# Latchetts Mead, Chobham

## ECOLOGICAL APPRAISAL

784-B028538 Revision 1

William Lacey Group

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Prepared on Behalf of Tetra Tech Limited. Registered in England number: 01959704

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# EXECUTIVE SUMMARY

| Contents | Summary |
|---|---|
| **Site Location** | A deciduous woodland parcel adjacent to SANG Chobham Meadows in Chobham, Woking. Ordnance Survey National Grid Reference SU 97882 62051. |
| **Proposals** | An approximately 1 hectare extension to the adjacent Chobham Meadows SANG. Some limbs to be removed on tree 'T2'. |
| **Existing Site Information** | WYG (now part of Tetra Tech) was commissioned by William Lacey Group on the 20th December 2017 to undertake an ecological survey and assessment of the site's potential suitability for SANG use. The site met all the requirements and all but one of the 'desirable' features against Natural England SANG guidelines. |
| **Scope of this Survey(s)** | An Ecological appraisal, to include a desk study and an extended Phase 1 habitat survey. This report provides an assessment of the potential ecological receptors on site, any potential constraints and recommendations for further surveys, avoidance, mitigation or enhancement measures that are needed. |
| **Results** | There were 15 designated sites within 2 km of the site, the closest of which was Chobham Meadows SANG SINC, located immediately south of the site. Semi-natural broadleaf deciduous woodland was present within the site. The site has suitability / potential to support roosting bats, foraging and commuting bats, reptiles, badger, breeding birds, otter, hazel dormouse and invertebrates. The site had negligible suitability /potential to support great crested newt and water vole. |
| **Recommendations** | • Three bat emergence / return-to-roost surveys of T2;<br>• The removal of all invasive species from site;<br>• Screening of the western boundary by planting native species;<br>• Mitigation for public disturbance by introducing dog waste bins, regular litter picking and interpretation boards; and<br>• Installation of bat and bird boxes and leaving log piles/deadwood. |

## GLOSSARY

| | |
|---|---|
| BCT | Bat Conservation Trust |
| BoCC | Bird(s) of Conservation Concern |
| BSI | British Standard Institute |
| BTO | British Trust for Ornithology |
| CIEEM | Chartered Institute of Ecology & Environmental Management |
| CRoW Act | Countryside and Rights of Way Act 2000 |
| DEFRA | Department for the Environment, Food and Rural Affairs |
| EPS | European Protected Species |
| EPSL | European Protected Species Licence |
| GCN | Great Crested Newt |
| Habitats Regulations | Conservation of Habitats and Species Regulations 2017 (as amended) |
| HAP | Habitat Action Plan |
| Hedgerow Regulations | The Hedgerow Regulations 1997 |
| HPI | Habitat(s) of Principal Importance |
| HRA | Habitats Regulations Assessment |
| JNCC | Joint Nature Conservation Committee |
| LBAP | Local Biodiversity Action Plan |
| LNR | Local Nature Reserve |
| LPA | Local Planning Authority |
| LWS | Local Wildlife Site |
| MCIEEM | Member of CIEEM |
| Natura 2000 site | A European site designated for its nature conservation value |
| NE | Natural England |
| NERC Act | Natural Environment and Rural Communities Act 2006 |
| NNR | National Nature Reserve |
| NPPF | National Planning Policy Framework |
| PEA | Preliminary Ecological Appraisal |
| SAC | Special Area of Conservation |
| SANG | Suitable Natural Alternative Greenspace |
| SAP | Species Action Plan |
| SBIC | Surrey Biodiversity Information Centre |
| SINC | Site of Important Nature Conservation |
| SNCO | Statutory Nature Conservation Organisations |
| SPA | Special Protection Area |
| SPI | Species of Principal Importance |
| SSSI | Site(s) of Special Scientific Interest |
| W&CA | Wildlife & Countryside Act 1981 (as amended) |

# 1.0 INTRODUCTION

## 1.1 BACKGROUND

Tetra Tech was commissioned by the William Lacey Group on 18th May 2021 to undertake an Ecological Appraisal of the site known as Latchetts Mead, in Chobham, Surry.

This report has been prepared by Assistant Ecologist Hannah Goodenough BSc and the conditions pertinent to it are provided in Appendix A.

## 1.2 SITE LOCATION

The 'site' is located at Latchetts Mead in Chobham, Surrey, GU24 8PH and is centred at Ordnance Survey National Grid Reference SU 97882 62051 – see Figure 1. It comprises of approximately 1 hectare of deciduous woodland, to the east of Chobham village centre. The site is bounded by Mill Bourne Brook and grassland fields to the south (SANG Chobham Meadows), residential housing and gardens to the west and north, and grassland fields with tree lines and hedgerows to the east.

## 1.3 DEVELOPMENT PROPOSALS

Previous proposals for the site were for residential development comprising of 15-20 units. It has now been proposed that the site acts as an approximately 1 hectare extension to the adjacent Chobham Meadows SANG. This would mitigate for adverse effects from recreational pressure on the Thames Basin Heath Special Protection Area (SPA) from new residential housing within Surrey Heath Borough Council.

Some limbs from tree 'T2' are being proposed for removal due to it being unsafe.

## 1.4 EXISTING SITE INFORMATION

WYG (now part of Tetra Tech) was commissioned by William Lacey Group on 20th December 2017 to undertake an ecological survey and assessment of the site's potential suitability for Sustainable Alternative Natural Green Space (SANG) use (WYG, 2018). An assessment of the site against the Natural England SANG guidelines showed that the site met all of the 'must/should have' requirements, and all but one of the 'desirable' features. As such, consultation with Natural England and the Local Planning Authority (LPA) was recommended to commence to discuss the next stage / steps for the site.

To support a future planning application for the site the following recommendations were made:

- Invasive species removal / mitigation (by avoidance);
- Tree survey;
- Walkover survey for bluebell, other ancient woodland indicator species and invasive plant species;
- Barn owl check;
- Bat inspection and dormouse survey should any trees / shrubs require removal;
- Pre-commencement badger check; and
- Specific timings and methodologies to be required for birds, reptiles and amphibians.

## 1.5 PURPOSE OF THE REPORT

The purpose of this report is to complete:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected/notable species within the site and its zone of influence;
- An extended Phase 1 habitat survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species;
- An assessment of the potential ecological receptors present on site, identify any constraints they pose to future development and (if possible) any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

A summary of the key legislation is also provided in Appendix B.

# 2.0 METHODOLOGY

## 2.1 DESK STUDY

### 2.1.1 Local Ecological Records Centre

Information was requested from the Surrey Biodiversity Information Centre (SBIC) for information on any nature conservation designations and protected or notable species records within 2 km of the site.

The data search covered:

- Statutory designated sites for nature conservation, namely Special Areas of Conservation (SACs), SPAs, Ramsar sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs);
- Non-statutory designated sites for nature conservation, namely Local Wildlife Sites (LWS) and Sites of Nature Conservation Interest (SINCs);
- Legally protected species, such as great crested newts *Triturus cristatus*, badger *Meles meles* and bats;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance (HPIs or SPIs); and,
- Priority habitats or species within the Surrey Local Biodiversity Action Plan (LBAP).

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

### 2.1.2 Online Resources

A search for relevant information was also made on the following websites:

- MAGIC www.magic.gov.uk - DEFRA's interactive, web-based database for statutory designations and information on any European Protected Species Mitigation Licence (EPSML) applications that have been granted in the local area.
- NBN Atlas https://nbnatlas.org/ - for records of protected and notable species.

Note that the use of some NBN Atlas data is limited (e.g. commercial use of data provided under a CC BY-NC licence is not possible) therefore we may not be able to report full details of those records in such cases.

## 2.2 FIELD SURVEYS

The following methodologies have been used to identify the ecological receptors present on or near the site, which are relevant to the proposed development.

### 2.2.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on 2nd June 2021 by Tetra Tech Project Ecologist Harriet Baber and Tetra Tech Assistant Ecologist Hannah Goodenough. The weather conditions were warm with no cloud and a light breeze.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (JNCC, 2010). Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2019). The site was also appraised for its suitability to support notable flora, with regard to the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017).

## 2.2.2 Protected & Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRoW Act, those given extra protection under the NERC Act, and species included in the Surrey LBAP.

### Great Crested Newt

The site was appraised for its suitability to support great crested newts *Triturus cristatus*. The assessment was based on Guidance outlined in the *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

### Bats

#### Roosting Bats –Trees

Any suitable trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) – hereafter referred to as the 'BCT Guidelines'. The categories used to classify the bat roost suitability of any features found, are explained in Table 1 below.

**Table 1: Categories of Bat Roost Suitability (BCT Guidelines)**

| Suitability | Typical Roosting Features |
|---|---|
| **Negligible** | Negligible habitat feature on site likely to be used by roosting bats. |
| **Low** | A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential. |
| **Moderate** | A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed). |
| **High** | A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. |

#### Foraging/commuting Bats

The BCT Guidelines use the criteria in Table 2 below to categorise the potential value of habitats and features for use by foraging and commuting bats and these have been used to characterise the value of this site.

**Table 2: Categories of Habitat Suitability (BCT Guidelines)**

| Suitability | Typical Foraging & Commuting Features |
|---|---|
| **Negligible** | Negligible habitat features on site likely to be used by commuting or foraging bats. |
| **Low** | Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub. |
| **Moderate** | Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. |

| Suitability | Typical Foraging & Commuting Features |
|---|---|
| | Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |
| **High** | Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.<br>Site is close to and connected to known roosts. |

### Reptiles
The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the Herpetofauna Workers' Manual (Gent & Gibson, 2003).

### Badger
The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989).

### Hazel Dormouse
The site was surveyed for its suitability to support hazel dormice. The assessment was based on guidance outlined in Bright, Morris and Mitchell-Jones (2006).

### Other Species
The site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development* (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

### Invasive Species
The site was searched for evidence of invasive plant species, such as Japanese *knotweed Reynoutria japonica* (formerly *Fallopia japonica*), Indian (Himalayan) balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, wall cotoneaster *Cotoneaster horizontalis* and rhododendron *Rhododendron ponticum* × *Rhododendron maximum*. A full list of all invasive plant species is provided in Appendix B.

## 2.3 LIMITATIONS
The optimal period to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in June which is in the optimal survey window. As such this is not considered to be a limitation to the accurate assessment of the habitats as the dominant species of the respective vegetation types were visible and identifiable.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

The details of this report will remain valid for a period of 18 months from the date of the survey (December 2022), after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

# 3.0 BASELINE CONDITIONS

## 3.1 DESIGNATED SITES

The following designated sites of ecological importance have been identified within 2 km of the site as displayed in Table 3 and shown on Figure 2.

**Table 3: Designated Sites Within 2 km**

| Designation | Site Name | Distance & Direction | Summary of features |
|---|---|---|---|
| NNR<br>SSSI<br>SPA<br>SAC | Chobham Common | 1 km north | The largest NNR in the south-east of England (655.7 hectares) with a large area of lowland heath. It is part of the Thames Basin Heaths SPA and the Thursley, Ash, Pirbright and Chobham SAC. It is home to over 100 bird species, 300 species of wildflower, 25 mammal species and 33 species of butterfly. |
| SSSI<br>SPA | Horsell Common | 1.9 km south east | 152 hectares of SSSI and part of the Thames Basin Heaths SPA. The Common has a rich mosaic of heathland habitats and is important for supporting breeding populations of nightjar *Caprimulgus europaeus*, woodlark *Lullula arborea* and Dartford warbler *Sylvia undata.* |
| SANG<br>SINC | Chobham Meadows<br>South of the Mill Bourne | 0 km south<br>(adjacent to site) | A herb rich meadow which are a rare resource within Surrey many having been lost to agricultural improvement and development. It was created to limit human disturbance on the SPA's mentioned above. |
| SINC | Little Heath | 0.6 km north | Heathland, acid grassland and broadleaved secondary woodland, and a colony of silver-studded blue *Plebejus argus.* |
| SINC | Broadford Meadows by The Bourne | 0.8 km south west | Contains food plain grazing marsh habitat with a diversity of plant species. 21 species typical of grassland of conservation interest in Surrey have been recorded on the site. Also contains a band of wetland woodland. |
| SINC | Burrow Hill Green | 1 km north west | Small common with acid grassland, heath, scrub, belt of woodland and pond. Selected, for acid grassland and small area of heath including species uncommon in the County – yellow-rattle *Rhinanthus minor*. |
| SINC | Millbrook Meadows | 1.3 km south west | Habitats include semi-improved grassland, semi-natural woodland and damp semi-improved grassland (declining habitat in Surrey) |
| SINC | Bourne Fields & Young Stroat Meadows | 1.7 km south east | Selected for semi-improved, species rich wet meadow and possibly old water-meadow, with interesting species-rich ditch flora and bankside vegetation. |

| Designation | Site Name | Distance & Direction | Summary of features |
|---|---|---|---|
| SINC | Chobham Place Woodland | 1.8 km north west | Ancient replanted woodland. Main interest of site is the old sweet chestnut trees *Castanea sativa*, many of which are starting to die, hollow out and self-pollard. |
| SINC | Chobham Place Grassland | 1.8 km north west | An unimproved grassland with several uncommon species. Lowland neutral grasslands are included within the Surrey BAP. |
| SINC | Wet meadows at Roselands Nursery | 1.8 km south west | The site is selected for unimproved wet grassland. 21 species typical of grassland of conservation interest in Surrey have been recorded on the site. The woodland on site supports 8 Ancient Woodland Indicator Species |
| SINC | Horsell Common Field | 1.8 km south east | Rough damp grassland with a rich flora. The site supports a good orchid population and the Forester moth *Adscita statices.* |
| SINC | Lovelands Farm Meadows | 1.8 km south west | Contains species rich rush dominated pasture. 12 species typical of grassland of conservation interest in Surrey have been recorded on the site. |
| SINC | Hay Meadow by the Bourne | 2 km south west | Wet meadow with species-rich flora noted for southern marsh-orchid *Dactylorhiza praetermissa*. |

## 3.2 HPI AND ANCIENT WOODLAND

The desk study identified the following Habitats of Principal Importance (HPIs) and ancient woodland within 2 km of the site:

- 287 parcels of lowland deciduous woodlands, the nearest is located 0.4 km west;
- 88 parcels of lowland heathland, the nearest is located 1 km south east;
- 29 parcels of lowland fens, the nearest is located 1.1 km north;
- 15 parcels of traditional orchard, the nearest is located 0.6 km south;
- 11 parcels of woodland and parkland, the nearest is located 0.7 km north;
- 1 parcel of ancient woodland located 0.3 km south.

## 3.3 HABITATS

The following habitats have been identified through our assessment, with detailed Target Notes (TN) included in Appendix C as appropriate, and shown on Figure 3:

### 3.3.1 Semi-natural broadleaved deciduous woodland

The entire site comprises of semi-natural broadleaved deciduous woodland which is mature in age and mostly comprises of pedunculate oak *Quercus robur*, ash *Fraxinus excelsior* and wild cherry *Prunus avium* (TN1). The understorey layer contained hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, holly *Ilex aquifolium* and bramble *Rubus fructicosus* agg. Ground flora in abundance included tufted hair grass *Deschampsia cespitosa*, ivy *Hedera helix*, dog's mercury *Mercuriais perennis* and ground elder *Aegopodium podagraria*. English bluebells *Hyacinthoides non-scripta* were found on site. Dog's mercury and English bluebell are ancient woodland indicator species.

The woodland on site is mapped as deciduous woodland within MAGIC and qualifies as a Habitat of Principal Importance under the NERC Act, 2006.

### 3.3.2 Dry ditch

Figure 4 shows the location of waterbodies on site and in the surrounding area. A ditch runs along the northern boundary of the site and cuts into the site at the north-east corner (Figure 4). The section within the site was dry upon inspection but it has been noted in a previous assessment by WYG to be wet in February 2018. At the edges of the ditch, species tolerant of wet conditions were observed, such as tufted hair grass *Deschampsia cespitosa* and pendulous sedge *Carex pendula.*

As the ditch traverses outside of the site boundary to the north-east, it was seen to be filled with water that was slow flowing (TN2). Indian (Himalayan) balsam was abundant along the banks of the ditch (TN3) and is listed as an invasive species under Schedule 9 of the W&CA (Appendix B).

## 3.4 PROTECTED & NOTABLE SPECIES

### 3.4.1 Great Crested Newt

The desk study returned 4 records of GCN within 2 km of the site, with the most recent record being reported in 2017. A search on MAGIC returned one GCN EPSML granted within 2 km of the site. This was for the damage and destruction of a GCN resting place granted in 2017, 0.5 km south of the site.

There are no habitats on site suitable to support breeding GCN due to the ditch being dry, and usually having low water levels when wet. However, opportunities were available for GCN (if present locally) to disperse, rest and hibernate within the woodland habitat. Possible refugia was noted with a pile of bricks (TN4). The nearest pond is located 450m south-east from the site and is separated by the Mill Bourne Brook – which has a fast flow in some places, making it unlikely for GCN to traverse through. As such, it is considered unlikely that GCN potentially using this pond would utilise the terrestrial habitats on site.

#### Habitat Suitability Index (HSI) Assessment

To assess the potential for the surrounding landscape to support GCN, waterbodies within 500m were assessed using HSI (Table 4; Figure 4) (Oldham *et al*, 2000). This included the ditch which traverses the site in the north-east corner. Table 4 below shows the results of the HSI assessment and photographs.

**Table 4: HSI Assessment Results**

| Waterbody | HSI Score | Photograph |
|---|---|---|
| WB1a | Dry at time of survey |  |
| WB1b | 0.66<br>**Average** |  |

Detailed results of the HSI for W1b are provided in Table 5.

**Table 5: Detailed HSI Assessment Results for W1b**

| Criterion | WB1b |
|---|---|
| Map location | A |
| Surface area (shape) | Irregular |
| Surface area ($m^2$) | 370 |
| Desiccation rate | Frequently |
| Water quality | Moderate |
| Shade (% 1m from bank) | 10 |
| Waterfowl | Absent |
| Fish population | Absent |

| | |
|---|---|
| Pond density (ponds within 1 km) | 3 |
| Terrestrial habitat | Good |
| Macrophyte cover (%) | 5% |
| Notes | Yellow flag iris *Iris pseudacorus* and Indian Balsam |
| **HSI Score:** | **0.66** |
| **Pond Suitability:** | **Average** |

Deciduous woodland on site and the semi-improved grassland on adjacent land to the south and east provide suitable terrestrial habitat for GCN. The results of the HSI suggest that one waterbody within 500 m of the site provides aquatic habitat suitable for GCN. It is therefore possible that the site and its boundaries could be used by foraging, dispersing, resting and hibernating GCN.

### 3.4.2 Bats

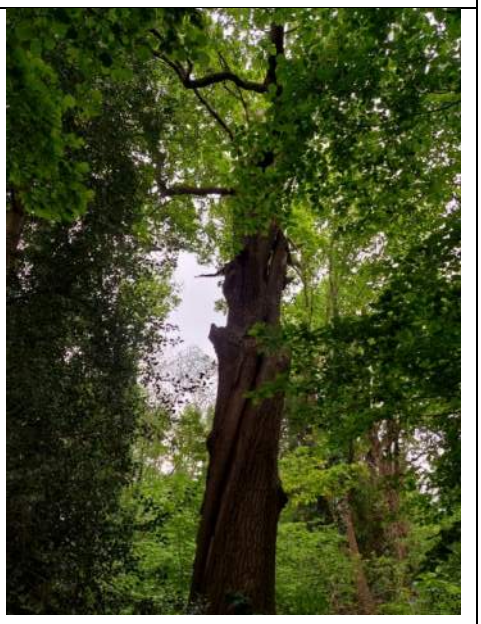
The desk study returned 31 records for bats within 2 km of the site. These records were for common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus* noctula, serotine *Eptesicus serotinus* and brown long-eared bat *Plecotus auritus*. All species were last recorded in 2019. A search of MAGIC returned 6 EPSMLs granted for bats within 2 km of the site, summarised in Table 6.

**Table 6: EPSLs Granted within 2 km**

| Species | Reason for Licence | Distance & Direction | Year Granted |
|---|---|---|---|
| Common pipistrelle | Destruction of a resting place | 0.7 km north west | 2014 |
| Common pipistrelle | Destruction of a resting place | 0.7 km north west | 2013 |
| Common pipistrelle and brown long-eared bat. | Destruction of resting place | 1.3 km north west | 2012 |
| Common pipistrelle and brown long-eared bat. | Destruction of a breeding and resting place | 1.8 km east | 2013 |
| Common pipistrelle and brown long-eared bat. | Destruction of a resting place | 1.5 km west | 2017 |
| Common pipistrelle, soprano pipistrelle and brown long-eared bat. | Destruction of a breeding and resting place | 0.5 km south | 2010 |

The woodland and surrounding semi-improved grassland have a high potential to support roosting, foraging and commuting bats. Two trees were recorded to have a moderate bat roost suitability (T1 and T3) while T2 has high suitability, see Table 7. The woodland, wet ditches and surrounding grassland (being well connected) are likely to provide high value foraging and commuting habitat for bats.

**Table 7: Trees noted as suitable for bats on site**

| Tree | Suitability | Rationale and summary | Photograph |
|---|---|---|---|
| T1 | **Moderate** suitability | **Pedunculate Oak with a horizontal hazard beam. Potential to support small numbers of less common bat species.** |  |
| T2 | **High** suitability | Multiple cavities contain evidence of nesting (sticks present) -likely to be jackdaw *Corvus monedula* (unsuitable for owls).<br>Multiple woodpecker feeding holes.<br>Potential cavities, access through splits in cambium.<br>Recommend climbing and using an endoscope to inspect further. |  |

| | | | |
|---|---|---|---|
| T3 | **Moderate** suitability | Woodpecker hole and lots of dead limbs higher up the tree (obscured view but trunk of a suitable size to support a good number of bats). |  |

Overall, the site was assessed to have **a high potential to support roosting, foraging and commuting bats.**

### 3.4.3 Reptiles

The desk study returned 38 records for adder *Vipera berus*, 82 records for common lizard *Zootoca vivipara*, 18 records for grass snake *Natrix helvetica* and 94 records for slow worm *Anguis fragilis* within 2 km of the site.

No reptiles were identified during the survey. The woodland within the site has potential to provide foraging, resting and hibernating habitat for reptiles, especially for slow worm. The edges of the woodland and the roots of trees may provide basking opportunities for reptiles. The wet ditch network within the surrounding area may support grass snake (which are associated with wet habitats). Overall, the site is considered to have **moderate** potential to support reptiles.

### 3.4.4 Badger

The desk study returned no records for badgers within 2 km. No evidence of badger was found on site or within 50m of the site boundary, however the woodland habitat within the site could be a habitat of primary importance to local badgers for foraging/shelter. The semi-improved grassland directly adjacent to the south and east of the site is considered to be of secondary importance to badgers. As such, the site has been assessed as being **suitable** for badger foraging and sett building.

### 3.4.5 Hazel Dormouse

The desk study returned no records of hazel dormouse *Muscardinus avellanarius* within 2 km of the site. The woodland on site provides suitable habitat for dormouse due to a small amount of hazel coppice present (a favoured food source of dormouse), as well as oaks and bramble. Furthermore, the site is well connected to the surrounding area by hedgerows with mature trees. The site is assessed as having a **moderate** potential to support dormouse.

### 3.4.6 Otter & Water Vole

The desk study returned no records of water vole *Arvicola amphibious* or otter *Lutra lutra* within 2 km of the site.

Otters are considered highly unlikely to be present within the site, as the site is flat and lacks mature trees adjacent to the Mill Bourne Brook. Otters may pass through the Mill Bourne Brook along the southern boundary occasionally and they may also make use of woodland and grassland habitat within 100m of the Mill Bourne Brook occasionally. Water voles are extinct in Surrey therefore the potential for the site to support them is negligible (the habitats are sub optimal as well).

The site is assessed as having a **low** potential to support otter and **negligible** potential to support water vole.

### 3.4.7 Birds

The desk study returned records for 13 notable bird species within 2 km of the site. There were 7 Birds of Conservation Concern (BoCC) red list species, including house sparrow *Passer domesticus*, song thrush *Turdus philomelos*, cuckoo *Cuculus canorus* and starling *Sturnus vulgaris*; 5 BoCC amber list species, including tawny owl *Strix aluco* and Mallard *Anas platyrhynchos;* and 1 NERC species, woodlark *Lullula arborea*.

The woodland on site provides high value foraging habitat and is suitable to support a range of nesting bird species, such as blue tit *Cyanistes caeruleus* and blackbird *Turdus merula.* The site is also well connected to the surrounding area by hedgerows with mature trees. For this reason, the site has been assessed as having **high potential** to provide nesting and foraging opportunities for a variety of bird species.

### 3.4.8 Invertebrates

The desk study returned 773 records for notable invertebrate species within 2 km of the site, including 40 NERC species, such as broom moth *Ceramica pisi* and white admiral *Limenitis Camilla*; and 2 W&CA species, silver-studded blue *Plebejus argus* and stag beetle *Lucanus cervus.* The most recent records were in 2019 for brilliant emerald *Somatochlora metallica,* grayling *Hipparchia Semele*, orange-horned nomad Bee *Nomada fulvicornis*, silver-studded blue and stag beetle.

The woodland habitat on site is likely to provide breeding and feeding opportunities for a range of invertebrates, with dead wood within the site with potential to support species such as stag beetle.

### 3.4.9 Notable Plants

The woodland supports the native English bluebell. Bluebell is a protected species listed under Schedule 8 of the W&CA.

### 3.4.10 Invasive species

Variegated yellow archangel *Lamiastrum galeobdolon argentatum* and rhododendron *Rhododendron ponticum* were recorded on site during the 2018 SANG Assessment (WYG, 2018). Indian (Himalayan) balsam was recorded within the site, the woodland edge (TN5) and along the wet ditch east of the site (TN3). This species is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) (W&CA) which makes it an offence ‘plant or otherwise cause to grow in the wild”.

## 3.5 IMPORTANCE OF ECOLOGICAL FEATURES

In line with the CIEEM PEA Guidelines, and based on the above baseline information, the importance of each ecological feature recorded within the study area is given in Table 8 below. The categories used are those which are defined in Section 4 of the CIEEM EcIA Guidelines (2018 v1.1):

**Table 8: Importance of Ecological Features**

| Feature | Importance | Rationale |
|---|---|---|
| Thursley, Ash, Pirbright and Chobham SAC (Chobham Common) | International | Internationally significant heathland habitat and supports populations of sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca.* |
| Thursley, Hankley and Frensham Commons SPA<br>(Chobham Common, Horsell Common) | International | Internationally significant populations of heathland breeding birds. |
| Thursley, Hankley and Frensham Commons SSSI<br>(Chobham Common, Horsell Common) | National | Nationally important heathland containing nationally important breeding populations of nightjar *Caprimulqus europaeus* and Dartford warbler *Sylvia undatall.* |
| Chobham Common<br>NNR | National | Nationally important heathland and bird, reptile and invertebrate populations. It is home to over 100 bird species, 300 species of wildflower, 25 mammal species and 33 species of butterfly. |
| Chobham Meadows<br>SANG<br>SINC | County | Created to limit human disturbance on the SPA mentioned above. |
| Semi-natural broadleaved deciduous woodland | Local | An HPI which may support species such as bats and breeding birds. |
| Great crested newts | Unknown | Suitable habitat for breeding GCN in the wider area. GCN in their terrestrial stage can be supported by the woodland habitat on site. Further surveys would be needed to clarify their presence. |
| Reptiles | Unknown | Small numbers of reptiles could be present on site. |
| Roosting bats | Unknown | Potential roost features on three trees found within the site. Further surveys would be needed to clarify presence of bats. |
| Commuting and foraging bats | Local | Site is likely to be used by a number of bat species for foraging/commuting. |
| Badger | Unknown | Suitable habitat for badgers – site could support a small population. |
| Hazel dormouse | Unknown | Suitable habitat is present on site (coppiced hazel and bramble) Further surveys would be needed to clarify their presence. |
| Otter | Local | Highly unlikely to use the site but may move through the Mill Bourne Brook south of the site occasionally. |

| Feature | Importance | Rationale |
|---|---|---|
| Birds | Local | Suitable amounts of nesting and foraging habitat for notable and common bird species present. |
| Common and rare invertebrates | Negligible | Small numbers of common invertebrates and potentially small numbers of notable invertebrates |
| Invasive non-natives | Negligible | One schedule 9 species present in the wider SANG area and within the site. |
| **Either:** International (incl. European) / National / Regional / County / Local / Negligible<br>**Or:** Unknown (i.e. further surveys/information needed) | | |

The potential for the proposals to have adverse or beneficial impacts on these features, along with the need for any mitigation or enhancement measures are discussed in detail below.

# 4.0 RELEVANT PLANNING POLICY & LEGISLATION

## 4.1 REVISED NATIONAL PLANNING POLICY FRAMEWORK

A revised NPPF was issued on 19th February 2019 (Ministry of Housing Communities and Local Government, 2019) and currently supplements government Circular *06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System* (Office of the Deputy Prime Minister, 2005).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 170 of the NPPF also states that:

'*Planning policies and decisions should contribute to and enhance the natural environment by:*

*a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)*

*b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*

*c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate*

*d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*

*e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*

*f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.*

The conservation and enhancement of wildlife is also specifically reference re: development within the National Parks or the Broads.

Paragraph 175 then goes on to confirm that:

*When determining planning applications, local planning authorities should apply the following principles:*

*a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

*b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*

d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

Regarding EcIA's and HRA's – any sites identified, or required, as compensatory measures for adverse effects on any Natura 2000/habitats site should also be given the same level as protection as the pSPA's and cSAC's themselves. In addition, when an application is being determined, Paragraph 177 clarifies that:

"*The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.*"

Paragraph 180 is also relevant as;

*Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:…*

c) *limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.*

## 4.2 BIODIVERSITY 2020: A STRATEGY FOR ENGLAND'S WILDLIFE & ECOSYSTEM SERVICES

Biodiversity 2020 (DEFRA, 2011) replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under the NERC Act.

## 4.3 LOCAL BIODIVERSITY ACTION PLAN

LBAPs identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Surrey Nature Partnership (2015) website now hosts the information on the former Surrey Biodiversity Action Plan online and in the form of the Biodiversity & Planning in Surrey document, which lists the Priority Species and Habitats in the county.

Surrey priority species/habitats are listed in Tables 9 & 10.

**Table 9: SAPs**

| Species Action Plans | |
|---|---|
| All Surrey occurring bats | All UK reptiles |

| Species Action Plans | |
|---|---|
| Great crested newt | Starling *Sturnus vulgaris* |
| Turtle dove *Streptopelia turtur* | Song thrush *Turdus philomelos* |

**Table 10: HAPs**

| Habitat Action Plans | |
|---|---|
| Lowland mixed deciduous woodland | Rivers |

It should be noted that the existence of an SAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats/species, rather than to protect a county-scarce feature (for example).

## 4.4 LOCAL PLAN

The site falls within Surrey Heath Borough Council who adopted their local plan (The Surrey Heath Local Plan 2000) in December 2000. The policies relevant to the site and ecology fall within Section 3: Conservation and Enhancement. Of most relevance is:

**Policy G22: Protection of species**

*Development and other land use changes having an adverse effect on species and habitats protected by appropriate legislation will not be permitted. Where development is permitted which may have an adverse effect on these species, the Borough Council will, through the use of conditions or planning agreements, require the developer to:*

a) *Facilitate the survival of individuals of the species; and*
b) *Reduce disturbance to a minimum; or*
c) *Where it is not possible to retain the species on their current site, to provide adequate alternative habitats*

**Policy G23: Green corridors**

*The Borough Council will seek to ensure that any development in the vicinity of green corridors, as shown on the Proposals Map, preserves their landscape character. The Borough Council will encourage, where necessary, the enhancement of the character of the area through landscape design.*

**Policy G24: Retention of trees**

*The Borough Council will seek to retain any trees which make a significant contribution to the environment of a site, street or other area. Where retention of trees is not possible, the tree(s) should be replaced with good quality stock of an appropriate species*

## 4.5 LEGISLATION

Full details of the UK legislation and offences which are relevant to the ecological receptors identified are included in Appendix B. However, based on the findings of our assessment, it is considered that the proposals will need to consider the following legal provisions:

- Disturbance or killing of an EPS
- Disturbance of nesting wild birds
- Disturbance of nesting Schedule 1 bird species or their dependant young
- Cause or permit the spread of an invasive species into the wild

# 5.0 DISCUSSION

## 5.1 DESIGNATED SITES

It is highly unlikely that the proposed plans will adversely impact upon the designated sites within 2 km of the site. The proposals will enhance the biodiversity of the current Chobham Meadows SANG which the site will become part of. This will aid in reducing pressure on the Thames Basin Heaths SPA which is an internationally important heathland site that supports rare breeding birds such as the Dartford warbler and nightjar. SANGs encourage recreational use outside of the SPA.

## 5.2 HABITATS

The deciduous woodland qualifies as an HPI habitat under the NERC Act, 2006. The current footpath in the woodland may be made wider to accommodate for more human activity, and human disturbance may increase. This could have a negative impact on the woodland due to increased noise, litter and potentially an increase in dog presence which will disturb wildlife. The woodland area can be enhanced to compensate this by installing dog bins, ensuring there are regular litter picking and installing interpretation boards to educate the public on the local wildlife.

### 5.2.1 Invasive species

It is advised that the invasive non-native species across the adjacent existing SANG site and within the site are removed to prevent their spread into the wild, as this would be an offence under the W&CA. An invasive species removal plan should be created in order to achieve this with cutting and hand pulling being the most effective method of controlling Indian balsam. Variegated yellow archangel *Lamiastrum galeobdolon argentatum* and rhododendron *Rhododendron ponticum* were recorded on site during the 2018 SANG Assessment (WYG, 2018). These are also invasive species and should be removed accordingly if seen.

## 5.3 PROTECTED & NOTABLE SPECIES

Only species likely to be affected by the proposals are discussed below.

### 5.3.1 Roosting bats

T2 has been identified as having high suitability for bats. As T2 will be impacted by delimbing proposals, emergence and return-to-roost surveys should be carried out following the BCT guidelines to confirm presence or likely absence of roosting bats. Three separate survey visits should take place which will be comprised of two dusk emergence and one dawn return-to-roost survey from May to September, inclusive. No works to this tree should take place without further surveys being undertaken.

## 5.4 ENHANCEMENTS

In line with NPPF and the Surrey Heath Local Plan, the site should be enhanced for biodiversity.

These could include:

- Installation of bat and bird boxes on retained trees.
- Add screening by planting native scrubby woodland species to give privacy to private gardens along the western site boundary (holly *Ilex aquifolium,* hawthorn *Crataegus monogyna,* blackthorn *Prunus spinosa,* dog rose *Rosa canina* and guelder rose *Viburnum opulus.*)
- Leave deadwood or log piles to increase biodiversity of invertebrates.

# 6.0 SUMMARY

The development is unlikely to have any significant negative effects upon designated sites identified during the desk study. The semi-natural broadleaved deciduous woodland may be affected by increased human disturbance if the site becomes part of the neighbouring SANG. Mitigation is proposed by installing dog waste bins, having regular litter picking and installing interpretation boards. The site has suitability / potential to support the following protected species:

- Roosting bats
- Foraging and commuting bats
- Reptiles
- Otter
- Badger
- Breeding birds; and
- Invertebrates

The site has negligible suitability / potential for all other protected species.

Further surveys include three bat emergence/return-to-roost surveys for T2 to determine the presence of a roost. No work can be done on the tree until surveys have been completed. All invasive species should be removed from site.

The site should be enhanced for biodiversity, enhancements could include screening by planting native species along the western boundary, the inclusion of bat and bird boxes and by leaving log piles and deadwood for invertebrate species.

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- WYG, (2018) Assessment for SANG A102550 Latchetts Mead, Chobham.

Please note that the legislation which is relevant to this report is not included in the list above, but details are included in Appendix B below.

# FIGURES

# Site Location Plan

**Latchetts Mead, Chobham**

## Legend

- Chobham Meadows SANG
- Site boundary

Notes:

Drawn by: CL
Checked by: HG
Office: Southampton

Figure No. 1
Revision No. A

0 70 140 210 Meters
Scale 1:5,000 @A3

14 July 2021
NGR: 498023E 161917N



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# Nature Conservation Designated Sites

**Latchetts Mead, Chobham**

**Mark Turner**

## Legend

- Site boundary
- Site boundary 2km buffer
- Site boundary 5km buffer
- Special Protection Areas (SPA)
- Special Areas of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- National Nature Reserves (NNR)
- Local Nature Reserves (LNR)
- Ancient & Semi-Natural Woodland
- Ancient Replanted Woodland
- Site of Importance for Nature Conservation (SINC)

Notes:

Drawn by: BB
Checked by: HG
Office: Southampton

Figure No. 2
Revision No. A

0 550 1,100 1,650 Meters
Scale 1:37,500 @A3

07 July 2021
NGR: 497881E 162032N



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# Phase 1 Habitat Plan

**Latchetts Mead, Chobham**

## Legend

- Target note
- Potetial bat roost trees
- Site boundary
- Broadleaved woodland - semi-natural

Notes:

Drawn by: CL
Checked by: HG
Office: Southampton

Figure No. 3
Revision No. A

0 9 18 27 Meters
Scale 1:600 @A3

14 July 2021
NGR: 497884E 162031N




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# Waterbody Location Plan

**Latchetts Mead, Chobham**

WB1a dry ditch

WB1b wet ditch

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## Legend

- Site boundary
- Site boundary 500m buffer
- Ditch - Not surveyed
- Ditch - Surveyed
- Waterbody - Not surveyed

Notes:

Drawn by: CL

Checked by: HG

Office: Southampton

Figure No. 4

Revision No. A

0 60 120 180 Meters

Scale 1:4,500 @A3

14 July 2021

NGR: 497884E 162031N




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# APPENDIX A – REPORT CONDITIONS

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The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

# APPENDIX B – KEY LEGISLATION

| Bern Convention |
| --- |
| The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.<br>To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union. |
| **Bonn Convention** |
| The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.<br>In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW). |
| **Habitats Directive** |
| The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.<br>In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland. |
| **Birds Directive** |
| The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance. |
| **Conservation of Habitats and Species Regulations 2017 (as amended)** |
| Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.<br>The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:<br>https://www.legislation.gov.uk/uksi/2018/1307/note/made<br>The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below: |

| Schedule 2 – European Protected Species of Animals | Schedule 5 – European Protected Species of Plants |
|---|---|
| Horseshoe bats *Rhinolophidae* - all species | Shore dock *Rumex rupestris* |
| Common bats *Vespertilionidae* - all species | Killarney fern *Trichomanes speciosum* |
| Large Blue Butterfly *Maculinea arion* | Early gentian *Gentianella anglica* |
| Wild cat *Felis sylvestris* | Lady's-slipper *Cypripedium calceolus* |
| Dolphins, porpoises and whales *Cetacea* – all sp. | Creeping marsh-wort *Apium repens* |
| Dormouse *Muscardinus avellanarius* | Slender naiad *Najas flexilis* |
| Pool frog *Rana lessonae* | Fen orchid *Liparis loeselii* |
| Sand lizard *Lacerta agilis* | Floating-leaved water plantain *Luronium natans* |
| Fisher's estuarine moth *Gortyna borelii lunata* | Yellow marsh saxifrage *Saxifraga hirculus* |
| Great crested newt *Triturus cristatus* | |
| Otter *Lutra lutra* | |
| Lesser whirlpool ram's-horn snail *Anisus vorticulus* | |
| Smooth snake *Coronella austriaca* | |
| Sturgeon *Acipenser sturio* | |
| Natterjack toad *Epidalea calamita* | |
| Marine turtles *Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricata, Dermochelys coriacea* | |

**Wildlife & Countryside Act 1981 (as amended)**

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to: intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant; unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

| Schedule 1 - Birds which are protected by special penalties | | | |
|---|---|---|---|
| Avocet | *Recurvirostra avosetta* | Osprey | *Pandion haliaetus* |
| Bee-eater | *Merops apiaster* | Owl, Barn | *Tyto alba* |
| Bittern | *Botaurus stellaris* | Owl, Snowy | *Nyctea scandiaca* |
| Bittern, Little | *Ixobrychus minutus* | Peregrine | *Falco peregrinus* |
| Bluethroat | *Luscinia svecica* | Petrel, Leach's | *Oceanodroma leucorhoa* |
| Brambling | *Fringilla montifringilla* | Phalarope, Red-necked | *Phalaropus lobatus* |
| Bunting, Cirl | *Emberiza cirlus* | Plover, Kentish | *Charadrius alexandrinus* |
| Bunting, Lapland | *Calcarius lapponicus* | Plover, Little Ringed | *Charadrius dubius* |
| Bunting, Snow | *Plectrophenax nivalis* | Quail, Common | *Coturnix coturnix* |
| Buzzard, Honey | *Pernis apivorus* | Redstart, Black | *Phoenicurus ochruros* |
| Capercaillie | *Tetrao urogallus* | Redwing | *Turdus iliacus* |
| Chough | *Pyrrhocorax pyrrhocorax* | Rosefinch, Scarlet | *Carpodacus erythrinus* |
| Corncrake | *Crex crex* | Ruff | *Philomachus pugnax* |
| Crake, Spotted | *Porzana porzana* | Sandpiper, Green | *Tringa ochropus* |
| Crossbills (all species) | *Loxia* | Sandpiper, Purple | *Calidris maritima* |
| Curlew, Stone | *Burhinus oedicnemus* | Sandpiper, Wood | *Tringa glareola* |
| Divers (all species) | *Gavia* | Scaup | *Aythya marila* |
| Dotterel | *Charadrius morinellus* | Scoter, Common | *Melanitta nigra* |
| Duck, Long-tailed | *Clangula hyemalis* | Scoter, Velvet | *Melanitta fusca* |
| Eagle, Golden | *Aquila chrysaetos* | Serin | *Serinus serinus* |
| Eagle, White-tailed | *Haliaetus albicilla* | Shorelark | *Eremophila alpestris* |
| Falcon, Gyr | *Falco rusticolus* | Shrike, Red-backed | *Lanius collurio* |
| Fieldfare | *Turdus pilaris* | Spoonbill | *Platalea leucorodia* |
| Firecrest | *Regulus ignicapillus* | Stilt, Black-winged | *Himantopus himantopus* |
| Garganey | *Anas querquedula* | Stint, Temminck's | *Calidris temminckii* |
| Godwit, Black-tailed | *Limosa limosa* | Swan, Bewick's | *Cygnus bewickii* |
| Goshawk | *Accipiter gentilis* | Swan, Whooper | *Cygnus cygnus* |
| Grebe, Black-necked | *Podiceps nigricollis* | Tern, Black | *Chlidonias niger* |
| Grebe, Slavonian | *Podiceps auritus* | Tern, Little | *Sterna albifrons* |
| Greenshank | *Tringa nebularia* | Tern, Roseate | *Sterna dougallii* |
| Gull, Little | *Larus minutus* | Tit, Bearded | *Panurus biarmicus* |
| Gull, Mediterranean | *Larus melanocephalus* | Tit, Crested | *Parus cristatus* |
| Harriers (all species) | *Circus* | Tree-creeper, Short-toed | *Certhia brachydactyla* |
| Heron, Purple | *Ardea purpurea* | Warbler, Cetti's | *Cettia cetti* |
| Hobby | *Falco subbuteo* | Warbler, Dartford | *Sylvia undata* |
| Hoopoe | *Upupa epops* | Warbler, Marsh | *Acrocephalus palustris* |
| Kingfisher | *Alcedo atthis* | Warbler, Savi's | *Locustella luscinioides* |
| Kite, Red | *Milvus milvus* | Whimbrel | *Numenius phaeopus* |
| Merlin | *Falco columbarius* | Woodlark | *Lullula arborea* |
| Oriole, Golden | *Oriolus oriolus* | Wryneck | *Jynx torquilla* |
| **Animal (Vertebrate) Species Listed in Schedule 5 (full legal protection at all times)** | | | |
| Horseshoe Bats (all species) | *Rhinolophidae* | Newt – Great Crested | *Triturus cristatus* |
| Typical Bats (all species) | *Vespertilionidae* | Snake – Smooth | *Coronella austriaca* |
| Dolphin – Bottle-nosed | *Tursiops truncatus (tursio)* | Toad, Natterjack | *Epidalea calamita* |
| Dolphin – Common | *Delphinus delphis* | Turtles – All Species | *Cheloniidae & Dermochelyidae* |
| Dormouse – Hazel | *Muscardinus avellanarius* | Basking Shark | *Cetorhinus maximus* |
| Pine Marten | *Martes martes* | Burbot | *Lota lota* |
| Porpoise – Harbour | *Phocaena phocaena* | Goby – Giant | *Gobius cobitis* |
| Otter – Eurasian | *Lutra lutra* | Goby – Couch's | *Gobius couchii* |
| Squirrel – Red | *Sciurus vulgaris* | Seahorse – Short-snouted[1] | *Hippocampus hippocampus* |
| Walrus | *Odobenus rosmarus* | Seahorse – Spiny | *Hippocampus guttulatus* |
| Water Vole | *Arvicola amphibius* | Sturgeon | *Acipenser sturio* |
| Whales – All Species | *Cetacea* | Vendace | *Coregonus albula* |

[1] Both sea horse species are protected in England only.

| | | | |
|---|---|---|---|
| Wildcat | *Felis sylvestris* | Whitefish | *Coregonus lavaretus* |
| Lizard – Sand | *Lacerta agilis* | | |
| **Animal (Vertebrate) Species Protected under Section 9 (1) part: Killing and Injuring & Section 9 (5) Sale** | | | |
| Adder | *Vipera berus* | Slow-worm | *Anguis fragilis* |
| Lizard – Viviparous | *Zootoca vivipara* | Snake – Grass | *Natrix helvetica (natrix)* |
| **Animals (Vertebrate) Species Protected under Section 9 (5) Sale only** | | | |
| Frog – common | *Rana temporaria* | Newt – Smooth | *Lissotriton vulgaris* |
| Newt – Palmate | *Lissotriton helvetica* | Toad – Common | *Bufo bufo* |
| **Animals (Vertebrate) Species Protected under Section 9 (1) (4)(a): Killing, Injuring & Taking and Damage / Destruction of place of shelter / protection only** | | | |
| Allis Shad | *Alosa alosa* | Shark – Angel | *Squatina squatina* |
| Twaite Shad | *Alosa fallax* | | |
| **Butterflies & Moths – Full Protection under Schedule 5[2] at all times** | | | |
| High brown fritillary | *Argynnis adippe* | Fisher's Estuarine Moth | *Gortyna borelii* |
| Large Blue | *Maculinea arion* | Barberry Carpet | *Pareulype berberata* |
| Heath Fritillary | *Mellicta athalea* | Black-veined Moth | *Siona lineata* |
| Marsh Fritillary | *Eurodryas aurinia* | Sussex Emerald | *Thalera fimbrialis* |
| Swallowtail | *Papilio machaon britannicus* | Essex Emerald | *Thetidia smaragdaris* |
| Large Copper | *Lycaena dispar* | Fiery Clearwing | *Bembecia chrysidiformis* |
| Reddish-buff Moth | *Acosmetia caliginosa* | New-Forest Burnet | *Zygaena viciae* |
| **Butterflies – Protected under Section 9 (5) Sale Only** | | | |
| Purple Emperor | *Apatura iris* | Adonis Blue | *Lysandra bellargus* |
| Northern Brown Argus | *Aricia artaxerxes* | Chalkhill Blue | *Lysandra coridon* |
| Pearl-bordered Fritillary | *Boloria euphrosyne* | Glanville Fritillary | *Melitaea cinxia* |
| Chequered Skipper | *Carterocephalus palaemon* | Large Tortoiseshell | *Nymphalis polychloros* |
| Large Heath | *Coenonympha tullia* | Silver-studded Blue | *Plebejus argus* |
| Small Blue | *Cupido minimus* | Black Hairstreak | *Strymonidia pruni* |
| Mountain Ringlet | *Erebia epiphron* | White-letter Hairstreak | *Strymonidia w-album* |
| Duke of Burgundy | *Hamearis lucina* | Brown Hairstreak | *Thecla betulae* |
| Silver-spotted Skipper | *Hesperia comma* | Lulworth Skipper | *Thymelicus acteon* |
| Wood White | *Leptidea sinapis* | | |
| **Other Invertebrates – Full Protection under Schedule 5 at all times** | | | |
| Rainbow Leaf-beetle | *Chrysolina cerealis* | Tadpole Shrimp | *Triops cancriformis* |
| Spangled Diving-beetle | *Graphopterus zonatus* | Trembling Sea-mat | *Victorella pavida* |
| Lesser Silver Water-beetle | *Hydrochara caraboides* | De Folin's Lagoon Snail | *Caecum armoricum* |
| Moccas Beetle | *Hypebaeus flavipes* | Sandbowl Snail | *Catinella arenaria* |
| Violet Click-beetle | *Limoniscus violaceus* | Freshwater Pearl Mussel | *Margaritifera margaritifera* |
| Bembridge Beetle | *Parcymus aeneus* | Glutinous Snail | *Myxas glutinosa* |
| New Forest Cicada | *Cicadetta montana* | Lagoon Snail | *Paludinella littorina* |
| Wart-Biter | *Decticus verrucivorus* | Lagoon Sea Slug | *Tenellia adspersa* |
| Mole-Cricket | *Gryllotalpa gryllotalpa* | Northern Hatchet-shell | *Thyasira gouldi* |
| Field-Cricket | *Gryllus campestris* | Tentacled Lagoon-worm | *Alkmaria romijni* |
| Norfolk Hawker Dragonfly | *Aeshna isosceles* | Lagoon Sand-worm | *Armandia cirrhosa* |
| Southern Damselfly | *Coenagrion mercuriale* | Medicinal Leech | *Hirudo medicinalis* |
| Fen Raft Spider | *Dolomedes fimbriatus* | Marine Hydroid | *Clavopsella navis* |
| Ladybird Spider | *Eresus niger (cinaberinus)* | Ivell's Sea Anemone | *Edwardsia ivelli* |
| Fairy Shrimp | *Chirocephalus diaphanus* | Starlet Sea Anemone | *Nematosella vectensis* |
| Lagoon Sand Shrimp | *Gammarus insensibilis* | Atlantic Stream (White-clawed) Crayfish | *Austropotamobius pallipes* |
| **Other Invertebrates Protected under Section 9 (1) Possession & 9 (2) (5) Sale only** | | | |
| Stag Beetle | *Lucanus cervus* | Roman Snail[3] | *Helix pomatia* |

[2] Viper's Bugloss Moth *Hadena irregularis* was removed from Schedule 5 in 1996 as it is believed to be extinct.

[3] England only

| | | | |
|---|---|---|---|
| Fan Mussel | *Atrina fragilis* | Pink Sea-fan | *Eunicella verrucosa* |
| **Other Invertebrates Protected under Section 9 (4) (a) Damage / Destruction of Place of Shelter / Protection only** | | | |
| Mire Pill Beetle | *Curimopsis nigrita* | | |
| **Vascular Plant Species - Full Protection under Schedule 8 at all times (previous Scientific name in brackets)** | | | |
| Adder's-tongue Least | *Ophioglossum lusitanicum* | Lily – Snowdon | *Gagea serotina (Lloydia serotina)* |
| Alison- Small | *Alyssum alyssoides* | Marsh-mallow – Rough | *Malva setigera (Althaea hirsuta)* |
| Broomrape – Bedstraw | *Orobanche caryophyllacea* | Milk-parsley – Cambridge | *Selinum carvifolia* |
| Broomrape – Oxtongue | *Orobanche picridis* | Mudwort – Welsh | *Limosella aquatica* |
| Broomrape – Thistle | *Orobanche reticulata*[4] | Naiad – Holly-leaved | *Najas marina* |
| Cabbage – Lundy | *Coincya wrightii (Rhynchosinapis wrightii)* | Orache – Stalked | *Atriplex pedunculata (Halimione pedunculata)* |
| Calamint – Wood | *Clinopodium menthifolium (Calamintha sylvatica)* | Orchid – Early Spider | *Ophrys sphegodes* |
| Catchfly – Alpine | *Silene suecica (Lychnis alpina)* | Orchid – Ghost | *Epipogium aphyllum* |
| Centaury – Slender | *Centaurium tenuiflorum* | Orchid – Lapland Marsh | *Dactylorhiza lapponica* |
| Cinquefoil – Rock | *Potentilla rupestris* | Orchid – Late Spider | *Ophrys fuciflora* |
| Clary – Meadow | *Salvia pratensis* | Orchid – Lizard | *Himantoglossum hircinum* |
| Club-rush – Triangular | *Schoenoplectus triqueter (Scirpus triqueter)* | Orchid – Military | *Orchis militaris* |
| Colt's-foot – Purple | *Homogyne alpina* | Orchid – Monkey | *Orchis simia* |
| Cotoneaster – Wild | *Cotoneaster cambricus (C. integerrimus)* | Pear – Plymouth | *Pyrus cordata* |
| Cotton-grass – Slender | *Eriophorum gracile* | Pennycress – Perfoliate | *Microthlaspi perfoliatum (Thlaspi perfoliatum)* |
| Cow-wheat – Field | *Melampyrum arvense* | Pennyroyal | *Mentha pulegium* |
| Crocus – Sand | *Romulus columnae* | Pigmyweed | *Crassula aquatica* |
| Cudweed – Broad-leaved | *Filago pyramidata* | Pine - Ground | *Ajuga chamaepitys* |
| Cudweed – Jersey | *Gnaphalium luteoalbum* | Pink – Cheddar | *Dianthus gratianopolitanus* |
| Cudweed – Red-tipped | *Filago lutescens* | Pink – Childing | *Petrorhagia nanteuilii* |
| Cut-grass | *Leersia oryzoides* | Ragwort – Fen | *Jacobaea paludosa (Senecio paludosa)* |
| Deptford Pink | *Dianthus armeria* | Ramping-fumitory – Martin's | *Fumaria reuteri (F. martinii)* |
| Diapensia | *Diapensia lapponica* | Rampion – Spiked | *Phyteuma spicata* |
| Eryngo – Field | *Eryngium campestre* | Restharrow – Small | *Ononis reclinata* |
| Fern – Dickie's-bladder | *Cystopteris dickieana* | Rock-cress – Alpine | *Arabis alpina* |
| Fleabane – Alpine | *Erigeron borealis* | Rock-cress – Bristol | *Arabis scabra* |
| Fleabane – Small | *Pulicaria vulgaris* | Sandwort – Norwegian | *Arenaria norvegica*[5] |
| Galingale – Brown | *Cyperus fuscus* | Sandwort – Teesdale | *Minuartia stricta* |
| Gentian – Alpine | *Gentiana nivalis* | Saxifrage – Drooping | *Saxifraga cernua* |
| Gentian - Dune | *Gentianella amarella subsp. occidentalis (Gentianella uliginosa)* | Saxifrage – Tufted | *Saxifraga cespitosa* |
| Gentian – Fringed | *Gentianopsis ciliata (Gentianella ciliata)* | Solomon's-seal – Whorled | *Polygonatum verticillatum* |
| Gentian - Spring | *Gentiana verna* | Sow-thistle – Alpine | *Cicerbita alpina* |
| Germander – Cut-leaved | *Teucrium botrys* | Spearwort – Adder's-tongue | *Ranunculus ophioglossifolius* |
| Germander – Water | *Teucrium scordium* | Speedwell – Fingered | *Veronica triphyllos* |

[4] The Weeds Act 1959 does not apply to thistles *Cirsium* & *Carduus* species supporting this broomrape.

[5] All subspecies occurring in the UK

| | | | |
|---|---|---|---|
| Gladiolus – Wild | *Gladiolus illyricus* | Speedwell – Spiked | *Veronica spicata*[6] |
| Goosefoot – Stinking | *Chenopodium vulvaria* | Spike-rush – Dwarf | *Eleocharis parvula* |
| Grass-poly | *Lythrum hyssopifolia* | South-stack Fleawort | *Tephroseris integrifolia ssp. maritima* |
| Hare's-ear – Sickle-leaved | *Bupleurum falcatum* | Star-of-Bethlehem – Early | *Gagea bohemica* |
| Hare's-ear – Small | *Bupleurum baldense* | Starfruit | *Damasonium alisma* |
| Hawk's-beard – Stinking | *Crepis foetida* | Strapwort | *Corrigiola littoralis* |
| Hawkweed – Northroe | *Hieracium northroense* | Violet – Fen | *Viola persicifolia* |
| Hawkweed – Shetland | *Hieracium zetlandicum* | Viper's-grass | *Scorzonera humilis* |
| Hawkweed – Weak-leaved | *Hieracium attenuatifolium* | Water-plantain – Ribbon-leaved | *Alisma gramineum* |
| Heath – Blue | *Phyllodoce caerulea* | Wood-sedge – Starved | *Carex depauperata* |
| Helleborine – Red | *Cephalanthera rubra* | Woodsia – Alpine | *Woodsia alpina* |
| Horsetail – Branched | *Equisetum ramosissimum* | Woodsia – Oblong | *Woodsia ilvensis* |
| Hound's-tongue – Green | *Cynoglossum germanicum* | Wormwood – Field | *Artemisia campestris* |
| Knawel – Perennial | *Scleranthus perennis*[7] | Woundwort - Downy | *Stachys germanica* |
| Knot-grass – Sea | *Polygonum maritimum* | Woundwort – Limestone | *Stachys alpina* |
| Leek – Round-headed | *Allium sphaerocephalon* | Yellow-rattle – Greater | *Rhinanthus angustifolius* |
| Lettuce – Least | *Lactuca saligna* | | |
| **Vascular Plant Species – Partial Protection under Section 13 (2) Protection from commercial exploitation and sale** | | | |
| Bluebell | *Hyacinthoides non-scripta* | | |
| **Bryophytes – Full Protection under Schedule 8 at all times** | | | |
| Anamodon – Long-leaved | *Anomodon langifolius* | Flamingo Moss | *Desmatodon cernuus* |
| Blackwort | *Southbya nigrella* | Frostwort | *Gymnomitrion apiculatum* |
| Crystalwort – Lizard | *Riccia bifurca* | Glaucous Beard Moss | *Barbula glauca* |
| Earwort – Marsh | *Jamesoniella undulifolia* | Green Shield Moss | *Buxbaumia viridis* |
| Feathermoss – Polar | *Hygrohypnum polare* | Hair Silk Moss | *Plagiothecium piliferum* |
| Flapwort – Norfolk | *Leiocolea rutheana* | Knothole Moss | *Zygodon forsteri* |
| Grimmia – Blunt-leaved | *Grimmia unicolor* | Large Yellow Feather Moss | *Scorpidium turgescens* |
| Petalwort | *Petalophyllum ralfsii* | Millimetre Moss | *Micromitrium tenerum* |
| Lindenberg's Leafy-Liverwort | *Adelanthus lindenbergianus* | Multi-fruited River Moss | *Cryphaea lamyana* |
| Feather-moss Slender Green | *Drepanocladus vernicosus* | Nowell's Limestone Moss | *Zygodon gracilis* |
| Alpine Copper-Moss | *Mielichoferia meilicoferia* | Rigid Apple Moss | *Bartramia stricta* |
| Baltic Bog-Moss | *Sphagnum balticum* | Round-leaved feather Moss | *Rhynchostegium rotundifolium* |
| Blue Dew-Moss | *Saelania glaucescens* | Schleicher's Thread Moss | *Bryum schleicheri* |
| Blunt-leaved bristle-Moss | *Orthotrichum obtusifolium* | Triangular Pygmy Moss | *Acaulon triquetrum* |
| Bright-Green Cave-Moss | *Cyclodictyon laetevirens* | Turpswort | *Geocalyx graveolens* |
| Cordate Beard Moss | *Barbula cordata* | Vaucher's Feather Moss | *Hypnum vaucheri* |
| Cornish Path Moss | *Ditrichum cornubicum* | Western Rustwort | *Marsupella profunda* |
| Derbyshire Feather Moss | *Thamnobryum angustifolium* | | |
| **Stoneworts – Full Protection under Schedule 8 at all times** | | | |
| Bearded Stonewort | *Chara canescens* | Foxtail Stonewort | *Lamprothamnium papullosum* |

[6] Both subspecies: *spicata* & *hybrida*

[7] Includes both subspecies: *perennis* & *prostratus*

| | | | |
|---|---|---|---|
| **Lichens – Full Protection under Schedule 8 at all times** | | | |
| New Forest Beech Lichen | *Enterographa elaborata* | Forked Hair Lichen | *Bryoria furcellata* |
| Snow Caloplaca | *Caloplaca nivalis* | Golden Hair Lichen | *Teloschistes flavicans* |
| Tree Catapyrenium | *Catapyrenium psoromoides* | Orange-fruited Elm Lichen | *Caloplaca luteoalba* |
| Laurer's Catillaria | *Catillaria laurei* | River Jelly Lichen | *Collema dichotomum* |
| Convoluted Cladonia | *Cladonia convoluta* | Starry Breck Lichen | *Buellia asterella* |
| Upright Mountain Cladonia | *Cladonia stricta* | Caledonia Pannaria | *Pannaria ignobilis* |
| Goblin Lights | *Catolechia wahlenbergii* | New Forest Parmelia | *Parmelia minarum* |
| Elm Gyalecta | *Gyalecta ulmi* | Oil Stain Parmentaria | *Parmentaria chilensis* |
| Tarn Lecanora | *Lecanora archariana* | Southern Grey Physcia | *Physcia tribacioides* |
| Copper Lecidea | *Lecidea inops* | Ragged Pseudo-cyphellaria | *Pseudocyphellaria lacerata* |
| Arctic Kidney Lichen | *Nephroma arcticum* | Rusty Alpine Psora | *Psora rubiformis* |
| Ciliate Strap Lichen | *Heterodermia leucomelos* | Rock Nail | *Calicium corynellum* |
| Coralloid Rosette Lichen | *Heterodermia propagulifera* | Serpentine Selanopsora | *Selanopsora liparina* |
| Ear-lobed Dog Lichen | *Peltigera lepidophora* | Sulphur Tresses | *Alectoria ochroleuca* |
| **Lichens – Partial Protection under Section 13 (2) Commercial Exploitation and Sale Only** | | | |
| Tree Lungwort | *Lobaria pulmonaria* | | |
| **Fungi – Full Protection under Schedule 8 at all times** | | | |
| Royal Bolete | *Boletus regius* | Oak Polypore | *Buglossosporus pulvinus* |
| Hedgehog Fungus | *Hericium erinaceum* | Sandy Stilt Ball | *Battaria phalloides* |
| **Invasive plant species listed in Schedule 9** | | | |
| Alexanders, Perfoliate | *Smyrnium perfoliatum* | Kelp, Japanese | *Laminaria japonica* |
| Algae, Red | *Grateloupia luxurians* | Knotweed, Giant | *Reynoutria (Fallopia) sachalinensis* |
| Archangel, Variegated Yellow | *Lamiastrum galeobdolon subsp. argentatum* | Knotweed, Hybrid | *Reynoutria (Fallopia) japonica x sachalinensis* |
| Azalea, Yellow | *Rhododendron luteum* | Knotweed, Japanese | *Reynoutria (Fallopia) japonica* |
| Balsam, Himalayan | *Impatiens glandulifera* | Leek, Few-flowered | *Allium paradoxum* |
| Cotoneaster, Wall | *Cotoneaster horizontalis* | Lettuce, water | *Pistia stratiotes* |
| Cotoneaster, Entire-leaved | *Cotoneaster integrifolius* | Montbretia | *Crocosmia x crocosmiiflora* |
| Cotoneaster, Himalayan | *Cotoneaster simonsii* | Parrot's Feather | *Myriophyllum aquaticum* |
| Cotoneaster, Hollyberry | *Cotoneaster bullatus* | Pennywort, Floating | *Hydrocotyle ranunculoides* |
| Cotoneaster, Small-leaved | *Cotoneaster microphyllus* | Potato, Duck | *Sagittaria latifolia* |
| Creeper, False Virginia | *Parthenocissus inserta* | Primrose, Floating Water | *Ludwigia peploides* |
| Creeper, Virginia | *Parthenocissus quinquefolia* | Primrose, Water | *Ludwigia grandiflora* |
| Dewplant, Purple | *Disphyma crassifolium* | Primrose, Water | *Ludwigia uruguayensis* |
| False-acacia | *Robinia pseudoacacia* | Rhododendron | *Rhododendron ponticum* and hybrid *R. ponticum x R. maximum* |
| Fanwort/Carolina Water-Shield | *Cabomba caroliniana* | Rhubarb, Giant | *Gunnera tinctoria* |
| Fern, Water | *Azolla filiculoides* | Rose, Japanese | *Rosa rugosa* |
| Fig, Hottentot | *Carpobrotus edulis* | Salvinia, Giant | *Salvinia molesta* |
| Garlic, Three-cornered | *Allium triquetrum* | Seafingers, Green | *Codium fragile* |
| Hogweed, Giant | *Heracleum mantegazzianum* | Seaweed, Californian Red | *Pikea californica* |

| | | | |
|---|---|---|---|
| Hyacinth, Water | *Eichhornia crassipes* | Seaweed, Hooked Asparagus | *Asparagopsis armata* |
| Kelp, Giant species | *Macrocystis angustifolia, M. integrifolia, M. laevis, M. pyrifera* | Seaweed, Japanese | *Sargassum muticum* |
| Seaweeds, Laver | *Porphyra spp* except except native species, P. *amethystea, P. leucosticte, P. linearis, P. miniate, P. purpurea, P. umbilicalis* | Wakame | *Undaria pinnatifida* |
| Shallon | *Gaultheria shallon* | Waterweed, Curly | *Lagarosiphon major* |
| Stonecrop, Australian Swamp/New Zealand Pygmyweed | *Crassula helmsii* | Waterweeds | All species of the genus *Elodea* |

**Protection of Badgers Act 1992**

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: “any structure or place which displays signs indicating current use by a badger”

**Natural Environment and Rural Communities Act 2006**

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

**Hedgerow Regulations 1997**

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

**Birds of Conservation Concern**

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.

- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

**Global IUCN Red List**

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

**Local Biodiversity Action Plan (LBAP)**

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

**Wild Mammals (Protection) Act 1996**

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

# APPENDIX C – TARGET NOTES

Plant species frequencies were recorded using the DAFOR scale (D= dominant, A = abundant, F = frequent, O = occasional, R= rare) as estimated by eye.

| Target Note | Description | Photograph(s) |
|---|---|---|
| 1 | **Broad-leaved deciduous woodland**<br>Mature woodland with understorey and ground flora. Species include:<br>• Ash *Fraxinus excelsior* **A**<br>• Beech *Fagus sylvatica* **O**<br>• Bracken *Pteridium aquilinum* **O**<br>• Bramble *Rubus fructicosus* agg. **F**<br>• Bugle *Ajuga reptans* **O**<br>• Cleavers *Galium aparine* **F**<br>• Common hemp-nettle *Galeopsis tetrahit* **R**<br>• Common nettle *Urtica dioica* **O**<br>• Creeping buttercup *Ranunculus repens* **O**<br>• Cypress tree (non-native) *Cupressaceae* **R**<br>• Dog's Mercury *Mercuriais perennis* **A**<br>• Elder *Sambucus nigra* **O**<br>• English Elm *Ulmus procera* **O**<br>• Garlic mustard *Alliaria petiolata* **R**<br>• Greater Stitchwort *Stellaria holostea* **O**<br>• Green alkanet *Pentaglottis Sempervirens* **R**<br>• Ground Elder *Aegopodium podagraria* **F**<br>• Ground Ivy *Glechoma hederacea* **F**<br>• Hawthorn *Crataegus monogyna* **F**<br>• Hazel *Corylus avellana* **O**<br>• Hedge woundwort *Stachys sylvatica* **O**<br>• Herb Robert *Geranium robertianum* **O**<br>• Holly *Ilex aquifolium* **O**<br>• Ivy *Hedera helix* **F**<br>• Ivy-leaved speedwell *Veronica hederifolia* **R**<br>• Lesser celandine *Ranunculus ficaria* ***O***<br>• Lords and ladies *Arum maculatum* **O**<br>• Native bluebell *Hyacinthoides non-scripta* **O**<br>• Pedunculate Oak *Quercus robur* **D**<br>• Pignut *Conopodium majus* **O**<br>• Red campion *Silene dioica* **O**<br>• Rough meadow grass *Poa trivialis* **F**<br>• Sycamore *Acer pseudoplatanus* **O**<br>• Tufted hair grass *Deschampsia cespitosa* **D**<br>• Wild cherry *Prunus avium* **F**<br>• Wild privet *Ligustrum vulgare* R |  <br>  <br>  |

| | | |
|---|---|---|
| | • Wood avens *Geum urbanum* **O** | |
| 2 | Ditch that traverses through the site.<br>-WB1a on site is dry (shown in 1st photograph)<br>-WB1b adjacent to the site is wet and slow flowing (shown in 2nd photograph) |  <br>  |

| | | |
|---|---|---|
| 3 | Indian (Himalayan) balsam *Impatiens glandualifera*<br>-Schedule 9 invasive species<br>-Found along the banks of WB1b |  |
| 4 | Pile of bricks on site<br>-potential GCN refugia |  |

| | | |
|---|---|---|
| 5 | Indian (Himalayan) balsam *Impatiens glandualifera*<br>-Schedule 9 invasive species<br>-Found on site and along the woodland boundary. |  |
| 6 | Remnants of low lying brick structure on site |  |