THE SPINNEY & NATURE RESERVE ECOLOGICAL ASSESSMENT

LITTLE HORWOOD PARISH COUNCIL
THE SPINNEY AND NATURE RESERVE, LITTLE HORWOOD, BUCKINGHAMSHIRE

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Wildlife Trust Consultancies

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Site Location	The Spinney, off Wood End, Little Horwood and The Nature Reserve, off Winslow Road, Little Horwood
Project Name	The Spinney & Nature Reserve Ecological Assessment
Project Code	FN24-222

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Version	2	

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SUMMARY

Future Nature Wildlife Trust Consultancy (WTC) was commissioned by Little Horwood Parish Council in March 2025 to undertake baseline surveys and provide broad management recommendations for three sites that they manage in the Parish. These sites are the Spinney and Nature Reserve which includes the Millennium Wood and a small area of linear habitat leading to the latter.

There are five non-statutory designated sites within 1km of the sites, spread around the Parish area and consisting of a mix of habitats including woodland, wood pasture, open water, wet meadows, and unimproved and semi-improved grassland. The whole 1km search area around the sites sits within a B-line, providing opportunities for connecting to the wider landscape.

Habitats present at the Spinney include wetland, streams and ditches, lowland mixed deciduous woodland and small parcels of grassland and scrub. The Nature Reserve habitats consist of native hedgerows, broadleaved woodland, a small pond, scrub and grassland. Habitats across the sites have the potential to support protected and notable species.

Key recommendations across the sites include phased removal of some ash with dieback, hedgerow improvements through laying, height reduction and protection of the ground around hedgerow bases, recording and monitoring of veteran trees, and some thinning of woodland areas to improve structural diversity and improve light levels in some areas. Management of wetland and pond areas to maintain open water and structural diversity, along with surveys for presence of amphibian and invasive species are also recommended. Some work to maintain path condition is also considered.

1. INTRODUCTION

1.1 BACKGROUND

Little Horwood Parish Council owns an area of land known as the Spinney, and a nature reserve and Millennium Wood in the village. All areas are largely managed by a volunteers with some support from contractors employed by the Parish Council. In order to inform future management of both sites, the Parish Council asked Future Nature to carry out ecological assessments of each. The results of those assessments are laid out in the following report, with broad recommendations for future management.

1.2 SITE LOCATION & DESCRIPTION

The sites are located in Little Horwood as shown on Figure 1, with the Spinney to the north of the village, off Wood End, and the nature reserve, Millennium Wood and meadow further south and largely adjacent to Winslow Road.

Little Horwood is located within the Horwood Claylands Landscape Character Area on the northern boundary of the Greenway Open Farmland Landscape Character Area[1]). Little Horwood itself occupies a hillside, spring line location, straddling a number of small water courses which drain south-westwards to the Claydon Brook which forms part of the Great Ouse catchment.

1.2.1 The Spinney

The Spinney comprises the site of a former moated manor house with mill and race, a Scheduled Ancient Monument, listed by Historic England as a 'Moated site'[2]. The majority of the area has been colonised by secondary woodland and scrub, with a small area of grassland. A ditch runs along the northern boundary and leads into a larger stream and ditch to the northwest, with the mill race leading away from the southwest corner of the moat to feed into the stream further to the southwest. There is an area of dense scrub in the south of the site bordering the mill race and a small, open area of grassland adjacent to this. Public footpaths run through the site which also comprises part of the recreation ground to the west of the monument and a marsh area to the east.

[1] AVDC Landscape Character Assessment LCA 4.8 and 4.10

[2] https://historicengland.org.uk/listing/the-list/list-entry/1018668 accessed 15/07/2025

1.2.2 Nature Reserve

The area described as the Nature Reserve is divided into two broad sections: a linear hedged woodland strip along the footpath adjacent to the allotment site on Winslow Road and around the field boundaries towards the Millennium Wood. A permissive path separates this section from the two adjacent sites known locally as the Nature Reserve and the Millennium Wood.

The Nature Reserve allotment path and woodland comprises an L-shaped linear strip of planted native broadleaved woodland with a large number of fruit trees planted within it. The site surrounds the main public footpath adjacent to the allotment site which leads to the Nature Reserve and Millennium Wood.

The southern block consists of the Nature Reserve which was planted about 40 years ago on a former tip and the more recent Millennium Wood, which again has a number of fruit trees as well as a small meadow area. The sites are bordered by mature hedgerows which merge with the woodland edges.

The site locations are shown in Figure 1 and the boundaries in Figures 2 and 3.

Figure 1: Site Locations

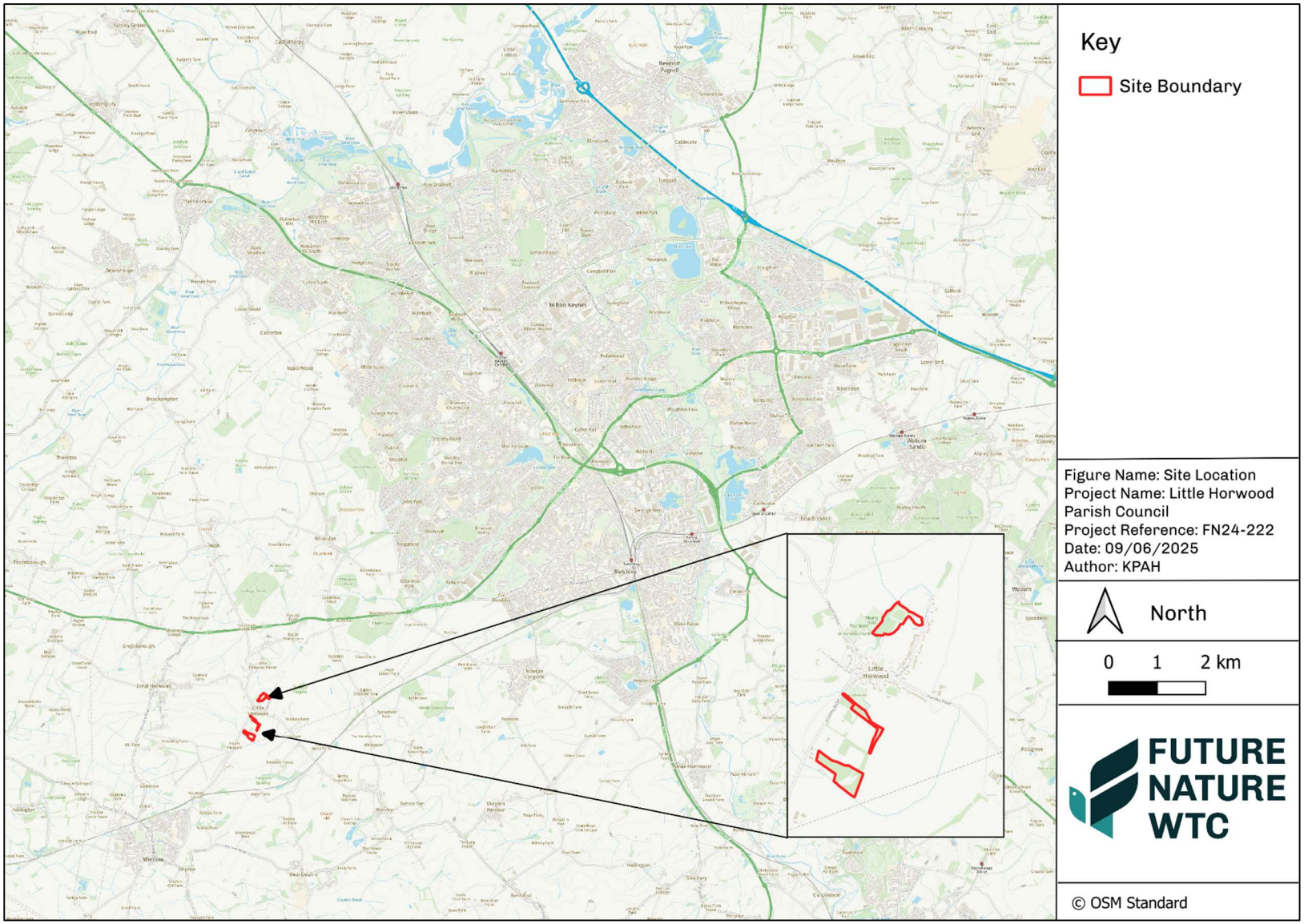


Figure 2: The Spinney Boundary

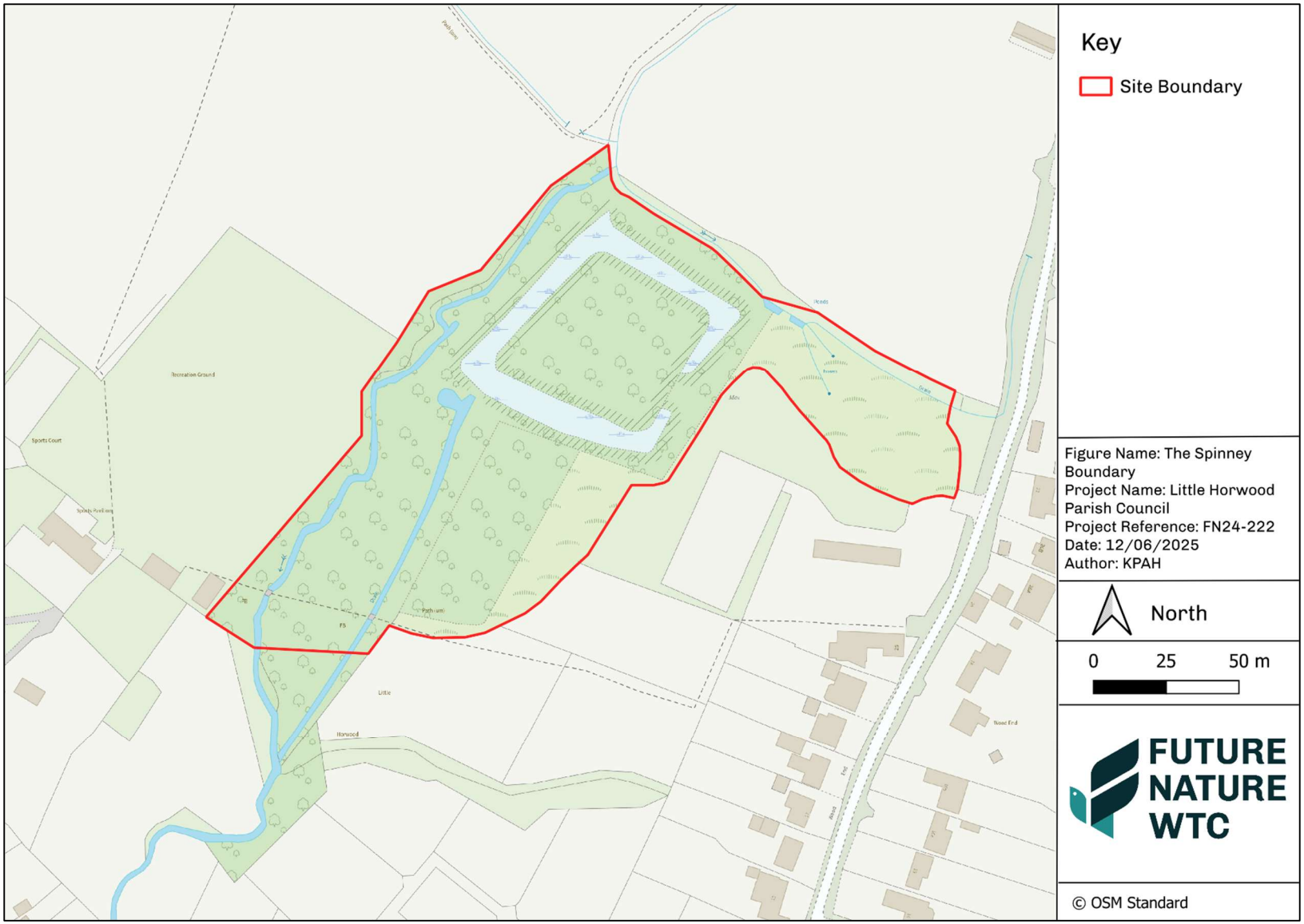
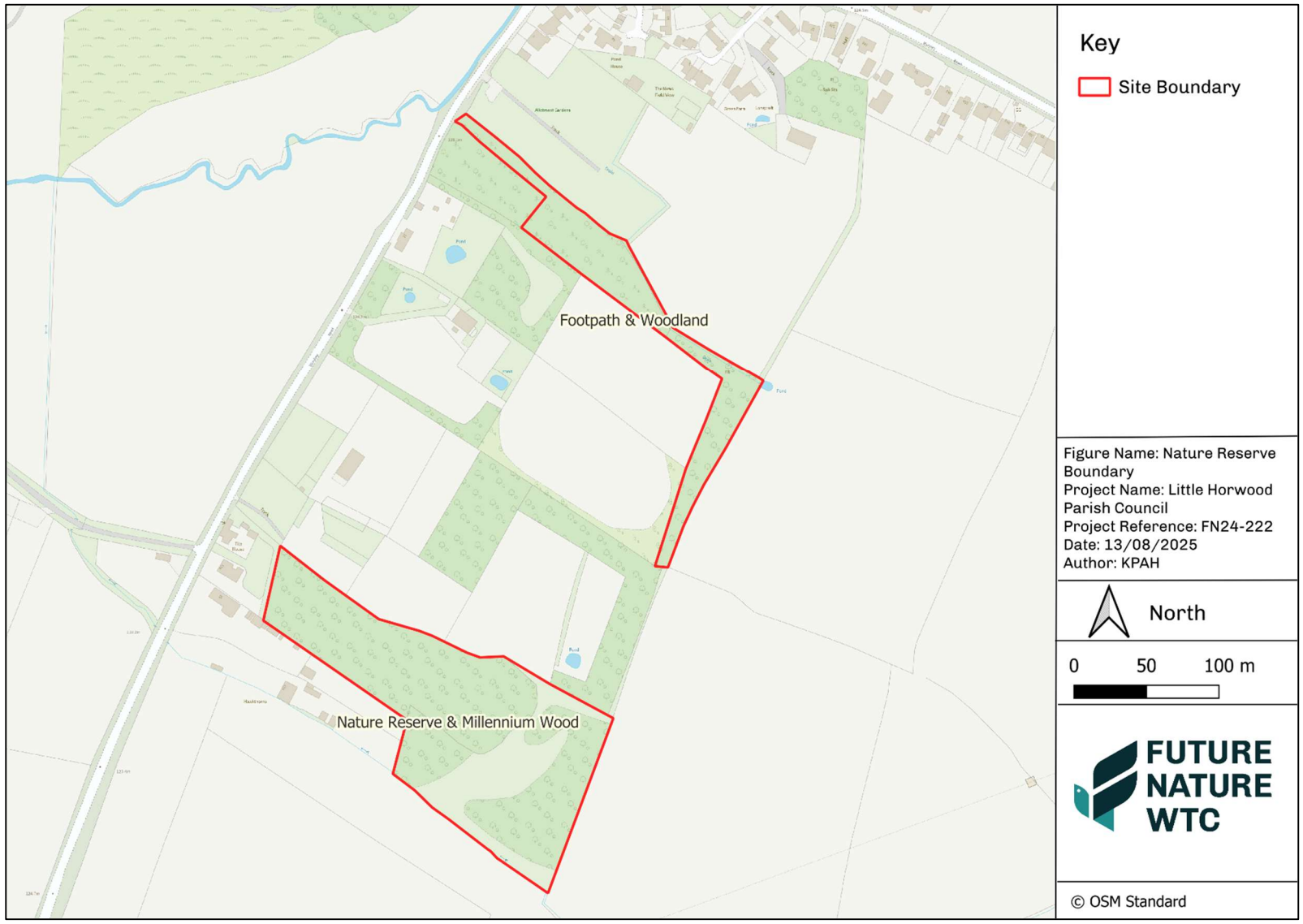


Figure 3: Nature Reserve Boundary



1.3 REPORT OBJECTIVES

This report presents the details of the ecological assessment, and the objectives of the report are to:

- Identify important ecological features within 1km of the sites, including statutory and non-statutory designated sites, areas of priority habitat, and records of protected and notable species.
- Describe the habitats present on the sites and their ecological condition.
- Evaluate the potential for the site to support protected and notable species.
- Provide broad recommendations for future management and wildlife enhancements that can be implemented at the sites.

2. METHODOLOGY

2.1 DESK STUDY

A desk-based study was undertaken to obtain information about the ecological context of both sites within the wider landscape, as well as the presence of any designated sites of nature or conservation importance, priority habitats and records of protected and notable species from the surrounding area.

The Department for Environment, Food, and Rural Affairs' Multi Agency Geographic Information for the Countryside (MAGIC) website[3] was consulted for information on statutory designated sites (such as Special Protection Areas (SPA), Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI)), priority habitats (comprising those listed under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006), and licence returns for European Protected Species within the Parish boundary.

The Buckingham and Milton Keynes Environmental Records Centre (BMKERC) was contacted to obtain records of protected and notable species (including invasive non-native species) and information about non-statutory designated sites within 1km of the boundaries of both sites. Data from BMERC was returned on 15th May 2025.

Finally, aerial imagery and Ordnance Survey mapping were reviewed to obtain information about the context of the sites and connectivity to the wider landscape, with particular attention paid to potential habitat corridors which could connect them to off-site areas of habitat.

2.2 FIELD SURVEY

Katie Horgan (PhD MSc), Community Ecologist at Future Nature WTC carried out walkover surveys of the Spinney and Nature Reserve on 3 April and 2 May 2025 respectively.

The surveys were undertaken with reference to the UK Habitat Survey guidance[4]. The ecologist carried out a walkover of the Site, identifying and mapping the habitats present and making notes

[3] DEFRA, "Multi Agency Geographic Information for the Countryside (MAGIC)," Department for Environment, Food, and Rural Affairs, n.d., https://magic.defra.gov.uk/

[4] UKHab Ltd, "UK Habitat Classification Version 2.0," 2023, https://www.ukhab.org/

on the range of plant species present as well as their relative abundance using the DAFOR scale. Habitats were classified according to the UK Habitat Classification system.

Where necessary to inform the habitat classification, representative 1-meter squared quadrats were taken within the habitat parcel to obtain information about the number of species per meter squared.

2.3 BIODIVERSITY NET GAIN HABITAT CONDITION ASSESSMENT

Although the sites are not being used either as habitat banks or for development, Biodiversity Net Gain (BNG) habitat condition assessments were undertaken during the UK Habitat Classification surveys described above, to help determine the habitat's current condition. For each habitat parcel identified, the Statutory Biodiversity Metric equivalent habitat classification was noted (where this differed from its UK Habitat Classification) and a habitat condition assessment carried out using the relevant Statutory Biodiversity Metric condition assessment sheet for the habitat type. The condition assessments were carried out with reference to the guidance in the Statutory Biodiversity Metric User Guide[5].

Each condition assessment sheet details a series of criteria for which the habitat parcel is scored; the scores are then tallied to provide an overall score that indicates whether the habitat parcel is in 'poor', 'moderate', or 'good' ecological condition.

The results of the condition assessment are given in field survey tables 3, 5 and 7.

2.4 LIMITATIONS

BNG uses habitats as a proxy for biodiversity and is a simplification of the real world. Ecological function must also be considered to manage this limitation, and this is detailed throughout relevant sections of the report. Additionally, any survey is only a snapshot of the habitats and species observed on that day and cannot provide a full account of the ecology present.

[5] DEFRA, "The Statutory Biodiversity Metric User Guide," July 2024, https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

3. RESULTS

This section sets out the results of the surveys and assessment undertaken of the sites.

3.1 DESK STUDY

3.1.1 Designated sites

A search of the MAGIC website was undertaken to identify statutory designated sites within 1km of the sites and showed that there are no statutory designated sites within the search area.

The data provided by BMERC identified five non-statutory designated sites within 1 km of the sites: one Biodiversity Opportunity Area (BOA), two Biological Notification Sites (BNS) and two Local Wildlife Sites (LWS), as detailed in Table 1 below:

Table 1: Non-Statutory Designated Sites within 1km of the project sites

Designation	Site Name	Description	Distance (Spinney)	Distance (Reserve)
Biodiversity Opportunity Area	Whaddon Chase	A large 225.2ha area divided into four distinct units covering mixed broadleaf woodland and standing open water. Notable for its scattered veteran trees and oak pasture woodland. BOA's identify areas where the creation of certain habitats should be targeted, in this case this includes fens, hedgerows, lowland meadows, ponds, woodland and wood pasture.	500m west	
Biological Notification Site	Wet Meadow near Hill Farm	Wet meadow southwest of Hill Farm, Little Horwood, on south facing slope, with stream at base of slope.	340m	90m
Biological Notification Site	Horwood House	House grounds include parkland, semi-natural woodland and cattle grazed improved pasture. Areas of wetland related to the stream running through the south of the site.	957m	400m
Buckinghamshire Local Wildlife Site	Little Horwood Airfield	One of a series of fields on the site of the old WW2 airfield, includes wet, ridge and furrow pasture, situated approximately 1km to the west of Little Horwood. Bordered on all sides by unimproved/semi-	725m	376m

		improved pasture, the complex of fields represents a large tract of good quality grassland.		
Buckinghamshire Local Wildlife Site	Norbury Coppice	An ancient wood northeast of Little Horwood with trees including ash, oak and field maple with shrub layer of hazel coppice, hawthorn, elder Sambucus nigra, blackthorn and other species. Broad rides host a number of damp patches with rush species and ragged robin *Lychnis flos-cuculi*, primrose *Primula vulgaris* found throughout the wood.	520m	947m
B-Lines		Both sites are situated fully within a B-Line, an initiative led by Buglife[6], creating a series of interconnected insect pathways or corridors across the landscape.	0m	0m

3.1.2 Priority habitats

The data search and a search of MAGIC revealed a total of five different priority habitats within 1km. The findings are summarised below:

- **Ancient Woodland** – the search returned one 4.2ha parcel of ancient & semi-natural woodland at Norbury Coppice which is 520m to the north of the Spinney.
- **Lowland fens** – there is a small 0.2ha area of lowland fen, with the nearest point 475m to the west of the reserve.
- **Traditional Orchard –** there are three traditional orchards within 1km of the sites, each measuring approximately 0.2ha in size. The closest parcel is 37m away from the reserve area.
- **Wet Woodland** – Norbury Coppice is also designated as wet woodland.

3.1.3 European Protected Species Licencing

There were no licence returns within the 1km search area.

3.1.4 Protected and Notable Species

The potential for the habitats on site to support protected and notable species is set out below in Table 2. The results of the data search are available in Appendix B.

[6] https://www.buglife.org.uk/our-work/b-lines/

Table 2: Potential for protected and notable species

Species/group	Protection/ Designation	Desk study results *(protected/notable species recorded within 1km)*	On site habitat suitability	Potential/ confirmed presence?	Further survey recommended *(see Section 4)*
Amphibians	Red list – IUCN WCA5 County Interest	A total of 2 amphibian species	Common frog *Rana temporaria* and great crested newt *Triturus cristatus* (GCN) were recorded within 1km of the sites with one record located 230m from the Spinney and 280m from the reserve sites. Habitats on both sites are likely to support amphibian species, particularly the wetland and woodland areas at the Spinney.	Yes	Yes
Bats	Red list – IUCN Red data book – national lists WCA5 County Interest	A total of 10 bat species	A high number of bat species were recorded within the 1km search area around the sites with records largely from the urban area of Little Horwood village. It is likely that both sites support a number of bat species due to their connectivity to the wider landscape through the hedgerow network across the area, and the presence of mature and veteran trees, particularly at the Spinney.	Yes	No
Birds	Red list – IUCN Red data book – national lists WCA1.1 County Interest	A total of 36 bird species	A high number of protected and notable bird species were recorded within the 1km search area around the sites with records spread through the area. Some records were from the Spinney with the most recent from 2017. Habitats on all three sites are likely to support an assemblage of common and widespread bird species, as	Yes	No

			well as some of the protected and notable species recorded due to the variety of suitable habitats present. Species seen/heard during surveys: green woodpecker, robin, dunnock, wren, red kite, great tit, blue tit, blackbird, chiffchaff, jackdaw, whitethroat, crow.		
Invertebrates	County Interest	A total of 3 invertebrate species	A very low number of protected and notable invertebrates were recorded just outside the 1km search area. Habitats on all three sites are likely to support an assemblage of common and widespread invertebrates and may also support protected and notable species due to the variety of habitats present. These include woodland with a significant quantity of deadwood both lying and standing, grassland and open glades, wetland, streams and small areas of open water. Species seen on survey visit: speckled wood, peacock, large white, orange tip, brimstone, small tortoiseshell, red admiral butterflies. Buff-tailed bumblebee, European hornet.	Yes	No
Terrestrial Mammals	Red list – IUCN Red data book – national lists County Interest	A total of 3 terrestrial mammal species	Hedgehog *Erinaceus europaeus*, hare *Lepus europaeus* and badger *Meles meles* were recorded within the 1km search area. Habitats on all three sites are likely to support a number of common and widespread mammals and may also support protected and notable species.	Yes	Yes
Plants and lichens	Red list – IUCN Red data book – national lists WCA8	A total of 17 plant, fungi and lichen species	A low number of notable plants and lichen were recorded within 1km of the sites and are found spread across the area.	Yes	No

	County Interest		No protected or notable plants or lichen were identified during the field survey and the potential for them to be present was considered low.		
Invasive Non-native Species		A total of 3 invasive non-native plant species	One record of Canadian water weed was probably located in the pond at the reserve. This record is from 1990 and was not confirmed on the 2025 survey visit, however an additional survey to check for presence is advisable. Other INNS records were from one location approximately 600m from the sites at the nearest point. No INNS were recorded on the survey visits.	No	No

3.1.5 General land use

A review of aerial photography revealed that the surrounding land use is predominantly agricultural, grassland and woodland with a small amount of residential use in the village. Little Horwood is connected to nearby towns and villages by Little Horwood Road and Winslow Road, the B4033 to the west and by the A421 to the north. The immediate landscape surrounding Little Horwood is a patchwork of farmland interwoven with a network of hedgerows and farm buildings. There is one main watercourse through the village which rises on land just to the north of the Spinney and runs from the northwest to the southeast through the village and is a tributary of the Claydon Brook.

3.2 FIELD SURVEY

3.2.1 UK Hab Classification Survey

The types of habitat identified on the sites have been categorised using the UK Habitat Classification and in most cases given a condition score using the statutory metric as guide for areas for improvement.

The habitat features found in the survey area are described below in Tables 2-7. The locations of these features are presented on the baseline habitat maps in Figures 3, 4 & 5.

Broad management recommendations for each area are given in Section 4.

3.2.2 The Spinney

The Spinney comprises a small area of wetland to the northeast, and a woodland that has largely regenerated over the past 100 years on the former site of a manor house and mill. The site is a Scheduled Monument listed on Historic England as a 'moated site 200m north east of St. Nicholas's Church'[7] and includes the former mill also located within the site. The main house platform sits within the moated area and this feature is a defining characteristic of the site. It delineates a central woodland area that is largely inaccessible and unmanaged, while the surrounding broadleaved woodland, footpaths and ditches that are publicly accessible are managed for multiple uses. The remains of the mill and millrace are heritage features adding interest to the site, and the race, along with other streams and ditches on the site, provides a valuable water resource. There is also an area of rough grassland adjacent to the wooded area. A total of four different habitat types and one class of linear feature were recorded during the survey.

Tables 3 and 4 refer to Figure 3, which is located on page 30.

Table 3: UK Habitat Survey Results, The Spinney

Habitat Feature	Area (ha) Length (m)	Figure 3 reference	Condition	Description	Photo
f – wetland	0.229	Wet1	Poor	Small wetland area recently burnt at time of survey. Dominated by common reed *Phragmites australis* with occasional lesser celandine *Ficaria verna*, common nettle *Urtica dioica*, goat willow *Salix caprea*, hard rush *Juncus inflexus*, cocksfoot *Dactylis glomerata*, false oatgrass *Arrhenatherum elatius*, and creeping buttercup *Ranunculus repens*. A drain runs along the northern boundary and joins the stream that issues from the wetland, as shown	

[7] https://historicengland.org.uk/listing/the-list/list-entry/1018668?section=official-list-entry accessed 29/07/2025

				on Ordnance Survey mapping. At the time of survey there were plans to (re)create up to 5 ponds in this area. There is a mown path along the southern edge leading down to the woodland and moat.	
h3 – dense scrub	0.019	S1	Poor	Patch of dense bramble *Rubus fruticosus* scrub in northwest corner of wetland area providing important cover at this end of the site as the ditch and tree line are connected to wider landscape. Some burnt off by fire.	
w1f – lowland mixed deciduous woodland **49 – Freshwater – artificial**	1.486	W1	Good	An approximately 120-year-old woodland that is multi-use and publicly accessible and has regenerated on the former site of the Manor House and Mill, surrounded by a moat. Parts of the moat had been recently cleared at the time of survey and forms the southeast boundary to the woodland, while the northeast and northwest boundaries are formed by streams. A diverse mix of mature, semi-mature and young trees. Abundant ash with signs of dieback. Frequent goat willow, sycamore *Acer pseudoplatanus*, field maple and occasional oak. With blackthorn *Prunus spinosa*, hazel, willow *Salix sp.*, hawthorn understorey. There is a circular footpath around the site and trees along this have been previously audited. Several goat willow were removed in winter 24/25 and some coppice works have been started to improve structural diversity.	 

				The central woodland area inside the moat has been left unmanaged and is not easily accessed. Standing deadwood, log piles and coppice stools are present throughout the site. There are frequent trees with veteran features.	
r2a Rivers (priority habitat)	0.226	D1	Poor	Stream along northwest boundary which separates the site from surrounding fields and recreation ground. Narrows in places with steep bank particularly on NW side. Very shaded although some trees had been removed during winter works 24/25 to increase light levels. The source for the stream rises in two locations: on-site approximately 100 m to south within the wetland area; and off-site 400m to north adjacent to Little Horwood Manor.	 
r1 - Standing open water and canals		D2		Mill race leading from the moat through the site to join the stream to the south. Confluence outside survey area. Majority of length is overgrown and filled with deadwood. It reportedly flows (pers com) but deadwood blocking is retained to slow flow and prevent downstream flooding. Aquatic species present include greater water parsnip *Sium latifolium*, watermint *Mentha aquatica* and brooklime *Veronica beccabunga*.	 

				The ground on either side of the mill race is raised and may be remains of previous earthworks and former buildings[8]. Not condition assessed	
g3 – neutral grassland **16 – tall forbs**	0.15ha	G1	Moderate	Small parcel of previously grazed, tussocky grassland and ruderal vegetation that sits in a shallow dip with scrub encroachment from the woodland edge. Was previously fishponds for the manor. Dominated by great willowherb *Epilobium hirsutum*, and abundant meadowsweet *Filipendula ulmaria*, with frequent celandine and occasional common nettle, hogweed *Heracleum sphondylium*, hard rush and spear thistle *Cirsium vulgare*. Grasses include cocksfoot, perennial rye grass *Lolium perenne*, and fescue sp. *Festuca sp.*	
r1 - Standing open water and canals	0.218	D3	poor	Footprint of former moat with some wet areas but generally not a ditch holding year-round standing water and is more characteristic of wet grassland and woodland in places. Species include great willowherb, rosebay willowherb *Chamerion angustifolium*, ground ivy *Glechoma hederacea*, common nettle, lesser celandine, common reed, spear thistle and sedges *Carex sp.*. The southern area was recently cleared of scrub and large willow in order to keep an open character along this edge and to reveal the Moat, an historic feature.	 

[8] https://historicengland.org.uk/listing/the-list/list-entry/1018668?section=official-list-entry

Table 4: The Spinney Target Notes

Target notes highlight areas of interest across the site and are distinct from the habitat descriptions given above.

Habitat Feature	Figure 3 reference	Description	Photo
TN1	1	Mounded banked area around the wetland, possibly previously used as shooting butts. Foxes reported to be using this area and the scrub (S1) prior to burning.	
TN2	2	Young ash *Fraxinus excelsior* scorched from the fire but likely to recover.	 TN2
TN3	3	There are a number of saplings planted around the site either as individuals or in small groups, mostly comprising oak *Quercus* sp., hazel *Corylus avellana*, field maple *Acer campestre*.	 TN3
TN4	4	Point of possible ingress of water from pond system leading form Wet1 to moat. There are plans to put in a land drain to reduce flooding onto path.	

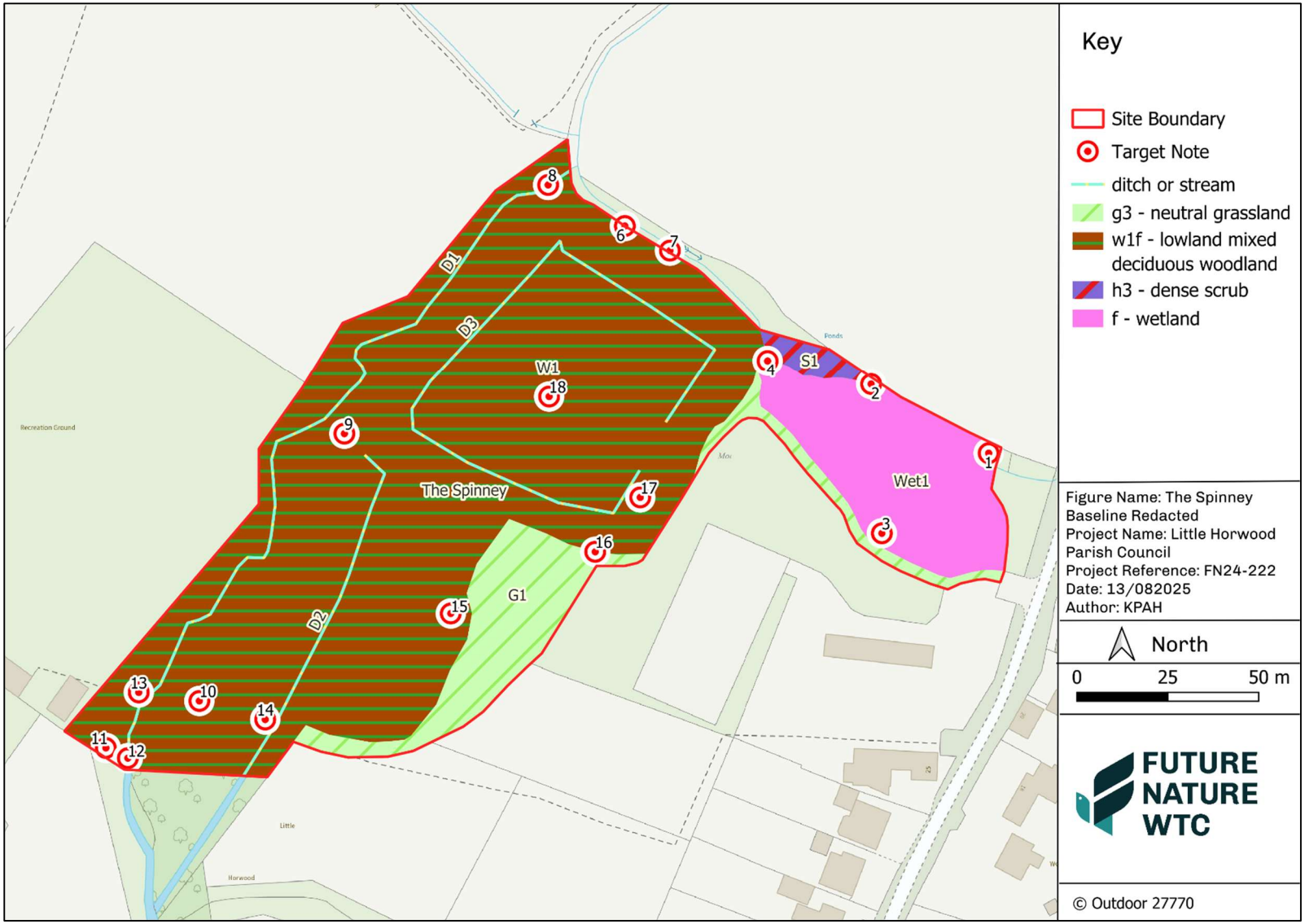
TN5	5	Occasional standards newly planted and throughout the site.	
TN6	6	Ivy *Hedera helix* covered veteran ash with bat roost potential	 TN6  TN7
TN7	7	Stream/ditch forming northeastern boundary of the site but outside survey area. Land up to bank managed by Parish Council. Heavily shaded by trees which are probably outgrown hedge but most now mature and veteranized.	
TN8	8	Bridge at confluence of stream, ditch and moat with veteran ash adjacent	 

TN9	9	Site of former mill where mill race descends through the main site. Includes visible remains of the mill wall with several ash growing through the structure as well as large lying logs and lots of lying dead wood. The stone walls may be providing habitat for invertebrates, reptiles and amphibians, although there were no records for reptiles returned in the data search.	
TN10	10	Glade area used for Forest Church and nearby nursery with access to recreation ground. Species include numerous young ash, oak and field maple, with some bramble scrub that has been recently cleared back to the edges.	  

TN11	11	Veteran trees including two boundary ash trees and a large mature hazel coppice stool.	
TN12	12	Multiple grips across stream to reduce flow and downstream flooding.	
TN13	13	Dead sycamore next to stream.	 TN13  TN14
TN14	14	Veteran field maple standing on higher ground above the glade.	

TN15	15	Scrubby woodland edge with dominant willow sp. and blackthorn.	
TN16	16	Planted standards along edge of grassland.	
TN17	17	Recently opened area at woodland edge to increase visibility, retain integrity of moat and provide structural diversity of woodland.	
TN18	18	Central woodland area on former house platform. Species composition as for W4 but generally denser understorey due to reduced public access.	

Figure 3: The Spinney Baseline Habitats



3.2.3 Nature Reserve – Reserve and Millennium Wood

These two sites are located in the south of the village and form one contiguous site. The Nature Reserve was planted approximately 40 years ago on the site of a former tip. Species composition and planting density reflect preferred planting schemes of that period. The Millennium Wood, as its name suggests, was planted more recently and is again rather dense but has a slightly different species composition with more fruit trees planted within the woodland blocks. Both woodland areas merge and the delineation between them is not always clear on the ground, although there is a remnant fence between them. An area of grassland also separates some of the Millennium Wood planted areas but they have been treated as one woodland block in this report as they have been planted and managed in the same way and have equivalent composition.

Tables 5 and 6 refer to Figure 4, which is located on page 35.

Table 5: UK Habitat Survey Results, Nature Reserve and Millennium Wood

Habitat Feature	Area (ha)	Figure 4 reference	Condition	Description	Photo
w1g – other woodland, broadleaved	1.21	W2	Moderate	The Nature Reserve woodland was planted on a former tip approximately 40 years ago. A narrow path leads into the woodland with many semi-mature ash showing signs of dieback. Other tree species include sycamore, hazel, walnut *Juglans regia*, small-leaved lime *Tilia* cordata, cherry *Prunus avium*, horse chestnut *Aesculus hippocastanum*, oak, beech *Fagus sylvatica*, silver birch *Betula pendula* and field maple. The understorey is comprised of blackthorn, hawthorn, hazel, elder *Sambucus nigra*, holly *Ilex aquifolium*, rowan *Sorbus aucuparia*, whitebeam *S. aria*, yew *Taxus baccata* and crab apple *Malus sylvestris*. Cow parsley	 

				Anthriscus sylvestris dominates the ground flora with patches of dog's mercury *Mercurialis perennis* and occasional Spanish bluebell *Hyacinthoides hispanica* and cuckoo pint *Arum maculatum*. Many of the trees are ivy covered which is also abundant on the ground. There is a large amount of standing deadwood largely due to dieback but there is also evidence of squirrel and deer damage. The woodland is quite even aged, with some regeneration of ash, rowan, and hazel saplings. However, light levels are likely to be too low for successful growth. Ash dieback appears to have created some glades due to sparser leaf cover but light levels are still limited.	
w1g	0.171 and 0.491	W3	Moderate	Millennium Wood with similar characteristics to W2 but younger with frequent hazel coppice stools. In two separate parcels but both have the same character, densely planted with the addition of fruit trees such as cherry, pear and apple, and could be described as a fruiting woodland. Currently hazel and hawthorn form much of the canopy but species including walnut, lime, oak and cherry may replace these over time. The woodland edge facing the meadow, particularly on the parcel connected to W2 forms a scrubby edge. Significant squirrel and deer damage is evident.	 

g3 neutral grassland	0.45	G2	poor	Open meadow area dominated by cow parsley and false oatgrass, with lower area dominated by common nettle. Other species present include common dandelion *Taraxacum officinale*, white clover *Trifolium repens*, broad-leaved dock, hogweed, cowslip *Primula veris*, spear thistle, poa sp., meadow buttercup *Ranunculus acris* and lady's bedstraw *Galium verum*. The grassland is currently managed with alternate annual cuts of upper and lower area.	
h2a - hedgerow (priority habitat) 50	0.123	H1	Moderate	Scrubby native hedge with trees adjacent to footpath and separated from ditch by fence line. Species include ash, hawthorn, hazel, field maple and elm with ash providing a large amount of deadwood.	
h2a - hedgerow (priority habitat) 11	0.067	H2	poor	Native hedge adjacent to footpath on eastern boundary of the site. Some sections are sparsely populated with trees outgrown to standards and the canopy extent of making it largely part of W3 around footpath. Some trees are off-site on the field side.	

Table 6: The Nature Reserve and Millenium Wood Target Notes

Habitat Feature	Figure 4 reference	Description	Photo
TN1	1	Small, lined pond (approximately 5mx3m) within nature reserve woodland. Dominated with yellow flag iris *Iris pseudacorus* and common duckweed *Lemna minor*. Surrounded by nettles, stickyweed *Galium aparine*, and hogweed.	
TN2	2	Scrubby woodland edge, bramble dominated	
TN3	3	Area dominated by common nettle.	
TN4	4	Group of grey poplar *Populus canescens* in the southern corner of the site.	

Figure 4: The Nature Reserve and Millennium Wood Baseline Habitats

3.2.4 Nature Reserve – allotment footpath and woodland

This area comprises the linear stretch of footpath adjacent and to the south of the allotment site off Winslow Road and leading south to the Millennium Wood and Nature Reserve sites. At the entrance there is a parcel of private woodland plantation on the southern side of the path before it opens out to woodland owned by the Parish Council. The northern edge of the path consists of a ditch and hedge that separates the path from the allotments. The woodland area has been planted throughout with native woodland species and fruit trees, with one parcel classified as orchard during the survey visit. After approximately 260m the path turns southwards with the woodland and hedged area either side narrowing along the wide footpath. Hedgerows are outgrown on both sides with some areas transitioning to a more scrub-like habit, particularly where the path meets the permissive path between the sites.

Tables 7 and 8 refer to Figure 5, which is located on page 40

Table 7: UK Habitat Survey Results, The Nature Reserve - allotment footpath and woodland

Habitat Feature	Area (ha)	Figure 5 reference	Condition	Description	Photo
h2a - hedgerow (priority habitat) 11, 50	0.272	H3	Poor	Hedge and ditch along allotment boundary with trees on both sides of ditch. Species include field maple, crack willow, elm sp., blackthorn and hawthorn. Ground flora is sparse (common nettle, cow parsley, stickyweed and ivy) with no specifically aquatic species identified in the ditch itself. The hedgerow trees are mostly outgrown and becoming in places a line of standards rather than a hedge. Trees are both sides of the ditch – along the footpath and along the allotment boundary. The trees do not significantly encroach on the path (mowing is regular along the path and was undertaken at the time of survey) and any encroachment issues appear to be more related to	

				off-site trees along the fence on the allotment side. There is clear disturbance from the allotment side of the hedge base.	
w1g – other woodland, broadleaved	0.586	W4	Poor	The woodland parcel owned by the Parish Council is adjacent to other privately owned parcels and forms a large contiguous woodland area. W4 has been densely planted over the past approximately 30-40 years with a mix of native woodland species (ash, field maple, oak, malus var., prunus var.) Trees are even aged with limited light or glades resulting in a reduced ground flora. Ash seedlings are dominant, along with hogweed, cow parsley, creeping buttercup, lesser celandine and broad-leaved dock.	
g3 – neutral grassland **27 Traditional orchard**	0.084	O1	Poor Moderate	Distinct glade within W4 planted with approximately 30 fruit trees including apple, pear, cherry, medlar. Grassland species include poa, perennial rye grass, and meadow buttercup.	
h2a – hedgerow (priority habitat)	0.081	H4	Moderate	Hedge on southern boundary of orchard, recently planted, possibly 10 years old with a mix of native species including small-leaved lime, cherry, blackthorn, hazel and hawthorn with limited ground flora.	

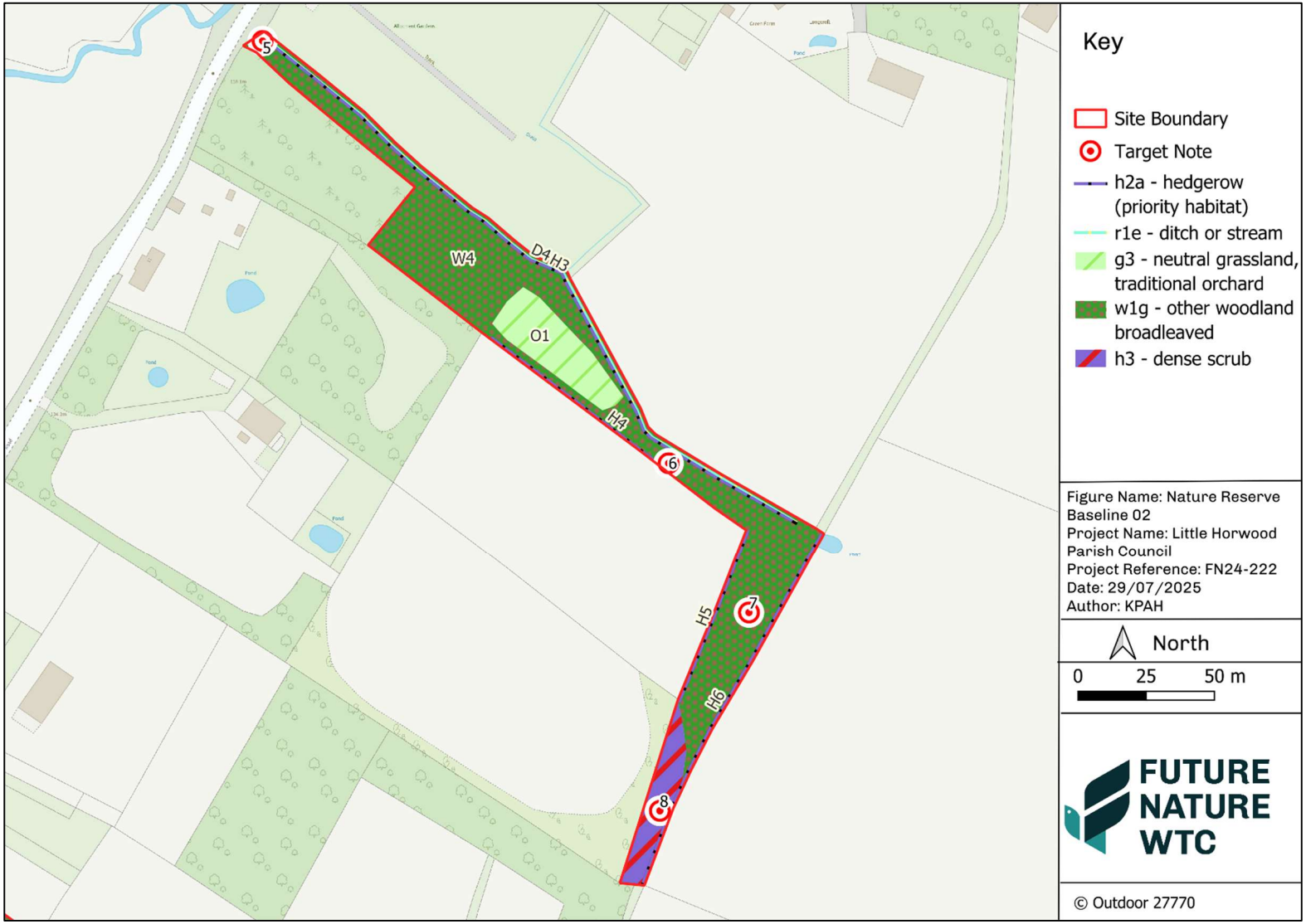
h2a – hedgerow (priority habitat)	0.067	H5	Poor	This section of the hedge had previously been laid but is very outgrown with some oak, ash and field maple potentially developing as standards. Other species present are whitebeam, hazel hawthorn and blackthorn. The hedge line continues to the permissive path and where the path narrows it widens and becomes more scrub like.	

Table 8: The Nature Reserve and Millenium Wood Target Notes

Habitat Feature	Area (ha)	Figure 5 reference	Condition	Description	Photo
TN5	NA	5	NA	Site entrance off Winslow Road next to the allotment site. Gravel path leading onto main track/footpath with pedestrian and vehicle access gate.	
TN6	NA	6	NA	Narrow woodland/hedge either side of path where boundary narrows, to form line of trees but contiguous with woodland so included as W4.	

TN7				Small woodland island where footpath splits and passes on both sides.	
TN8		8		Short section of path that becomes muddy at wetter times of year.	

Figure 5: The Nature Reserve Allotment Footpath and Woodland Baseline Habitats



3.3 FURTHER SURVEY

Below are a number of recommendations for further survey and/or monitoring, although none are essential for continued works on the sites.

Great Crested Newt

With the installation of new ponds in the wetland area and the future requirement for them to be maintained, it is advisable to confirm the presence or absence of GCN to ensure works are carried out within legal guidelines.

Badgers

Evidence of setts were identified during the survey. Further monitoring of the level of activity and use would help to inform management. This could be done by carefully installing a trail camera to observe the level of activity around the sett as well as a search for latrines, mammals trails, and guard hairs. Groundwork within 20m of setts must be avoided to prevent disturbance and any habitat management should be undertaken sensitively with vegetation around setts left undisturbed. The location of setts should remain confidential[9].

Bats

As there are a number of veteran trees at the Spinney and a network of woodland and hedgerows across all three sites, a Ground Level Tree Assessment (GLTA) to determine potential roost features, may be necessary prior to any work on veteran trees on site affected by those works.

Birds

Breeding bird surveys across the sites may be helpful for informing future management.

Invertebrates

Any additional recording of invertebrates observed across the sites would be helpful as records returned from the 1km data search were sparse, giving a very limited understanding of invertebrate populations in the area. This can be done through ecologist surveys and by volunteer recorders. Citizen science activities such as the Big Butterfly Count (https://bigbutterflycount.butterfly-conservation.org/) and the Pollinator Monitoring Scheme's Flower-Insect Timed (FIT) counts are easy ways to begin recording (https://ukpoms.org.uk/fit-counts).

[9] For more detailed guidance, see: Badger Protection Best Practice Guidance for Developers, Ecologists and Planners (England). Badger Trust, August 2023

An increase in species recording across the sites is advised to better understand the impact of management interventions and guide future actions. Creating an iRecord activity for the area and entering sightings here would enable specialists to verify sightings and make data available to the Local environmental records centre.

Little Horwood is also located within a Buglife B-Line, part of an interconnected network of corridors identified to help invertebrates move through the landscape. The B-Lines project provides advice and resources to connect and improve habitats within each B-Line and would be a helpful resource to engage with - https://www.buglife.org.uk/our-work/b-lines/.

Future Nature would be able to carry out the recommended surveys, if required, and can offer support and training for volunteer monitoring and recording.

4. RECOMMENDATIONS

Table 6 below outlines broad recommendations for habitat management activities across the three sites with links to further advice and sources of information where necessary. Although the three sites are considered separately, some recommendations are applicable across all three, for example when considering grassland management regimes and woodland thinning with reference to monitoring for ash dieback.

Table 6: Broad Management Recommendations

Habitat Feature	Figure 3 reference	Recommendations	Links and resources
The Spinney			
Ponds, Wetland	Wet1	• Maintain a minimum of 25% open water. • Consider rotational cutting of remaining wetland area to reduce dominance of common reed. • Allow some scrub to develop along boundary to improve connectivity to the main woodland site and provide shelter and forage for small mammals, birds and invertebrates. • Consider planting two black poplar *Poplus nigra* in the wetland area. • Monitor new ponds and ditches across the Spinney for the presence of GCN to inform ongoing management of this area.	Refer to FHT resources for detailed pond management advice: https://freshwaterhabitats.org.uk/advice-resources/pond-management-hub/
Woodland	W1 TN17, 18	The character of the site provides an opportunity to allow the central area to develop naturally while the outer, more accessible areas have more specific management. Thinning and coppicing will control overshading of the footpaths, stream and ditches and bring more light into the woodland edges as well as maintaining tree safety. Ash should be monitored for dieback with a phased approach to reducing and removing affected ash as part of a monitoring programme. Young ash could be removed from more publicly accessible areas and replaced with other tree species (e.g. field maple, oak, birch). Where open areas have been created, for example on the southern section of the moat, there is an opportunity to seed a woodland ground flora plant mix or plant woodland bulbs to enhance diversity in selected areas.	Forest Research: The management and creation of woodlands for biodiversity and wider environmental benefits: https://www.forestresearch.gov.uk/publications/management-creation-woodland-biodiversity/ Blakesley and Buckley, Managing Your Woodland for Wildlife: https://www.woodlands.co.uk/owning-a-wood/managing-your-woodland-for-wildlife/

		The open area of the moat should be kept clear of woody regrowth by cutting back each winter to retain the feature. Regrowth and other regeneration in felled areas should be monitored. Coppice regrowth can be severely affected by deer damage, so it may be helpful to protect new coppice stools from browsing. In the case of willow, which has rapid regrowth, it may be necessary to cut regrowth every few years to maintain the more open character of areas where it has initially been coppiced. Having a rotation of new coppice and regrowth at various stages helps to create a range of niches for invertebrates, small mammals and amphibians. Where new seedlings are establishing in glades, if possible check yearly growth and select seedlings to protect to encourage a more diverse understorey.	
Dense scrub	S1 and TN15	Allow scrub to develop where appropriate at the woodland edge with regular winter works to manage it and prevent encroachment into wetland and grassland areas. The graduated edge that scrub creates is valuable wildlife habitat.	The Scrub Management Handbook: https://publications.naturalengland.org.uk/publication/72031
Stream and ditches	D1, 2, 3 TN7, 8, 12	All streams and ditches on site are heavily shaded and would benefit from opening some areas of tree canopy to allow more light in. The stream adjacent to the recreation ground would benefit from some more light but works should be undertaken with caution as the ground is steep and extensive work would potentially alter the character of the area. Phased work would be the best approach and focused on discrete sections. It might also be beneficial to create shallow scoops along the stream to slow flow and widen the channel, where this is appropriate in relation to the footpath.	https://freshwaterhabitats.org.uk/

		Any changes to stream and ditch topography should only be carried out with the agreement and liaison of the local authority and once any necessary permissions have been granted. The Moat is a shallow depression for most of its length, with the southern aspect having been opened up by some tree removal over winter 2024/25. This open aspect can be maintained to create a more varied structure and provides an opportunity for introducing some woodland bulbs in small patches.	
Mill Race	TN9	Where the moat joins the Mill Race and flows downstream it is very overgrown, any attempt to open this should be treated with caution to avoid and increase in flow downstream, as has been done on other areas of the stream at the western end of the site.	
Mill	TN9	Works on the remains of the Mill should only be undertaken on the advice of Historic England. As this site is a registered Scheduled Monument any works that involve earthworks or potential disturbance to remaining structures should be registered and approved by Historic England.	https://historicengland.org.uk/
Grassland	G1	Tussocky grassland is a valuable habitat but needs to be balanced against tall forb and scrub encroachment. As there is potential for the site to support GCN, management should be undertaken sensitively to minimise the risk of harm or damage to GCN and their habitats (see Appendix A). Cutting this area in sections on a two-year rotation may be beneficial. Cutting and removing arisings will help with reducing the dominance of ruderals and maintain the boundary with the scrub.	Froglife: https://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf Plantlife: https://www.plantlife.org.uk/learning-resource/how-to-manage-a-meadow/
Trees and newly	TN2, 3, 5, 16	Monitor newly planted trees and replace those that have not taken or have signs of damage and/or disease.	

planted saplings			
Veteran Trees	TN6, 8, 11, 13, 14	Monitor ash for die back and in general overhanging branches in areas that are used by the public. Several trees are likely to be bat roosts, so a bat survey (GLTA) might be advisable to inform future management and will be needed if any works that affect veteran trees are planned. As there are a number of veteran or veteranized trees on the site, it would be helpful to add them to the Woodland Trust Ancient Tree Inventory.	https://www.woodlandtrust.org.uk/media/1836/what-are-ancient-trees.pdf https://www.ancienttreeforum.org.uk/wp-content/uploads/2016/11/Guidance-on-managing-ancient-and-other-veteran-trees.pdf https://ati.woodlandtrust.org.uk/
Nature Reserve sites			
Access Points and footpaths	TN5	Continue an annual programme of works to keep access points open, including grass cutting and thinning any trees as necessary	
Meadow	G2, G3, O1 TN3	G2 could be divided into 3 areas to cut on a 2-3 year rotation, with the area dominated by nettles cut more frequently. Reducing the cutting for other areas would make the possibility of removing arisings, particularly if this is carried out by hand, more achievable. It may also be possible to scythe smaller sections. Reducing the cutting frequency will allow the development of a more tussocky sward which is beneficial for amphibians and over-wintering invertebrates. If a less dense sward is desired, then the area would need to be cut more frequently. The meadow could also be enhanced by scarifying and seeding selected areas rather than the whole area with a meadow mix such as Emorsgate's General Purpose Wild Flowers or Naturescape's General Purpose Mix.	https://wildseed.co.uk/product/mixtures/wild-flower-only-mixtures/basic-general-purpose-wild-flowers/ https://www.naturescape.co.uk/product/n1f-general-purpose-mix-flowers-only/ Forest Research Best Practice Guidance for Land Regeneration: BPG 15 Wildflower meadow creation and management in land regeneration: https://cdn.forestresearch.gov.uk/2022/02/bpg_15.pdf

		The orchard grassland (G3) would benefit from similar management with an annual cut and removal of arisings. It may be possible in this area to add plant plugs or seed any bare ground with wildflower seed. A mix with more shade tolerant species would be advisable here. In all cases it is advisable to remove arisings. They can be moved to the edges of the meadow and piled to create habitat piles that will reduce over the winter months.	
Woodland	W2, 3, 4 TN7	All three woodland areas are semi-mature and quite dense having had limited management since planting. Leaving the woodlands to develop naturally where this does not affect public access can be beneficial, however, as the woodlands are rather even aged with the trees growing close together, this reduces their structural diversity and limits the range of ecological niches available to wildlife. For example, plants such as orchids, wild strawberry, violets and primroses can develop on open glades, while woodland butterflies benefit from the warmer spaces and increased nectar supply. Enhancing the ground flora should be priotritised over the next few years. As the thinned or coppiced area starts to become more shrubby, with taller plants, saplings and bramble, woodland bids such as warblers benefit from the feeding and nesting opportunities this provides. Coppice stools and an increase of deadwood on the ground creates more habitat for invertebrates. A management programme of selective thinning of sycamore and other trees in poor condition, alongside rotational coppice, where there are trees suitable for this management practice (e.g. hazel, lime, field maple, hornbeam, oak) would enhance the woodlands through increased light levels. Creating small glades through thinning and	See Blakesley and Buckley, Managing Your Woodland for Wildlife: https://www.woodlands.co.uk/owning-a-wood/managing-your-woodland-for-wildlife/ Chapter 5 discusses introducing woodland shade plants. TCV Handbooks are very informative for practical woodland management. Register with TCV for access to them: https://conservationhandbooks.com/handbook/woodlands/

		coppicing can allow the field, shrub and canopy layers of a structurally diverse woodland to develop on a small scale as ground flora and tree seedlings are able to establish in newly coppiced areas. Over time these areas can develop into the shrub layer and without further intervention may ultimately develop as the canopy. However, under a rotational management regime, they may be recoppiced so that there is a changing pattern of felled, or coppiced, and regrowth areas. This can be particularly important for the development of a diverse ground flora. Suggested management actions include removing or pollarding ash severely affected by dieback and where trees are a safety hazard, a 5-10 year programme of thinning stands of trees with dense growth of less valuable species such as sycamore to allow space for the remaining trees to grow outwards as well as upwards, and coppicing hazel under a 10-15 year rotation. W2 in particular has a significant amount of hazel where this would be possible. As for the Spinney, monitor coppice stools and seedling development for deer browsing. It may be necessary to selectively protect saplings to encourage a more diverse understorey. Once glades have been created it would be possible to encourage a more diverse ground flora by planting woodland bulbs or adding a woodland seed mix. This can also be applied along woodland edges.	
Pond	TN1	The small pond would benefit from some clearing and the large hazel coppice stool adjacent to the pond could be reduced to allow more light into the pond. Generally, reduce the amount of vegetation overhanging the pond and clear a small amount annually to maintain open water.	See Freshwater Habitats Trust links above for advice on pond management

		Survey and monitor the pond for presence of Canadian water weed. If present, cut and remove in early spring, if possible, and leave to decompose next to the pond if only small amounts are removed. Create smaller piles to avoid nutrient rich liquor seeping back into the pond.	NERC Information Sheet 7: https://nora.nerc.ac.uk/id/eprint/10424/3/N010424_leaflet.pdf
Hedgerows	H1-H6 TN2, 6, 8	General recommendations for the hedgerows include: • identifying sections where it would be possible to lay the hedge, for example H4 and H5 • reducing height and spread where the trees are excessively overshading the footpath, or creating scallops along path edge • managing some sections as scrub (for example H3, H5 and H1) and • encouraging more sympathetic use on the allotment side of H3	For detailed hedgerow management advice see: Hedgelink: https://hedgelink.org.uk/ PTES Hedgerows: https://ptes.org/hedgerow/
Fruit trees and orchard	O1	As there are fruit trees planted throughout the woodlands, and an area identified during the survey as an orchard, it is advisable to consider some management of the orchard trees. This would include summer and winter pruning for shaping and encouraging fruit production. Training and advice on establishing a community orchard or group of orchard volunteers might be an option. Specialist advice on orchard management is available locally from MidShires Orchard Group as well as via PTES Traditional Orchard project and the Orchard Project.	Midshires Orchard Group: https://www.tapatalk.com/groups/midshiresorchardgroup/ The Orchard Project: https://www.theorchardproject.org.uk/ PTES Traditional Orchards: https://ptes.org/campaigns/traditional-rchard-project/
Other	TN4	The small group of grey poplar *Populus canescens* in the southern corner of the site could be thinned or crown-lifted.	

5. CONCLUSION

All the sites surveyed are a valuable resource within the village of Little Horwood providing a range of habitats for local wildlife connected to the wider landscape. There are opportunities at all sites to contribute to initiatives such as B-Lines, the aims of the Whaddon BOA and, once it is complete, the Buckinghamshire Local Nature Recovery Strategy.

The survey and report have identified a number of opportunities to enhance the sites for wildlife, with consideration of the feasibility of carrying out management activities.

The Spinney provides valuable woodland and wetland habitats that will need to be sensitively managed to avoid disturbance of and provide habitat for protected species, with some actions that improve the structural and biodiversity of the site.

The Nature Reserve equally will benefit from some actions to improve woodland diversity, while the hedgerow network along the footpaths can be enhanced through sensitive management.

Providing a planned approach is taken, enhancements to each site will improve them for local wildlife.

6. APPENDICES

APPENDIX A - PROTECTED SPECIES LEGISLATION

European Protected Species

European Protected Species (EPS) are species of plants and animals (other than birds) protected by law throughout the European Union. They are listed in Annexes II and IV of the European Habitats Directive and receive full protection under The Conservation of Species and Habitats Regulations 2017. This makes it an offence to:

- deliberately capture, injure or kill any European Protected Species (EPS)
- to deliberately disturb any European Protected Species (EPS);
- to damage or destroy a breeding site or place of rest or shelter used by any European Protected Species (EPS).

The Wildlife and Countryside Act 1981 (as amended) adds further protection by making it an offence to intentionally or recklessly[10] disturb an EPS while it is occupying a structure or place which it uses for shelter or protection, or to obstruct access to any structure or place the species uses for shelter or protection.

European Protected Species relevant to the UK			
Animals		**Plants**	
All bat species	Great Crested Newt	Yellow marsh saxifrage	Creeping marshwort
Large blue butterfly	Otter	Shore dock	Slender naiad
Wild cat	Smooth snake	Killarney fern	Fen Orchid
Dolphins, porpoises and whales (all species)	Sturgeon fish	Early gentian	Floating-leaved water plantain
Dormouse	Natterjack toad	Lady's slipper	
Sand lizard	Pool Frog		
Fisher's Estuarine Moth	Snail, Lesser Whirlpool Ram's-horn		
Marine Turtles			

Birds

Under Schedule 1 of the Wildlife and Countryside Act (1981) all wild birds are protected against the following actions:

[10] *Under the Countryside and Rights of Way Act 2000 (CROW Act) extended the protection to cover reckless damage or disturbance*

- intentionally killing, injuring or taking any wild bird;
- intentionally taking, damaging or destroying the nest of any wild bird whilst that nest is in use of being built; and
- intentionally taking, damaging or destroying eggs of any wild bird.

Some wild birds that are specifically listed on Schedule 1 receive further protection from:

- intentional or reckless disturbance whilst it is building a nest or is in, on or near a nest containing eggs or young; and
- disturbance of dependent young.

Reptiles

The common UK reptiles (adder, common lizard, slow worm and grass snake) are partially protected by Section 9 of Schedule 5 making it an offense to kill or injure them.

Badgers

Badgers and their setts are protected under the 1992 Badgers Act (PBA) and the Wildlife and Countryside Act 1981 and are listed in Appendix III of the Convention on the Conservation of European Wildlife and Natural Habitats. It is illegal to capture, kill or injure a badger, or to disturb, damage or destroy a sett, either intentionally or without knowledge of their legally protected status.

APPENDIX B – DESK STUDY DATA FOR PROTECTED AND NOTABLE SPECIES

Mammals (excl. bats)

Table B.1: Mammal records (excl. bats) from within 1km of the sites

Common name	Scientific name	Number of records
Eurasian badger	*Meles meles*	6
Brown hare	*Lepus europaeus*	7
West European hedgehog	*Erinaceus europaeus*	1

Bats

Table B.2: Bat records from within 1km of the sites

Common name	Scientific name	Number of records
Barbastelle	*Barbastella barbastellus*	7
Bat (unidentified)	*Chiroptera*	6
Brandt's Bat	*Myotis brandtii*	1
Brown long-eared bat	*Plecotus auritus*	16
Common pipistrelle	*Pipistrellus pipistrellus*	2
Daubenton's Bat	*Myotis daubentonii*	4
Leisler's Bat	*Nyctalus leisleri*	1
Myotis Bat species	*Myotis*	15
Natterer's Bat	*Myotis nattereri*	4
Noctule	*Nyctalus noctula*	4
Pipistrelle bat	*Pipistrellus sp.*	17
Soprano Pipistrelle	*Pipistrellus pygmaeus*	13
Whiskered Bat	*Myotis mystacinus*	3

Birds

Table B.3: Bird records from within 1km of the sites		
Common name	**Scientific name**	**Number of records**
Brambling	*Fringilla montifringilla*	1
Bullfinch	*Pyrrhula pyrrhula*	6
Corn Bunting	*Emberiza calandra*	1
Cuckoo	*Cuculus canorus*	3
Dunnock	*Prunella modularis*	20
Fieldfare	*Turdus pilaris*	1
Green Sandpiper	*Tringa ochropus*	3
Greenfinch	*Chloris chloris*	14
Grey Wagtail	*Motacilla cinerea*	1
House Martin	*Delichon urbicum*	1
House Sparrow	*Passer domesticus*	23
Kestrel	*Falco tinnunculus*	3
Lapwing	*Vanellus vanellus*	2
Linnet	*Linaria cannabina*	1
Little Ringed Plover	*Charadrius dubius*	1
Mallard	*Anas platyrhynchos*	2
Nightingale	*Luscinia megarhynchos*	1
Redshank	*Tringa totanus*	1
Redwing	*Turdus iliacus*	1
Reed Bunting	*Emberiza schoeniclus*	1
Rook	*Corvus frugilegus*	4
Skylark	*Alauda arvensis*	4
Snipe	*Gallinago gallinago*	1
Song Thrush	*Turdus philomelos*	17
Sparrowhawk	*Accipiter nisus*	1
Starling	*Sturnus vulgaris*	22
Swift	*Apus apus*	1
Tawny Owl	*Strix aluco*	1
Turtle Dove	*Streptopelia turtur*	1

Wheatear	*Oenanthe oenanthe*	1
Whitethroat	*Curruca communis*	1
Willow Warbler	*Phylloscopus trochilus*	1
Woodpigeon	*Columba palumbus*	5
Wren	*Troglodytes troglodytes*	4
Yellow Wagtail	*Motacilla flava*	1
Yellowhammer	*Emberiza citrinella*	4

Amphibians

Table B.4: Amphibian records from within 1km of the sites

Common name	Scientific name	Number of records
Common Frog	*Rana temporaria*	1
Great Crested Newt	*Triturus cristatus*	10

Invertebrates

Table B.5: Invertebrate records from within 1km of the sites

Common name	Scientific name	Number of records
Essex Skipper	*Thymelicus lineola*	4
Shaded Broad-bar	*Scotopteryx chenopodiata*	1
Cinnabar	*Tyria jacobaeae*	1

Higher plants

Table B.6: Higher plant records from within 1km of the sites

Common name	Scientific name	Number of records
Canadian Waterweed	*Elodea canadensis*	2
Giant Hogweed	*Heracleum mantegazzianum*	4
	Rhododendron ponticum	3
Scots Pine	*Pinus sylvestris*	6
Quaking-grass	*Briza media*	2
Box	*Buxus sempervirens*	2
Whorl-grass	*Catabrosa aquatica*	2

Wild Strawberry	*Fragaria vesca*	2
Bluebell	*Hyacinthoides non-scripta*	6
Woad	*Isatis tinctoria*	2
Field Pepperwort	*Lepidium campestre*	2
Grape-hyacinth	*Muscari neglectum*	1
Hoary Plantain	*Plantago media*	6
Black-poplar	*Populus nigra subsp. betulifolia*	6
Tormentil	*Potentilla erecta*	3
Sanicle	*Sanicula europaea*	3
Annual Knawel	*Scleranthus annuus*	1
Ragged-Robin	*Silene flos-cuculi*	10
Lesser Sea-spurrey	*Spergularia marina*	1
Marsh Valerian	*Valeriana dioica*	1