



Preliminary Ecological Appraisal

Wintons Fishery, Burgess Hill

November 2023

Preliminary Ecological Appraisal

Wintons Fishery, Burgess Hill

16/11/2023

Parker Dann

Unit 42, Sussex Innovation Centre
University of Sussex
Science Park Square
Falmer
Brighton
BN1 9SB

Document Control:

Project no.:		Project name:		
12484		Wintons Fishery		
Version:	Written by:	Checked by:	Authorised by:	Date:
V1	Harry Webster	Paul Carter	Richard Schofield	16 November 2023

This report has been prepared for the exclusive use of the commissioning party and may not be reproduced without prior written permission from Phlorum Limited.

All work has been carried out within the terms of the brief using all reasonable skill, care and diligence.

No liability is accepted by Phlorum for the accuracy of data or opinions provided by others in the preparation of this report, or for any use of this report other than for the purpose for which it was produced.

Phlorum Limited

Southern Office: Unit 12, Hunns Mere Way, Brighton, BN2 6AH

T: 01273 307 167 E: info@phlorum.com W: www.phlorum.com

Contents

1.	Introduction.....	1
2.	Methodology.....	2
3.	Baseline Conditions	7
4.	Evaluation	16
5.	Discussion and Recommendations	19
6.	Conclusions	26
7.	References	27
8.	Glossary of Terms.....	28

Appendices

Appendix A – Habitat map and target notes

Appendix B – Photographs

Appendix C – Legislation

Appendix D – Plant species list

Appendix E – Suggested compensatory planting

Appendix F – Bird and bat box designs

Non-technical Summary

Phlorum Ltd was commissioned by Parker Dann to undertake a Preliminary Ecological Appraisal, and Tree Preliminary Roost Assessment (PRA), which was carried out at Wintons Fishery, Burgess Hill, West Sussex, RH15 0DR on the 11th September 2023, in order to determine whether any ecological constraints could affect the proposed works for the site.

Current proposals are for four new glamping pods at the site. The survey area extended over approximately 3.4 hectares (ha).

The main findings of the surveys are as follows:

-  The site is not subject to any statutory or non-statutory designations. The closest statutory designated site is the South Downs National Park which is located immediately adjacent the sites eastern boundary.
-  The site comprised hardstanding, modified grassland, lines of trees, introduced shrubs, standing water, and ditches.
-  It is recommended that targeted surveys in respect to foraging bats and great crested newts are carried out.
-  Should any of the mature trees be removed, an updated tree assessment for bats should be undertaken.
-  In addition, a precautionary approach to site clearance in respect to breeding birds, reptiles, badgers, hazel dormice, water voles, otters, hedgehogs, and stag beetles, is recommended to minimise any adverse impacts on this/these species group(s).

Further information on precautionary working practices and additional surveys together with recommended mitigation and enhancement measures are discussed in Section 5.

1. Introduction

Background

- 1.1 Phlorum Ltd has been commissioned by Parker Dann to undertake a Preliminary Ecological Appraisal, with a Bat Preliminary Roost Assessment (PRA) to inform the potential ecological constraints of proposed future development of Winton's Fishery, Burgess Hill (hereafter referred to as "the site").
- 1.2 The purpose of the Preliminary Ecological Appraisal was:
 -  to identify the major habitats present;
 -  to identify the potential for any legally protected species to be present; and
 -  to recommend any additional ecological surveys, if required.
- 1.3 As part of the assessment, a desktop review and a site visit were carried out. The results of which were used to assess the nature conservation importance of the site and the potential of the site to support protected species.
- 1.4 This report has been compiled in accordance with current guidelines (British Standard 42020:2013 Biodiversity. Code of Practice for Planning and Development, 2013 and CIEEM, 2017 and 2018).
- 1.5 It is understood that the proposed development is for four new glamping pods.

Site Location

- 1.6 The site is located on the outskirts of Burgess Hill, West Sussex. The land surrounding the site to the south, east, and west is a mix of woodland, grassland, and arable fields, and the land to the north is residential. Ditchling Common is located 600m to the west of the site.
- 1.7 The National Grid Reference for the centre of the site is TQ 32408 17772. The survey area extended over approximately 3.4 hectares (ha).

2. Methodology

Desk Study & Consultations

Database and Map Search

- 2.1 The desktop study involved conducting database searches for statutory and non-statutory designated sites, legally protected species and features of interest within a 2km radius of the site. The database and map search was based on available information provided by the following sources:
-  Sussex Biodiversity Records Centre (SxBRC, 2023);
 -  Multi-Agency Geographical Information for the Countryside (MAGIC, 2023);
 -  Ordnance Survey mapping;
 -  Aerial photography; and
 -  The Woodland Trust online Ancient Tree Inventory.

Habitat Survey and Assessment

- 2.2 Phlorum Limited carried out an ecological survey of the site on 11th September 2023. The survey was carried out by a suitably qualified ecologist, Harry Webster, who has over 3 years' professional experience of undertaking ecological surveys. The survey results and assessment was reviewed by Paul Carter (BSc (Hons), MBA and awaiting MCIEEM application), an ecologist with over 20 years of experience of managing ecological and landscaping projects, and by the project director Richard Schofield (BSc (Hons), MSc, CSJK, MCIEEM, MIEMA, CEnv), with over twenty years of experience in managing projects. The weather conditions during the survey were sunny, warm, and clear.
- 2.3 The field survey comprised a walkover inspection of the land and habitats present. The survey followed standard Phase 1 survey methodology (JNCC, 2010) and covered all accessible parts of the site, including boundary features. The description of the site habitats has used the code/referencing from The UK Habitat Classification User Manual 2.0 (UKHab 2023). UKHab uses primary habitat codes, either on their own or followed by one or more secondary codes. Each individual code is separated by a space. Habitats were described and mapped (Figure 1: Appendix A). A list of plant species was compiled, together with an estimate of abundance made according to the DAFOR scale. The DAFOR scale provides an estimate of the relative abundance of plant species within the Survey Area (Appendix D).

- 2.4 This assessment provides information on the habitats in the survey area and identifies actual or potential presence of legally protected or otherwise notable species/habitats in or immediately adjacent to the site.
- 2.5 Target notes highlighting a particular feature of ecological interest are provided in Appendix B, with associated photographs.
- 2.6 Scientific names are given after the first mention of a species, thereafter, common names only are used. Nomenclature follows Stace (2010) for vascular plant species.

Protected Species Assessment

- 2.7 The potential for the site to provide habitat for protected species was assessed from field observations in conjunction with results of the desk study. The site was inspected for indications of the presence of protected species including:
 -  Habitat considered suitable to support widespread reptile species including areas with a scrub/grassland mosaic and potential hibernation sites;
 -  On-site ponds offering potential breeding opportunities for great crested newts (*Triturus cristatus*) and the presence of suitable terrestrial habitat including hedgerows and rough grassland;
 -  The presence of features in and on trees indicating potential for roosting bats (Chiroptera), including knot and rot holes and loose bark. Secondary evidence of bats including staining, droppings, and feeding remains were also looked for;
 -  The presence of nesting habitat for breeding birds, including mature trees, dense scrub, and hedgerows, and direct evidence of bird nesting including bird song, old nests etc.;
 -  Habitats considered suitable to support badger (*Meles meles*) setts, and evidence in the form of hair, pathways, and latrines;
 -  Presence of woodland and/or hedgerows providing suitable habitat to support hazel dormice (*Muscardinus avellanarius*);
 -  Riparian habitat supporting suitable features for water voles (*Arvicola amphibius*) and otters (*Lutra lutra*); and the
 -  Presence of nationally protected and/or invasive plants.
- 2.8 The potential presence for protected species is categorised as **Negligible, Low, Moderate, High, or Present**, based on the findings of the field survey and on the evaluation of existing data.
- 2.9 The purpose of this assessment is to identify whether more comprehensive Phase 2 surveys for protected species or mitigation should be recommended.

Preliminary Roost Assessment

- 2.10 The inspection of the trees near to the proposed glamping pod locations was carried out concurrently with the initial habitat survey, in accordance with good practice guidelines (Collins, 2016, although this was updated in October, Collins, 2023).
- 2.11 The exterior of the trees was inspected closely from ground level using binoculars when needed to get a closer look at features higher up the trees. The aim of the inspection was to identify any secondary evidence together with any potential roost sites. Secondary evidence includes droppings, feeding remains, scratch marks and oil and urine staining.
- 2.12 Potential roost features for trees can be woodpecker holes, crack and fissures in the tree, hollow cavities, loose flaking bark, or thick ivy.
- 2.13 In accordance with current standing advice issued by Natural England (2015), the following types of bat roosts were considered during the assessment:
-  Day Roost - where individual bats, or small groups of males, rest or shelter in the day
 -  Night Roost - where bats rest or shelter at night between foraging in the active period, but rarely during the day
 -  Feeding 'Perch' Roost - where bats hang to eat or catch their prey or rest at night between feeding sessions.
 -  Hibernation Roost - where bats are found during winter. These roosts typically comprise a stable environment where bats can enter torpor; these areas are normally of a constant temperature.
 -  Transitional or Occasional Roost - where individual or small numbers of bats gather at a temporary site before and after hibernation.
 -  Maternity Roost – where female bats give birth and raise their young.
 -  Satellite Roost – an alternative roost found in close proximity to the main nursery roost colony and used by a few individual breeding females to small group of breeding females through the breeding season.

Table 2.1: Tree Assessment Criteria

Cowan Scale	Features
0: No Value	No visible features of use to bats.
1: Low Value	One or two minor features, possibly associated with feeding or night roosts, easily replaced; sparse ivy (<i>Hedera helix</i>), minor branch splits, small areas of loose bark, features less than 10 years old.
2: Moderate Value	Features which may provide a more secure site for small groups and individuals, fairly common features; dense ivy, significant branch splits, small cavities, present for between 10-30 years.
3: High Value	Features of particular significance, suitable for high priority roosts and large numbers of bats, conditions rare or uncommon in local area; large cavities, extensive branch splits, multiple opportunities in same tree, features may have been available for >30 years.
4: Confirmed roost	Evidence of use by bats e.g. bats, bat droppings.

- 2.14 Any features that could potentially support roosting bats were viewed remotely from the ground using binoculars to assess suitability and identify signs of use.
- 2.15 Due to the large number of trees within the survey area, only trees identified as having moderate potential or higher for roosting bats are detailed in this report. These were individually numbered for the assessment and their locations marked on the survey map in Appendix A.

Caveat

Data Search Constraints

- 2.16 It is important to note that, even where data is held, a lack of records for a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may be simply under-recorded.

Survey Constraints

- 2.17 Ecological surveys are limited by factors that affect presence of plants and animals such as seasonality. Whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation of the environment.
- 2.18 The survey was carried out late in the growing season and therefore many species may not have been visible above ground or readily identifiable.

- 2.19 The appraisal does not constitute a full botanical survey, or a Phase 2 pre-construction survey that would include accurate GIS mapping for invasive or protected plant species. This survey provides a preliminary view of the likelihood of protected species occurring on the site based on the suitability of the habitat, known distribution of the species in the local area, and any direct evidence on the site. It is therefore used as a tool to recommend further protected species surveys (or other species of significant nature conservation interest) if on the basis of the preliminary assessment or during subsequent surveys, it is considered reasonably likely that protected species may be present.
- 2.20 It is however considered that the survey was sufficiently rigorous to assess the ecological value of the site.

Bat Survey Constraints

- 2.21 Bats are mobile animals which can move roost sites throughout the year. It is possible that surveys carried out in September may miss roosts not occupied until later in the year. However, where undisturbed, it is generally possible to find secondary evidence of bats throughout the year.
- 2.22 It is considered that the survey was sufficiently rigorous to assess the ecological value of the site for the purposes of this assessment.

Limitations

- 2.23 This appraisal also does not constitute as a full invasive species survey. All surveys are subject to the conditions on site at the time of the survey. Site surveys are non-intrusive and rely on the visual identification of aboveground growth. If parts of a site are inaccessible, then these areas can often not be surveyed unless they can be viewed from other areas. If any aboveground growth is being managed or has been disturbed or covered, or the below ground growth is dormant, then it may be impossible for us to identify invasive plants in these areas during our non-intrusive survey.

3. Baseline Conditions

Aerial Photography and OS Maps

- 3.1 Aerial photographs and OS maps show the site to be predominantly a series of lakes with treelines, scrubland, and grassland. There appear to be 14 ponds and several ditches/streams within 500m of the site.

Statutory and Non-Statutory Designated Sites

Statutory Sites

- 3.2 The closest statutory designated site is South Downs National Park / Brighton and Lewes Biosphere Reserve located immediately adjacent the east site boundary. Table 1 provides a list of statutory sites within 2km of the site.

Table 1: Statutory sites within 2km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
South Downs National Park	The chalk hills of the South Downs, chalk grassland, lowland heaths, woodland, wetlands, rivers, farmland, coastal and marine habitats.	162,700	Adjacent east site boundary
Brighton and Lewes Downs UNESCO Biosphere Reserve	Chalk down land makes up the principal terrestrial landscape of the area, bounded at each end by the two river valleys. The coastline is dominated by impressive chalk cliffs in the east and urbanized plains in the west.	29,514	Adjacent east site boundary
Ditchling Common Site of Special Scientific Interest (SSSI)	This site on Weald Clay contains a range of grassland types which have resulted from the wide variation in drainage conditions. The flora includes a number of locally uncommon plants.	63.6	600m to the east

Non-Statutory Sites

- 3.3 There are seven non-statutory designated sites within 2km of the site. Table 2 provides a list of the five closest non-statutory sites within 2km of the site.

Table 2: Non-statutory sites within 2km of the site

Site Name	Reason for Designation	Area (ha)	Distance from the Site
Brambleside Meadow Local Wildlife Site (LWS)	The area is important as a semi-natural habitat in a heavily developed area.	6.7	600m to the east
Keymer Tile Works LWS	Supports a matrix of successional habitats ranging from temporary pools and bare clay through unimproved grassland to dense scrub, deciduous woodland and willow carr. It is a very varied site of particular importance for breeding amphibians and is also of high geological interest.	20.6	800m to the north
Keymer Tileworks, Burgess Hill Local Geological Site (LGS)	Large clay pit in final stages of operation, exposing a section at the top of the lower Weald Clay. The site is well known for its vertebrate and insect fossils.	No data	800m to the north
Blackbrook Wood & The Plantation LWS	Ancient woodland with rich flora.	41.4	1.5km to the east
Ditchling Common Meadow LWS	Small meadow that is an example of unimproved chalk grassland in the area.	1.6	1.8km to the northeast

Ancient Woodland

- 3.4 There is no ancient woodland covering any part of the site or immediately adjacent to the site. No trees on or adjacent to the site are listed on the Woodland Trusts' Ancient Tree Inventory.
- 3.5 The closest area of ancient woodland is situated 600m to the southwest.

Habitats

Site Summary

- 3.6 The site comprised hardstanding, modified grassland, continuous scrub, scattered trees, lines of trees, and standing water.

3.7 The main habitats recorded within the site are described below. The UKHab code is shown in the bracket after the habitat type (UKHab 2023). Additional details are shown on the habitat survey plan in Appendix A, and the target notes are listed in Appendix B.

3.8 Areas outside the redline boundary are shown on the map in Appendix A but are not mentioned below. These included the lake at the northeast ownership boundary which is used recreationally, and the area of scrub at the south extent of the ownership boundary. The islands at the centre of the lakes were also not included due to access restrictions. These areas may have increased recreational pressures as a result of the development, but these are likely to be minor due to the small scale of the proposed development.

Modified Grassland (g4)

3.9 There is a good deal of modified grassland around the site which is used by fishers so they can pitch up their tents. Some areas were less managed with taller swards, but the dominant habitat was that of short mown modified grasses. Species noted include white clover (*Trifolium repens*), selfheal (*Prunella vulgaris*), mallow (*Malva sylvestris*), broadleaf plantain (*Plantago major*), ragwort (*Senecio jacobaea*), common nettle (*Urtica dioica*), and dandelion (*Taraxacum sp.*).

Hardstanding (ub16)

3.10 There are gravel paths around the site, a car park, and some wooden footbridges over the ditches.

Introduced shrub

3.11 Small areas of introduced shrub were present across the site. Species noted include rhododendron (*Rhododendron sp.*), magnolia (*Magnolia sp.*) and Japanese maple (*Acer palmatum*).

Line of Trees (w 33)

3.12 Lines of trees were present along the boundaries, and around the lakes. Small sections of scrub and other ruderals were present at the field later beneath. Species noted include common oak (*Quercus robur*), weeping willow (*Salix babylonica*), hawthorn (*Crataegus sp.*), blackthorn (*Prunus spinosa*), bramble (*Rubus sp.*), red cedar (*Thuja plicata*), silver birch (*Betula pendula*), common nettle, dogs mercury (*Mercurialis perennis*), giant rhubarb (*Gunnera manicata*), and poplar (*Populus sp.*).

Water Bodies (r1 41)

3.13 There were 2 lakes within the site boundary. These are used for fishing/angling activities specialising in carp and catfish.

Ditches (g 50)

3.14 Ditches were present at across the site. These were dry at the time of the survey and heavily overshadowed by the treeline and field layer beneath.

Target Note (TN)

3.15 The following features of interest were noted during the survey and have been marked on Figure 1:

-  **TN1** – Giant rhubarb (*Gunnera sp.*) was present at the northern site boundary beneath the tree canopy. *Gunnera tinctoria* is listed in the Schedule 9 Part II of the Wildlife and Countryside Act (1981 amended). As the seed head was not visible at the time of the survey It was not possible to identify the plant to species level.
-  **TN2** – A log pile was present at the south boundary. Other smaller log piles were evident across the site as well.

Tree Assessment for Bats

- 3.16 The survey revealed there were six trees at the site which had low-moderate potential for roosting bats. These were a mix of oak, willow, and ash trees with roost features such as knot holes, woodpecker holes, flaking bark, cracked branches, and limbless branches.
- 3.17 Under current design proposals all trees noted as having potential to support roosting bats are to be retained.
- 3.18 The results of the tree assessment are provided in the summary table below (Table 3.1). Moderate value trees are highlighted in blue and the locations of these trees are marked on the map in Appendix A. The co tree numbers assigned during the PEA assessment have been provided in the table and on the map for cross referencing purposes. Only trees with PRF have been numbered due to the high number of trees at the site.

Table 3.1: Tree Assessment Summary

Tree Number	Tree Species	Cowan Score	Potential	Proposed Works
T1	Oak	1	Low	Retain
T2	Oak	1	Low	Retain
T3	Willow	1	Low	Retain
T4	Oak	2	Moderate	Retain
T5	Oak	2	Moderate	Retain
T6	Ash	1	Low	Retain

Moderate Value Trees: Category 2

- 3.19 In total two trees were recorded as moderate value for roosting at the site. Dominant features include knot/rot holes, limbless branches, and some split branches. These trees were located along the boundary away from the proposed glamping pod locations.

Low Value Trees: Category 1

- 3.20 In total four trees were recorded as low value for roosting bats at the site. There was less volume of PRF on these trees. General features were knot holes, and limbless branches. T3 is located near the lake at the southern extent of the site. The remaining trees are located along the boundaries.

No Value: Category 0

- 3.21 All remaining trees close to the proposed development were considered to be relatively young and small with no potential to support roosting bats.

Protected Species

- 3.22 Legislation relating to the protected species referred to in this section is included in Appendix C.
- 3.23 The following paragraphs detail the suitability of the on-site habitats to support protected species and include information from the data search for protected, rare and otherwise notable species returned within a 2km radius.

Bats

- 3.24 The data search showed records of bats from the genera pipistrelle (*Pipistrellus*), long eared (*Plecotus*), myotis (*Myotis*), serotine (*Eptesicus*), and Noctule/Leisler's (*Nyctalus*), occurring within the 2km search area in the past 15 years.
- 3.25 During the survey potential bat roosting features were seen in six trees across the site. For the purposes of the PRA, only trees close to the proposed glamping pod locations were inspected. The current proposed development will seek to retain all trees throughout the site.
- T1: An oak tree at the northeast boundary. The tree was mature with a complex growth and had limbless branches. T1 was assessed as having **low** potential for roosting bats.
 - T2: An oak tree at the northeast boundary next to T1. The tree was mature with a complex growth and had limbless branches. T2 was assessed as having **low** potential for roosting bats.
 - T3: A weeping willow located at the southern extent of the site. The tree was mature with complex growth forms and had loose flaking bark at the trunk. T3 was assessed as having **low** potential for roosting bats.
 - T4: A common oak tree located at the southwest boundary. The tree had complex growth forms, knot holes, woodpecker holes, limbless and cracked branches, and flaking bark. T4 was assessed as having **moderate** potential for roosting bats.
 - T5: A common oak tree located at the northwest boundary. The tree had complex growth forms, knot holes, woodpecker holes, limbless and cracked branches, and flaking bark. T5 was assessed as having **moderate** potential for roosting bats.

- T6: An ash tree located at the northwest boundary. The tree was mature and had complex growth forms, limbless branches, and cracks in some branches. T6 was assessed as having **low** potential for roosting bats.
- 3.26 The site may have some foraging and commuting value to bats due to the presence of wetland. The treelines and scrubland surrounding the site may also offer commuting value given the rural and undeveloped nature of the site and the land to the east, south, and west.
- 3.27 Overall, it was considered that the site offered **moderate** potential for foraging and commuting bats.

Amphibians

- 3.28 The data search showed records of great crested newt within 2km of the site within the past 15 years, as recently as 2019. Aerial photographs and maps show 14 ponds within 500m of the site.

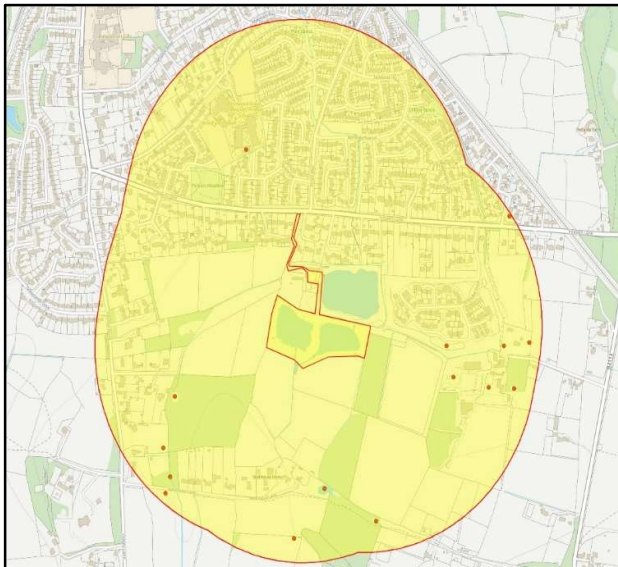


Figure 2: Ponds within 500m of the site

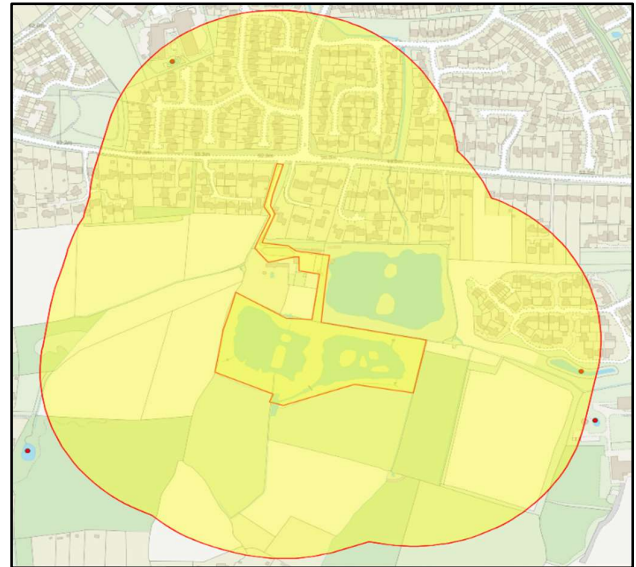


Figure 1: Ponds within 250m of the site

- 3.29 During the survey it was noted that water was present which could be suitable for breeding great crested newts. The lakes are stocked with carp and lionfish which reduces their suitability for breeding, however the ditches connecting the lakes which appeared still could provide the appropriate conditions for breeding newts. Additionally, there was terrestrial habitat that could support foraging and commuting great crested newt. This would be restricted to the boundary habitats which are to be retained.
- 3.30 It was considered that the site offered **moderate** potential for breeding newts and **moderate** potential for foraging and commuting newts.

Reptiles

- 3.31 The data search showed records of slow worm (*Anguis fragilis*), grass snake (*Natrix helvetica*), adder (*Vipera berus*), and common lizard (*Zootoca vivipara*) within 2km of the site within the past 15 years.

- 3.32 The habitat of the proposed glamping pod locations was not considered optimal for reptiles due to being short-mown modified grassland. There is suitable habitat present at the site, however this is being retained. Furthermore, the site is heavily foot trafficked by fishers which would deter reptiles from using the accessible parts of the site.
- 3.33 Overall the site was assessed as having **low** potential to support reptiles.

Birds

- 3.34 Several Red or Amber listed Birds of Conservation Concern¹ (BoCC), and notable² bird species were returned by the data search that may utilise habitats within the site. Species include swift (*Apus apus*), lesser spotted woodpecker (*Dryobates minor*), and brent goose (*Brant bernicla*).
- 3.35 During the survey it was noted that the onsite trees, hedgerows, and vegetation along the lakes provided suitable habitat for nesting birds.
- 3.36 Overall it was considered that the site offered **high** potential for breeding birds.

Badgers

- 3.37 Records for this species are kept confidentially and were not returned by the data search.
- 3.38 The habitat on site was not suitable for breeding badgers. The land around the site was more appropriate for breeding badgers. There was suitable commuting and feeding badger habitat.
- 3.39 Overall, the site offered **low** potential for breeding badgers and **moderate** potential for foraging and commuting badgers.

Hazel Dormice

- 3.40 The data search showed records of dormice within 2km of the site within the past 15 years.
- 3.41 The site did not contain vegetation of a density and type that would support breeding dormice due the hedges being sparse. It did however seem to be suitable for commuting dormice.
- 3.42 Overall it was considered that the site offered **low** potential to support breeding dormice and **low-moderate** potential to support commuting dormice.

¹ Birds of Conservation Concern status is prioritised into high concern (Red), medium concern (Amber) and low concern (Green) (Eaton et al, 2009). Red-list species are those that are globally threatened according to the IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and have not shown a substantial recent recovery. Amber-list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations. Green-list species are those that fulfil none of the criteria.

² Notable Birds are based on a list of birds that are particularly scarce or vulnerable either at national or a regional level. The majority of these bird species are designated as Schedule 1 species, under the Wildlife and Countryside Act 1981 (as amended), or listed as red or amber-listed BoCC.

Water Voles

- 3.43 The data search showed no recent records of water vole within the 2km search area in the past 15 years. There have not been any records of water voles in the search area since 1997.
- 3.44 The islands within the lakes may have the appropriate habitat conditions to support breeding water voles, but the survey is inconclusive as access to the islands was not possible. However, the proposals will not alter the island habitat in any way. The presence of water also meant it could be suitable for commuting and foraging water voles.
- 3.45 Overall it was considered that the site offered **moderate** potential to support breeding water voles and **moderate** potential to support commuting and foraging water voles.

Otters

- 3.46 Reports of otter are not returned by the record centre in this area.
- 3.47 As above, the islands may offer ideal breeding habitat for otters as they will not be regularly disturbed. The presence of water also meant it could be suitable for commuting otter.
- 3.48 Overall it was considered that the site offered **moderate** potential to support breeding otter and **moderate** potential to support foraging and commuting otter.

Hedgehogs

- 3.49 The data search showed records of hedgehogs (*Erinaceus europaeus*) within 2km of the site within the past 15 years, as recently as 2022.
- 3.50 Although no direct evidence of hedgehogs was seen during the survey, the habitats on site, such as the short grassland, log piles, leaf litter and scrub seen on site would provide suitable habitat for them to forage and/or hibernate.
- 3.51 Overall, the site offered **high** potential for hedgehogs.

Stag Beetles

- 3.52 The data search showed records of stag beetle (*Lucanus cervus*) within 2km of the site within the past 16 years.
- 3.53 Although no direct evidence of stag beetle was seen during the survey, the stands of dead wood seen on site would provide suitable habitat for them to breed. The log piles should be retained and not impacted by the development.
- 3.54 Overall, the site offered **high** potential for stag beetle.

Invasive Plants

- 3.55 The data search showed records of plant species including Japanese Knotweed (*Reynoutria Japonica*), and Himalayan balsam (*Impatiens glandulifera*) occurring within the 2km search area in the past 15 years. These plants are listed as invasive in Schedule 9 Part II of the Wildlife and Countryside Act (1981 amended).

- 3.56 During the survey specimens of giant Rhubarb (*Gunnera sp.*) were seen (See Target Note 1 in Appendices A & B). *Gunnera tinctoria* is listed as invasive in Schedule 9 Part II of the Wildlife and Countryside Act (1981 amended). As the seed heads were not visible at the time of the survey, only genus identification was possible.
- 3.57 Specimens of rhododendron were also present. Two species of rhododendron are listed in Schedule 9 Part II which is rhododendron ponticum. Typically, identification requires the plant to be in flower. As the survey was carried out late in the growing season, species identity was not determined.

4. Evaluation

- 4.1 On the basis of the information available from the habitat survey and desk study, the site has been evaluated in terms of its potential for biodiversity, support of protected species and habitats, and the contribution the area makes as part of the wider landscape. The nature conservation value of the site has been assessed following standard criteria developed by CIEEM (2017 and 2018) and in accordance with BS 24040:2013 Biodiversity – code of practice for planning and development. This is provided below.
- 4.2 The biodiversity value of protected species within the site is a preliminary evaluation based upon the desk study records, habitat suitability, and the conservation status of the species in question. It should be noted that where European Protected Species (EPS) or species of Principle Importance for the Conservation of Biodiversity are present on-site they may be valued at a lower level/scale where it is considered likely that populations would not be of sufficient importance to justify designation at a higher level. However, regardless of their biodiversity value, such species are still subject to national and/or European legislation.
- 4.3 Key aspects of relevant planning policy regarding conservation, including an explanation of species referred to as being of 'Principal Importance for Conservation of Biodiversity' and European Protected Species and habitats, are provided in the Legislation section in Appendix C.

Geographic Evaluation

Features of International Importance

- 4.4 Features of International Importance are principally sites covered by international legislation or conventions. The Conservation of Habitats and Species Regulations 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) implements the Natural Habitats and Wild Fauna and Flora (92/43/EC) (Habitats Directive) in England and Wales. The Regulations mainly deal with the protection of sites with certain habitats and populations of species that are important for nature conservation in a European context, i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
- 4.5 The site is not subject to any international statutory nature conservation designations. The closest site of International Importance is Lewes Dows SAC located 12 km to the southwest. The designated habitats of this SAC are Semi-natural dry grasslands and scrubland facies on calcareous substrates. There are no qualifying species associated with this SAC. The site does not provide any supporting habitat for this designated site.

Features of National Importance

- 4.6 Features of national importance include Sites of Special Scientific Interest (SSSIs) which are designated under the Wildlife and Countryside Act 1981 (as amended). The site is not subject to any national statutory nature conservation designations and it is not considered that any habitats or populations or assemblages of species within the site would meet the criteria for the designation of SSSIs at an appropriate geographic level³.
- 4.7 The closest designated site of national importance for nature conservation is Ditchling Common SSSI located 600m to the east. The site does not provide any supporting habitat for this SSSI which is designated for locally uncommon plants.
- 4.8 The site is also located within the 2km Impact Risk Zone of Ditchling Common SSSI, but the site does not have any supporting habitat for this SSSI due to reasons mentioned above.

Features of Regional (i.e. Sussex) Importance

- 4.9 The site does not include any features of value at this level neither is it likely to be selected as a SINCC based on the results of the current survey.

Features of District (i.e. Brighton and Hove) Importance

- 4.10 The site is relatively small and does not support any features that were considered to be of value at this level.

Features of Local (i.e. Burgess Hill) Importance

- 4.11 The site may support protected species including great crested newt and bats which might have importance at the local level, but surveys are yet to be carried out to determine this.

Features of Value Immediate Vicinity (c. 250m) of the Project

- 4.12 The on-site vegetation is of value within the immediate vicinity and provides suitable habitat to support protected species including breeding birds, bats, reptiles, badgers, great crested newts, hazel dormice, water voles, otters, hedgehogs, and stag beetles. It also forms part of the wider ecological network of habitats in the locality, providing wildlife corridors for mobile species to move through the landscape.

Summary

- 4.13 Overall on the basis of the survey results and the above criteria, habitats within the site are considered largely to be of ecological value within the immediate vicinity only. The site provides suitable habitat to support several protected species and groups including breeding birds, bats, reptiles, badgers, hazel dormice, water voles, otters, hedgehogs, and stag beetles. However, populations of these are unlikely to be locally significant.

³ JNCC Guidelines for selection of biological SSSIs (see <http://jncc.defra.gov.uk/page-2303#download>).

Local Plan Evaluation

- 4.14 It is considered that the statutory Mid Sussex District Plan (Adopted 2014) contains the following nature conservation policies relevant to the site. A list of the policies is provided below. The full text of the relevant policies is contained in the Legislation section in Appendix C and this should also be referred to.

Mid Sussex District Plan (2014)

-  DP38 – Biodiversity.

5. Discussion and Recommendations

Discussion

- 5.1 The survey site is located at Wintons Fishery, Burgess Hill, West Sussex. The survey area extended over approximately 3.4 hectares (ha). Habitats to be impacted by the development proposals include modified grassland, introduced shrub, treelines, ditches, and standing water.
- 5.2 Design proposals include the construction of four glamping pods.
- 5.3 The desk study has shown the site is situated on the outskirts of Burgess Hill and is surrounded by a mix of arable land, woodland, and neutral grassland to the south, east, and west. The site itself is used as a fishery and composes lakes, treelines, grassland, and introduced shrubs.
- 5.4 Habitats within the proposed development area were assessed as being of value to wildlife within the local vicinity with potential to support breeding birds, bats, reptiles, badgers, great crested newts, hazel dormice, water voles, otters, hedgehogs, and stag beetles and these species may pose a constraint to works.
- 5.5 It is recommended that eDNA surveys in respect to great crested newts are undertaken in order to determine presence or likely absence of newts within the nearby vicinity. Alternatively, there is the option of joining the District License rub by NatureSpace for great crested newts which can be signed up for at any time of year.
- 5.6 It is also recommended that a series of bat transect surveys are undertaken due to the presence of wetland habitat which may support Daubenton's bats. The habitat is assessed as having moderate foraging and commuting potential for bats. However, due to the scale of the development being minor, the surveys should only take place once each season (autumn, spring, and summer), plus where possible static detectors should be left out for five consecutive nights once each season.
- 5.7 Further roost surveys of the trees are not considered necessary as the plans don't involve tree removal. If trees are to be removed, then activity surveys or an aerial tree inspection of the moderate value trees will be required. Trees with low roost value can be felled in a precautionary approach.
- 5.8 In addition, a precautionary approach to site clearance in respect to breeding birds, reptiles, badgers, hazel dormice, water voles, otters, hedgehogs, and stag beetles is recommended to minimise any adverse impacts on these species groups.
- 5.9 Details regarding specific mitigation, including further surveys and precautionary working practices together with habitat enhancement measures are provided below.

Recommendations

Breeding Birds

- 5.10 The on-site trees, scrub, and lakeside vegetation provide suitable nesting habitat for a range of bird species. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.11 In order to avoid any potential impact on breeding birds, the clearance of any trees or scrub should be undertaken outside the main bird nesting season which runs from March to August inclusive⁴, with clearance works possible between September and February. Where this is not possible, an ecologist would need to check the vegetation for active nests and signs of bird breeding activity.
- 5.12 In the event that a nest is found, an exclusion zone around the nest would be established. Works would have to cease within this buffer area until the young birds have fledged.

Reptiles

- 5.13 The proposed development is considered to have a relatively low impact on any potential reptile populations that may be present. It is therefore felt that a precautionary approach to vegetation clearance should be sufficient to safeguard this protected species group. This would involve vegetation clearance to be carried out in stages in order to avoid any potential impacts on reptiles. This work should be supervised by a suitably experienced ecologist.

Great Crested Newts

- 5.14 Great crested newts receive protection under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended). Due to the potential for great crested newts to use on-site habitats, a great crested newt survey should be carried out to determine presence/likely absence and if present, the survey will enable a population assessment to be made.
- 5.15 The on-site ditches and, where possible, all ponds within 500m of the site, should be included in the survey. The survey protocol should follow that set out in the Great Crested Newt Mitigation Guidelines (English Nature, 2001). An initial four surveys are required to demonstrate presence or absence and these must be carried out between mid-March and mid-June with two of those visits taking place within the peak survey time between mid-April and mid-May.

⁴ It should be noted that this is the main breeding period. Breeding activity may occur outside this period (depending on the particular species and geographical location of the site) and thus due care and attention should be given when undertaking potentially disturbing works at any time of year.

- 5.16 An alternative survey approach is an eDNA survey. All ponds and suitable drainage ditches within 500m of the Survey Area should be tested to identify the presence or absence of great crested newts. eDNA testing can be carried out between mid-April and the end of June. It should be noted that if the eDNA survey identifies that great crested newts are present, a series of six conventional surveys will then be required, with at least three of these carried out between mid-April and mid-May, in order to make a population size class estimate to obtain a European Protected Species Mitigation Licence
- 5.17 If great crested newts are found to be present, an additional two survey visits will then be required to allow a population size class assessment to be made, with at least one of these visits being undertaken within the peak survey time between mid-April and mid-May.
- 5.18 The results of the survey should then be used to inform mitigation proposals for this species.
- 5.19 If great crested newts are found to be present in the locality following the survey, a European Protected Species Mitigation Licence from Natural England may be required to remove aquatic or terrestrial habitat in order to facilitate the works. Once submitted, a licence application can take up to 30 days to be processed. Natural England will only grant a licence once planning permission has been received.
- 5.20 As part of the licence application, a Method Statement will need to be submitted to guide works in relation to this species. If individuals are found to be using the onsite water features, suitable compensation measures to mitigate for losses to any aquatic habitat will be required in addition to undertaking a formal translocation to ensure individuals are not present within the development footprint. This process will involve fencing the development area and trapping and relocating newts over a number of weeks.
- 5.21 An alternative approach is District Level Licensing by NatureSpace. This approach enables a development to progress all year round, and results in the developer funding great crested newt projects in the district and county. Although this approach is usually quicker it can be more expensive than a conventional licence if there are ponds on site, or in the immediate vicinity.

Badgers

- 5.22 Badgers receive protection under The Protection of Badgers Act 1992.
- 5.23 Due to the potential presence of badgers in the area, a series of general precautions are recommended. This will include the following;
 -  Throughout construction, all on-site contractors must be made aware of the potential presence of badgers in the locality and a tool box talk should be given by a qualified ecologist immediately prior to the start of construction works to discuss the potential for badgers to pass through the site and to provide information on legislation and the ecology of this species.

-  All trenches should be covered at night or if this is not possible, ramps must be installed into the trenches to enable badgers to escape should they enter the excavations. All materials must be stored safely and lids securely fitted, particular waste and other potential food sources.

Bats

- 5.24 Bats receive protection under The Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended).
- 5.25 The onsite habitats were assessed as having moderate potential for foraging bats. Normally this would require one survey per month during their active period. However, due to the minor scale of the development, it is considered that one transect survey each season (spring, summer and autumn) is sufficient to assess the use of the site by bats. Where possible static detectors are required to be left out for five consecutive nights once each season.
- 5.26 Further roost surveys of the trees are not considered necessary as the plans don't involve tree removal. If trees are to be removed, then an aerial tree inspection or activity surveys of the moderate value trees will be required. Trees with low value for roosting bats can be felled in a precautionary approach.
- 5.27 The results of the bat surveys can then be used to inform specific mitigation and enhancement measures for this species group to include a lighting scheme that is sympathetic to bats.
- 5.28 Where a roost is likely to be impacted by the works, and where avoidance is not possible, it may be necessary to obtain a European Protected Species Mitigation (EPSM) Licence before the works can proceed and to complete any necessary mitigation.
- 5.29 Such a licence would need to be obtained from Natural England once full planning permission is in place. The application will require the drafting of a detailed mitigation strategy including timing and construction methods in addition to the mitigation measures proposed. Natural England currently require 30 working days to determine a licence application.
- 5.30 If a bat roost is found for a common bat species and the roost is of low conservation value, then a Low Impact Class Licence may be obtained for the site instead. This type of licence is typically obtained within 15 days.

Hazel Dormice

- 5.31 The hazel dormouse is protected under the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended).
- 5.32 Although there was habitat on site that was considered suitable for supporting dormice, it is not felt that this will be significantly impacted by the proposed development. Therefore, a precautionary approach to the clearance of the site should be sufficient for protecting any dormice present.

- 5.33 It is recommended that all clearance work is undertaken in the presence of a suitably qualified ecologist, who will guide the schedule of works.

Water Voles

- 5.34 Water voles are protected under the Wildlife and Countryside Act 1981 (as amended).
- 5.35 The onsite habitats were considered to provide limited potential for water vole and therefore, at this stage, no further survey is considered necessary. It is however considered necessary to adopt a precautionary approach to works to safeguard this protected species. This will require a suitably qualified ecologist carrying out an updated walkover survey of the site immediately prior to works starting on the site. The ecologist will then give a toolbox talk to the on-site contractors prior to the start of works to discuss a precautionary approach to works.
- 5.36 It is also recommended that any on-site bankside vegetation is cut to ground level using hand held trimmers or similar prior to ground works commencing in order to make the ditch unsuitable for this species group and discourage use of this feature during works. These works should be overseen by a suitably qualified ecologist.

Otters

- 5.37 Otters and their places of refuge are protected at a European level under the EC Habitats Directive (as amended 2010) and have full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).
- 5.38 Although potential habitat for otters was identified on/near the site, no otters or secondary signs of otters were found on the site. It is therefore recommended that a precautionary approach will be required to safeguard this protected species. This will require a suitably qualified ecologist carrying out an updated walkover survey of the site immediately prior to works starting on the site. The ecologist will then give a toolbox talk to the on-site contractors prior to the start of works to discuss a precautionary approach to works.
- 5.39 To help maintain the value of the watercourse, the area should be litter picked at the start and end of works, and all construction related materials removed periodically through the contract period and on completion of works.
- 5.40 The use of high intensity lighting which would illuminate the watercourse should be avoided both during the works period and following on from the completion of the project, to ensure that suitable habitat for otter is maintained.
- 5.41 It is recommended that no works within 30m of the watercourse should be undertaken after dusk.
- 5.42 Otters are naturally inquisitive. Any excavations that are left overnight should include a ramp of 45 degrees or less on one face to allow otter and other wildlife to climb out should they fall into the excavation. Excavations should be inspected daily before the start of works.

- 5.43 Construction staff should be aware that otter may lie-up in stacked pipes or beneath pallets. These features should be inspected daily before the start of works.

Hedgehogs

- 5.44 Hedgehogs are listed on the Natural Environment and Rural Communities (NERC) Act 2006 Section 41 as a Species of Principal Importance. They are a rapidly declining species.
- 5.45 Hedgehogs need short grass areas to search for invertebrate prey. Log piles and decaying vegetation are used to forage and hibernate in. Areas of leaf litter can be collected and used in nests. Dense scrub areas are also useful to build hibernation nests during winter. Wildlife friendly corridors allow hedgehogs and other wildlife to migrate across a site. These are discussed in the Wildlife Friendly Pathways Section below.

Stag Beetles

- 5.46 Stag beetles are a Species of Principle Importance for the UK and are also listed on the Sussex Rare Species inventory, therefore a precautionary approach to the clearance of all dead wood should be taken during works. Where possible the standing dead wood around the site boundaries should be retained as part of the works. Where the dead trees pose a health and safety risk, the above ground section should be felled and the arisings stacked on the ground. The tree base and root system of these trees should be retained where possible.
- 5.47 Where it is not possible to retain these areas, the root system of the dead trees should be removed under an ecological watching brief and any larvae encountered should be removed to suitable retained deadwood habitat elsewhere around the site boundaries.

Habitat Retention

- 5.48 All retained trees, including all adjacent off-site trees should be protected in accordance with British Standards (BS 2012) 5837:2012 Trees in Relation to Design, Demolition and Construction. The root protection areas of any retained trees must be left free from excavation and disturbance, and protected during any proposed works. Protection should be in the form of fencing and signs installed for the duration of the works.

Habitat Enhancement

- 5.49 New development offers the opportunity for habitat enhancement in accordance with national and local planning policy and some recommendations are included below.

Control of Invasive Non-Native Species (INNS)

- 5.50 Although it is not illegal to have species listed under the Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended), it is illegal to permit these species to spread and grow in the wild.

- 5.51 We recommend that a member for the Property Care Association Invasive Weed Control Group (PCA IWCG) is contacted to provide further advise on the giant rhubarb (*Gunnera sp.*) and rhododendron specimens.

Bird and Bat Boxes

- 5.52 Additional bird nesting and bat roosting provision could be incorporated into new design proposals. These could either be installed on trees or incorporated into the new building design. Some recommendations are made below as a guide.
- 5.53 Bat roosting opportunities could be provided through the installation of boxes on the outside of the walls or remaining trees, such as the Schwegler 2F, or other makes of a similar design, such as Chavenage Bat box. There are a range of bat boxes available and these can be selected to suit the development and bat species in the locality.
- 5.54 Bird boxes could be installed on the walls of the new building or in the remaining trees which could include the following Schwegler bird house or 1B makes, or similar designs from alternative suppliers. If the client is happy for bird boxes to be installed on the walls of the new building then a Schwegler sparrow terrace 1SP could also be used.
- 5.55 Further details of the bird and bat boxes are provided in Appendix F.
- 5.56 Bat boxes should be installed at appropriate locations ideally with south-east, south, or south-west facing aspects at least 3m from ground level. Ideally they need to be exposed to 6-8 hours of direct sunlight, but sheltered from strong winds. If installed on the building, these should ideally be positioned directly below the eaves.
- 5.57 Bird Boxes should be located out of prevailing wind, rain, and strong sunlight, ideally with a clear flight path to the entrance. Ideally they should be installed two to four metres from the ground facing north or north-east.

Wildlife Friendly Pathways

- 5.58 The increase in building can result in ecological areas which are unconnected. Effectively these are ecological islands, and often there is no way for wildlife to migrate to and from these areas. One way to reduce the impact and allow wildlife, including hedgehogs, to migrate across sites is to install wildlife friendly pathways across a site. This can include a range of things such as wildlife corridors, such as hedgerows and scrub or rough grassland corridors, but also installing holes in fences. Wildlife holes, often referred to as hedgehog holes, help wildlife migrate through areas. The holes need to be at least 13cm by 13cm, at ground level.

Compensatory Planting

- 5.59 Additional tree and shrub planting could be incorporated into the landscape proposals to compensate for any removal to facilitate the works. Planting should include a high proportion of native species and be of local provenance where possible. These should be carefully selected to ensure they contain species suitable for the area. Some species of known wildlife value are listed in Appendix E.

6. Conclusions

- 6.1 The site survey revealed the following habitats:
-  Modified grassland;
 -  hardstanding;
 -  lines of trees;
 -  standing water;
 -  introduced shrub; and
 -  ditches.
- 6.2 The site is not subject to any statutory or non-statutory designations. The closest statutory site is the South Downs National Park and Lewes and Brighton Biosphere reserve located adjacent the eastern site boundary at its closest point and the survey area does not support any features that contribute to the designation of these sites.
- 6.3 The following protected species surveys are recommended in order to determine presence or likely absence:
-  Great crested newt; and
 -  Bat transect.
- 6.4 Under current design proposals all trees noted as having potential to support roosting bats (T1, T2, T3, T4, T5, and T6) are to be retained. If the proposals change and the trees with moderate value for roosting are to be removed, then an aerial tree inspection or activity surveys will be required. Trees with low value for roosting can be felled in a precautionary approach.
- 6.5 In addition, a precautionary approach to site clearance in respect to breeding birds, reptiles, badgers, hazel dormice, water voles, otters, hedgehogs, and stag beetles is recommended to minimise any adverse impacts on these species groups.
- 6.6 It has been recommended that the site is enhanced by introducing some compensatory planting and installing bat and bird boxes.

7. References

- British Standards Institute (2012). 5837:2012. *Trees in Relation to Design, Demolition and Construction – Recommendations*. Standards Policy & Strategy Committee. Milton Keynes: BSI.
- British Standards Institute (2013). 24040:2013. *Biodiversity-Code of Practice for Planning and Development*. Standards Policy & Strategy Committee. Milton Keynes: BSI.
- CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal Second Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.
- Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.
- Department for Communities and Local Government (2021) *National Planning Policy Framework (NPPF)* (on-line). Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60777/2116950.pdf
- ILP – Institute of Lighting Professionals (2018). Guidance Note 08/18 Bats and artificial lighting in the UK. Bats in the built environment series. ILP and the Bat Conservation Trust [on-line].
- Joint Nature Conservation Committee (2010). *Handbook for Phase 1 habitat survey - A technique for Environmental Audit*. JNCC, Peterborough.
- MAGIC - Multi-Agency Geographic Information for the Countryside (2022). *MAGIC* Natural England, Leeds. [on-line]. Available from: www.magic.gov.uk
- Mid Sussex District Plan 2014 – 2031. Available from: <https://www.midsussex.gov.uk/media/3406/mid-sussex-district-plan.pdf>
- Stace, C.A. (2010). *New Flora of the British Isles* (3rd Ed.). Cambridge University Press, Cambridge.
- Schwegler (2018). *Bird and Nature Conservation Products* [on-line]. Available from <http://www.schwegler-natur.de>
- SxBRC (2023). Ecological data search for land at Wintons Fishery, Burgess Hill.
- UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>).

8. Glossary of Terms

BAP	Biodiversity Action Plan
BRC	Biological Records Centre
CIEEM	Chartered Institute of Ecology and Environmental Management
Habitats Directive	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographical Information for the Countryside
NNR	National Nature Reserve
Nomenclature	The system of devising of names for plants
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal- formerly referred to as a Phase 1 Habitat Survey
SAC	Special Area of Conservation
SINC	Site of Importance for Nature Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
INNS	Invasive Non-native Species
PCA IWCG	Property Care Association Invasive Weed Control Group

Figures and Appendices

Appendix A

Habitat Map and Target Notes



Figure 1: Wintons Fishery Habitat Survey Map

Drawn by: HW
On the: 02/11/2023
Not to Scale
Ref: 12484



Phlorum Limited, 12 Hunns Mere Way,
Woodingdean, Brighton, East Sussex,
BN2 6AH
Tel: +44(0)1273 307167
Web: www.phlorum.com
Email: info@phlorum.com

Target Notes (TN)

The following features of interest were noted during the survey and have been marked on Figure 1:

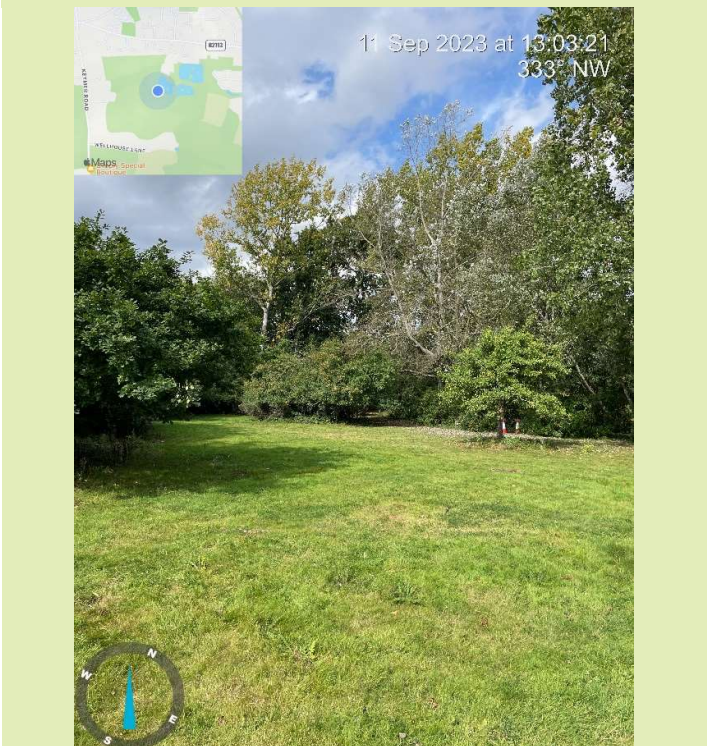
-  **TN1** – Giant rhubarb (*Gunnera sp.*) at the northern boundary.
-  **TN2** – Log piles at the southern extent of the site.

Appendix B

Photographs

Photographs

Photo No.	Feature (Target Note No.)	Photograph of Feature
1	TN1: Giant rhubarb present at the northern boundary	

2	TN2: Log pile at the southern extent	 11 Sep 2023 at 12:56:53 326° NW
3	Modified grassland area of proposed glamping pod location	 11 Sep 2023 at 13:03:21 333° NW

4

Another proposed pod location of modified grassland at the south boundary



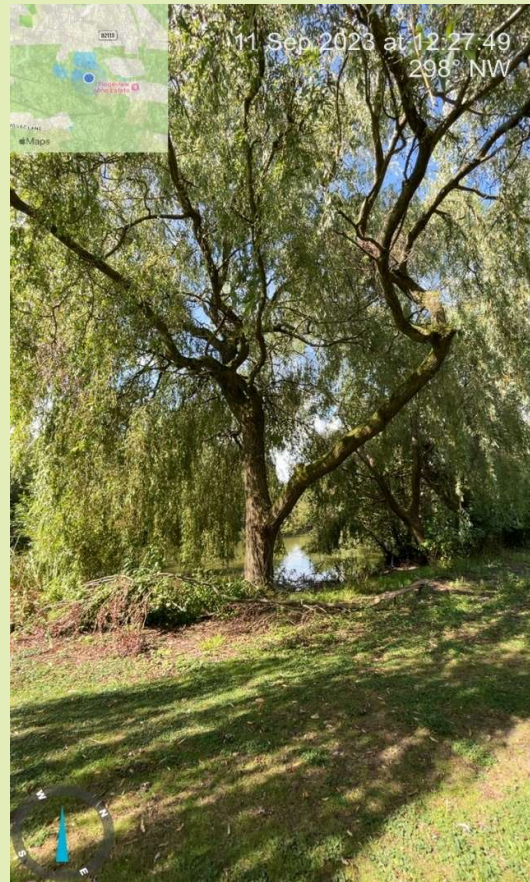
5

T1 and T2 at the northeast boundary – both trees had **low** bat roost potential



6

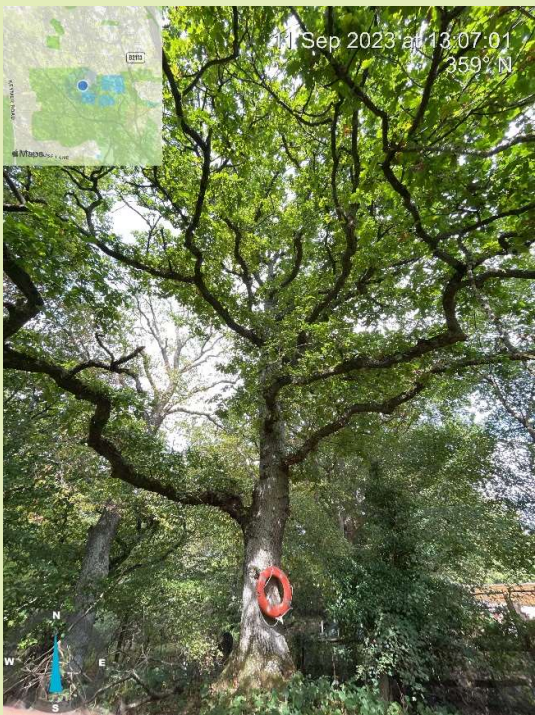
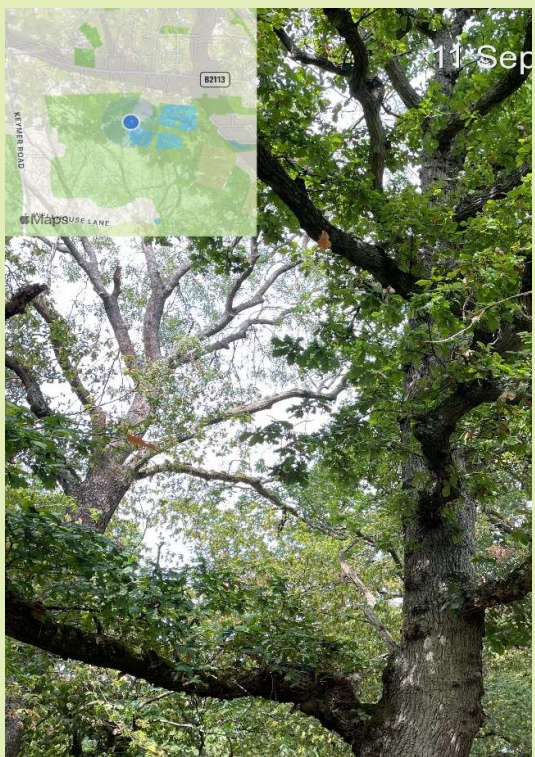
T3 at the southern site
extent with **low** bat roost
potential



7

T4 located at the
southwest boundary with
moderate bat roost
potential



8	T5 located at the northwest boundary with moderate bat roost potential	 The photograph shows a large, mature tree with a thick trunk and dense green foliage. A red circular marker is visible on the trunk. An inset map in the top left corner shows the tree's location relative to a road and a water body. The date and time '11 Sep 2023 at 13:07:01' and coordinates '50° 35' 39" N' are displayed in the top right corner.
9	T6 at the northwest boundary with low bat roost potential	 The photograph shows a large, mature tree with a thick trunk and dense green foliage. An inset map in the top left corner shows the tree's location relative to a road and a water body. The date '11 Sep' is displayed in the top right corner.

Appendix C

Legislation

Legislation

This section contains information pertaining to the legislation and planning policy applicable in Britain. This information is not applicable to Northern Ireland, the Republic of Ireland the Isle of Man or the Channel Islands. Information contained in the following appendix is provided for guidance only.

Species

The objective of the EC Habitats Directive⁵ is to conserve plants and animals which are considered to be rare across Europe. The Directive is transposed into UK law by The Conservation of Habitats and Species Regulations 2017 (as amended) (formerly The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended).

The Wildlife and Countryside Act 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and also implements the obligations set out for species protection from the Council Directive 2009/147/EC (formerly 79/409/EEC) on the Conservation of Wild Birds (EC Birds Directive) in Great Britain.

Various amendments have been made since the Wildlife & Countryside Act came into force in 1981. Further details pertaining to alterations of the Act can be found on the following website: www.opsi.gov.uk. Key amendments have been made through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

There are a number of other legislative Acts affording protection to species and habitats. These include:

-  Countryside and Rights of Way (CROW) Act 2000;
-  Deer Act 1991;
-  Natural Environment & Rural Communities (NERC) Act 2006;
-  Protection of Badgers Act 1992; and
-  Wild Mammals (Protection) Act 1996.

Badgers

Badgers and their setts are protected under the Protection of Badgers Act (1992), which consolidated and added to the previous Badger Acts of 1973 and 1991. Under this legislation it is an offence to:

-  cruelly ill-treat a badger, including use of tongs and digging;

⁵ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

- 🌿 intentionally or recklessly cause a dog to enter a badger sett;
- 🌿 intentionally or recklessly damage, destroy or obstruct access to a badger sett⁶ or any part thereof;
- 🌿 intentionally or recklessly disturb⁷ a badger when it is occupying a badger sett;
- 🌿 possess or control a dead badger or any part of a badger;
- 🌿 sell or offers for sale, possesses, or has under his control, a live badger; and
- 🌿 wilfully kill, injure, take, or attempt to kill, injure, or take a badger.

A Development Licence will be required from Natural England for any development works affecting an active badger sett, or to disturb badgers while individuals are occupying the sett. Depending on the nature of the works and the specifics of the sett, badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett itself. Natural England has issued guidelines on what constitutes a licensable activity. There is no provision in law for the capture of badgers for development purposes and therefore it is not possible to obtain a licence to translocate badgers from one area to another.

Bats

Bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). This act protects individuals from:

- 🌿 intentional or reckless disturbance (at any level);
- 🌿 intentional or reckless obstruction of access to any place of shelter or protection; and
- 🌿 selling, offering, or exposing for sale, possession or transporting for purpose of sale.

In addition, all species of bat are fully protected under The Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2. Regulation 41 prohibits:

- 🌿 deliberate killing, injuring, or capturing of Schedule 2 species (all bats);
- 🌿 deliberate disturbance of bat species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.

⁶ A badger sett is defined in the legislation as *"any structure or place which displays signs indicating current use by a badger"*. This includes seasonally used setts. Natural England (2009) have issued guidance on what is likely to constitute current use of a badger sett: www.naturalengland.org.uk/Images/WMLG17_tcm6-11815.pdf

⁷ For guidance on what constitutes disturbance and other licensing queries, see Natural England (2007) Badgers & Development: A Guide to Best Practice and Licensing. www.naturalengland.org.uk/Images/badgers-dev-guidance_tcm6-4057.pdf, Natural England (2009) Interpretation of 'Disturbance' in relation to badgers occupying a sett www.naturalengland.org.uk/Images/WMLG16_tcm6-11814.pdf, Scottish Natural Heritage (2002) Badgers & Development. www.snh.org.uk/publications/online/wildlife/badgersanddevelopment/default.asp and Countryside Council for Wales (undated) Badgers: A Guide for Developers. www.ccw.gov.uk.

- deliberate disturbance of bat species as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part thereof.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect a bat roost or for operations likely to result in a level of disturbance which might impair their ability to undertake activities listed above. A licence is required to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Breeding Birds

Under the Wildlife & Countryside Act, 1981 (as amended), a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds, however, are not included in this definition (except for limited parts of the Act). They are covered by the Games Acts, which fully protect them during the closed season.

Under the Wildlife & Countryside Act, 1981 (as amended), all birds, their nests and eggs are protected under Sections 1-8 of the Act and it is an offence, with certain exceptions, to:

- intentionally (or recklessly in Scotland) kill, injure, or take any wild bird;
- intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird;
- have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act;
- have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act;
- use traps or similar items to kill, injure or take wild birds;
- have in one's possession or control any bird (dead or alive) unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations; and
- in Scotland only, intentionally or recklessly obstruct or prevent any wild bird from using its nest.

Certain rare species receive additional special protection under Schedule 1 of the Act and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC). This affords them protection against:

- intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young;
- intentional or reckless disturbance of dependent young of such a bird;

- in Scotland only, intentional or reckless disturbance whilst lekking; and
- in Scotland only, intentional or reckless harassment.

The British Trust for Ornithology (BTO) has a list of birds that are Species of Conservation Concern. These birds are not legally protected but where they are found on site they should be given planning consideration. The criteria for birds listed as amber (medium conservation concern) include:

- historical population decline during 1800-1995, but recovering: population has more than doubled over last 25 years;
- moderate (25-49%) decline in UK breeding population over last 25 years;
- moderate (25-49%) contraction of UK breeding range over last 25 years;
- moderate (25-49%) decline in UK non-breeding population over last 25 years;
- species with unfavourable conservation status in Europe (Species of conservation Concern);
- five year mean of breeding pairs in the UK;
- ≥50% of UK breeding population in 10 or fewer sites;
- ≥50% of UK non-breeding population in 10 or fewer sites;
- ≥20% of European breeding population in UK; and
- ≥20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding populations in UK.

Hazel Dormice

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under The Conservation of Habitats and Species Regulations 2017 through its inclusion on Schedule 2. Regulation 41 prohibits:

- deliberate killing, injuring, or capturing;
- deliberate disturbance as to impair its ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- damage or destruction of a breeding site or resting place; and
- keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

The hazel dormouse is also currently protected under the Wildlife and Countryside Act 1981 (as amended) through its inclusion on Schedule 5. Under this Act, this species is additionally protected from:

- intentional or reckless disturbance;

- 👁 intentional or reckless obstruction of access to any place of shelter or protection; and
- 👁 selling, offering or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect dormouse breeding or resting places (N.B. this is usually taken to mean dormouse 'habitat') or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence will allow derogation from the relevant legislation but will also to enable appropriate mitigation measures to be put in place and monitored.

Herpetofauna (Reptiles and Amphibians)

The following species receive full protection under the Conservation of Habitats and Species Regulations 2017 (as amended) through their inclusion on Schedule 2.

- 👁 sand lizard (*Lacerta agilis*);
- 👁 smooth snake (*Coronella austriaca*);
- 👁 natterjack toad (*Epidalea calamita*);
- 👁 great crested newt (*Triturus cristatus*); and
- 👁 pool frog (*Pelophylax lessonae*).

Under this legislation, Regulation 41 prohibits:

- 👁 deliberate killing, injuring or capturing of species listed on Schedule 2;
- 👁 deliberate disturbance of any Schedule 2 species as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- 👁 deliberate disturbance of any Schedule 2 species as to affect significantly the local distribution or abundance of the species;
- 👁 deliberate taking or destroying of the eggs of a Schedule 2 species;
- 👁 damage or destruction of a breeding site or resting place; and
- 👁 keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of a species.

With the exception of the pool frog, these species are also currently listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under this Act, they are additionally protected from:

- 👁 intentional or reckless disturbance (at any level);
- 👁 intentional or reckless obstruction of access to any place of shelter or protection; and

- selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of herpetofauna are protected solely under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). These species include:

- adder (*Vipera berus*);
- grass snake (*Natrix natrix*);
- common lizard (*Zootoca vivipara*); and
- slow-worm (*Anguis fragilis*).

Under this legislation, for these species it is prohibited under Section 9(1) & (5) to:

- intentionally (or recklessly in Scotland) kill or injure these species; or
- sell, offer, or expose for sale, possess, or transport for purpose of sale these species, or any part thereof.

The following species are listed in respect to Section 9(5) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) which only affords them protection against sale, offering or exposing for sale, possession, or transport for the purpose of sale:

- common frog (*Rana temporaria*);
- common toad (*Bufo bufo*);
- smooth newt (*Lissotriton vulgaris*); and
- palmate newt (*L. helveticus*).

Water Voles

The water vole (*Arvicola amphibius*) (= *terrestris*) is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- intentionally kill, injure, or take (capture) this species;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection; and
- sell, offer, or expose for sale, or have in his possession or transport for the purpose of sale, any live or dead water vole or part of this species.

Where development works are liable to affect habitats known to support water voles, Natural England must be consulted. All alternative design options must have been explored and communicated to Natural England in order to demonstrate that works have tried to avoid contravening the legislation e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable etc. Conservation licences for the capture and translocation of water voles may be issued by Natural England for the purpose of development activities if it can be shown that the

activity has been properly planned and executed and thereby contributes to the conservation of the population.

Otters

Otters (*Lutra lutra*) are fully protected under The Conservation of Habitats and Species Regulations 2017 through their inclusion on Schedule 2. Regulation 41 prohibits:

- 🌿 deliberate killing, injuring, or capturing of otters;
- 🌿 deliberate disturbance as to impair their ability:
 - (i) to survive, breed, or reproduce, or to rear or nurture young; and
 - (ii) to hibernate or migrate.
- 🌿 deliberate disturbance as to affect significantly the local distribution or abundance of the species;
- 🌿 damage or destruction of a breeding site or resting place; and
- 🌿 keeping, transporting, selling, exchanging, or offering for sale whether live or dead or of any part of this species.

Otters also receive protection under the Wildlife and Countryside Act 1981 (as amended) through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- 🌿 intentional or reckless disturbance (at any level);
- 🌿 intentional or reckless obstruction of access to any place of shelter or protection; and
- 🌿 selling, offering, or exposing for sale, possession or transporting for purpose of sale.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect breeding or resting places or for activities likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above. The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and monitored.

Wild Mammals

All wild mammals are protected against intentional acts of cruelty under the Wild Mammals (Protection) Act 1996. Under this legislation it is an offence to:

- 🌿 mutilate, kick, beat, nail, or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention of this legislation, due care and attention should be taken when carrying out works that have the potential to impact any wild mammal as described above.

Plants

Wild plants are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Some rare plant species also receive full protection under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits:

-  intentionally (or recklessly in Scotland) picking, uprooting, or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only); and
-  selling, offering, or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or parts.

In addition to the legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2017. Regulation 45 makes it an offence to:

-  deliberately pick, collect, or destroy a wild Schedule 5 species; and
-  be in possession of, or control, transport, sell, or exchange any wild live or dead Schedule 5 species or anything derived from it.

A European Protected Species Mitigation (EPSM) Licence issued by Natural England will be required for works liable to affect species of plant listed under The Conservation of Habitat and Species Regulations 2017.

Invasive Plant Species

Certain plants are listed on Part II of Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) in respect to Section 14(2). Species include:

-  Japanese knotweed (*Reynoutria japonica*);
-  giant hogweed (*Heracleum mantegazzianum*);
-  Himalayan balsam (*Impatiens glandulifera*);
-  certain species of rhododendron (*Rhododendron* sp.); and
-  certain species of cotoneaster (*Cotoneaster* sp.).

Species listed are non-natives whose establishment or spread in the wild may be detrimental to native wildlife. Inclusion on Part II of Schedule 9 therefore makes it an offence to:

-  plant or otherwise cause these species to grow in the wild.

This legislation makes it is an offence to cause species listed to grow in the wild. Therefore, if they are present on site and development activities have the potential to cause the further spread of these species to new areas, it will be necessary to ensure appropriate measures are in place to prevent this.

Habitats

International Statutory Designations

-  Special Protection Areas (SPAs): Terrestrial SPAs are afforded protection by The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) and offshore SPAs are afforded protection under The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended by EU Exit Regulations 2019). SPAs are designated under the EC Birds Directive (Council Directive 2009/147/EC on the Conservation of Wild Birds). SPAs are areas recognised as important habitat for rare and migratory birds within the European Union (rare birds as listed on Annex I of the Directive).
-  Special Areas of Conservation (SACs): These areas are designated under the EC Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora), designated for the habitats and (non-bird) species listed on Annexes I and II to the Directive under the same regulations as detailed for SPAs.
-  Ramsar sites: These areas are wetlands designated under the Convention on Wetlands of International Importance (1971). Wetlands can include areas of marsh, fen, water, or peatland and may be natural or artificial, permanent, or temporary. Ramsar sites are underpinned through prior notification as Sites of Special Scientific Interest (SSSIs) and as such receive statutory protection under the Wildlife & Countryside Act 1981 (as amended) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000.

National Statutory Designations

-  Sites of Special Scientific Interest (SSSIs): These sites are designated by the countryside agencies (for example Natural England) under the Wildlife & Countryside Act 1981 (as amended). Prior to 1981 these were designated under the National Parks and Access to the Countryside Act 1949. Improved mechanisms for the protection of SSSIs have also been introduced by the Countryside and Rights of Way Act 2000 (in England and Wales).
-  National Nature Reserves: These sites are also designated by the countryside agencies under the Wildlife & Countryside Act 1981 (as amended).

Local Statutory Designations

-  1949 Local Nature Reserves (LNRs): These sites are designated by local authorities under the National Parks and Access to the Countryside Act 1949. These are sites recognised for their wildlife or geological interest at a local level and are managed for nature conservation.

Non-Statutory Designations

-  Local Wildlife Sites: Areas of local conservation interest may be designated by local authorities. The terminology for these sites varies depending on the county. They can be called Sites of Nature Conservation Importance (SNCI's), Sites of Importance for Nature Conservation (SINCs), County Wildlife Sites (CWS), Listed Wildlife Sites (LWS), Local Nature Conservation Sites (LNCS), and Sites of Biological Importance (SBIs). The designation criteria may vary between counties. Local Wildlife Sites are of material consideration when planning applications are being determined.
-  The Hedgerow Regulations 1997: These have been compiled to protect 'important' countryside hedgerows from damage or removal. A hedgerow is considered important if it (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy certain hedgerows without permission from the local planning authority. Hedgerows covered by these regulations include those on or adjacent to common land, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry, and land used for the keeping or breeding of horses, ponies, or donkeys.

National Planning Policy

-  The National Planning Policy Framework (NPPF) (2021) replaces the former NPPF 2019, 2018 and 2012, and the former PPS9 document and emphasises the need for sustainable development. The Framework specifies the need to protect and enhance biodiversity and geodiversity, identify and safeguard components of local wildlife-rich habitats and wider ecological networks including the hierarchy of international, national, and locally designated sites of importance for biodiversity; wildlife corridors; and stepping that connect them. Plus partnerships for habitat management, enhancement, restoration, or creation. The Framework aims to promote the conservation, restoration, and enhancement of priority habitats, ecological networks, and the protection and recovery of priority species. In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from adverse harm; appropriate mitigation or compensation measures are in place where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

Local Planning Policy

Mid Sussex District Plan (2014 – 2031)

DP38: Biodiversity

Strategic Objectives: 3) To protect valued landscapes for their visual, historical and biodiversity qualities; and 5) To create and maintain easily accessible green infrastructure, green corridors and spaces around and within the towns and villages to act as wildlife corridors, sustainable transport links and leisure and recreational routes. Evidence Base: Biodiversity 2020; Biodiversity Action Plan; Biodiversity Opportunity Areas; Green Infrastructure mapping; Habitats and Species Records; Mid Sussex Ancient Woodland Survey; Mid Sussex Infrastructure Delivery Plan; The Natural Choice: Securing the Value of Nature; West Sussex SNCI Register. Biodiversity will be protected and enhanced by ensuring development:

- 🌿 Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and
- 🌿 Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and
- 🌿 Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and
- 🌿 Promotes the restoration, management and expansion of priority habitats in the District; and
- 🌿 Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas.

Designated sites will be given protection and appropriate weight according to their importance and the contribution they make to wider ecological networks. Valued soils will be protected and enhanced, including the best and most versatile agricultural land, and development should not contribute to unacceptable levels of soil pollution. Geodiversity will be protected by ensuring development prevents harm to geological conservation interests, and where possible, enhances such interests. Geological conservation interests include Regionally Important Geological and Geomorphological Sites.

Appendix D

Plant Species List

Plant Species List

Scientific nomenclature follows Stace (2010) for vascular plant species and British Bryological Society (BBS) Special Volume No. 5 *English Names for British Bryophytes* for bryophyte species. Vascular plant common names follow the Botanical Society of the British Isles 2003 list, published on its web site, www.bsbi.org.uk. The plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, L = locally

Key to qualifiers: G = garden origin, P = planted, Y = young, S = seedling or sucker, T = tree, H = hedge, W = water, ? = identification uncertain.

Scientific Name	Common Name	Abundance	Qualifier
<i>Acer palmatum</i>	Japanese Maple	O	P
<i>Betula pendula</i>	Silver birch	F	T
<i>Crataegus sp</i>	Hawthorn	F	T
<i>Gunnera manicata</i>	Giant rhubarb	O	P
<i>Magnolia sp</i>	Magnolia	O	P
<i>Malva sylvestris</i>	Mallow	F	
<i>Mercurialis perennis</i>	Dogs mercury	F	
<i>Plantago major</i>	Broadleaf plantain	F	
<i>Populus sp</i>	Poplar	F	T
<i>Prunella vulgaris</i>	Selfheal	F	
<i>Prunus spinosa</i>	Blackthorn	F	T
<i>Quercus robur</i>	Common oak	F	T
<i>Rhododendron</i>	Rhododendron species	O	P
<i>Rubus sp</i>	Bramble	F	
<i>Salix babylonica</i>	Weeping willow	F	T

<i>Senecio jacobaea</i>	Ragwort	F	
<i>Taraxacum sp</i>	Dandelion	O	
<i>Thuja plicata</i>	Red cedar	O	T
<i>Trifolium repens</i>	White clover	F	
<i>Urtica dioica</i>	Common nettle	F	

Appendix E

Suggested Compensatory Planting

Suggested Compensatory Planting

This section provides a list of plants which are of proven value to wildlife. The list is not exhaustive and merely provides a guide for suggested planting for wildlife value. Planting should be tailored on a site by site basis. The list includes some native and ornamental species however the emphasis should always be on the use of predominantly native species.

N = Native, NN = Non-native.

This list includes species that may be harmful if handled or ingested. Schedule 9 (Part 2) of the Wildlife and Countryside Act, 1981 (as amended) includes a list of invasive plants, including aquatic species, that should always be avoided in planting schemes.

Large Shrubs

Hedge veronica/Hebe (*Veronica* spp.) NN

Hawthorn (*Crataegus monogyna*) N

Blackthorn (*Prunus spinosa*) N

Rose: dog rose (*Rosa canina*), field rose (*R. arvensis*), burnet rose (*R. pimpinellifolia*) N

California lilac (*Ceanothus* spp.): (*C. arborea*) NN

Wild privet (*Ligustrum vulgare*) N

Common holly (*Ilex aquifolium*) N

Barberry (*Berberis* spp.): (*B. darwinii*), (*B. thunbergii*), (*B. x stenophylla*) NN

Daisy Bush (*Olearia* spp.): (*O. x hastii*), (*O. macrodonta*), (*O. traversii*) NN

Firethorn (*Pyracantha coccinea*) NN

Hazel: (*Corylus avellana*) N, (*C. maxima*) NN

Viburnum (*Viburnum* spp.): wayfaring tree (*V. lantana*) N, guelder rose (*V. opulus*) N, laurustinus (*V. tinus*) NN. Note: *V. lantana* can become invasive in more open habitats.

Dogwood (*Cornus sanguinea*) N

Broom (*Cytisus scoparius*) N

Escallonia (*Escallonia macrantha*) NN

Hardy fuchsia (*Fuchsia magellanica*) NN

Buckthorn (*Rhamnus cathartica*) N

Spindle (*Euonymus europaeus*) N

Tutsan (*Hypericum androsaemum*) N

Yew (*Taxus baccata*) N

Trees

Cherry (*Prunus* spp.): wild cherry (*P. avium*), bird cherry (*P. padus*), domestic plum (*P. domestica*) N, or cherry plum (*P. cerasifera*) NN

Ash (*Fraxinus excelsior*) N

Apple (*Malus* spp.): edible apple (*M. domestica*), crab apple (*M. sylvestris*) N

Pear (*Pyrus* spp.): edible pear (*P. communis*) NN

Small-leaved lime (*Tilia cordata*) N

Silver birch (*Betula pendula*) N

Yew (*Taxus baccata*) N

Black poplar (*Populus nigra*) N

Foxglove tree (*Paulownia tomentosa*) NN

Beech (*Fagus sylvatica*) N

Climbers

Jasmine (*Jasminum* spp.): summer jasmine (*J. officinale*), winter jasmine (*J. nodiflorum*) NN

Ivy (*Hedera helix*) N

Climbing hydrangea (*Hydrangea anomala* ssp. *petiolaris*) NN

Honeysuckle (*Lonicera* spp.): (*L. periclymenum*) N

Clematis (*Clematis* spp.) NN

Hop (*Humulus lupulus*) N

Firethorn (*Pyracantha atalantoides*) NN

Bulbs

English bluebell (*Hyacinthoides non-scripta*) N

Squill species (*Scilla* spp.) N/NN

Snowdrop (*Galanthus nivalis*) N

Winter aconite (*Eranthis hyemalis*) E

Crocus species (*Crocus* spp.) NN

Wild Daffodil (*Narcissus pseudonarcissus*) N

Onion species (*Allium* spp.) N/NN. Note: *Allium triquetrum* (three cornered leek) and *Allium paradoxum* (few-flowered leek) are Schedule 9 invasive plant species.

Wood anemone (*Anemone nemorosa*) N

Lesser celandine (*Ficaria verna*) N

Appendix F

Bird and Bat Box Designs

Bird and Bat Box Designs

Bird Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
 A photograph of a red, rectangular wooden nest box hanging from a tree branch. A small bird is visible entering the hole.	Schwegler Nest Box 1B Hole-fronted 26mm entrance hole	16 x 16 x 23	Multi-purpose, including: blue-, marsh-, coal-, and crested tit, and possibly wren. All other species are prevented from using the nest box due to the smaller entrance hole.	Suitable walls or semi-mature/mature trees and shrubs; attached to a tree trunk or hung from branches. Ideal points include discrete areas away from predators, such as against walls, plant, and metal supports.
 A photograph of two yellow, arched wooden bird houses. One is shown from the front with a circular entrance hole, and the other is shown from the back with a hanging bracket.	Schwegler Bird House 32mm entrance hole	15 x 21 x 33	Multi-purpose, including: great-, blue-, marsh-, and coal tit, redstart, nuthatch, pied flycatcher, and sparrows.	Fixed to a semi-mature/mature tree trunk, wall or fence using the hanging bracket on the back. Between 1.5 m and 3 m high, and should be sited higher if area has a particularly high cat population.

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	Schwegler Sparrow Terrace 1SP	20 x 43 x 24.5	House sparrow. It may also occasionally attract tits, redstarts, and spotted flycatchers.	In an elevated position such as on post/platform within dense shrub/tree planting or on top of lighting columns. Alternatively, they could be attached to the side of a building. The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds, and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds. Ideally place the terrace two metres or more above the ground. Either install on the surface of the wall using the plugs and screws provided or install directly into the wall. Cleaning is not necessary. The front panel can be removed by turning the screw hook.

Bat Boxes

Example	Type	Dimension D x W x H (cm)	Target Species	Location
	2F Schwegler Bat Box (General Purpose) with or without Double Front Panel	16 x 16 x 33	Without panel: Particularly successful with brown long-eared bat. Also used by noctule. With panel: Ideal for crevice-dwelling species: pipistrelles, Myotis species (particularly Daubenton's), Leisler's, and serotine.	On trees or buildings and at a height of 3 to 6m. In open sunny positions and in groups of 3 to 5 facing different directions. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.
	Chavenage Bat Box	10 x 18 x 38	Small crevice-dwelling bats: e.g. pipistrelles.	On trees in gardens or woodland and also on house walls. 2.5 - 5m high on a building, mature tree, or vegetation line (trees/tall hedge) or on a feeding/flight route in partial daytime sun. Please note that once bats have inhabited a roost site they may only be disturbed by licensed bat workers.



Phlorum Limited

Head Office & Registered Office:

Unit 12
Hunns Mere Way
Woodingdean
Brighton
East Sussex
BN2 6AH
T: 01273 307 167

Northern Office:

Ground Floor
Adamson House
Towers Business Park
Wilmslow Road
Didsbury
Manchester
M20 2YY
T: 0161 955 4250

Western Office:

One Caspian Point
Pierhead Street
Cardiff Bay
Cardiff
CF10 4DQ
T: 029 2092 0820

info@phlorum.com
www.phlorum.com

Registered in England & Wales. Reg No. 4967256