



**Preliminary Ecological Assessment of Land East
Of Wakeley Farm, Cherry Green, Westmill, Buntingford,
Hertfordshire SG9 9NH**

Commissioned by Unplugged

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1 Executive Summary

A Preliminary Ecological Assessment was carried out at Wakeley Farm, Cherry Green, Westmill, Buntingford, Hertfordshire SG9 9NH during May and July 2023. The purpose was to check for any ecological issues which might affect proposed development works on site. The works proposed are already partially completed and involve installation of small “off-grid” cabins within fields, connected by existing hardstanding and grassland tracks. A small car park is also proposed and has already been completed.

Below is a summary of recommendations are made following the survey findings. Further details concerning the recommendations are given in the main body of the report.

Ecological factor	Summary of recommendations
Great crested newts & reptiles	Low risk of these species being present in grassland to be cut for remaining cabin addition. Grass to be cut in 2 stages as described in recommendations section to minimise risk to these species.

The report sections below should be read in full and detailed guidance given in this report must be followed to avoid breaching legislation regarding protected and invasive species.

This report is valid for one year from the date of the survey visit. Should works be delayed to later than one year after the survey then a further update survey of the site would be required as habitats change over time, along with their potential to support protected species.

2 Introduction

2.1 Site description

The site is located at Land East of Wakeley Farm and consists of small areas on the edges of fields where cabins are to be added or have been added, along with tracks and paths connecting them. The redline boundary consists of tracks connecting cabins and car parking area and the locations of the cabins themselves. Overall the area within the redline boundary is approximately 0.7250 hectares in area. The site currently contains grassland and hardstanding habitats, as well as a completed car parking area and two cabins.



Example cabin location showing “Wilbur” cabin at edge of field and grass track leading to cabin

2.2 Local area and surrounding habitats

The local area is rural and apart from small towns and villages contains predominantly farmland (mostly arable) with hedgerows and small woodland patches. The site itself is bordered on all sides by farmland, hedgerows and woodland.

2.3 Client

Green Shoots Ecology were instructed by Unplugged.

2.4 Survey scope and purpose

The survey covered all areas within the site proposal boundary. It was commissioned to identify any ecological constraints that should be considered when carrying out works in the area. Constraints could include the potential for impacts on protected or notable species or sites, and presence of invasive species. Annex 3 to this report includes details of relevant legislation and policies relating to protected species and sites and invasive species. .

Further surveying or mitigation works are recommended where relevant. If works are to be carried out any later than a year after this report, then a second site visit is recommended so that an update to this report be carried out. A Preliminary Ecological Appraisal was carried out in order to provide the information required.

PEA guidelines are published by CIEEM (2013). PEA is based on Phase 1 Survey methodology, as described in the JNCC Handbook for Phase 1 Survey (1990). Its use allows habitat types on sites to be mapped. From this the ecological value of areas of a site can be ascertained. It can then be determined how likely it is that protected, or otherwise notable species might occur on site. It also determines which areas on site might support protected species.

2.5 Survey Dates

18th May and 20th July 2023

2.6 Surveyor

Initial information on the site was obtained from a site visit by Rachel Geller QCIEEM BSc (Hons) On 18th May. An additional survey visit was carried out on 20th July by Dan Sullivan BSc (Hons) MCIEEM to provide additional information required to complete the survey report.

The main surveyor and author of this report is Dan Sullivan MCIEEM. Dan is a full member of CIEEM with a BSc (Hons) 1st Class in Applied Ecology from the University of East London. He has been a full time Ecological Consultant since 2002 and during that time has carried out a wide variety of ecological works and surveys including many BREEAM ecology surveys, protected species surveys including bats ████████ reptiles, great crested newts, bird surveys of various types, water voles, otters, dormice, Preliminary Ecological Assessments and Ecological Impact Assessments, reptile and great crested newt translocations and habitat creation works and management plans.

3 Methodology of survey

The Preliminary Ecological Assessment followed the methodology outlined in the JNCC (1990) Handbook for Phase 1 Survey. A map showing habitat types and locations on site is included as Annex 2.

The Preliminary Ecological Assessment determines the potential for presence of protected and otherwise important or notable species on sites. Where it shows no evidence of a protected species and no suitable habitats for them, then further surveying for that species can be ruled out. Where suitable habitat is present further surveying is recommended if current guidelines and the judgement of the surveyor suggest presence is reasonably likely.

The following protected species are those most commonly found on potential development sites:

1. Bats
2. Birds
3. Great crested newts
4. Reptiles
5. Terrestrial mammals – ████████ dormice, water voles

Table 1: Terms used in report to indicate likelihood of species presence

Confirmed	Species directly observed on site Clear evidence of species presence observed (e.g. droppings, burrows, etc.)
High	Important structures or features of use for breeding or refuge present. For instance, ponds for newts, old trees for bats. Significant amount of high-quality foraging habitat present Site adjacent to surrounding areas of suitable habitat, or connected by linear features of use to commuting species (e.g. river) Site close to known offsite species populations
Medium	Some features suitable for breeding or refuge present. Some suitable foraging habitat available Site connected to suitable offsite areas of habitat
Low	Small amounts of low-quality areas for refuge or breeding Small areas suitable for foraging Site not connected to suitable offsite habitats or species not likely to enter site.
Negligible	No suitable habitats on site

The likelihood of species being present ranges in a continuum from extremely unlikely to highly likely. The judgement of the surveyor combined with knowledge of habitats present, signs and sightings of animals and evidence from records is used to give an estimated likelihood of presence.

4 Desk Study

4.1 Data search

A data search for protected and notable species and statutory and non-statutory nature reserves within 1 kms of the site was commissioned from Herts Environmental Records Centre (HERC).

4.2 General background

The ordnance survey 1:25000 scale map for the area was also examined for evidence of water bodies within 250m of the site which might be potential great crested newt breeding sites.

5 Survey Results

5.1 Weather conditions during site visit

Weather conditions are shown below:

18th May 2023

Precipitation: None
Temperature: 14 °C
Cloud cover: 25 %
Wind (Beaufort Scale): 2

20th July 2023

Precipitation: None
Temperature: 20 °C
Cloud cover: 10 %
Wind (Beaufort Scale): 2

5.2 Desk study results

The search found records of relevant protected species within 1 km of the site. These were:



Bats – Brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's bat (*Myotis daubentonii*), natterer's bat (*Myotis nattereri*).

Dormice (*Muscardinus avellanarius*)

Great crested newts (*Triturus cristatus*) – single record from 1972

The desk study showed 9 potential great crested newt breeding ponds within 250m of the site that were not separated from the site by major barriers to dispersal. Major barriers might include busy roads, walls, dense housing or similar.

The data search found no records of statutory designated nature conservation sites within 1 km of the site. There are no non-statutory protected sites adjacent to or on the site.

5.3 Constraints to surveying

All works areas were visible and accessible. Therefore, there were no constraints to surveying.

5.4 Habitats found on site

The proposed development area was found to contain the habitats described below. Annex 2 to this report is a map showing locations of these habitats. Scientific names for plants listed below are given in Annex 1.

Table 2: Habitats found on site

Habitat type	Description
Modified grassland	<p>The survey area contained grass tracks and areas of grass where a proposed cabin is due to be added and grassy areas around already existing cabins. These areas contain primarily modified grassland with a low herb density. The grassland is dominated by perennial rye-grass, with some Yorkshire fog and fescue in low density. Herb species present in grassland consisted of occasional wild carrot, creeping buttercup, dock, yarrow, birds-foot trefoil, white clover and common knapweed.</p>  <p>Example of grass track on site</p>  <p>Example section of grass track with perennial rye-grass dominant and single wild carrot plant visible.</p>



Grassland around an already added cabin

Arable land

The site redline boundary includes part of an arable field, however this area will not be impacted by the proposal and will remain as arable.



Arable field on right of photo, part of which is within proposal boundary

Hardstanding and gravel covered areas

The survey area contained a new small gravel car parking area and also sections of concrete road.



New gravel car park area



Section of concrete road within redline application boundary

Cabins

The proposal includes addition of 3 small cabins to site, these are flat roofed, single storey small cabins with wooden walls. 2 of the cabins have been already added.



Example of already added cabin



Cabin on edge of grassland visible on right hand side of photo

5.5 Recommendations relating to protected species and sites and invasive species

Table 3: Discussion of results and recommendations

Protected species or features	Potential for presence	Discussion
Bat roosts	Potential-Negligible	The data search found records of 5 species of bats recorded within 1km of the site. The works areas contain no buildings or trees suitable for bats to roost in.
Recommendations regarding roosting bats: The survey found it unlikely that bats are roosting on site. As a result, no further surveying or mitigation for roosting bats is recommended.		
Bat foraging and commuting routes	Likely importance of area for foraging and commuting bats – Negligible	The site is composed of unsuitable habitats to be used by bats for foraging or commuting to any significant extent. Bats tend to roost over water bodies or along treelines, woodland edges or hedgerows. The site contains only hardstanding and grassland. Bats are likely to forage along nearby treelines and hedges and woodland edges, but these will not be impacted by the proposals.
Recommendations regarding foraging and commuting bats: If lighting is to be added, it is recommended that site lighting is designed to avoid increasing lightfall onto trees and hedges around the site which might be used by bats for foraging around. Lighting should be designed to avoid increased lightfall onto trees adjacent to the boundaries of the site, as additional lightfall may deter foraging bats and negatively impact other nocturnal wildlife.		
Guidance on bats and lighting can be found in this link - https://www.theip.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/		
Nesting birds	Potential - Negligible	The site contained only short grass, hardstanding and cabins. No suitable areas for bird nesting were found.
Recommendations regarding nesting birds: The survey found a negligible probability of birds nesting on site. As a result, no further surveying or mitigation for nesting birds is recommended.		
Dormice	Potential-Negligible	The data search found records of dormice within 1km of the site. The site contains no habitats suitable for dormice and will not impact on any adjacent woodland or hedge habitats they might use.
Recommendations regarding dormice: The survey found a negligible probability of dormice being present on site. As a result, no further surveying or mitigation for dormice is recommended.		

Great crested newts	Potential – Low	<p>The data search found a single record of great crested newts within 1km of the site, dating from 1972.</p> <p>The site is within 250m of around 9 water bodies. The proposed cabin site for the remaining yet to be built cabin contains managed modified grassland. The nearest pond to this area is 185m to the west. Given the lack of records of great crested newts in the area, and the small area of grassland to be impacted, the risk to great crested newts appears minimal. Although there is a pond 185m away, even if breeding in the pond the risk of great crested newts being present in the small area of grass to be cleared is very low as most crested newts will be within 50m of a breeding pond with very few beyond 100m away.</p>
<p>Recommendations regarding great crested newts: The survey found a very low probability of great crested newts being present in the area of grassland to be impacted. However, as a precaution it is recommended that grassland clearance is carried out using a 2 stage process to reduce risk to newts (and reptiles if present).. Grass clearance should first involve a cut to a height of no lower than 150 mm, unless already shorter than this. This will reduce cover for newts and deter them from the area. Between 1-3 days later the grass should then be cut to ground level to remove any cover. This should only be done when temperature is above 10 C in the daytime and predicted to be at least 5 C at night. This is because when temperature is lower than 5 C newts will not move from the area if present.</p>		
Reptiles	Potential – Low	<p>The data search found no records of reptiles within 1km of the site</p> <p>The remaining works area contains only sub-optimal habitat in the form of managed grassland. The potential for reptiles in the area is low given the lack of records for the area and sub-optimal habitat due to be impacted. .</p>
<p>Recommendations regarding reptiles: The survey found a low probability of reptiles being present on site. No further surveying or mitigation for reptiles is recommended. However, as a precaution grassland should be cleared using a 2 stage cut as described above for great crested newts. This will also deter reptiles if present. Cutting should be done only when temperature is above 10 C as mentioned above as reptiles will only move around in temperatures above 10 C.</p>		
Other protected species	Potential – Negligible	<p>No habitats suitable for water voles, otters, or other protected species not mentioned above.</p>
<p>Recommendations for other protected species: No further survey or mitigation required</p>		
Species of Principal Importance under NERC Section 41	Potential - Negligible	<p>No habitats likely to support Species of Principal Importance (such as toads, hedgehogs, stag beetles, etc.).</p>
<p>Recommendations relating to Species of Principal Importance: None required</p>		
Invasive species	None found on site	<p>No important invasive species were found on site</p>
<p>Recommendations relating to invasive species: As no important invasive species were found no precautions are required relating to these, however, should workers subsequently find species such as Japanese knotweed or giant hogweed on site works should stop within 7 m of the area until further advice can be sought from an ecologist or specialist knotweed or invasive species control contractor.</p>		

Protected sites	None on site or adjacent	
Recommendations relating to Protected Sites: None required, as there are no non-statutory protected sites adjacent to the site and no statutory protected sites within 1 km of the site the works proposed are unlikely to have any negative impact on protected sites.		
Habitats of Principal Importance	None on site	The site does not contain any NERC Section 41 Habitats of Principal Importance.
Recommendations: As the proposal does not impact any important habitats, no mitigation is required.		

6 Impact Assessment and recommendations

6.1 Impact assessment

The development is a very low impact development resulting in minimal impacts on biodiversity.

6.2 Mitigation and compensation

Provided recommendations are followed regarding clearance of site vegetation there should be no significant impact on biodiversity.

6.3 Recommended Enhancements

A separate Biodiversity Net Gain report is being produced for this development, this will include recommended enhancement, likely to involve planting of one or more additional native trees.

7 References

English Nature (2001) Great Crested Newt Mitigation Guidelines, English Nature, Peterborough
HMSO, 1981. The Wildlife and Countryside Act 1981 (as amended). The Stationery Office, Norwich.

HMSO, 1992. Protection of Badgers Act (1992).

HMSO, 1994. The Conservation (Natural Habitats, &c) Regulations 1994. The Stationery Office, Norwich.

Joint Nature Conservation Committee (1990). Handbook for Phase 1 habitat survey a technique for environmental audit.

8 Annexes

Annex 1: List of plant species mentioned in report showing scientific names

Annex 2: Phase 1 Habitat Map showing habitats on site on 20th July 2023

Annex 3 : Relevant Legislation and Planning Policies

Annex 1: List of plant species mentioned in report showing scientific names

Common Bird's-foot-trefoil	<i>Lotus corniculatus</i>
Common knapweed	<i>Centaurea nigra</i>
Creeping buttercup	<i>Ranunculus repens</i>
Dock	<i>Rumex</i> sp.
Fescue	<i>Festuca</i> sp.
Perennial Rye-grass	<i>Lolium perenne</i>
White Clover	<i>Trifolium repens</i>
Wild Carrot	<i>Daucus carota</i> subsp. <i>carota</i>
Yarrow	<i>Achillea millefolium</i>
Yorkshire-fog	<i>Holcus Lanatus</i>

Annex 2: Habitat Map showing habitats on site on 20th July 2023



Annex 3 : Relevant Legislation and Planning Policies

Bats

All species of British bat are listed in Appendix II of the Berne Convention and various annexes of the Habitats Directive. They are protected under Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 2 of the Conservation (Natural Habitats, etc) Regulations 2017 (Regulation 43). It is therefore illegal to kill, injure or handle any bat or obstruct access to, destroy or disturb any site that they use. A £5000 fine and/or 6 months imprisonment per offence is the maximum penalty. Where a bat roost will be affected by development a licence to carry out the work will be required (issued by Natural England). This will be granted only if suitable mitigation for any adverse impacts on bats is to be carried out.

Nesting Birds

Under the Wildlife and Countryside Act (1981) it is a criminal offence to disturb nesting birds. The breeding season for most species is generally considered to extend between 1st March and 31st August inclusive, although some species may breed slightly earlier in the year or later. Site operations should be phased where possible to occur outside the breeding season. Within this period, clearance of structures and vegetation can only take place if either:

- 1) Affected areas are first checked by an ecologist or other suitably qualified person and no nesting is found to be occurring.
- 2) All parts of the vegetation or structures are clearly visible, and no sign of nesting can be seen. If nests are found, work will have to be delayed in that area until chicks have left any nests.

For birds listed on Schedule 1 of the Wildlife and Countryside Act the protection is increased and it is also an offence to disturb them whilst in the process of nest building or at a nest containing eggs or young. It is an offence also to disturb dependent young. Bird species included in Schedule 1 include kingfishers, black redstarts, barn owls and red kites among others.

Dormice

The hazel dormouse is protected under the Wildlife and Countryside Act 1981 (as amended). It is also a European Protected Species and as has additional protection in the UK under Regulation 43 of the Conservation of Habitats and Species Regulations 2017. It is an offence to intentionally kill, injure or take a hazel dormouse, possess or control any live or dead specimen or anything derived from a hazel dormouse, intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a hazel dormouse (including their habitat). It also an offence to intentionally or recklessly disturb a hazel dormouse while it is occupying a structure or place used for shelter or protection. A £5000 fine or six months custodial sentence per offence applies.

Great crested newts

Great crested newts are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also a European Protected Species and has additional protection under Regulation 43 of the Conservation of Habitats and Species Regulations 2017. It is an offence to intentionally kill, injure or take a great crested newt, possess or control any live or dead specimen or anything derived from a great crested newt, intentionally or recklessly damage, destroy or obstruct access to any

structure or place used for shelter or protection by a great crested newt (in practice this means breeding sites and terrestrial habitat). It is an offence to intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for shelter or protection. A £5000 fine or six months custodial sentence per offence applies.

Otters

Otters are legally protected by the Conservation (Natural Habitats, &c.) Regulations 2017(as amended) - "the Habitats Regulations". They are therefore classed as European Protected Species. Under these Regulations they are given the highest level of species protection. In summary it is illegal to:

deliberately or recklessly kill, injure or take (capture) an otter;
deliberately or recklessly disturb or harass an otter;
damage, destroy or obstruct access to a breeding site or resting place of an otter (i.e. an otter shelter).

Otter shelters are legally protected whether or not an otter is present.

Reptiles

All native reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). They are protected against killing or injuring even during lawful development. A £5000 fine or six months custodial sentence per offence applies.

Water voles

Water voles are fully protected under the Wildlife and Countryside Act 1981 (as amended). Water voles are protected against intentional killing, capture or injury and intentional or reckless disturbance, obstruction, damage or destruction of their burrows. A £5000 fine or six months custodial sentence per offence applies.

Other protected species

There is a list of species of principle importance as set on in section 42 of Natural Environment and Rural Communities Act 2006 (NERC 2006). These species are regarded a material consideration in planning applications and are usually protected by planning policies.

Invasive Plant Species

Some plants, such as Japanese knotweed are listed under Schedule 9, Part 2 of the Wildlife and Countryside Act 1981. This states that it is an offence to "plant or otherwise cause to grow in the wild" any plant listed in the schedule. "In the wild" is generally taken to mean any area outside the landowner's site. It is therefore an offence to allow it to spread onto neighbouring sites or to allow some listed plants to be removed offsite without proper disposal, as this could also allow them to spread offsite.

Hedgerows

The Hedgerow Regulations 1997 provide protection for some types of hedgerows. Under the regulations most hedges require submission of a 'hedgerow removal notice' and approval by the local authority before they can be removed. All 'important' hedgerows are to be retained and protected from destruction and damage. There are a number of rules determining how a hedgerow is classified as 'Important'. In most cases the hedgerow is required to be in excess of 30 years old and to contain specific indicator plants. An individual hedge, or more likely, the trees within a hedge can also be subject to a Tree Preservation Order, or TPO, under the Town and Country Planning Act 1990.

Protected/priority habitats

There is a list of habitats of principle importance as set on in section 41 of Natural Environment and Rural Communities Act 2006 (NERC 2006). These habitats are regarded a material consideration in planning applications and are usually protected by planning polices

National Planning Policy

The NPPF (2019) describes the Government's planning policies for England and how these should be applied. The NPPF states 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;
- 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;
- e) The following should be given the same protection as habitats sites; potential Special Protection Areas and possible Special Areas of Conservation, listed or proposed Ramsar sites and 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.

Under the NPPF, the Planning Authority has a responsibility to:

- a) promote preservation, restoration and re-creation of priority habitats, ecological networks and to protect and aid recovery of populations of priority species;
- b) identify and pursue opportunities for securing measurable net gains for biodiversity.
- c) contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes and sites of biodiversity (in a manner commensurate with their statutory status or identified quality in the development plan)
- d) minimise impacts on, and provide net gains for biodiversity, including by establishing a coherent ecological network that is more resilient to current and future pressures.

Local Planning Policy

Local councils also have various policies designed to protect and enhance local biodiversity.