# Appendix F1 Ecology Report



# East Claydon Greener Grid Park

## **Ecology Report**

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#### APPLIED ECOLOGY LTD

St John's Innovation Centre Cowley Road Cambridge CB4 0WS

Tel: 01223 422 116 Email: info@appliedecology.co.uk

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# **1** Introduction

### Background

- 1.1 In April 2024, Applied Ecology Ltd (AEL) was commissioned by Statkraft UK Ltd to carry out a Preliminary Ecological Appraisal (PEA) and follow-up protected species surveys of land north of East Claydon substation, Buckinghamshire ("the Site"). A plan showing the location of the Site is provided in **Figure 1.1**.
- 1.2 The study was required in order to determine the likely ecological constraints associated with a development proposal for a Greener Grid Park comprising energy storage and grid balancing equipment and associated infrastructure including access, drainage, landscaping and other incidental works ("the Development"), and to establish the potential scope of further, more detailed ecological surveys which may be needed to support any future planning application(s).

### **Purpose of this report**

1.3 This report provides details relating to baseline ecology surveys undertaken on the Site between April and September 2024 considered relevant to the development. It includes a description of the Site's habitat features and protected species interest, and a summary of its biodiversity opportunities and constraints.

### Legislation and Planning Policy

#### Legislation

- 1.4 The Wildlife and Countryside Act 1981 (as amended) provides the main legal framework for nature conservation and species protection in the UK. The Site of Special Scientific Interest (SSSI) is the main statutory nature conservation designation in the UK. Such sites are notable for their plants, or animals, or habitats, their geology or landforms, or a combination of these. Natural England is the key statutory agency in England for advising Government, and for acting as the Government's agent in the delivery of statutory nature conservation designations.
- 1.5 Designation of a SSSI is a legal process, by which sites are notified under the Wildlife and Countryside Act 1981. The 1981 Act makes provision for the protection of sites from the effects of changes in land management, and owners and occupiers receive formal notification specifying why the land is of special scientific interest, and listing any operations likely to damage the special interest.
- 1.6 The Countryside and Rights of Way Act 2000, and The Natural Environment and Rural Communities (NERC) Act 2006, provide supplementary protected species legislation. Specific protection for badgers *Meles meles* is provided by the Protection of Badgers Act 1992.



#### Habitats and Species of Principal Importance in England

- 1.7 The Natural Environment and Rural Communities (NERC) Act came into force on 1 October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.
- 1.8 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 Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

#### Habitats of Principal Importance

1.9 Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and sub-tidal sands and gravels.

#### Species of Principal Importance

- 1.10 There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Biodiversity Framework 2024. In addition, the hen harrier *Circus cyaneus* has also been included on the list because without continued conservation action it is unlikely that the hen harrier population will increase from its current very low levels in England.
- 1.11 In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

#### **National Planning Policy Framework**

1.12 The National Planning Policy Framework (NPPF) was first published in March 2012 (and replaced previous planning policy guidance (PPS 9) on biodiversity). The latest revision was published in December 2024, with paragraphs 193-195 stating the following in relation to habitats and biodiversity:

*"193. 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 improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.
- 194. The following should be given the same protection as habitats sites:
  - a) potential Special Protection Areas and possible Special Areas of Conservation;
  - b) listed or proposed Ramsar sites; and
  - c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

195. 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."





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# 2 Methodology

### Pre-existing data records

- 2.1 The Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC) was commissioned by AEL to complete a search of its database for existing biological records. This included a search for records of statutory and non-statutory wildlife sites, ancient woodland, and protected and notable species both on the Site and within 2 km of the Site.
- 2.2 Additional information relating to protected wildlife sites and ancient woodland was obtained from the government's MAGIC<sup>1</sup> online mapping tool and AEL's own database.

### Habitats and Plants

- 2.3 An extended Phase 1 habitat survey was undertaken for the Site in the afternoon of 10 May 2024 by AEL ecologist Richard Dale MCIEEM<sup>2</sup> in dry and bright weather conditions. The methodology adopted followed the standard JNCC approach to Phase 1 habitat survey (JNCC, 1993<sup>3</sup>) by which all habitats present within the Site were classified and mapped according to standard categories. Target notes were used to describe areas of both typical and unique botanical character. Habitat patches were mapped as polygon features, and if sufficient space on the map linear features (such as walls and fences) as lines where this provided added value. Point features were recorded where there were notable isolated trees or scrub. Plant species abundance was noted using the DAFOR<sup>4</sup> system.
- 2.4 The habitat map was subsequently digitised using a Geographical Information System (ArcGIS).
- 2.5 The entire Site was accessible during the survey, which was completed within the accepted season for completing Phase 1 habitat survey (which runs from late March until mid-October in southern England).

### Invertebrates

2.6 The proposed development site was dominated by arable land and improved sheep grazed pasture of negligible value to invertebrate species that possess high individual levels of nature conservation importance. Development related habitat loss beyond the loss of arable and improved pasture would be small-scale and would impact habitats considered to be of very limited significance for important invertebrate species. In light of this it was not considered necessary or reasonable to complete further survey and assessment for invertebrates to inform development planning.

<sup>&</sup>lt;sup>4</sup> DAFOR: whereby species occurrence may be classified as being **d**ominant, **a**bundant, **f**requent, **o**ccasional or **r**are. Rare in the context of a DAFOR score should not be confused with species rarity in the more widely accepted meaning of general scarcity.



<sup>&</sup>lt;sup>1</sup><u>http://www.magic.defra.gov.uk/MagicMap.aspx</u> accessed 04/01/2024.

<sup>&</sup>lt;sup>2</sup> Level 4 Botanical Society of Britain and Ireland (BSBI) Field Identification Skills Certificate, and an ornithologist with over 30 years of experience

<sup>&</sup>lt;sup>3</sup> JNCC (1990) Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit. JNCC, Peterborough.

### **Breeding birds**

- 2.7 A walkover survey of the proposed development location was first completed in dry and still weather conditions on the morning of 10 April 2024 by AEL ecologist Dr Duncan Painter MCIEEM, CEnv. Bird species present within the likely development construction area and other protected species field signs were noted.
- 2.8 A follow-up survey of all land within the study area boundary was completed by Richard Dale MCIEEM in the early morning of 10 May 2024 to record breeding bird species use of the Site and, following this survey, to check the site for evidence of badger and other protected species as part of a more general habitat mapping and protected species assessment.
- 2.9 The bird survey commenced early in the morning (06:00 start) to capture the peak bird activity period and was completed in optimal weather conditions for birds to be active. It followed a route around the site that encompassed all field boundaries See **Figure 2.1**. During the survey, the positions, age, sex, and behaviour of individual birds were recorded on a large-scale field map. Depending on the behaviour observed, species were allocated levels of breeding confirmation using slightly adapted BTO guidelines<sup>5</sup> as summarised in **Table 2.1**.

| Breeding status   | Breeding evidence  |  |  |  |
|-------------------|--|--|--|--|
| Non-breeder       | Suspected to be on migration.  |  |  |  |
|                   | Summering non-breeder.   |  |  |  |
|                   | <ul> <li>Not nesting within Site boundary (but potentially close by).</li> </ul>   |  |  |  |
| Possible breeding | Species observed in suitable nesting habitat or singing male present.  |  |  |  |
| Probable          | Pair in suitable breeding habitat.   |  |  |  |
| breeding          | <ul> <li>Permanent territory presumed through registration of territorial behaviour<br/>(song etc.) on at least two different days a week or more apart at the same<br/>place or many individuals on one day.</li> </ul> |  |  |  |
|                   | Courtship and display.   |  |  |  |
|                   | Visiting probable nest site.   |  |  |  |
|                   | <ul> <li>Agitated behaviour or anxiety calls from adults, suggesting presence of nest or<br/>young nearby.</li> </ul>  |  |  |  |
|                   | Nest-building or excavating nest-hole.   |  |  |  |
| Confirmed         | Distraction display of feigning injury.  |  |  |  |
| breeding          | • Used nest of eggshells found (occupied or laid during period of survey).   |  |  |  |
|                   | <ul> <li>Recently fledged young (nidicolous species) or downy young (nidifugous species)</li> </ul>  |  |  |  |
|                   | <ul> <li>Adults entering or leaving nest site in circumstances indicating occupied nest, or<br/>adults seen incubating.</li> </ul>   |  |  |  |
|                   | Adult carrying faecal sac or food for young.   |  |  |  |
|                   | Nest containing eggs.  |  |  |  |

#### Table 2.1: Breeding status of bird species and evidence.

<sup>&</sup>lt;sup>5</sup> www.bto.org/volunteer-surveys/birdatlas/methods/breeding-evidence



| Breeding status | Breeding evidence              |
|-----------------|--------------------------------|
|                 | Nest with young seen or heard. |

- 2.10 All adult birds detected by sight and/or sound were recorded, although species flying over the Site were omitted unless it was clear the birds were feeding over the Site or were flying to or had originated on or near the Site. Every effort was made to ensure that individual birds were only recorded once, and where possible, repeated records and clusters of registrations were used to map approximate breeding territories and assess species breeding density and abundance.
- 2.11 Birds were recorded in immediately adjacent off-site habitat where it was considered possible that these birds' breeding or foraging territories could overlap with on-site habitats. and note Both surveyors searched for evidence of or potential for the presence of protected species or species of nature conservation interest within and close to the Site.
- 2.12 The use of the Site by crepuscular / nocturnal species (principally owls) was assessed as part of the three after dark bat activity surveys completed in the spring, summer and autumn.
- 2.13 Given the relatively limited extent and type of breeding bird habitat loss predicted to occur as a result of the development, and reflecting that the breeding bird survey was completed at the peak of the bird breeding period in optimal conditions for recording bird activity after the arrival of all expected summer migrant species, it was felt that the single survey visit provided sufficient data to provide a reasonable assessment of the potential impact of the development on breeding birds and that further repeat visits would not have significantly changed our understanding of the breeding bird use and conservation value of the Site.

### Herpetofauna

#### **Great crested newt**

- 2.14 The 1:25,000 scale Ordnance Survey map was checked and online aerial photos inspected to identify any ponds within 250 m of the Site that could potentially support breeding populations of the legally protected amphibian great crested newt *Triturus cristatus* (GCN).
- 2.15 Records of GCN were recorded from on-line sources, including GCN survey data presented on the MAGIC website and planning reports for nearby developments were also assessed.
- 2.16 No ponds or other standing waterbodies occur within the Site, and no off-Site ponds or other waterbodies that have not been subject to previous GCN survey occur within 250 m of the Site boundary.
- 2.17 One pond occurs within 250 m of the study area boundary on private land to the east near Tuckey Farm and has been subject to GCN presence/absence survey previously in 2018 when GCN were confirmed to be absent from it. This pond is separated from the Site by the Claydon Brook, a minor barrier to GCN dispersal between the pond and the Site, and has not been subject to a repeat GCN survey in 2024 due to access difficulties. However,



Pond 8 is located over 250 m from proposed construction activity, and it is not considered essential to survey it to confirm continued GCN absence.

#### Reptiles

- 2.18 The Site was dominated by arable land and short-grazed improved grassland pasture of uniform structure considered to be of negligible value to reptile species. A tree-lined former rail line embankment runs through the centre of the Site was also grazed by sheep and devoid of ungrazed rank grassland habitats considered suitable for reptiles. The arable field margins were narrow and/or contained a high proportion of tall ruderal species and appeared entirely unsuitable for reptiles.
- 2.19 Reptiles are considered, for the purposes of development planning, likely to be absent from the Site and are not considered further.

### **Hazel dormouse**

- 2.20 While some of the hedgerows at the Site were theoretically suitable habitat for the species, there are no historic records of hazel dormouse *Muscardinus avellanarius* returned by the data search, and investigation of other online resources (Magic<sup>6</sup> and NBN Gateway<sup>7</sup>) revealed no evidence of dormouse records from within 5 km of the Site.
- 2.21 Dormice are considered, for the purposes of development planning, likely to be absent from the Site and are not considered further.

### **Brown Hare**

- 2.22 Incidental sightings of brown hare *Lepus europaeus* recorded during baseline surveys completed within the Site have been noted. Although a species of conservation concern, brown hare has minimal legal protection because they are considered a game species and can be shot throughout the year, including through their breeding season. They are the only game species in the UK without a closed season (when hunting is prohibited).
- 2.23 Specific survey for brown hare has not been conducted as part of this assessment and is not considered necessary.

### Badger

2.24 Badger field signs including setts, latrines and dung, footprints and paths were specifically searched for and recorded during the field survey visits conducted on 10 April and 10 May 2024.

<sup>&</sup>lt;sup>7</sup> <u>https://species.nbnatlas.org/species/NHMSYS0000080214</u> accessed 31/07/2024.



<sup>&</sup>lt;sup>6</sup> <u>https://magic.defra.gov.uk/MagicMap.aspx</u> accessed 31/07/2024

### Bats

#### **Bat roosting**

- 2.25 There are no buildings or built structures within the site that could be utilised by bats for roosting purposes, and bat roosting opportunity within the Site relates only to mature trees with potential roost features (PRFs) such as woodpecker holes, and cracks/crevices in trunks and limbs. There are a number of mature oak and ash trees in hedgerows within the Site that were of a size that could support PRFs. However, none of these trees are to be removed to enable the development and have not been subject to any specific assessment to assess their value to roosting bats
- 2.26 A visual inspection of trees along the central plantation woodland belt associated with the former rail-line embankment in locations directly impacted by the development was completed on 10 April 2024 by DP. This verified that the trees were all relatively small semi-mature similarly aged specimens that were devoid of obvious PRFs and were of negligible value to tree roosting bats. Given the absence of trees with PRFs in locations where tree loss will occur, adverse impacts on roosting bats are not considered likely and further survey and assessment of roosting bat use of the Site is not considered necessary.

#### **Bat Activity**

2.27 Surveys of bat activity have focussed on areas of the Site considered likely to have the most value to commuting/foraging bats that would be adversely impacted by the proposed development. Namely: the tree lined former rail embankment that runs through the middle of the Site (that would be subject to some tree removal at its northern end); and an adjoining hedgerow to the east of the embankment that would be removed in its entirety.

#### Vantage Point Survey

- 2.28 In accordance with best practice bat survey guidelines for habitats of low bat suitability<sup>8</sup>, three vantage point surveys of the Site have been completed corresponding with the spring, summer, and autumn bat activity periods. The three surveys were completed to record bat activity associated with the two linear habitat features that would be directly impacted by the development. These were: the tree lined former rail embankment that supports a narrow belt of broadleaved plantation woodland; and a hedgerow that connects to the rail embankment at its northern end on the east side of the embankment.
- 2.29 The hedgerow was subject to a summer and autumn bat activity survey only as its removal was not identified in time to enable a spring survey to be completed, but the absence of the spring survey is not considered to be a particularly limiting factor.

#### Spring

2.30 Two experienced bat surveyors completed a spring vantage point survey on the evening of 27 May 2024. The surveyors were located in fixed positions from 15 minutes before sunset until 90 minutes after sunset to record bat activity along the former rail embankment from vantage point 1 (VP-1) and vantage point 2 (VP-2) - see **Figure 2.2** for locations.

<sup>&</sup>lt;sup>8</sup> Collins, J. (2023) Bat Surveys for Professional Ecologist – Good Practice Guidelines 4<sup>th</sup> Edition. BCT, London



- 2.31 Both surveyors were equipped with a hand-held full spectrum Elekon Bat-logger electronic bat detector and a tripod mounted FLIR T540 thermal camera set to record MPEG video from the start to the end of the fixed vantage point watch which enabled the surveyors to see bat activity in darkness using the viewing screen on the back of the camera (see **Appendix A** for thermal camera fields of view).
- 2.32 All bats seen and heard, their direction of flight and activity were noted. The thermal videos were checked against sightings and recorded bat calls the following day using a PC.

#### Summer and Autumn

2.33 A third vantage point location (VP-3) was introduced to the summer and autumn surveys to record bat activity along the hedge that is to be removed to enable the development in addition to the surveys at VP-1 and VP-2. The summer and autumn surveys were completed by three surveyors each equipped with a Elekon Bat-logger electronic bat detector and a tripod mounted FLIR T540 thermal camera on 21 August and 16 September 2024 respectively.

#### Automated static Survey

- 2.34 An automated bat detector survey was completed using Song Meter SM4Bat full spectrum electronic bat detectors set-up to record bat activity along the tree lined former rail embankment near to the location of proposed tree loss. The survey position (SM4-1) was in a tree 2.5 m above the ground along the western side of the embankment with the detector microphone positioned facing east into the centre of the embankment see **Figure 2.2** for location.
- 2.35 The survey location SM4-1 was subject to three multiple night surveys in the spring/early summer, summer and autumn seasons:
  - Spring / early summer 14 consecutive nights: 27 May 7 June 2024
  - Late summer five consecutive nights: 21–25 August 2024
  - Autumn five consecutive nights: 16–20 September 2024
- 2.36 A second automated/static bat detector survey location (SM4-2) in the hedgerow that adjoins rail embankment was completed in the summer and autumn 2024 with the microphone located 2 m above the ground in the hedge canopy on the north side of the hedge:
  - Late summer five consecutive nights: 21–25 August 2024
  - Autumn five consecutive nights: 16–20 September 2024

#### Limitations

2.37 Each survey was conducted in weather that were suitable for bats to be active in dry and relatively still conditions such that there were no obvious survey limitations.





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# **3** Survey Findings

### Pre-existing data records

#### Designated wildlife sites and ancient woodland

- 3.1 The Site is not covered by any statutory wildlife site designation and does not support any ancient woodland.
- 3.2 The closest statutory designated site is called **Sheephouse Wood Site of Special Scientific Interest (SSSI)**, located 4.45 km to the south-west. This is a large, well-structured block of ancient pedunculate oak *Quercus robur* woodland carrying a wide range of stand types, some of which are relatively uncommon in the region. It has a characteristically diverse woodland flora and is of particular interest for its invertebrate fauna which includes notable and local species including black hairstreak *Strymonidia pruni*.
- 3.3 **Finemere Wood SSSI** is 45.7 ha ancient pedunculate oak woodland which also supports black hairstreak and other notable butterflies and occurs 4.58 km to the south-west of the Site.
- 3.4 **Pilch Fields SSSI** occurs 4.8 km to the north of the site and is an 11.05 ha remnant of old meadow grassland habitat that supports a mosaic of dry and wet grassland communities of both neutral and calcareous types that support a number of rare plant species that are now rare in Buckinghamshire.
- 3.5 All of these SSSIs have small parts of their outer impact risk zones (IRZs) overlapping the development Site see **Figure 3.1** and the proposed development represents a development type large (>1 ha) non-residential development located outside of existing settlement/urban areas) that could potentially result in adverse impacts on local SSSIs.
- 3.6 The data search returned details of two non-statutory designated sites within 2 km of the Site:
  - South Lake, Addington Biological Notification Site (BNS), 620 m to the north a small lake surrounded by mixed woodland.
  - Grassland near Addington BNS), 500 m to the north dry and damp grassland habitats, including hollows from past clay extraction.
- 3.7 The closest area of ancient woodland is Home Wood, located 3.11 km to the south-west.

#### **Protected species**

- 3.8 A total of 212 records were returned by the data search, summarised as follows:
  - Bats 164 records, of at least five species, comprising 115 records of common pipistrelle *Pipistrellus pipistrellus*, 12 of soprano pipistrelle *Pipistrellus pygmaeus*, 11 of noctule *Nyctalus noctula*, two of brown long-eared bat *Plecotus auritus* and one of Daubenton's bat *Myotis daubentonii*, as well as 18 records of unidentified *Pipistrellus* bats, four of unidentified *Myotis* bats and one record of a bat not identified to family.
  - Badger one record, from Addington South Lake.



- Birds two records, of swift Apus apus and yellowhammer Emberiza citrinella.
- Herpetofauna one record, of great crested newt, relating to three surveys during April 2021 from a location 540 m to the north-west of the Site.
- Fish four records of bullhead *Cottus globio* from Clayton Brook, Addington.
- Invertebrates 25 records, including three of grizzled skipper *Pyrgus malvae* and two of small heath *Coenonympha pamphilus*.
- Plants 13 records, most of which were from Grassland near Addington BNS and date from 1979.

### Habitats

- 3.9 The Phase 1 Habitat Map is shown in **Figure 3.2**. A summary of the habitats recorded is provided in **Table 3.1** below, and target notes can be found in **Appendix B**. A selection of habitat survey photographs can be found in **Figure 3.3**.
- 3.10 In summary, the Site comprised an area of farmland, with sheep-grazed pasture to the east and arable land to the west, divided by a narrow belt of trees and scrub running northsouth along a former rail line embankment, as well as various other field boundary hedgerows.

#### Arable

- 3.11 The western part of the site comprised three large arable fields, sown with spring cereal crops at the time of survey. Narrow field margins, supporting poor semi-improved neutral grassland were present, and along the eastern edge of the fields was a strip of uncultivated land. The uncultivated field margin supported a range of arable weeds and early successional species, including abundant bristly oxtongue *Picris echioides*, alongside, curled dock *Rumex crispus*, black grass *Alopecurus myosuroides*, winter-cress *Barbarea vulgaris* and greater plantain *Plantago major*.
- 3.12 The field margins supported species including false oat-grass *Arrhenatherum elatius*, barren brome *Anisantha sterilis*, cock's-foot *Dactylis glomerata*, cow parsley *Anthriscus sylvestris* and common nettle *Urtica dioica*, as well as regular patches of bramble *Rubus fruticosus*.

#### Improved grassland

3.13 The eastern part of the Site comprised several fields of improved grassland, grazed by sheep at a relatively high density at the time of survey. This was dominated by perennial rye-grass *Lolium perenne*, with abundant Yorkshire-fog *Holcus lanatus* and frequent white clover *Trifolium repens*, cock's-foot *Dactylis glomerata* and sweet vernal grass *Anthoxanthum odoratum*. An area in the north of the Site supported a high proportion of soft rush *Juncus effusus*. The overall species diversity was very low, at 4.6 species per m<sup>2</sup> (range 4–5).

#### **Broadleaved plantation woodland**

3.14 A narrow strip of trees and scrub ran north-south across the Site, dividing the arable land from the pasture, and occupying a former rail line embankment. This was a linear mosaic of various habitats, predominantly comprised of lines and groups of semi-mature trees,



sections of defunct hedgerow and scrub, and areas of improved grassland including a track running the entire length of the habitat parcel. However, it had a closed canopy over much of its extent and was therefore mapped as broadleaved plantation woodland. It was open to the pasture fields to the east and as such the ground layer was heavily grazed by sheep.

- 3.15 A range of tree species were present, including ash *Fraxinus excelsior*, sycamore *Acer pseudoplatanus*, pedunculate oak *Quercus robur*, beech *Fagus sylvatica* and poplar *Populus* spp., with understorey species including hawthorn *Crataegus monogyna*, blackthorn *Prunus spinosa*, ivy *Hedera helix*, bramble and elder *Sambucus nigra*. The ground layer was dominated by grass species, including Yorkshire-fog and rough meadow-grass *Poa trivialis*, alongside forbs such as lords-and-ladies *Arum maculatum*, cow parsley and cleavers *Galium aparine*.
- 3.16 Patches of bramble and hawthorn scrub were present, particularly where power lines crossed overhead.

#### **Hedgerows and trees**

- 3.17 Various hedgerows were present within the Site, the majority of which were species-poor, typically supporting hawthorn, blackthorn, elm *Ulmus* spp., elder and field maple *Acer campestre*. Three of the hedgerows were species-rich, two in the east of the Site and one along the southern boundary.
- 3.18 Several hedgerows were associated with ditches, most of which were dry but some held shallow water at the time of survey. A number of hedgerows, including all three species-rich hedgerows, contained trees, predominantly mature and overmature pedunculate oak and ash.
- 3.19 In addition to the hedgerows within or on the Site boundary, there were hedgerows forming the field boundaries just outside the northern Site boundary which are not shown in **Figure 3.2**.

| Habitat                         | Area (ha) | % of Site |
|---------------------------------|-----------|-----------|
| Arable                          | 34.510    | 57.2      |
| Improved grassland              | 22.68     | 37.1      |
| Fallow arable                   | 2.085     | 3.5       |
| Broadleaved plantation woodland | 1.329     | 2.2       |

#### Table 3.1: Summary of habitat types recorded on the Site.



### Fauna

#### **Great crested newt**

- 3.20 Great crested newt *Triturus cristatus* (GCN) are known to occur in ponds located beyond the study area, with nine waterbodies that occur at distances of between 420 m (Pond 7) and 960 m (Pond 14) from the development site boundary possessing historic records of GCN see **Figure 3.4**.
- 3.21 There are no ponds or waterbodies within the development site or study area boundary. The closest pond to the Site is Pond 8 which was shown to be devoid of GCN by eDNA survey completed in 2018 to support a solar farm application around Tuckey Farm to the east. Pond 8 occurs 210 m to the east of the development boundary and 290 m to the east of the development construction area, and is separated from the Site by a partial barrier to GCN movement – the Claydon Brook.
- 3.22 The development site falls almost entirely within the Nature Space green impact risk zone for GCN with only a narrow sliver of land along the eastern side of the site falling within the amber risk zone. The entire development construction area occurs within the green risk zone see **Figure 3.5**.
- 3.23 In summary, the development is not considered likely to harm GCN and the species is not considered further by this assessment.

#### **Breeding birds**

- 3.24 A total of 21 bird species were recorded during the survey within the study area, as detailed in **Table 3.2** with individual registrations shown by **Figure 3.6**.
- 3.25 Recorded bird species included a small number of farmland specialist red-listed species of elevated conservation concern, namely skylark *Alauda arvensis* and yellowhammer *Emberiza citrinella*. In addition, a single grey heron *Ardea cinerea* and red kite *Milvus milvus* were observed in flight over the Site, and a single tawny owl *Strix aluco* was observed at the northern end of the central wooded belt during the site visit in April 2024.
- 3.26 A foraging barn owl *Tyto alba* was observed hunting over the uncultivated arable field margin along the east side of the arable field next to the former rail line embankment during the bat activity survey in September 2024, but no trees with holes or cavities suitable for nesting barn owl obviously occur within the site.
- 3.27 The birds recorded represent a typical assemblage for the habitats present, dominated by common and generalist species of hedgerows, with a small number of farmland specialists.



| Species                                    | UK<br>conservation<br>status | Count |
|--|------------------------------|-------|
| Blackbird Turdus merula                    | Green                        | 3     |
| Blue tit Cyanistes caeruleus               | Green                        | 6     |
| Carrion crow Corvus corone                 | Green                        | 1     |
| Chaffinch Fringilla coelebs                | Green                        | 6     |
| Chiffchaff Phylloscopus collybita          | Green                        | 6     |
| Dunnock Prunella modularis                 | Amber                        | 5     |
| Goldcrest Regulus regulus                  | Green                        | 1     |
| Goldfinch Carduelis carduelis              | Green                        | 1     |
| Great spotted woodpecker Dendrocopos major | Green                        | 1     |
| Great tit Parus major                      | Green                        | 4     |
| Lesser whitethroat Sylvia curruca          | Green                        | 3     |
| Long-tailed tit Aegithalos caudatus        | Green                        | 4     |
| Pheasant Phasianus colchicus               | Green                        | 2     |
| Robin Erithacus rubecula                   | Green                        | 7     |
| Skylark Alauda arvensis                    | Red                          | 6     |
| Song thrush Turdus philomelos              | Amber                        | 1     |
| Stock dove Columba oenas                   | Amber                        | 1     |
| Whitethroat Sylvia communis                | Amber                        | 1     |
| Woodpigeon Columba palumbus                | Amber                        | 27    |
| Wren Troglodytes troglodytes               | Amber                        | 6     |
| Yellowhammer Emberiza citrinella           | Red                          | 5     |

#### Table 3.2: Birds recorded during Preliminary Ecological Appraisal.

#### **Red list species**

- 3.28 Six singing skylarks were holding part of their territories over arable land within the Site. Of these birds, only two had territories that were completely within the Site and not overlapping adjoining (off-Site) arable land. Four singing birds had territories that overlapped off-site adjoining arable land.
- 3.29 Two pairs of yellowhammer pairs were present within the Site in separate hedgerows, to the west of the central plantation woodland belt. A further two were on territory in hedges close to but off-Site to the south and north of the study area. The two yellow hammer registrations side by side in the northern hedge as shown by **Figure 3.6** were a male and female bird assumed to be a breeding pair.

#### Amber list species

3.30 Amber-listed species of conservation concern that were breeding within the site were: dunnock *Prunella modularis*, a common hedgerow species; song thrush *Turdus philomelos* a bird of woodland and hedgerows that has suffered recent declines particularly in garden and hedgerow habitats; stock dove *Columba oenas*; woodpigeon *Columba palumbus*; whitethroat *Sylvia communis* a common migrant warbler; and wren *Troglodytes* 



*troglodytes,* all common species assigned to the Amber list due to the large size and European importance of the UK populations.

#### **Conservation Value**

- 3.31 Standard procedures for assessing the value of bird communities have been established by Fuller (1980)<sup>9</sup>. Recording the number of species on a site can provide a simple measure of species diversity from which to confer a level of conservation importance. For breeding birds, the standard qualifying levels provided by Fuller (1980) are as follows:
  - National Importance, 85+ species;
  - Regional Importance, 70–84 species;
  - County Importance, 50–69 species;
  - Local Importance, 25–49 species.
- 3.32 Based on the breeding bird survey findings and other recorded bird sightings the breeding population at the Site is estimated to be 22 species which confers the study area with less than Local importance with respect to the diversity of the assemblage.
- 3.33 Further repeat breeding bird survey visits were considered unlikely to result in sufficient additional species being recorded to raise the value of the Site into the Local importance category, and the single visit survey is considered to provide a robust picture of the breeding bird interest of the Site.
- 3.34 The Site is highly unlikely to possess any value in terms of its population size or species rarity according to the criteria set out by Fuller.

#### **Brown Hare**

3.35 A brown hare was noted within the Site during the spring bat activity survey where it was recorded along the central former rail line embankment.

#### Bats

#### Vantage Point Survey

- 3.36 The vantage point bat activity surveys recorded between one and three individual commuting pipistrelle bats flying along the belt of plantation woodland along the former rail line embankment, but did not record any evidence that the central woodland belt or the adjoining hedgerow supports a large or important bat flyway or commuting route.
- 3.37 In May, a single commuting common pipistrelle flew north along the corridor at 21.33 (24 minutes after sunset). This was followed by a single foraging common pipistrelle at 21.45 and thereafter occasional foraging passes by individual common and soprano pipistrelle bats until the end of the survey see **Figure 3.7**.
- 3.38 During the August survey, two individual commuting soprano pipistrelles flew south along the central wooded embankment at 20.23 (9 minutes after sunset) and 20.27. Thereafter regular foraging passes of individual common pipistrelle bats and occasional passes of

<sup>&</sup>lt;sup>9</sup> Fuller, R.J. (1980). A Method for Assessing the Ornithological Interest of Sites for Conservation. Biological Conservation, 17: 229–239.



individual foraging soprano pipistrelle bats were recorded along the central wooded embankment, with no bat activity recorded along the adjoining hedgerow during the survey.

3.39 During the September survey three individual commuting soprano pipistrelle flew south along the central wooded embankment at 19.39 (24 minutes after sunset) and 19.45 (x2 bats). Thereafter single foraging passes of individual common pipistrelle bats and occasional soprano pipistrelle bats were recorded at all three vantage points until the end of the survey. A foraging Daubenton's bat was also recorded along the hedge at 20.05 and 20.09 and along the central wooded embankment at 20.28 and 20.45.

#### Automated static survey

- 3.40 The results of the three season automated bat detector survey are presented in **Table 3.3** and confirm the presence of seven bat species making use of the two survey areas within the Site.
- 3.41 The total number of recorded bat calls was markedly higher in the autumn compared to the spring and summer. Common and soprano pipistrelle calls made up the majority of all recorded calls at both locations on each survey occasion, with the two species making up between 93.8% and 96.8% of all recorded calls each season in the central woodland belt, and between 79.7% and 73.3% of all recorded calls along the hedge in summer and autumn respectively. There were significantly fewer bat calls recorded along the hedgerow compared to the central woodland belt on both survey occasions (summer and autumn) when the two locations were being surveyed concurrently.
- 3.42 Brown long-eared bat calls were recorded in very small numbers at both locations, but it is a bat species that is likely to have been under recorded on account of its quiet / no calling behaviour.
- 3.43 Two species of *Myotis* bat were recorded: Daubenton's *Myotis daubentonii* and natterers *M. nattereri*, along with a small number of *Myotis* calls that were either too faint or similar to be able reliably assign an identification. Daubenton's calls were recorded at both locations during each survey in low numbers, with natterers bat calls recorded in even smaller numbers at both locations.
- 3.44 Barbastelle bat was recorded during all three survey periods. In the spring/early summer barbastelle was recorded only as a single pass on four separate nights over the central woodland belt, and as a single pass on two nights over the hedge in the summer. In contrast to the spring/summer, barbastelle was recorded on a number of occasions each night during the autumn with most of the calls being recorded over the central woodland belt and only a single pass over the hedgerow.



| Bat species                          | Central wood  | land belt (SM        | 41)                  | Hedge (SM42           | Hedge (SM42)         |                      |  |
|--------------------------------------|---|----------------------|----------------------|-----------------------|----------------------|----------------------|--|
|                                      | Spring/early<br>summer (14<br>nights)<br>(total<br>number of<br>call files) | Summer<br>(5 nights) | Autumn<br>(5 nights) | Spring<br>(no survey) | Summer<br>(5 nights) | Autumn<br>(5 nights) |  |
| Common pipistrelle                   | 2,478<br>(90.85%)   | 1,746<br>(86.4%)     | 8,668<br>(89.8%)     | -                     | 955<br>(78.1%)       | 883<br>(54.4%)       |  |
| Soprano pipistrelle                  | 164 (5.96%)   | 149<br>(7.4%)        | 454<br>(4.7%)        | -                     | 20<br>(1.6%)         | 307<br>(18.9%)       |  |
| <i>Pipistrellus</i> species combined | 96.81%  | 93.8%                | 94.5%                | -                     | 79.7%                | 73.3%                |  |
| Noctule                              | 23<br>(0.84%)   | 123<br>(6.1%)        | 437<br>(4.5%)        | -                     | 215<br>(17.6%)       | 405<br>(25.0%)       |  |
| Daubenton's                          | 53<br>(1.93%)   | 2<br>(0.1%)          | 32<br>(0.3%)         | -                     | 12<br>(1.1%)         | 10<br>(0.6%)         |  |
| Natterers                            | 14<br>(0.51%)   | -                    | 4<br>(<0.1%)         | -                     | 3<br>(0.2%)          | 6<br>(0.4%)          |  |
| <i>Myotis</i> sp                     | 11<br>(0.40%)   | -                    | 30<br>(0.3%)         | -                     | 4<br>(0.3%)          | 8<br>(0.5%)          |  |
| Barbastelle                          | 4<br>(0.15%)  | -                    | 29<br>(0.3%)         | -                     | 2<br>(0.2%)          | 1<br>(0.1%)          |  |
| Brown long-eared                     | 4<br>(0.15%)  | -                    | -                    | -                     | 11<br>(0.9%)         | 2<br>(0.1%)          |  |
| Total                                | 2,752<br>(100%)   | 2,020<br>(100%)      | 9,654<br>(100%)      | -                     | 1,223<br>(100%)      | 1,622<br>(100%)      |  |

Table 3.3: Bat calls recorded by automated bat detector survey

#### **Conservation Value**

3.45 The bat assemblage recorded within the site has been assessed in accordance with current UK bat mitigation guidelines<sup>™</sup> to be of County importance, as it scores 13 out of a maximum possible 28 points (46%) for the bat assemblage of south-eastern England. For reference, the County importance threshold is reported to be between 45 and 54%.

#### Badger

3.46 A badger sett with four well-used entrance holes was dug into the east side of the raised former rail line embankment in the centre of the Site. The sett was considered to be a well-

<sup>&</sup>lt;sup>10</sup> Reason, P.F and Wray, S. (2023) *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats.* CIEEM, Ampfield



used outlier or subsidiary sett but possessed no associated evidence to indicate that it was a higher status (breeding) sett. The sett is vulnerable to disturbance by sheep that were seen regularly using this part of the embankment for shelter. The location of the sett is shown in **Figure 3.8**.







#### Figure 3.3: Selection of habitat survey photographs.



(a) Improved grassland sheep pasture and sheep grazed species poor hedgerow – the hedgerow shown is to be removed to enable the development

(b) Improved grassland field on which the battery farm is to be constructed

(c) Arable land including strip of uncultivated land and field boundary hedgerows on which the battery farm is to be constructed.

(d) Arable land and hedgerow with mature pedunculate oak and ash trees retained as part of the development







(e) Narrow strip of plantation woodland and a hedgerow on raised former rail line embankment that runs through the centre of the Site. A small section of this corridor is to be removed as part of the development.

(f) Section of central wooded strip below power lines in south of Site, dominated by mature hawthorn scrub.

(h) Badger sett dug into the east side of the central former rail line embankment











#### Figure 3.6

Map Scale @ A4: 1:7,400

| Surveyed by: RD          |  |
|--------------------------|--|
| Survey date: 10 May 2024 |  |
| Drawn by: RD             | 444                                      |
| Checked by: DP           | Applied<br>Ecology Ltd                   |
| Status: Final            | 1. |

AEL2270\_01-06-02\_Birds\_20250410 A4 10/04/2025

![](_page_33_Picture_0.jpeg)

AEL2270\_01-09-00\_BatsResults\_20241014 A4 15/10/2024

# 4 Development Implications and Recommendations

### **Development Implications**

#### **Protected sites**

- 4.1 The Site is not covered by any statutory or non-statutory wildlife site designation and does not comprise ancient woodland, but the outer development impact risk zones (IRZs) around three local SSSIs overlap the development site. The development will result in the replacement of >1 ha of arable and improved grassland habitat with a battery storage facility with associated infrastructure, and its potential impact on local SSSIs is considered below.
- 4.2 The development site is located 4.5 km to the north-east of Sheephouse Wood Site of Special Scientific Interest (SSSI), 4.6 km to the north-east of Finemere Wood SSSI and 4.8 km to the south of Pilch Fields SSSI. The Site has no direct habitat linkage to any of the three SSSIs and is separated from them by intensively farmed arable land, watercourses and associated anthropogenic infrastructure including a rail line to the north and various rural roads.
- 4.3 The construction of the development will not result in any direct adverse impact on the three SSSIs, and battery storage is a development type that will not result in air pollution or any emissions that could result in pollution to these SSSI when operational.
- 4.4 In summary the construction and operation of the East Claydon Greener Grid battery storage development is considered unlikely to result in adverse impacts (direct or indirect) on any local SSSI.

#### Habitats

- 4.5 The Site was dominated by arable and improved grassland habitats of low relative biodiversity and nature conservation value. The central plantation woodland belt along the side of a former rail line embankment provides a wildlife corridor function but is to be largely retained and protected as part of the development. The development layout necessitates the permanent loss of a species poor hedgerow that adjoins to the eastern side of the central plantation woodland belt. The hedgerow was dominated by hawthorn *Crataegus monogyna* and elm *Ulmus* sp. with wild plum *Prunus domesticus* (rare), dog rose *Rosa canina* agg (rare), and crab apple *Malus sylvestris* (rare).
- 4.6 The scheme has been designed to retain all mature and overmature trees within the Site and minimise tree loss. A small number of trees are to be removed along the central former rail line embankment associated with the access track between the western and eastern battery storage areas, along with the loss of 31 trees along the same embankment to facilitate the construction of two maintenance vehicle passing bays.

![](_page_34_Picture_12.jpeg)

#### **Breeding Birds**

- 4.7 The study area supports a breeding bird assemblage of less than Local importance dominated by common hedgerow species, with small numbers of farmland specialists of elevated conservation concern namely skylark and yellowhammer.
- 4.8 In terms of the potential impact of the development on breeding birds of conservation concern, the construction and operation of the East Claydon Greener Grid is considered likely to result in the **permanent displacement of up to three pairs of skylark from the Site** that will occur as a result of the permanent loss of arable land to the development, and the associated reduction in size and attractiveness to skylark of remaining arable land in the northern half of the Site. It is also anticipated that the construction of the Greener Grid would result in the **temporary displacement of one pair of skylark** from arable land in the southern half of the site where a temporary construction access track is proposed.
- 4.9 The single hedgerow that is proposed to be removed is overgrazed along its base by sheep and is not important bird nesting habitat. All other hedges are to be retained and/or enhanced and the development is not considered likely to adversely impact nesting yellowhammer.
- 4.10 The extensive planting and management of large areas of arable and improved grassland around the development compound as native wildflower meadow and native scrub and tree groups will provide a year-round foraging resource for a range of specialist farmland bird species including yellow hammer, grey partridge and linnet, and should compensate for the predicted permanent loss of two to three pairs of skylark from the Site.

#### Badger

4.11 A four-hole badger sett is present within the central former rail line embankment and occurs within 30 m of proposed construction related activity and is therefore susceptible to disturbance during construction.

#### Bats

- 4.12 The central plantation woodland belt that would be subject to minor habitat loss and fragmentation at its northern end and an adjoining hedgerow that would need to be removed in its entirety to enable the development, have both been shown to be used by a range of bat species that confer both habitat features with County importance for foraging bats. The majority of high value bat habitat within the study area namely field boundary hedgerows and the belt of plantation woodland along the former rail line embankment in the centre of the Site will be retained as part of the development, and the loss of plantation woodland and hedgerow represents only a minor loss of bat forage habitat from the Site and a negligible loss of an individual bats core sustenance zone.
- 4.13 Significant adverse impacts on commuting bats resulting from the proposed removal of linear feature habitat are not predicted to occur as they are only used by low numbers of individual common species of bats for commuting.

![](_page_35_Picture_12.jpeg)

### Recommendations

#### Mitigation

- 4.14 The clearance of any vegetation and soil stripping should take place outside the bird breeding season, in the period September–February, or immediately after a check by an experienced ornithologist that verifies nesting bird absence from the Site.
- 4.15 Subject to ongoing monitoring to confirm continued badger occupancy, the identified 4hole badger sett might need to be subject to temporary closure under the auspices of a Natural England badger sett closure licence in advance of construction commencing. The badger sett closure period is between July and November.
- 4.16 Its is recommended that eight skylark nest plots are incorporated into retained arable land beyond the development compound as mitigation to provide alternative nesting habitat for skylark that might be displaced from the development area.
- 4.17 The use of artificial lighting at night during construction or operation of the development should be avoided / minimised to ensure that retained trees, hedgerows and boundary habitats are unilluminated to avoid disturbance to light sensitive bat species and other nocturnal wildlife.

#### Enhancement

4.18 It is recommended that two barn owl nest boxes are erected on suitable mature trees in retained field boundary habitats as a biodiversity enhancement measure on land to the west and east of the central former rail line corridor.

![](_page_36_Picture_10.jpeg)

## **Appendix A** Bat vantage point survey thermal camera fields of view

![](_page_37_Picture_3.jpeg)

## **Appendix A** Bat vantage point survey thermal camera fields of view

![](_page_38_Picture_3.jpeg)

![](_page_39_Picture_0.jpeg)

FLIR T540 (464 x 348 pixel resolution) with 42 degree lens = bat in flight detection distance of 51 m.

![](_page_39_Picture_2.jpeg)

![](_page_40_Picture_0.jpeg)

FLIR T540 (464 x 348 pixel resolution) with 42 degree lens = bat in flight detection distance of 51 m.

![](_page_40_Picture_2.jpeg)

![](_page_41_Picture_0.jpeg)

FLIR T540 (464 x 348 pixel resolution) with 42 degree lens = bat in flight detection distance of 51 m.

![](_page_41_Picture_2.jpeg)

## **Appendix B** Habitat higher plant species lists

![](_page_42_Picture_3.jpeg)

Notes: DAFOR: D = dominant, A = abundant, F = frequent, O = occasional, R = rare, (LD = locally dominant).

#### Uncultivated arable land.

| Species                                       | DAFOR |
|---|-------|
| Bristly oxtongue Picris echioides             | А     |
| Field horsetail Equisetum arvense             | F     |
| Curled dock Rumex crispus                     | F     |
| Greater plantain Plantago major               | F     |
| False oat-grass Arrhenatherum elatius         | 0     |
| Creeping buttercup Ranunculus repens          | 0     |
| Creeping thistle Cirsium arvense              | 0     |
| Cock's-foot Dactylis glomerata                | 0     |
| Rough meadow-grass Poa trivialis              | 0     |
| Thyme-leaved speedwell Veronica serpyllifolia | 0     |
| Black grass Alopecurus myosuroides            | 0     |
| Creeping bent Agrostis stolonifera            | 0     |
| Oxeye daisy Leucanthemum vulgare              | 0     |
| Field forget-me-not Myosotis arvensis         | 0     |
| Perennial rye-grass Lolium perenne            | 0     |
| Hemlock Conium maculatum                      | 0     |
| Dandelion Taraxacum officinale agg.           | 0     |
| Barren brome Anisantha sterilis               | 0     |
| Winter-cress Barbarea vulgaris                | 0     |
| Great burnet Sanguisorba officinalis          | 0     |
| Grey poplar Populus x canescens (saplings)    | 0     |
| Tall fescue Festuca arundinacea               | R     |

#### Improved grassland.

| Species                                       | DAFOR |
|---|-------|
| Perennial rye-grass Lolium perenne            | D     |
| Yorkshire-fog Holcus lanatus                  | А     |
| White clover Trifolium repens                 | F     |
| Sweet vernal grass Anthoxanthum odoratum      | F     |
| Cock's-foot Dactylis glomerata                | F     |
| Creeping buttercup Ranunculus repens          | 0     |
| Annual meadow-grass Poa annua                 | 0     |
| Thyme-leaved speedwell Veronica serpyllifolia | 0     |
| Spear thistle Cirsium vulgare                 | 0     |
| Soft rush Juncus effusus                      | 0     |

![](_page_43_Picture_7.jpeg)

#### Broadleaved plantation woodland.

| Species                                  | DAFOR |
|--|-------|
| Ash Fraxinus excelsior                   | F     |
| Sycamore Acer pseudoplatanus             | F     |
| Pedunculate oak Quercus robur            | F     |
| Grey poplar Populus x canescens          | 0     |
| Beech Fagus sylvatica                    | 0     |
| Plum <i>Prunus</i> spp.                  | 0     |
| Alder Alnus glutinosa                    | 0     |
| Field maple Acer campestre               | 0     |
| Hawthorn Crataegus monogyna              | F     |
| Blackthorn Prunus spinosa                | F     |
| Dog rose Rosa canina                     | F     |
| Elder Sambucus nigra                     | 0     |
| Ivy Hedera helix                         | 0     |
| Bramble Rubus fruticosus                 | 0     |
| Perennial rye-grass Lolium perenne       | А     |
| Annual meadow-grass Poa annua            | F     |
| Yorkshire-fog Holcus lanatus             | F     |
| Smooth meadow-grass Poa pratensis        | F     |
| Cock's-foot Dactylis glomerata           | F     |
| Barren brome Anisantha sterilis          | 0     |
| Spear thistle Cirsium vulgare            | 0     |
| Common nettle Urtica dioica              | F     |
| Daffodil Narcissus pseudonarcissus       | 0     |
| Curled dock Rumex crispus                | 0     |
| Lords-and-ladies Arum maculatum          | 0     |
| White clover Trifolium repens            | 0     |
| Common mouse-ear Cerastium fontanum      | 0     |
| Groundsel Senecio vulgaris               | 0     |
| White dead-nettle Lamium album           | 0     |
| Black horehound Ballota nigra            | 0     |
| Cow parsley Anthriscus sylvestris        | 0     |
| Lesser burdock Arctium minus             | 0     |
| Common chickweed Stellaria media         | 0     |
| Shepherd's purse Capsella bursa-pastoris | 0     |
| Hogweed Heracleum sphondylium            | 0     |
| Broad-leaved dock Rumex obtusifolius     | 0     |
| Dandelion Taraxacum officinale agg.      | 0     |
| Herb-Robert Geranium robertianum         | 0     |

![](_page_44_Picture_4.jpeg)

| Species                                    | DAFOR |
|--|-------|
| Cut-leaved crane's-bill Geranium dissectum | 0     |
| Ground-ivy Glechoma hederacea              | 0     |
| Cleavers Galium aparine                    | 0     |
| Daisy Bellis perennis                      | 0     |

![](_page_45_Picture_3.jpeg)

![](_page_46_Picture_0.jpeg)