringe grasslands in the area, having been adopted as a recreational greenspace.

## **2.3 History and Archaeology**

Following the end of the last glacial period, the majority of Britain became covered with vast tracts of broadleaved woodland, akin to a wild-wood. In south-east Britain, whilst some localised clearance was likely to have been undertaken by early civilisations, it has been during more recent centuries that the forested landscape has been drastically altered in favour of farmland and timber production. Post Wood, along with other isolated ancient woodlands in the landscape, is a remnant of the former forests which stretched across much of the country.

Early records from the late medieval era of landownership in the area around Post Wood describe the local parishes as a mosaic of grazed and arable farmland amongst 'a 500 acre woodland'. Thereafter, into the 17<sup>th</sup> and 18<sup>th</sup> Centuries, estates and manor houses were appearing in the landscape which would have maintained local woodland as hunting parkland.

Through the 19<sup>th</sup> and early 20<sup>th</sup> century, continued industrialisation and population growth resulted in much of Britain's remaining woodlands being turned over to agriculture and/ or commercial production; these supplied industries including ship-building, iron and steel production, and railroads. Species including oak, hornbeam, elm and hazel were favoured to provide the highest quality materials, with other native species such as lime and birch removed from many woodlands; the respectively favouring and removal of these species is reflected in the composition of Post Wood seen today.

## **2.4 Habitats**

### **2.4.1 Ancient Semi-Natural Woodland (ASNW)**

Climate, soils and historical management have influenced the species make-up of most UK woodlands, including ASNW. Post Wood is predominantly an oak-hornbeam woodland (NVC W10 with patches of W8), with the canopy mainly comprised of mature hornbeam and oak standards. Sweet chestnut, ash, Norway maple, wild cherry and sycamore are occasionally distributed in small patches, where they have been planted or set seed.

Trees in the sub-canopy include smaller specimens of the canopy species plus rowan, elm and birch, although these have infrequent distribution.

The understorey is generally sparse owing to the densely-shaded hornbeam canopy, which limits the light that is required to trigger and sustain sapling growth. Human footfall and squirrel foraging is also likely to be having an impact on growth and the provision of seeds respectively. Sycamore has become locally abundant in patches of the woodland, where as native hazel, crab apple, hawthorn, elder and holly are infrequent. Non-native cherry laurel has encroached into some areas of the woodland, and should be removed as a priority.

Under the dense canopy, large areas of bluebells emerge each spring. Further ASNW indicator species in Post Wood include wood anemone, honeysuckle, common box, enchanter's nightshade, wood sage, common figwort, wood sorrel and butchers broom. Yellow archangel and dog's mercury are also present although infrequent. In small openings in the canopy where light reaches the floor, bramble, bracken and nettles become locally dominant; whilst beneficial for some fauna, this coarse vegetation can limit tree and wildflower regeneration.



*Understorey and bluebells in an open area of Post Wood*

## **Mammal browsing and tree health**

Damage to trees through bark stripping and browsing of seeds, notably of oak and hornbeam, is being caused by the abundant population of grey squirrels in the woodland. No evidence of browsing by deer has been recorded to date, although muntjac are occasionally seen in Post Wood, and their impact on sapling growth cannot be ruled out.

As an enclosed and sheltered woodland, tree health issues have not been recorded to date, although there are initial signs of dieback in ash trees at the western end of the woodland. With its proximity to London, the chances of oak processionary moth and gypsy moth reaching the area are high, and monitoring for tree health issues should be a priority for the woodland in order to protect tree stock and site visitors.

### **2.4.2 Glade**

The sheltered glade on the northern side of the woodland offers valuable opportunities for open habitat plants and invertebrates. The ground here becomes dominated each year by strong annual growth of bracken, bramble, willowherb, nettles and red campion. Himalayan balsam is an issue in the glade, spreading from the top of the glade, and is a priority for control. There is a thick layer of brash (15cm deep) across the glade which may be limiting finer wildflower and grass growth.

The glade habitat could be enhanced to provide opportunities for a wider diversity of open ground plants, in-turn providing habitat for a broader food web. A key focus should be on removing Himalayan balsam and reducing dominance of tall annual vegetation. Small-scale brash scrapes could be undertaken to trial exposing the underlying seedbed, aiming to trigger germination of plants within the soil.



*Post Wood glade in early summer*

### **2.4.3 Connecting hedgerows and linear woodland**

The linear woodland along Walnut Tree Walk bridleway contains tall lime and oak trees, with a patchy understorey of ash, elder, elm, birch and shrub species. A redundant chain link fence was removed in 2018 to open up the route and facilitate future woodland management.

The mix of species is highly valuable to invertebrates, and in particular the presence of elm owing to its scarcity in the landscape. To enhance the habitat and views from the bridleway across Presdales, and to allow ground flora to develop, a scalloped woodland edge and short gaps will be maintained in the vegetation. Appropriate planting of fruit-rich species and replacement lime would enhance the habitat.





*Walnut Tree Walk in winter*

The hedgerow along the eastern boundary of Presdales is predominantly blackthorn with three mature hedgerow trees. This forms a dense shrubby screen for the neighbouring property. The hedgerow could be enhanced by addition of different native shrub species in any gaps, and hedgelaying to improve its role as a hedgerow. Protecting the mature trees and planting of further standards, particularly oak, lime and field maple, would also enhance future habitat and landscape value of this boundary. The western boundary of linear woodland is outside of the ownership of East Herts Council.

## 2.4.4 Amenity grassland

Presdales is a large recreational open space, and its upkeep as amenity grassland will be maintained for public access. Pitches are mown regularly year-round, whilst pitches are 'set-aside' in rotation each year, to allow grass to recover.

To improve safety, capping of holes when football goals have been removed should be carried out.

## 2.5 Species

A brief overview of species records for Post Wood exists as follows. Whilst providing an overview of the biodiversity on site, the lack of targeted recording means the species record is incomplete, notably for taxa such as moths:

Taxonomic group	Species
Butterflies	<p>Peacock, brimstone, large white, green-veined white, orange-tip, holly blue, purple hairstreak, comma, red admiral, meadow brown, speckled wood, gatekeeper.</p> <p>Nearby relevant records: White-letter hairstreak, white admiral, purple emperor, silver-washed fritillary</p>

Taxonomic group	Species
Birds	<p>Woodland/ parkland specialists: Nuthatch, treecreeper, great-spotted woodpecker, green woodpecker, jay, goldcrest, brambling, bullfinch, mistle thrush</p> <p>Generalist species: Blue tit, great tit, coal tit, long-tailed tit, wren, dunnock, robin, blackbird, song thrush, collared dove, feral pigeon</p> <p>Birds of prey: Red kite, buzzard, sparrowhawk</p>
Mammals	<p>Bats: Soprano pipistrelle, noctule, serotine, brown long-eared, barbastelle</p> <p>Ground: European badger, red fox, hedgehog, rabbit</p> <p>Non-native species: Grey squirrel, muntjac deer (pers. Comms.)</p>
Invertebrates:	Long-horned beetle
Ground flora:	Bluebell, enchanter's nightshade, wood avens, wild clematis, dog's mercury, red currant, common box, honeysuckle, wood sage, wood anemone, butcher's broom, common figwort, wood sorrel

## 2.6 Access, Facilities and Infrastructure

There is a good network of footpaths around the site, offering a choice of walks, served by three access points: Post Wood Road, and either end of Walnut Tree Walk bridleway. Part of the footpath network was resurfaced in 2018 to improve the durability of the most commonly used paths; these improvements also aim to provide circular trails which are accessible throughout the year, reducing the need to walk off-path to by-pass muddy sections which is impacting soil conditions



*Access improvements including formalised footpaths and steps reconstruction*

The information and waymarking on-site is dated and in poor repair. This is undergoing renewal during winter 2018-19 in order to improve visitor information and provide a greater sense of identity and ownership of the woodland.

The car park receives moderate and almost constant use throughout the week, and is heavily used at peak times for football and dog walking, particularly at weekends. The surface of the main car park is in considerable need of repair and improvement.

Litter bins and benches will be provided at key access and resting points respectively.

## **2.7 Community and Events**

The site is popular throughout the week for exercise and dog walking; the latter is the most commonly observed activity on site, and a community has been established amongst dog walkers who use the site.

The car park and recreation ground are busiest when football matches are on, typically at weekends, when the full extent of the overflow car park is required.

Wider community groups use Post Wood including Great Amwell scout group, local fitness groups, walking associations and naturalists. All identified stakeholders are invited to engage in the production of this plan to assess and incorporate their requirements into future management; further unidentified stakeholders are hoped to be picked up as part of the engagement process.

Despite being well-used and valued by the local community, few organised events take place at the site. East Herts Council and Countryside Management Service intend to implement a programme of events that provide existing and new visitors with a greater understanding and connection to the site, such as wildlife walks around Post Wood and engagement of forest schools.



### 3.0 AIMS AND OBJECTIVES

The aim and objectives of the GAP are as follows:

#### Aim

To protect and enhance the ancient woodland habitat, and to maintain the sites as safe and enjoyable places

#### Objectives

**A. Public access and general maintenance – Ensure the sites are accessible, safe and enjoyable for visitors**

- A1 Renew and improve information panels and way-markers
- A2 Review condition of parking area to ensure it is safe, welcoming and resilient
- A3 Improve landscape features and visual amenity through enhancing boundary hedgerows and fences, and seek removal of telecom infrastructure

**B. Conservation and woodland management – Enhance condition and resilience of the oak-hornbeam woodland and associated habitats**

- B1 Undertake a sensitive and structured programme of woodland management to increase regeneration of trees and ground flora
- B2 Recognise the value of mature and veteran trees and provide optimum conditions for their longevity
- B3 Remove Invasive Non-Native Species (INNS) of plants, notably cherry laurel and Himalayan balsam, and selectively reduce introduced tree species
- B4 Maximise value of woodland glades and edges, and connected linear habitats
- B5 Implement monitoring of species, herbivore impacts and tree health; apply appropriate best practice in consultation with experts in these fields

**C. Heritage and marketing – Develop a stronger recognition of the heritage and ancient woodland aspects of site, and promote respectful and appropriate use**

- C1 Identify and preserve historic features
- C2 Inform site users and wider community about the site's heritage
- C3 Promote use of the footpath network and responsible dog ownership, to reduce woodland damage and improve user experience

**D. Community involvement** – Develop and maintain an informed, involved and enthusiastic local community.

- D1 Encourage local community and volunteer involvement in the stewardship of the site, and ensure all operate towards the objectives of the GAP
- D2 Publicise and facilitate the involvement of a range of local groups, including the forest schools
- D3 Promote responsible and respectful use of the site, and proactively respond to any misuse of the site

**E. Sustainable operations** – All management and activities will be environmentally and financially sustainable

- E1 Ensure the costs of ongoing maintenance proposed in the GAP are financially sustainable and achievable with the resources available
- E2 Seek external funding from grant bodies and development funds, to deliver proposed activities beyond annual maintenance
- E3 Ensure all management is carried out according to environmental best practice, including on herbicide use, plant biosecurity to minimise tree disease, and sustainable woodland management practices
- E4 Identify approaches which will deliver multiple benefits, such as combining habitat and tree risk management

## 4.0 MANAGEMENT PRESCRIPTIONS

The management prescriptions described here form the basis of the actions proposed on the action plan maps and tables (Section 5).

### A. Public access and general maintenance

#### Access

The footpath network contains a range of surfaced and informal paths. The main paths were resurfaced in 2018, and will be maintained to ensure provision of an even, free-draining surface. Secondary paths, including through the glade and around the western loop, will continue as unsurfaced tracks; should condition of these deteriorate, spot repairs and longer term solutions will be considered. Two circular walking loops will be promoted on new interpretation boards (see 'marketing' below).

Fencing and gates will be kept in good repair for visitor access and to maintain the barrier against rabbits entering the recreation ground. Four kissing gates joining Post Wood to Presdales were upgraded in 2018 to improve access for visitors.

Presdales car park is recognised as an area of high usage and is in considerably poor condition. This has been identified as a key concern for site users which, whilst falling outside the remit of this GAP, will be identified to the site owners for attention.

#### Visual appearance

The woodland is generally an attractive site, although a few man-made features detract from the overall condition. The status of telephone wires through Post Wood will be investigated, to seek removal; this would improve aesthetics along the primary path through the wood, whilst also facilitating woodland management along the valley.

Site boundaries, such as the derelict barbed wire fence along the northern boundary and partly-fenced boundary at western end, offer opportunities to be enhanced to improve views, function, and long-term maintenance; preferred options for each are described on the action plan maps, and will be discussed with neighbouring landowners to agree implementation.

The area surrounding the car park, containing hedgerow and hazel coppice, will be prioritised for litter clearance and coppicing, to maintain a tidy area of habitat and improve the safety of this area.



*Coppicing in progress at Presdales car park*



## B. Conservation and woodland management

### Woodland management

Management of the woodland will aim to protect and enhance mature tree stock, encourage regeneration of native trees and shrubs, and provide better growing conditions for ground flora. The following traditional and best practice approaches will be applied:

- Localised thinning and halo-thinning of poor specimen trees to gradually increase light and space, to promote ground flora growth and maintain vitality of mature trees.
- Removal of dense sycamore from the understorey; if left unchecked, sycamore is likely to outcompete native trees and dominate the woodland into the future.
- Selected thinning of mixed species woodland at the western end of the wood, to remove non-native species and tree health risks. Restocking will be with native species if required.
- Control Invasive Non-Native Species (INNS) as a priority. Notably cherry laurel, snowberry and Himalayan balsam are present on site; where other INNS are recorded, these should be removed.
- Increase chances for regeneration of trees, notably oak, hornbeam, crab apple, rowan and hazel, through removal of limiting factors: Lack of light, ground disturbance, and browsing/ bark stripping/ seed removal by introduced mammals (grey squirrel and muntjac deer) are all likely to be limiting new growth.
- Install individual tree protection and small fenced exclosures to encourage and protect growth of young saplings, particularly Hornbeam and oak. If regeneration remains poor, consider re-stocking or transplanting tree saplings.
- Trial small areas of leaf litter and top soil scrapes to regenerate ground flora growth.
- Increase deadwood coverage in the woodland including standing, in-tree and fallen deadwood, in all locations. Where trees are selected for felling and thinning (above), take opportunities for deadwood features and veteranisation.



*Example of shaded hornbeam canopy, Post Wood; 'Ancient' crab apple encroached by cherry laurel*

## Other habitat management

- Glade:
  - Reduce dominance of tall herbaceous plants and thatch layer through cutting and removing vegetation.
  - Trial scrapes of the brash layer and topsoil (c. 15cm deep) to leave a fine tilth, to expose the native historic seed base. If successful, replicate in further areas of the glade.
  - Control Himalayan balsam as a priority, through hand-pulling plants before seeding stage each year.
  - Allow bushy edges containing ferns and tall herbaceous plants to persist around the perimeter of the glade.



*Conservation volunteers removing Himalayan balsam*

- Boundary hedgerows:
  - Increase species diversity and continuity of hedgerows on boundaries around Presdales and Post Wood.
  - Plant and/ or protect oak, lime and field maple as standard trees in hedgerows.
- Linear woodland along Walnut Tree walk:
  - Achieve a linear woodland with a varied structure, appropriate species and open space, through light thinning and scalloping.
  - Ensure elm is a priority species for regeneration and growth.
  - Maintain provision of standing and fallen deadwood, and seek veteranisation of trees where possible.
  - Where mature trees require management to maintain public safety, use opportunity to create standing deadwood and restock with like-for-like species (lime, oak).

## C. Heritage and marketing

The provision of information on site will be overhauled. Two large map-based panels and a notice board will be located at entrances from Presdales car park and Post Wood Road. Three smaller information-based panels will be situated at the bridleway entrance from Great Amwell and in Post Wood.

The panels will be in-keeping with the site's rural setting, using natural materials and colours with a complementary design. Information will focus on the history and wildlife of the site, to allow visitors to better understand and care about the site's heritage.

Two circular walking routes will be shown on the site maps with appropriate waymarkers, to guide visitors around the site. The circular routes will also link to longer distance walking initiatives including *Hartham & Beyond*, to provide local people with a connected way to see the greenspaces in their local landscape.

The site will be marketed through presence on East Herts Council's website, where the management plan and site map will be available to view. Opportunities will be taken to market the site through articles and posts with social media, and use of CMS's Walks & More programme.



Example of new interpretation panel for Post Wood (final draft, February 2019)

## D. Community involvement

A period of public engagement accompanies the production of this management plan, enabling the local community and stakeholders to inform the management of the site. All user groups with an interest in the site are aimed to be picked up as part of this process, and for their requirements to be considered as part of the planning process.

Healthy lifestyles amongst the local community of Ware and East Herts will be promoted through walking initiatives, including EHC's upcoming *Hartham & Beyond* walking routes, and CMS's Walks & More programme.



CMS conservation volunteers deliver tasks on site, and opportunities to engage with this group will be promoted to encourage local residents to become actively involved in site management. Volunteering is a tried and tested way of increasing interest and care for a site, whilst providing participants with the benefits of healthy activity, socialisation and environmental projects.

Naturalist groups will be encouraged and supported to undertake wildlife surveys to improve species records on site. In addition to providing greater insight and enjoyment of the site, knowing the species biodiversity also informs site management actions.

A core aim of greater community involvement at Post Wood and Presdales is to improve the tidiness and safety of the site. Where small-scale littering, fly-tipping and anti-social activities occur, notably at the main entrances, setting a standard of cleanliness and respectful use will aim to reduce misuse.

## **E. Sustainable operations**

To ensure management on site is sustainable, all works will be specified to maximise affordability and durability. Proposed works will be achieved within the available site management budget, or funded by external means if required.

Best practice management will be employed with regards to all habitat and vegetation works. This will include:

- Proactive tree management (reducing tree risk through incorporation into habitat management aims, rather than reactively responding to dangerous/ fallen trees).
- Control of Invasive Non-Native Species through least damaging options available.
- Presumption against the use of peat, herbicides and pesticides, except where there is net benefit to the environment.

Regular surveying will be carried out to monitor key threats to the resilience and sustainability of the woodland, and safety of its users. This will include monitoring of oak processionary moth (OPM), ash dieback, and introduced mammal species.

## 5.0 ACTION PLANS AND MAPS

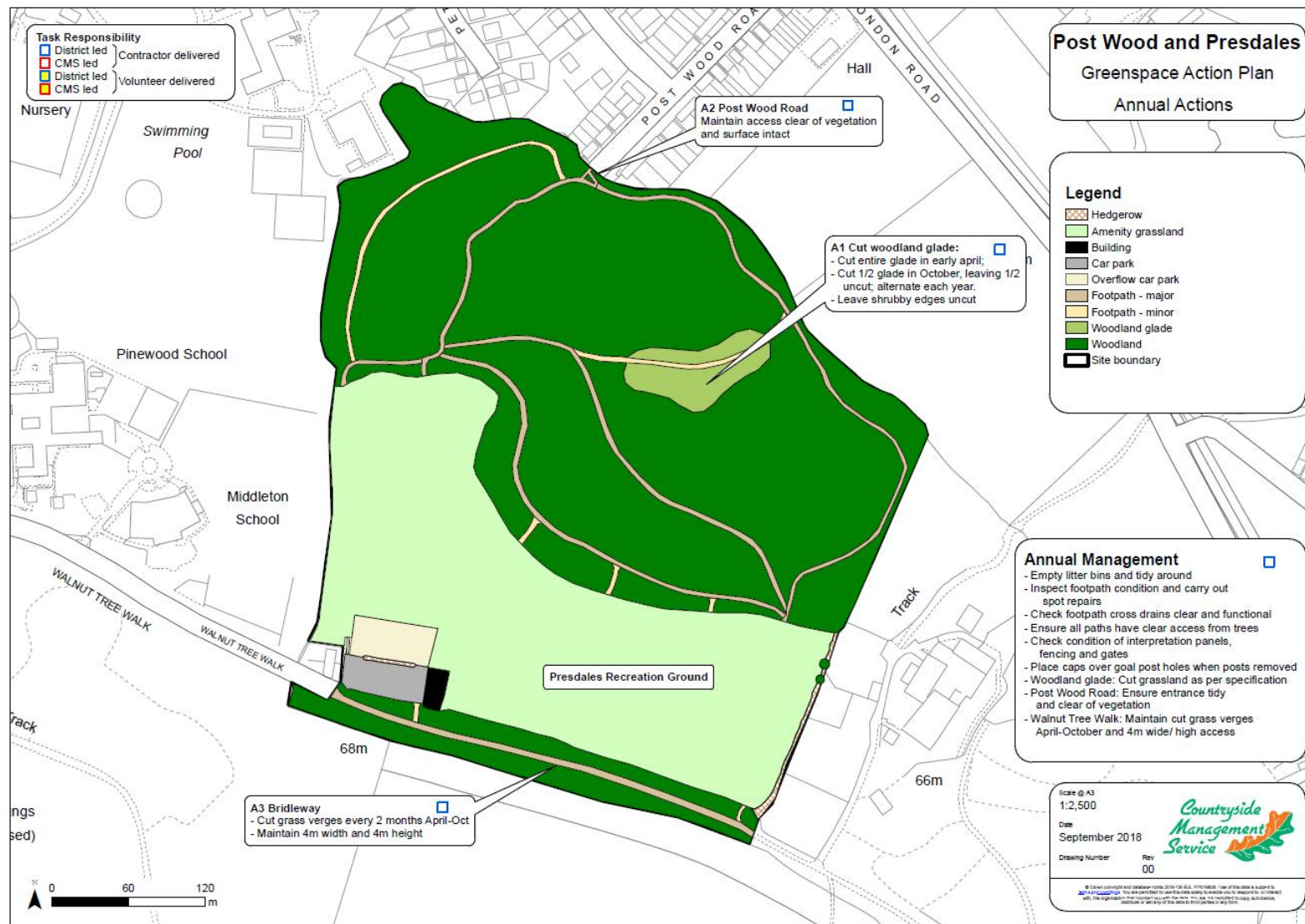
### Post Wood and Presdales Annual Actions

Please note, management of the amenity grassland at Presdales is not included within this document.

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Empty litter bins and ensure area around is clean and free of waste	-	Regularly, year-round	Maintenance contractor	-	Maintenance contract		
Annual inspection and spot repairs to footpaths, steps and entrance points	-	Annually	Maintenance contractor	-	Maintenance contract		
Ensure footpath cross drains and French drains are clear of debris and functional	-	Annually	Maintenance contractor	-	Maintenance contract		
Ensure footpaths have clear access from branches and fallen trees	-	-	EHC	-	Maintenance contract		
Inspect condition of interpretation panels, fencing and gates, and carry out spot repairs	-	Annually	Maintenance contractor	-	Maintenance contract		
Place caps over holes when goal posts removed during summer	-	Summer	Maintenance contractor	-	Maintenance contract		
Woodland glade: - In early March, cut entire glade and remove arisings. Leave 10m wide scrub edge to glade - In October, cut half of glade (alternate area each year) and remove arisings - An extra cut may be required in mid-summer	A1	March and October	Maintenance contractor	-	Maintenance contract		
Post Wood Road entrance: Ensure tidy and free of vegetation year-round	A2	Regular	Maintenance Contractor	-	Maintenance contract		

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Bridleway (Walnut Tree Walk): Cut grass verges regularly during summer months to maintain 4m wide and high access; trim undergrowth and standing/ fallen trees if necessary	A3	Every 2 months April to October	Maintenance Contractor	-	Maintenance contract		

## Annual Actions Map



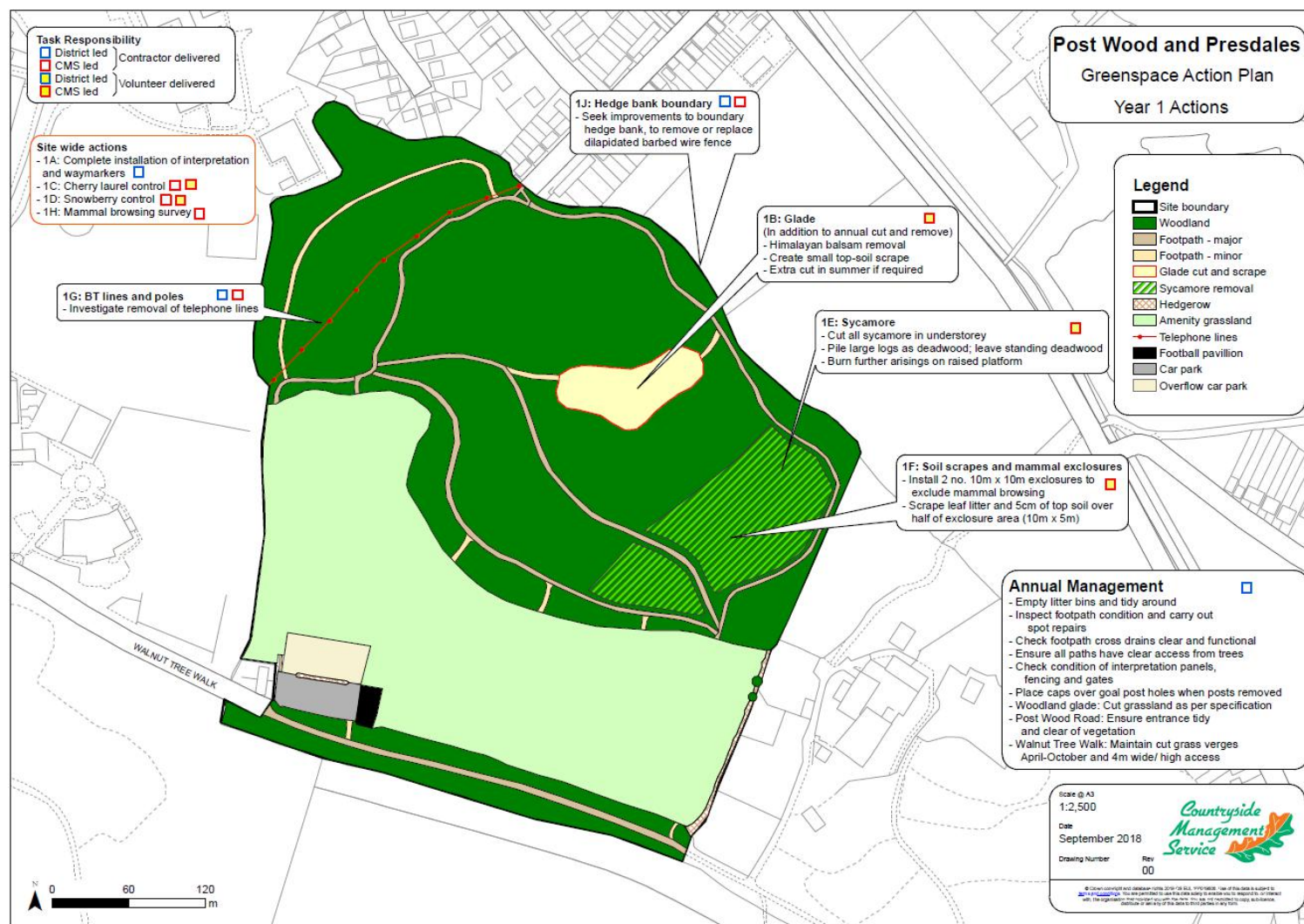


## Post Wood and Presdales Year 1 Actions 2019-2020

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Complete installation of new interpretation panels and waymarkers.	1A	April	EHC/ CMS	-	Maintenance contract		
Glade (in addition to annual cutting): Himalayan balsam removal by hand pulling Cut scrub if growth excessive.	1B	May-June	EHC/ CMS	-	Volunteers		
Glade: Carry out small area (10m x 5m) leaf litter/ top-soil scrape to trial exposing seed-bed.	1B	February	EHC/ CMS	-	tbc		
Cut all cherry laurel and remove from site (chipped). Pull out small laurel stumps (<10cm dia.).	1C	Autumn 2019	EHC/CMS	-	Volunteers/ maintenance contractor		Cutting and digging carried out by volunteers. Removal and disposal by maintenance contractor.
Treat cherry laurel stumps (>10cm dia.) to prevent regrowth. Inject or cap to prevent ingestion by mammals.	1C	Following above action	EHC/CMS	£250	Contractor		
Cut snowberry and remove root ball. Bag arisings and dispose off-site.	1D	Autumn 2019	EHC/CMS	-	Maintenance contract		
Cut sycamore in understorey – Area A. Burn arisings on raised platform.	1E	Winter 2019-20	EHC/ CMS	-	CMS volunteers		
Carry out 2no. light soil scrapes around hornbeams, and install 10m x 10m mammal exclosures, to trial protection.	1F	Winter 2019-20	EHC/ CMS	£200	CMS volunteers		
Investigate removal of telephone lines	1G	n/a	EHC/ CMS	-	Officer time		

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Survey population size and impact of mammals on tree health and regeneration	1H	Autumn	EHC/ CMS	-	Officer time		
Post Wood northern boundary – seek improvements to redundant barbed wire fence	1J	Year-round	EHC/ CMS	-	Officer time		
Produce and submit FC approved Woodland Management Plan		May-Sept	CMS	-	Officer time		
Apply to CS Higher Tier for Woodland Improvement		Mar-Apr 2020	CMS	-	Officer time		

## Year 1 Actions Map



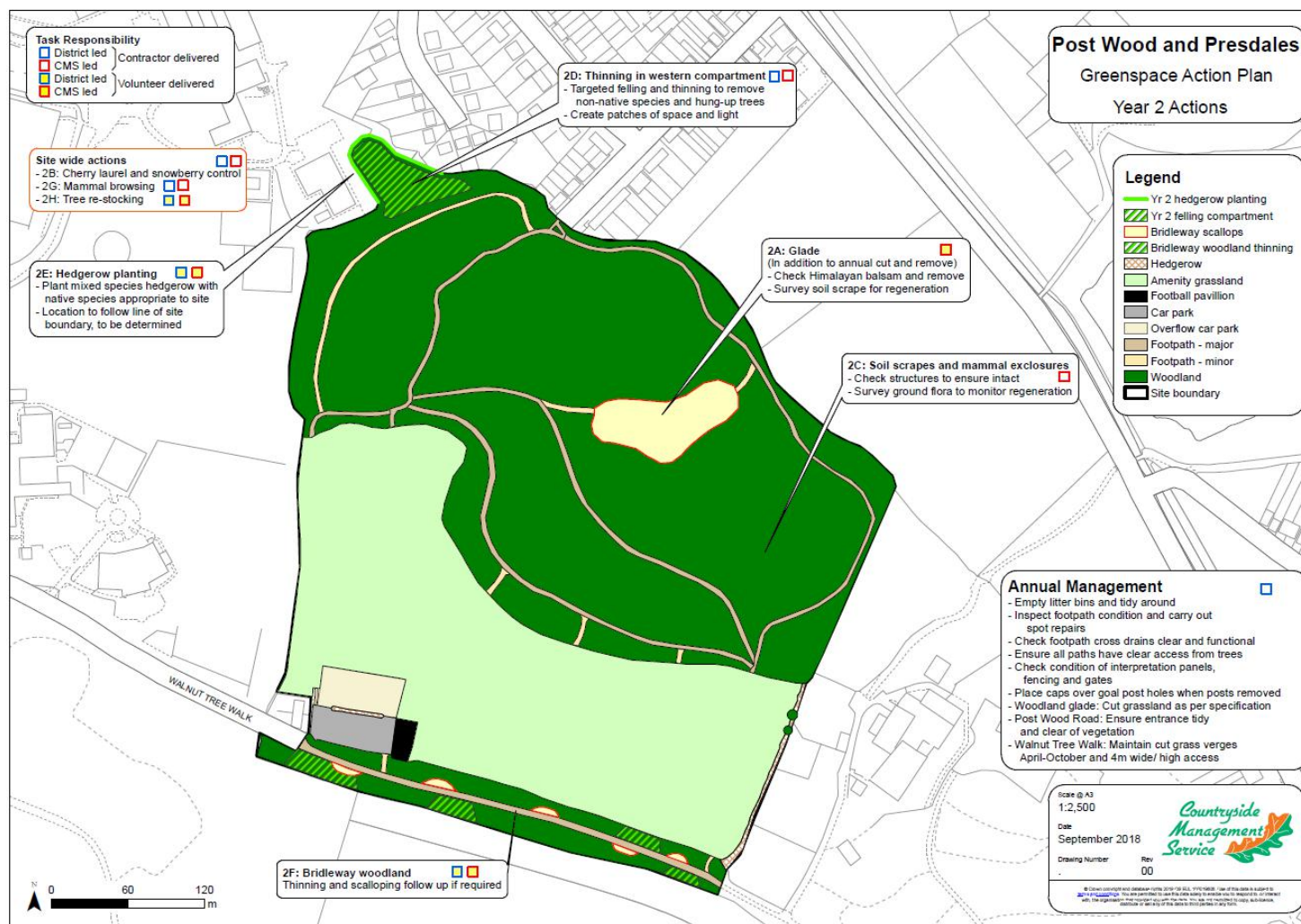
## Post Wood and Presdales Year 2 Actions 2020-2021

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Glade (in addition to annual cutting): Survey Himalayan balsam regrowth and carry out hand pulling if required.	2A	May-June	CMS	-	Officer time/ volunteers		
Glade: Survey soil scrape trial for wildflower and grass growth. Extend if successful; leave for a further year if not.	2A	June	CMS	-	Officer time/ volunteers		
Cherry laurel and snowberry: Survey control areas and wider woodland for regrowth. If present, control immediately.	2B	Autumn	EHC/ CMS		Officer time/ contractor		
Check status of woodland mammal enclosure, and repair if required.	2C	September, March	CMS	-	-		
Targeted felling and thinning in western compartment of Post Wood, to remove non-native trees and increase structural variety.	2D	October-November	EHC/ CMS	£2,000	Contractor		
Plant new hedgerow along western boundary of Post Wood	2E	Winter	EHC/ CMS (Volunteer task)	£250	Volunteers/ Tree planting budget		
Bridleway (Walnut Tree Walk): Carry out targeted thinning and scalloping of linear woodland	2F	Winter	EHC/ CMS	-	Volunteers		
Review mammal browsing survey results and implement action if required.	2G	April - July	EHC/ CMS	-	Officer time		
Tree re-stocking in target areas (if required)	2H	Winter	EHC/ CMS	£250	Volunteers/		Tree species appropriate for woodland: Hazel, hawthorn,



Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
					Tree planting budget		crab apple, rowan, willow

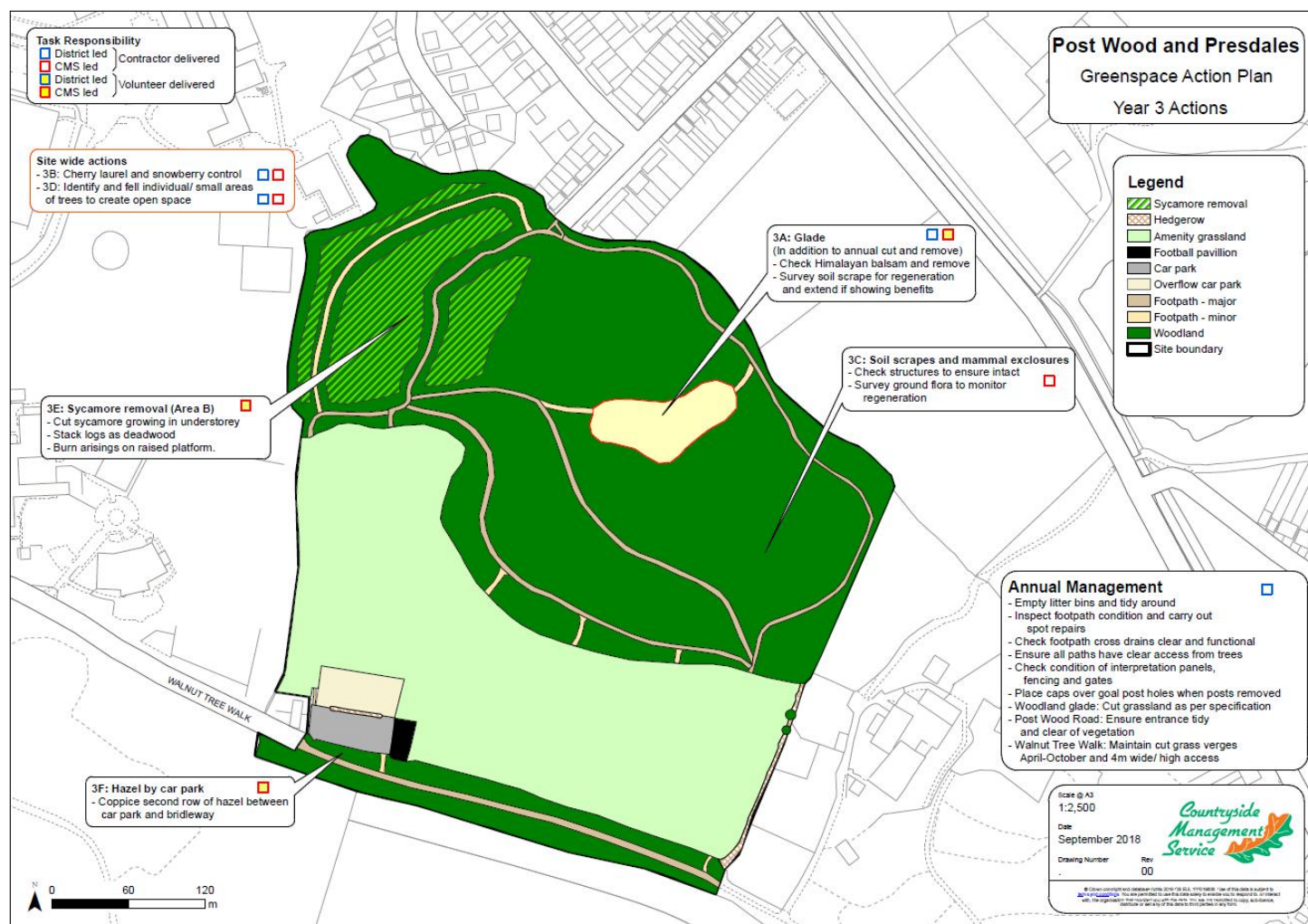
## Year 2 Actions Map



## Post Wood and Presdales Year 3 Actions 2021-2022

Action	Obj. ref	Timing /freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Glade: Assess soil scrape trial for wildflower and grass growth. Extend if successful, and revert to annual cutting.	3A	June/ winter	EHC/ CMS	-	Officer time		Survey wildflower growth in June. Target soil scrape for late winter if required.
Cherry laurel and snowberry: Survey for regrowth. If present, control immediately.	3B	Autum n	EHC/ CMS	-	Officer time/ contractor		
Survey woodland scrape areas for regeneration. If successful, repeat with another 2no. plots; if unsuccessful, assess and leave for further year.	3C	June	CMS	-	Officer time/ volunteers		
Identify and fell individual trees/ small areas of low value trees, to create small areas of open space. Ring-bark some or leave for deadwood.	3D	Oct- Nov	EHC/ CMS	tbc	Contractor		
Cut sycamore in understorey – Area B. Burn arisings on raised platform.	3E	Winter	CMS	-	Volunteers		
Coppice second row of hazel by Presdales car park	3F	Winter	CMS	-	Volunteers		

## Year 3 Actions Map

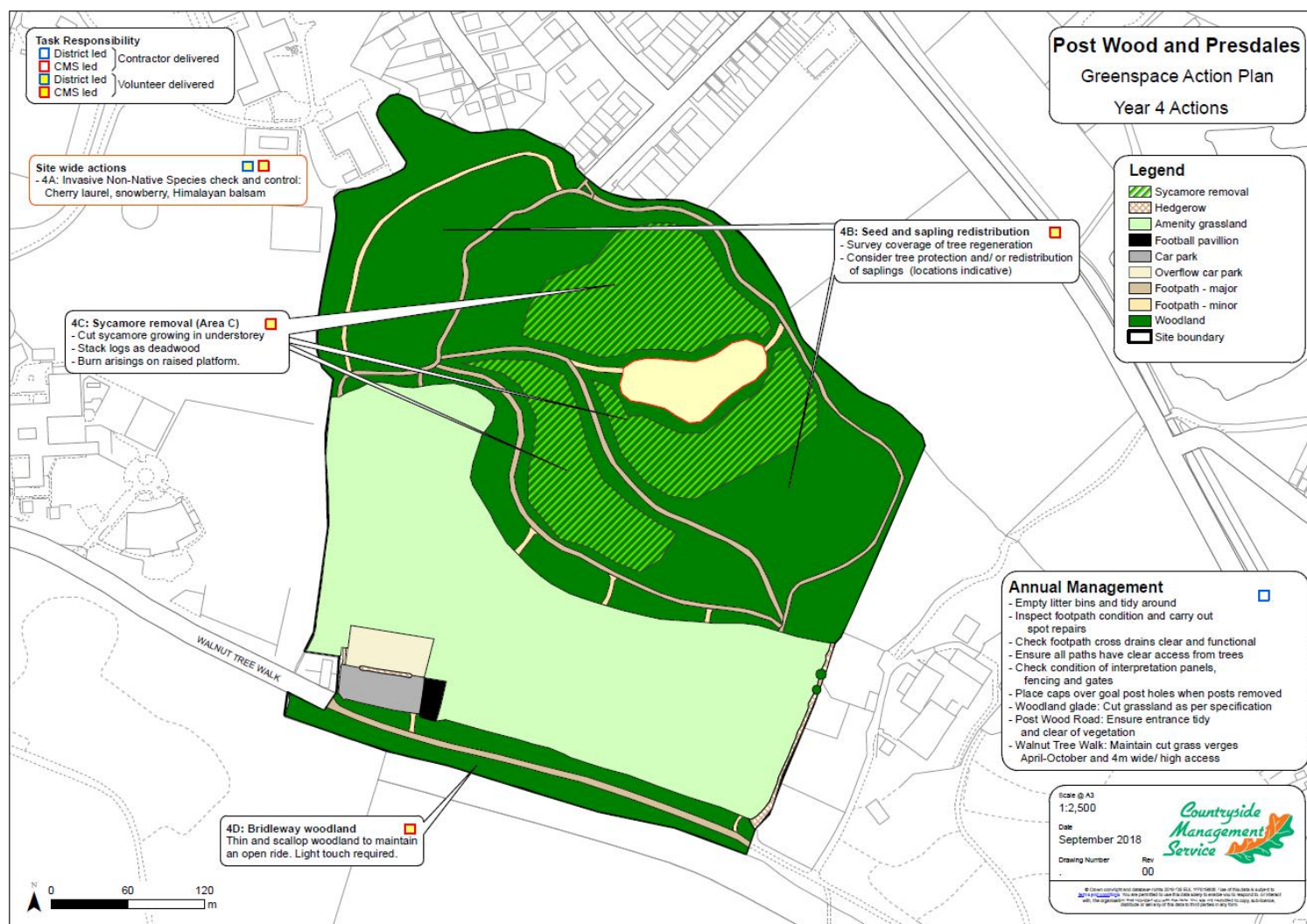




## Post Wood and Presdales Year 4 Actions 2022-2023

Action	Obj. ref	Timing /freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Invasive non-native species survey: Survey woodland for any INNS. If present, control immediately.	4A	June and Autumn	EHC/ CMS	-	Officer time/ contractor		
If regeneration remains poor, consider seed and sapling harvesting and re-planting. Tree saplings require location in mammal exclosures or other adequate protection	4B	Winter	EHC/ CMS	-	Volunteers		
Cut sycamore in understorey – Area C. Burn arisings on raised platform.	4C	Winter	CMS	-	Volunteers		
Bridleway (Walnut Tree Walk): Carry out targeted thinning and scalloping of linear woodland	4D	Winter	CMS	-	Volunteers		

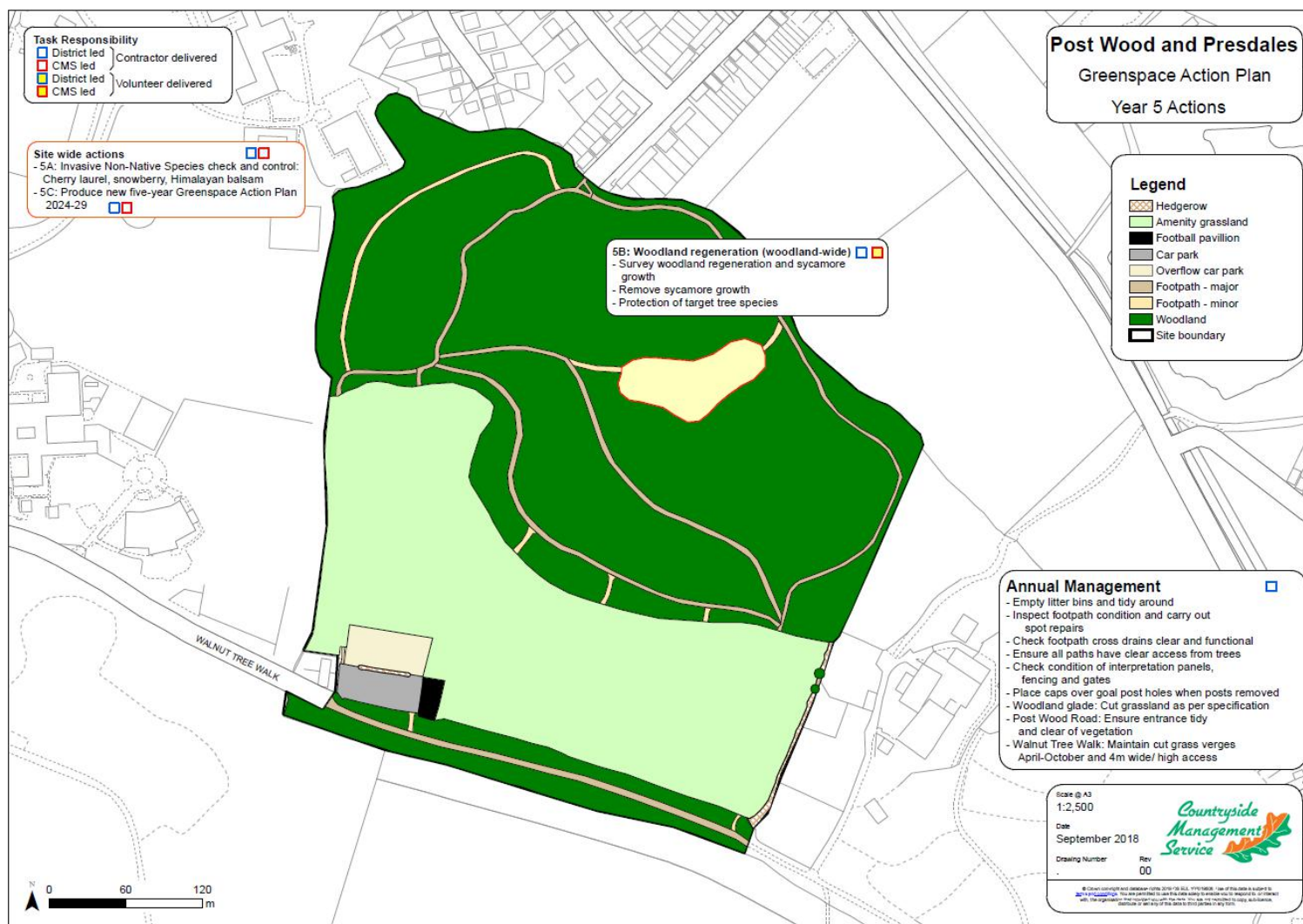
## Year 4 Actions Map



## Post Wood and Presdales Year 5 Actions 2023-2024

Action	Obj. ref	Timing/ freq.	Responsible	Est. cost	Funding and delivery	Status	Notes
Invasive non-native species survey: Survey woodland for any INNS. If present, control immediately.	5A	June and Autumn	EHC/ CMS	-	Officer time/ contractor		
Survey regeneration of ground flora and tree saplings, in trial management plots and generally across woodland, to monitor success of GAP restoration works.	5B	June	EHC/ CMS	-	Officer time		
Remove any sycamore regeneration, and install protection on target tree species if required.	5B	Winter	CMS	-	Volunteers		
Produce new five year management plan 2024-2029.	5C	Annual	EHC/ CMS	-	-		

## Year 5 Actions Map





## 6.0 SPECIFICATIONS

### 1 General prescriptions relevant to all woodland management operations

<i>Habitat Retention</i>	<ul style="list-style-type: none"><li>▪ All mature oak and hornbeam to be retained wherever practical.</li><li>▪ Regenerating native species to be retained wherever practical.</li><li>▪ Retain all standing and fallen dead wood where it is safe so to do, and take opportunities to increase dead wood provision.</li><li>▪ Care should be taken to protect ancient woodbanks and soils from mechanical damage.</li><li>▪ Encourage and leave to grow patches of bramble and scrub where they form valuable habitat and protect new tree growth.</li><li>▪ Avoid introduction of new species through planting or seed transfer.</li></ul>
<i>Visitor Safety</i>	<ul style="list-style-type: none"><li>▪ Members of the public to be kept a safe distance from active tree works with signs and or banks men. Access routes may require temporary closure.</li><li>▪ Where site boundaries may be compromised by tree removal, stumps are to be left higher or timber to be rolled into position to prevent unauthorised access to/ from adjacent land.</li></ul>
<i>Timing</i>	<ul style="list-style-type: none"><li>▪ Unless otherwise stated, all habitat management work will be undertaken between 1st September and 28th February.</li><li>▪ All woodland management work will aim to be undertaken outside of wettest winter months to minimise damage to soils and tracks.</li></ul>

### 2 Thinning and halo-thinning

<i>Details</i>	<ul style="list-style-type: none"><li>▪ Any thinning works will further the aim of reducing coverage of non-native species (e.g. sycamore) and encouraging natural growth/ regeneration of native species.</li><li>▪ Thinning to be gradual and small-scale (i.e. maximum 1/3 woodland thinned in one go) to maintain stable habitat conditions.</li><li>▪ Arisings to be disposed of appropriately through small amounts of deadwood stacking, removal off-site, or burning if possible (note ASNW requirements).</li><li>▪ Opportunities for deadwood creation to be realised through thinning works.</li><li>▪ <b>Halo-thinning</b> around crowded 'feature' trees will provide improved environmental conditions. Halo to be no larger in radius than half-height of feature tree.</li></ul>
<i>Timing</i>	<ul style="list-style-type: none"><li>▪ Thinning requiring mechanised techniques and/ or vehicles to be undertaken in autumn, to avoid worst weather conditions.</li><li>▪ Lighter thins involving volunteers can be undertaken at any stage between September and February.</li></ul>

### 3 Invasive Non-Native Species (INNS) management

<i>Details</i>	<ul style="list-style-type: none"><li>▪ Survey coverage and prevalence of INNS across woodland on an annual basis.</li><li>▪ Control each species by appropriate means, including:<ul style="list-style-type: none"><li>▪ Cherry laurel: Cut large plants to ground level. Grub out individual plant root balls.<ul style="list-style-type: none"><li>○ Control during September to March to have lowest impact on surrounding habitat.</li><li>○ Follow-up control regeneration.</li></ul></li><li>▪ Himalayan balsam: Pull plants at mid-growth stage (late May-June) before flowering and seeding. Pile arisings to rot.</li></ul></li></ul>
<i>Timing</i>	<ul style="list-style-type: none"><li>▪ Species dependent, see above</li></ul>

### 4 Woodland soil scrapes and tree protection

<i>Details</i>	<p>Soil scrapes:</p> <ul style="list-style-type: none"><li>▪ Select areas with no regeneration and/ or subject to sycamore removal.</li><li>▪ Undertake a manual leaf litter and top soil scrape, to expose a lower layer of soil where seed bed likely to be present (c. 15cm deep)</li><li>▪ Scrape to be 10m x 10m, and away from footpaths.</li><li>▪ Install post/ stake/ pole and plastic net fencing around trial scrape to exclude deer.</li></ul> <p>Tree protection:</p> <ul style="list-style-type: none"><li>▪ Protect individual naturally growing saplings in locations where they can be retained to maturity and will grow well.</li><li>▪ Use suitable protection to exclude deer (i.e. plastic tubes or wire mesh).</li><li>▪ Target appropriate tree species including oak, hornbeam, beech, crab apple, lime</li></ul>
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### 5 Tree re-stocking

<i>Details</i>	<ul style="list-style-type: none"><li>▪ Natural regeneration is the default and favoured method for new tree growth, due to the ancient woodland setting.</li><li>▪ If/ where regeneration or species diversity continues to remain poor following thinning and trial scrapes, re-stocking can be considered with species appropriate to the woodland.</li><li>▪ Provenance of trees should be from within the woodland or local landscape (transplant) where possible, or local nursery if brought in.</li><li>▪ Favour diversifying the woodland with appropriate species where possible, including beech, small-leaved lime, crab apple, hawthorn, hazel.</li></ul>
<i>Timing</i>	<ul style="list-style-type: none"><li>▪ Winter</li></ul>

## 6 Glade cutting and trial scrape

<i>Details</i>	<ul style="list-style-type: none"><li>▪ In early March, cut entire glade and remove arisings. Leave 10m wide scrub edge to glade</li><li>▪ In October, cut half of glade (alternate area each year) and remove arisings</li><li>▪ An extra cut may be required in early summer (May) if dominant plants (nettles, bracken, willowherb) are outcompeting wildflowers and grasses.</li><li>▪ Himalayan balsam to be hand-pulled in May each year if it persists.</li></ul> <p>Trial scrape:</p> <ul style="list-style-type: none"><li>▪ Assess need to undertake a trial scrape following two years of above cutting regime.</li><li>▪ If wildflower regeneration low, scrape leaf litter and top soil to 10-15cm deep over an area of 10m x 10m</li><li>▪ Bring in to cutting regime in year following scrape.</li></ul>
<i>Timing</i>	<ul style="list-style-type: none"><li>▪ March, May (if required), October</li></ul>