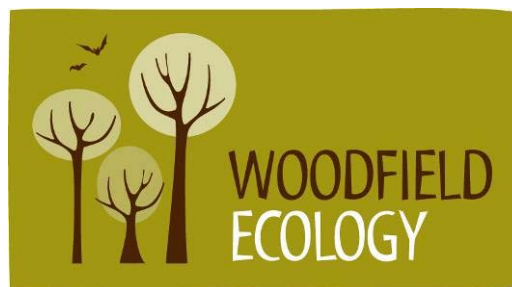


NEW BARN STUD, WIDEGATES

PRELIMINARY ECOLOGICAL APPRAISAL



On behalf of Tamsyn Hutchins

March 2021

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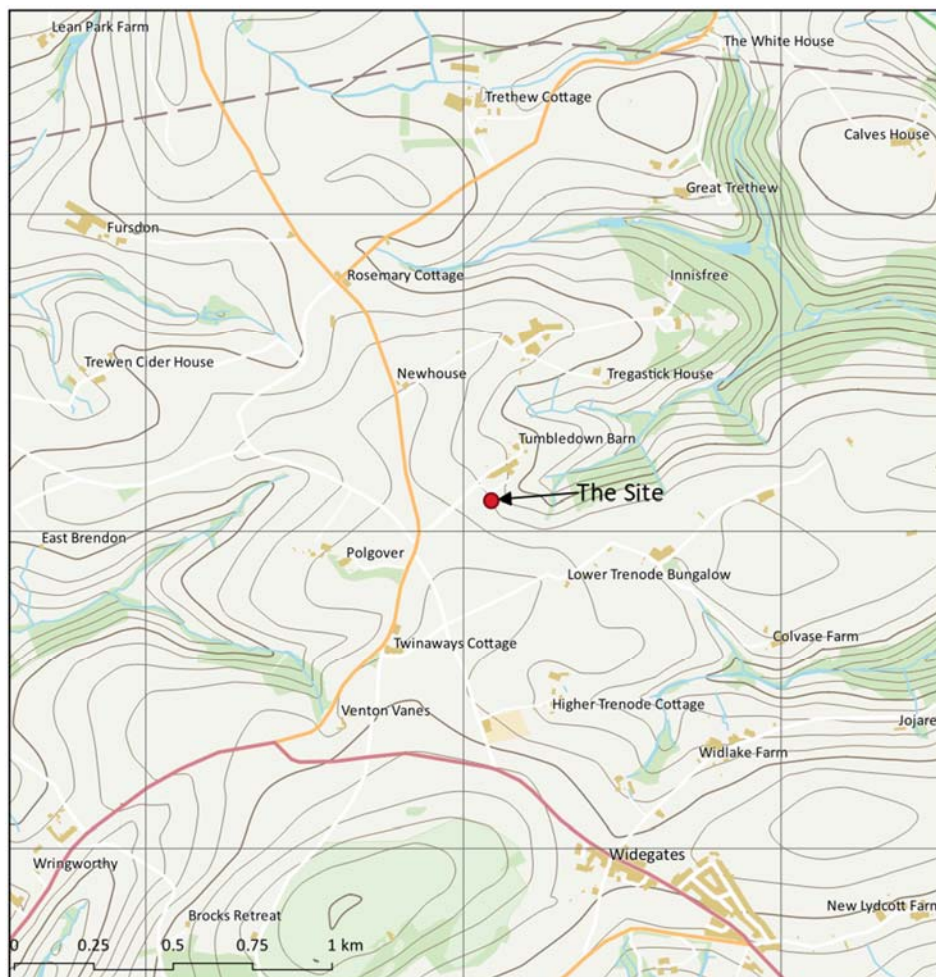
1.0 INTRODUCTION

1.1 SITE LOCATION & OVERVIEW OF PROPOSALS

1.1.1 Woodfield Ecology was commissioned by Tamsyn Hutchins to undertake a Preliminary Ecological Appraisal (PEA) of a small area of land at New Barn Stud, Cutparrett, Widegates, Cornwall, (NGR SX2811 5907), hereafter referred to as ‘the Site’.

1.1.2 The Site is located off a private driveway which runs from the B3252 to the west and serves the equestrian facility of New Barn Stud just to the north of the Site. See Figure 1 for below for Site Location.

Figure 1: Site Location



1.1.3 The Site comprises a c.0.03ha area of land either side of a mature hedgerow and encompassing parts of two field corners.

- 1.1.4 The proposals are for the installation of two glamping huts for use by equestrian residential course attendees. An unsurfaced pedestrian path will lead from the huts to the nearby drive where existing parking areas are available.

1.2 OBJECTIVES

- 1.2.1 An ecological survey of the Site was undertaken in order to carry out an Extended Phase 1 Habitat Survey to classify habitats and identify significant features and the presence or potential presence of legally protected or otherwise notable species.
- 1.2.2 The results of the survey are presented in the following report, with a summary of relevant legal and planning policy protection provided in Appendix A.
- 1.2.3 The overall purpose of this assessment is to identify the existing wildlife interests on the Site and set out mitigation and enhancement measures that would be implemented during and post-construction to provide a net gain in biodiversity, as required by national and local planning policy.

2.0 METHODOLOGY

2.1 DESK STUDY

- 2.1.1 An ecological desk study accessing data from freely available online data sources was undertaken, including on-line resources such as www.magic.gov.uk, the National Biodiversity Network (<https://nbnatlas.org/>), Cornwall Council's Interactive Map (<https://map.cornwall.gov.uk/website/ccmap>) and Google Earth <https://earth.google.com/>.
- 2.1.2 The following baseline data was gathered from a 1km radius surrounding the Site, extended to 5km for European Designated Sites (refer to Appendix A for further details regarding designations and legislation):
- Records of statutory sites designated for nature conservation value including European Sites (comprising Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar Sites) and UK sites such as Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs);
 - Records of non-statutory sites designated for nature conservation – in Cornwall these include County Wildlife Sites (CWSs) – sites of county importance for wildlife, designated on the basis of the habitat or known presence of a particular species;
 - Habitats of importance for nature conservation including ancient woodland and Habitats of Principal Importance (HPIs) under the NERC Act (2006); and
 - Records held on MAGIC of European Protected Species (EPS) licences which have been granted within the study area.

2.2 EXTENDED PHASE 1 HABITAT SURVEY

- 2.2.1 An Extended Phase 1 Habitat survey was undertaken at the Site following standard survey methods on 24th February 2021.
- 2.2.2 Habitats and obvious features within the Site were mapped following the Joint Nature Conservation Committee's Phase 1 Habitat Survey Method (2010) with dominant / indicator plant species identified in order to classify all habitats to a consistent level of detail and accuracy. An indicative plant species list was compiled, with nomenclature following Stace (2019).
- 2.2.3 The scope of the Phase 1 Habitat Survey was extended in accordance with the methodology provided by the Institute of Environmental Assessment (IEA, 1995) and in line with good practice (CIEEM, 2018) in that provision was made for recording information on the potential for protected species and, or species of conservation concern to be present. Any sightings, signs or evidence of protected faunal species were recorded during the survey and target notes were used to record any potential habitat for such species.

2.3 SURVEYOR DETAILS

- 2.3.1 The survey was undertaken by Oliver Prudden MCIEEM who has 20 years' experience as an ecological consultant.

2.4 SURVEY LIMITATIONS

- 2.4.1 The Extended Phase 1 Habitat survey was undertaken outside of the optimal window for this survey type (April to October inclusive). However, whilst some plant species may not have been visible at this time of the year, the vast majority will have been and could be readily identified using vegetative characteristics. Given this, and the nature of the habitats encountered as well as the minor scale of the predicted impacts, this is not considered to have significantly affected the overall results.

3.0 RESULTS

3.1 DESK STUDY

DESIGNATED SITES

- 3.1.1 No statutory designated sites were identified within the 1km search area around the Site.
- 3.1.2 The Site does however lie within the Zone of Influence of the Plymouth Sound and Estuaries Special Area for Conservation (SAC) and the Tamar Estuaries Complex Special Protection

Area (SPA). This zone has been identified as the area within which an increased residential or visitor population is considered to have potential to result in increased recreational impacts (in particular from disturbance & erosion) on these designated sites.

- 3.1.3 One non-statutory designated site was identified within the search area, c. 230m to the east of the site, namely Tregastick & Blacketon Woods County Wildlife Site (CWS). These woodlands form an important part of the Seaton Valley system and are of value to a wide range of wildlife, particularly birds and invertebrates. The CWS also includes areas of ancient re-planted woodland.

PROTECTED / NOTABLE SPECIES

- 3.1.4 The Site is within an entirely rural setting, surrounded by farmland and woodland with fields predominantly subdivided by mature hedges. No waterbodies or watercourses are present in the close vicinity. Legally protected or otherwise notable species that have potential to be present in areas of suitable habitats based on surveyor experience and regional/local species distributions include:

- Mammals including foraging, commuting and roosting bats, Dormouse, Badger & Hedgehog;
- Breeding birds;
- Commonly occurring species of reptiles such as Common Lizard, Slow-worm and potentially Grass Snake.

- 3.1.5 A search for European Protected Species licences granted within the surrounding area using www.magic.gov.uk found none within the 1km search radius, however mitigation licences for Dormice and bat species (including Lesser Horseshoe bat, Brown Long-eared Bat and Common Pipistrelle) were found within 2km of the Site.

3.2 EXTENDED PHASE 1 HABITAT SURVEY

HABITATS

- 3.2.1 The Extended Phase 1 Habitat Map setting out the location and extents of habitats identified on the Site is provided as Figure 2 below, with botanical species lists and accompanying target notes (TNs) in Appendix B. The following section describes each of the habitat types recorded within the Site in turn.

Species-poor Semi-improved Grassland

- 3.2.2 Horse-grazed grassland of varying sward heights and grazing intensities was recorded within the Site and immediate vicinity. Within the Site itself, the grassland was noted to be tall, dominated by coarse grasses and showing signs of nutrient enrichment. Species present included abundant Yorkshire Fog *Holcus lanatus*, frequent Creeping Bent *Agrostis*

stolonifera, Cock's-foot *Dactylis glomerata*, Creeping Buttercup *Ranunculus repens* and Broad-leaved Dock *Rumex obtusifolia*, with locally frequent Common Nettle *Urtica dioica*.

- 3.2.3 The field to the north west (off-site) was noted to be tightly grazed and moderately poached by horses but with a similar species composition. Some areas of grassland within the smaller fenced paddocks to the south and west of the Site (off-site) were noted to have patches of more species-rich and short sward grassland dominated by herbs and fine grasses. Species present in these areas included Red Fescue *Festuca rubra*, Sweet Vernal-grass *Anthoxanthum odoratum*, Smooth Meadow-grass *Poa pratensis*, Cut-leaved Crane's-bill *Geranium dissectum*, White Clover *Trifolium repens*, Common Sorrel *Rumex acetosa*, Ribwort Plantain *Plantago lanceolata*, Lesser Celandine *Ranunculus ficaria* and a hawkbit *Leontodon* sp.

Tall Ruderal with Scattered Scrub

- 3.2.4 This habitat was present on the northern side of a 'bulge' in the central hedge as well as extending to the north west between the hedge and the field fence. This habitat was noted to be heavily shaded by the out-grown mature hedge as well as the c. 2-3m change in levels from one side of the hedge to the other. As a result, vegetation was relatively sparse, but dominated by ruderal plants including abundant Red Campion *Silene dioica* and frequent Common Nettle, Broad-leaved Dock, Wood Avens *Geum urbanum* and Bramble *Rubus fruticosus* agg. Many species typical of heavily shaded environments were also present, including occasional Scaly Male-Fern *Dryopteris affinis* agg., Primrose *Primula vulgaris*, Bluebell *Hyacinthoides non-scripta*, Hart's-tongue *Phyllitis scolopendrium*, Herb-Robert *Geranium robertianum* and Atlantic Ivy *Hedera helix* subsp. *hibernica*.

Species-rich Hedge and Trees

- 3.2.5 The hedge running broadly north-west to south-east through the Site (TN4) was noted to be an intact, mature and outgrown species-rich hedgerow with scattered trees. A stone-faced bank was present on the north-eastern side, although not on the south western side due to the change in ground levels over the hedge. Two mature Ash *Fraxinus excelsior* stools were present within the section of hedge within the Site along with a diverse mix of hedgerow trees and shrubs including Holly *Ilex aquifolium*, Elder *Sambucus nigra*, Hazel *Corylus avellana*, Pedunculate Oak *Quercus robur*, Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Grey Willow *Salix cinerea* and Sycamore *Acer pseudoplatanus*.
- 3.2.6 A second hedge was present just to the east of the Site (TN3), which comprised a gappy hedge with trees on a low earth bank. Recent hedgerow management had been undertaken to coppice the majority of hedgerow shrubs leaving mature Ash stools, previous to which the hedge appeared to have been outgrown and un-managed. Species present included Ash, Hazel, Hawthorn, Elder and Holly.
- 3.2.7 All hedges meet the definition of hedges considered as Habitat of Principle Importance (HPI) under the NERC Act, 2006.

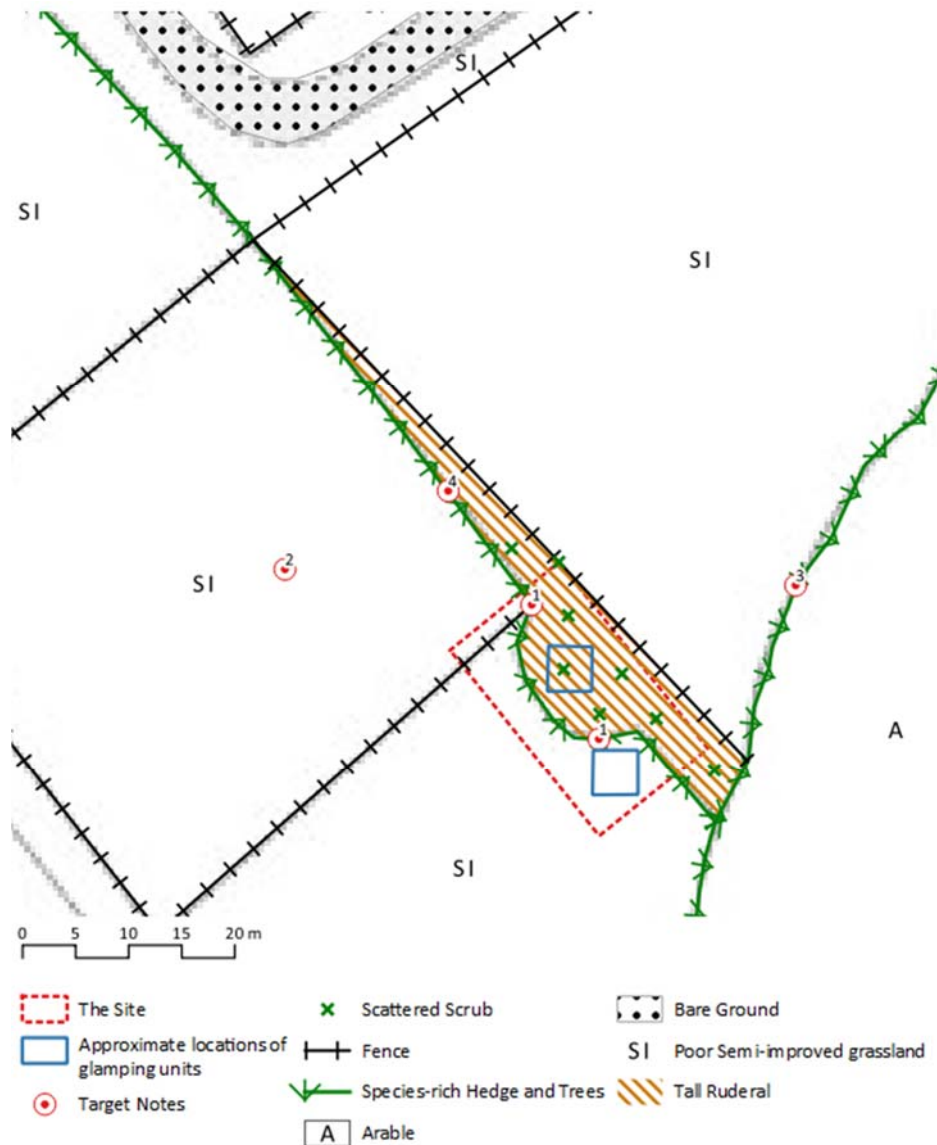


Figure 2: Extended Phase 1 Habitat Survey Map

PROTECTED & NOTABLE SPECIES

3.2.8 Table 1 below sets out the findings in relation to the presence of or suitable habitat for protected / otherwise notable species within the Site and its immediate surrounds.

Table 1: Suitability of habitats recorded for protected / notable species

Species/ Taxa	Description	Valuation (on Site)	Reasoning
Bats	The Site offers suitable foraging and commuting habitat for bats, with the grassland, hedgerows and trees providing	Foraging / commuting: Local	Habitats within the Site provide a small area of

Species/ Taxa	Description	Valuation (on Site)	Reasoning
	<p>sheltered feeding opportunities as a small part of a network of local foraging areas with good woodland and hedgerow connections to the wider landscape.</p> <p>Two mature Ash stools (TN 1) were assessed to have 'low' suitability for roosting bats due to the presence of knot holes and sections of hollow trunk from historic coppicing / laying. None of these features were more than 1.5m above ground level.</p>	Roosting: Local	<p>sheltered foraging and commuting habitat for bats, although given the small size and local availability of higher quality habitat this is unlikely to form a key foraging resource.</p> <p>A total of 2 trees provide some opportunities for roosting bats.</p>
Badger	No evidence of Badger within the Site was identified.	Negligible	No evidence found
Other Mammals	<p>Hedgerow habitats are suitable for Dormouse, with good connectivity to other high-quality habitats including nearby woodlands.</p> <p>The areas of tall ruderal, grassland and hedgerow habitats present are suitable for Hedgehog.</p>	Site	Relatively small areas of suitable habitat are present within the Site, with large areas of optimal dense woodland and hedgerow habitats in the wider area.
Breeding Birds	Hedgerows and trees provide suitable habitat for nesting birds. Scattered scrub within the Site was considered too low and sparse to provide suitable nesting sites.	Site	Small areas of suitable habitat are present within the Site, with large areas of optimal dense woodland and hedgerow habitats in the wider area.
Reptiles and Amphibians	<p>Habitats present were not considered suitable for reptiles due to heavy overshadowing or as a result of grazing regimes.</p> <p>No wetland habitats were present within the Site or the vicinity.</p>	Negligible	No areas of suitable habitat present.
Flora	No notable plant species were recorded during the field survey.	Negligible	No notable flora noted.

3.3 SUMMARY OF SURVEY FINDINGS

3.3.1 The Extended Phase 1 Habitat survey confirmed habitats present within the Site to comprise species-poor semi-improved grassland and tall ruderal with scattered scrub. None of these habitats are of particular ecological significance on account of their species composition and small size as well as being widespread and readily re-created. The species-rich hedge and trees present within the centre of the Site meets the definition of a Habitat of Principal Importance and is consequently assessed as being of high ecological value.

4.0 POTENTIAL ECOLOGICAL IMPACTS

4.1 ON-SITE IMPACTS

4.1.1 The proposals would result in the direct loss of less than c. 20m² of tall ruderal and c. 20m² of species-poor semi-improved grassland, assessed as being of negligible ecological significance. No direct impacts to any hedgerows or woody vegetation would occur.

4.1.2 As no direct impacts to hedgerows would occur, no direct impacts to species that may utilise this habitat type would occur, including potentially Dormice, breeding birds and foraging / commuting and roosting bats.

4.1.3 No exterior lighting is proposed to be installed, however interior lights in the two glamping huts would introduce some night-time lighting into a previously unlit area. Given the small size and low height of the glamping huts, any effect of this lighting is predicted to be minor and localised and unlikely to lead to any ecologically significant effects. Notwithstanding this, recommendations are made (see section 5 below) to further minimise the potential effects of night-time lighting on wildlife.

4.2 OFF-SITE IMPACTS

4.2.1 Due to the distance and the scale and nature of the proposals, no impacts to the Tregastick & Blacketon Woods CWS are considered likely to occur.

4.2.2 The Cornwall Council Marine and Estuarine European Sites Mitigation Supplementary Planning Document requires certain development types within the Zones of Influence of European Sites to make financial contributions to Strategic Access Management and Monitoring (SAMMs) plans in mitigation for any increased recreational pressure that may occur. This includes all new housing, student accommodation and tourist accommodation of one or more units, as follows:

- Hotels, guest houses, B&Bs, lodges, static caravans & touring pitches
- Flats as well as larger dwellings
- Affordable housing as well as market housing

- Student accommodation
- Tied accommodation
- Residential caravans/mobile homes/park homes

4.2.3 As the Site falls within the Zone of Influence of the Plymouth Sound and Estuaries SAC and the Tamar Estuaries Complex SPA, and the proposals fall within the development types required to contribute, a template Appropriate Assessment should be completed as part of the planning submission and the level of SAMMs contribution calculated.

5.0 RECOMMENDATIONS FOR FURTHER SURVEY, MITIGATION & ENHANCEMENT

5.1 FURTHER SURVEYS

5.1.1 Based on the survey findings, no additional ecological surveys are considered necessary to inform the planning application.

5.2 MITIGATION MEASURES

5.2.1 Given the very small scale of the impacts, no specific mitigation for habitat loss is considered necessary. The proposals will avoid any direct impacts to the highest value ecological feature (hedgerows).

5.2.2 Small amounts of shrub and tree pruning may be necessary to site the glamping huts. To ensure legal compliance in relation to breeding birds, any scrub or woody vegetation removal would be undertaken between September to February to avoid the main bird nesting season. If small areas of scrub required removal outside this period, a pre-clearance check would be made, and any active nests found would be left undisturbed until any young had fledged.

5.2.3 In order to minimise potential impacts from interior lighting, it is recommended that the glamping huts are orientated with window openings facing away from the central hedge to reduce light spill onto this feature.

5.3 ENHANCEMENTS

5.3.1 The National Planning Policy Framework (NPPF), Cornwall Local Plan Policy 23 and the Cornwall Council Biodiversity Supplementary Planning Document (SPD), require development proposals to provide a net gain for biodiversity. In line with this policy requirement, it is recommended that 2 No. bat boxes are installed on mature trees within hedgerow H1. Key considerations in siting the bat boxes in this location include:

- The location is as high as possible (at least 3m above ground level);
- Boxes should ideally be orientated west, south or east to maximise solar heating;
- The location is out of the reach of cats which are known to predate bats as they emerge from roost sites.

5.3.2 Examples of suitable maintenance-free bat boxes are provided in Appendix C and include:

- 2F Schwegler Bat Box
- 2FN Schwegler Bat Box

6.0 CONCLUSIONS

6.1.1 Based on the scale and nature of the impacts, no further ecological surveys were deemed necessary in support of the current application.

6.1.2 Proposed mitigation measures include appropriate controls on the installation of the glamping huts to avoid accidental damage to retained vegetation. A SAMMs contribution at the determined rates would mitigate for any potential recreational impacts on nearby European designated sites. Opportunities have been taken to provide enhancements for wildlife in the form of artificial refuges for roosting bats.

6.1.3 Overall, given the mitigation proposed together with the provision of bat boxes, a small net gain for biodiversity is anticipated.

REFERENCES

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.

Cornwall Council (2020) Marine and Estuarine European Sites Mitigation Supplementary Planning Document

Cornwall Council (2018) Biodiversity Supplementary Planning Document

Institute of Environmental Assessment (IEA) (1995). *Guidelines for Baseline Ecological Assessment*. Chapman and Hall, London

Joint Nature Conservation Committee (JNCC) (2010). *Handbook for Phase 1 habitat survey - A technique for environmental audit*. JNCC.

HMSO (2000) *The Countryside & Rights of Way Act*

HMSO (2006) *Natural Environment and Rural Communities Act*

HMSO (1981) *The Wildlife and Countryside Act*

APPENDIX A: SUMMARY OF LEGAL PROTECTION & PLANNING POLICY

STATUTORY DESIGNATIONS

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are of international nature conservation importance and provide protection for key species and habitats.

Sites of Special Scientific Interest (SSSIs) are of national importance and are designated to safeguard and enhance the characteristic plants, animals and physical features of our natural heritage. Formal consent from Natural England is a statutory requirement if a proposed project is likely to have a significant effect on the features for which a SAC or SPA was designated, or if a proposed project is likely to have a significant effect on a SSSI.

National Nature Reserves (NNRs) are managed for wildlife and receive the same protection as SSSIs. Local Nature Reserves (LNRs) are managed by the Local Authority as publicly accessible nature reserves and are protected from inappropriate use/development.

NON-STATUTORY / LOCAL DESIGNATIONS

There are a number of systems for identifying sites, habitats and species that do not qualify for legal (statutory) protection but may be important at the regional or county level, and may be conservation priorities for the future. They also contribute towards the UK's implementation of International Conventions and European Directives. Planning policies recognise that Local Authorities must give appropriate protection to such non-statutory designations with respect to development. This section provides a brief outline of these designations.

Non-statutory Sites

Non-statutory sites include County Wildlife Sites (CWS) and ancient woodlands. They are sites of at least county importance for wildlife, are shown on local plans and given greater protection through the planning process with respect to development.

Species & Habitats of Principal Importance

The Natural Environment and Rural Communities Act 2006 (NERC Act 2006) places a 'Biodiversity Duty' on Government (including local authorities) to have regard for biodiversity in the execution of their functions and on the Secretary of State to further promote the conservation of these habitats and species. It also provides the legal basis for listings of Species and Habitats of Principal Importance for the Conservation of Biodiversity in England. These listings and the actions relevant to them were elaborated in the (now superseded) UK Biodiversity Action Plan. The background information and habitat and species action plans elaborated for the BAP are still useful tools in the assessment of progress towards the Aichi Targets.

The Priority Species and Habitats (S.41) listing for England now has 945 species and 56 habitats.

PLANNING POLICY

The NPPF sets national planning policy, including in relation to natural resources. The nature conservation policies of the NPPF are intended to support an environmental objective of sustainable development, specifically:

“to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”.

The NPPF includes numerous provisions that encourage the protection of natural resources through the inclusion of effective policies in local plans that promote consideration of ecological features as planning determinations are made.

Paragraph 174 is of particular relevance, and guides local planning authorities to create policies which promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

SPECIES

European Protected Species (EPS)

Protected under both the Conservation of Habitats & Species Regulations, 2017 and the Wildlife and Countryside Act 1981 (as amended), it is an offence to:

- Intentionally kill, injure or capture an EPS;
- Intentionally or recklessly disturb an EPS;
- Intentionally or recklessly damage, destroy or obstruct access to a place of shelter or breeding (for example, bat roosts, hedgerows used by Dormice), and this applies regardless of whether the species is actually present at the time (for example, a bat roost used in the winter for hibernation is protected throughout the year, even during the summer when it is not occupied).
- Possess or transport a bat or any part of an EPS, unless acquired legally;
- Sell, barter or exchange bats, or parts of an EPS.
- Intentionally handle a wild EPS or disturb an EPS whilst using a place of shelter/ breeding unless licensed to do so by the statutory conservation agency (Natural England).

Birds

The nests (while in use or being built) and eggs of all wild birds are protected against taking, damage and destruction under the Wildlife and Countryside Act 1981 (as amended). It is also an offence to kill, injure or take any wild bird.

Bird species listed under Schedule 1 of the Wildlife and Countryside Act are afforded additional protection against intentional or reckless disturbance whilst building a nest or in or near a nest containing eggs or dependant young.



APPENDIX B: BOTANICAL SPECIES LISTS AND TARGET NOTES



Table B1: Botanical species recorded within habitats present on Site

Species Name		Abundance (DAFOR)
TALL RUDERAL WITH SCATTERED SCRUB		
Red Campion	<i>Silene dioica</i>	A
Broad-leaved Dock	<i>Rumex obtusifolius</i>	F
Lords-and-Ladies	<i>Arum maculatum</i>	F
Primrose	<i>Primula vulgaris</i>	F
Bluebell	<i>Hyacinthoides non-scripta</i>	F
Wood Avens	<i>Geum urbanum</i>	F
Bramble	<i>Rubus fruticosus agg.</i>	F
Scaly Male-Fern	<i>Dryopteris affinis</i>	O
Hart's-tongue	<i>Phyllitis scolopendrium</i>	O
Cleavers	<i>Galium aparine</i>	O
Common Nettle	<i>Urtica dioica</i>	F
Elder	<i>Sambucus nigra</i>	O
Atlantic Ivy	<i>Hedera helix subsp. hibernica</i>	F
Germander Speedwell	<i>Veronica chamaedrys</i>	F
Herb-robert	<i>Geranium robertianum</i>	O
SPECIES-POOR SEMI-IMPROVED GRASSLAND		
Yorkshire-fog	<i>Holcus lanatus</i>	A
Creeping Bent	<i>Agrostis stolonifera</i>	F
Broad-leaved Dock	<i>Rumex obtusifolius</i>	LF
Cut-leaved Crane's-bill	<i>Geranium dissectum</i>	O
Common Mouse-ear	<i>Cerastium fontanum</i>	F
White Clover	<i>Trifolium repens</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	F
Marsh Thistle	<i>Cirsium palustre</i>	R
Ribwort Plantain	<i>Plantago lanceolata</i>	O
Common Sorrel	<i>Rumex acetosa subsp. acetosa</i>	O
Common Nettle	<i>Urtica dioica</i>	LA
Dandelion	<i>Taraxacum officinale agg.</i>	O
A Hawkweed	<i>Leontodon sp.</i>	R
Lesser Celandine	<i>Ranunculus ficaria</i>	O
Cock's-foot	<i>Dactylis glomerata</i>	LF


Species Name		Abundance (DAFOR)
Red Fescue	<i>Festuca rubra</i>	LF
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	F
Smooth Meadow-grass	<i>Poa pratensis</i>	LF
SPECIES-RICH HEDGE AND TREES		
Ash	<i>Fraxinus excelsior</i>	A
Hazel	<i>Corylus avellana</i>	LA
Holly	<i>Ilex europaeus</i>	O
Elder	<i>Sambucus nigra</i>	O
Pedunculate Oak	<i>Quercus robur</i>	R
Hawthorn	<i>Crataegus monogyna</i>	F
Blackthorn	<i>Prunus spinosa</i>	F
Grey Willow	<i>Salix cinerea</i>	R
Sycamore	<i>Acer pseudoplatanus</i>	R
Foxglove	<i>Digitalis purpurea</i>	O
A violet	<i>Viola sp.</i>	O
Ground Ivy	<i>Glechoma hederacea</i>	LF
Wall Pennywort	<i>Umbilicus rupestris</i>	O
Lords-and-Ladies	<i>Arum maculatum</i>	O
Primrose	<i>Primula vulgaris</i>	F
Bluebell	<i>Hyacinthoides non-scripta</i>	O
Wood Avens	<i>Geum urbanum</i>	R
Bramble	<i>Rubus fruticosus agg.</i>	O
Scaly Male-Fern	<i>Dryopteris affinis</i>	O
Hart's-tongue	<i>Phyllitis scolopendrium</i>	O
Common Nettle	<i>Urtica dioica</i>	O
Atlantic Ivy	<i>Hedera helix subsp. hibernica</i>	F
Germander Speedwell	<i>Veronica chamaedrys</i>	R
Herb-robert	<i>Geranium robertianum</i>	R

Table B2: Target Notes

Target Note	Detail	Images
1	Two mature Ash stools assessed to be of 'low' suitability for roosting bats.	
2	Horse-grazed paddocks with areas of long and rank sward supporting species typical of nutrient enrichment with few herbs and dominated by coarse grasses. Some areas of shorter more species rich and herb-dominated swards where grazing has been more intense and nutrient enrichment less.	

Target Note	Detail	Images
3	Outgrown species-rich hedge and trees on low earth bank. Recently coppiced.	
4	Outgrown and un-managed species-rich hedge and trees on an asymmetric stone-faced bank.	

APPENDIX C: EXAMPLES OF BAT BOXES FOR TREES

Product	Notes	Image
<p>2F Schwegler Bat Box (General Purpose)</p>	<p>The 2F is manufactured from long-lasting Woodcrete, which is a blend of wood, concrete and clay which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects. Woodcrete is breathable and maintains a stable temperature inside the box and the 2F is painted black to absorb warmth. It also provides a rough surface for bats to cling to and climb up</p>	
<p>2FN Schwegler Bat Box</p>	<p>The 2FN Bat Box has two entrances - one at the front and one at the rear against the tree. Bats often creep into the rear entrance but leave by the front. It has a domed roof to allow the bats to form roosting clusters for warmth, and an increased internal height compared to the Schwegler 2F bat box. This bat box is also designed to be effective against small predators and excludes draughts and light. Due to the opening on the bottom, this bat box does not require cleaning. The 2FN is manufactured from long-lasting Woodcrete, which is a blend of wood, concrete and clay which will not rot, leak, crack or warp, and will last for at least 20 - 25 years, making it suitable for long-term mitigation projects.</p>	