

ELLENDALE
ENVIRONMENTAL

The Lodge, Bearwood Road, Wokingham
Preliminary Ecological Assessment (PEA)

For Artel31

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The report, and the information contained in it, is intended to be valid for a maximum of 12 months from the date of the survey, providing no significant alterations to the site have occurred.



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1. Introduction

1.1 Commission

Ellendale Environmental Limited was commissioned by Artel31, on behalf of their client, to undertake a Preliminary Ecological Assessment (PEA) for an area of land and a building at Bearwood Road, Barkham, Winnersh, in the Borough of Wokingham ('the site'). It is proposed to redevelop the site to provide two a residential property ('the proposed development').

1.2 Site Details

The site is located on Bearwood Road in Barkham, a village and civil parish in the borough of Wokingham in Berkshire, England, located approximately two miles south-west of the town of Wokingham, at OS grid reference SU 78452 68620.

Figure 1: Site location



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1.3 Survey Objectives

On the basis of the brief provided by the client, Ellendale Environmental conducted an ecological survey of the site and a 50m buffer (where accessible and appropriate) to fulfil the following needs:

- Obtain baseline information on the current habitats and ecological features in and around the site;
- Identify any further specialist surveys that may be required;
- Identify the presence (or potential presence) of any protected species whose disturbance may require consent under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) or the Wildlife and Countryside Act, 1981 (as amended); and
- Identify any species or habitats which may require special mitigation during the development of the site.



2. Methodology

2.1 Data Search

Publicly available databases, including MAGIC the NBN Atlas and Wokingham Borough Council constraints maps, were consulted for historical evidence of:

- Statutory land-based designations;
- Non-statutory land-based designations; and
- Protected and notable species.

The data search was conducted within a 2km (5km for bats) radius of the site boundaries.

2.2 Phase 1 Habitat Survey

A Phase 1 Habitat survey of the site area was undertaken, and the habitats present on the site were mapped following the Phase 1 survey methodology (JNCC, 2010), listing the plant species associated with each habitat. This methodology was a Phase 1 habitat survey, whereby all habitats were surveyed and recorded onto a base plan, and any habitats that were considered to be of potential interest to nature conservation were recorded through the use of target notes to annotate a Phase 1 habitat map.

2.3 Preliminary Protected Species Walkover

The site and surrounding areas were examined for signs of protected species. The presence/potential presence of protected or notable species of conservation concern was recorded using target notes, following the Chartered Institute of Ecological and Environmental Management guidance (CIEEM, 2012).

2.1 Invasive Non-Native Species (INNS)

The site and immediate vicinity were examined for the presence of any invasive weeds, such as Japanese Knotweed *Reynoutria japonica*, Himalayan balsam *Impatiens glandulifera* and/or giant hogweed *Heracleum mantegazzianum*. If they were recorded, they were highlighted through the use of target notes.



2.2 Preliminary Roost Assessment

An inspection of the building was undertaken, looking for evidence of bats, bat roosting sites and possible bat access/egress points.

In examining the buildings for bats, particular attention was given to any crevice in which bats may roost. These were inspected for bat droppings, bat urine, feeding remains, oil staining from the fur of bats (indication of frequent use of a particular site), and wear of substrates caused by the movement of bats in and out over a long period of time.

Survey work undertaken in relation to a proposed development needs to be conducted under a scientific/conservation licence issued by, in this case, NE. The work is normally conducted by an environmental consultant on the behalf of the developer and the consultant will advise on the necessary course of further action with respect to licences, mitigation and compensation measures. A number of recognised survey techniques are available to the consultant, such as:

- Natural England guidelines (A.J. Mitchell-Jones [2004], *Bat Mitigation Guidelines*, English Nature. ISBN 1 85716 781 3), which provide generic technical advice on bat mitigation; and
- Hundt L (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 4th Edition, Bat Conservation Trust, London. ISBN-13: 978-1-872745-96-1.

2.3 Survey Area

The survey covered the entire site and areas within 50m (where accessible and appropriate).

2.4 Survey Limitations

The aim of this survey was not to record every species present on the site, as one survey acts as a snap-shot, recording only those species which are present at the time or whose presence can be indicated through the occurrence of field signs, such as feeding remains, droppings or places used for shelter or foraging.



Evidence collected has been used to draw conclusions about the flora and fauna within the boundary of the site and to provide an assessment of their ecological and nature conservation value.

Weather was not a limiting factor to the survey. The prevailing conditions at the time of the survey are summarised in Table 1.

Table 1: Survey weather conditions

SURVEY DATE	TEMPERATURE (°C)	WIND SPEED (MPH)	CLOUD COVER / PRECIPITATION
22/09/22	18.6	0.6 Avg. 1.4 Max.	50% cloud cover, dry, warm with an occasional light breeze.

2.5 Surveyor

The survey was undertaken by Stewart Parsons, Director and Principal Ecologist of Ellendale Environmental, who is a full member of CIEEM and Chartered Environmentalist (CEnv).

Stewart holds a bat survey licence (Bat Survey Class Licence CL18 (Bat Survey Level 2), Registration number CLS01683), with respect to the Conservation Regulations 1994. The licence is valid for all counties of England, valid until June 2025.

Stewart has over 19 years' professional experience of undertaking ecological surveys and working with bat species across the UK.



3. Results

3.1 Desk Study

A data search for existing designated sites and biological records was undertaken from MAGIC¹, NBN Atlas² and the WBC Constraints Map³.

Statutory Designated Sites

The following statutory designated site was identified by the data search:

- Holt Copse and Joel Park Local Nature Reserve (LNR) is located 1.9km to the north-east of the site.

Non-Statutory Designated Sites

The following statutory designated site was identified by the data search:

- Traditional Orchards Priority Habitat (approximately 0.37ha) is located on and adjacent to the site;
- An area of deciduous woodland identified as a priority habitat is located around the boundary of the site;
- The Bearwood Estate Woods and Lakes Local Wildlife Site is located 125m west from the lodge building and approximately 15m from the larger redline boundary.

Protected and Notable Species

The following protected species were identified within 2km of the site boundaries by the data search:

- Great crested newt *Triturus cristatus* (seven records, the closest of which is located 1.6km north-west of the site, the most recent recorded in 2017);

¹ Magic database. <http://www.magic.gov.uk/MagicMap.aspx> Accessed on 11/11/22.

² NBN atlas database. [NBN Atlas - UK's largest collection of biodiversity information](#) Accessed on 11/11/22.

³ WBC Constraints Map [Microsoft Word - Appendix G](#) Accessed on 22/12/25.



- White-clawed crayfish *Austropotamobius pallipes* (two records, both located 1.9km west of the site, the most recent of which was recorded in 2002);
- Brown hare *Lepus europaeus* (one record, located 1 km north of the site and recorded in 2009);
- [REDACTED]
- Slow-worm *Anguis fragilis* (28 records, the closest of which is located 0.7km south of the site, the most recent recorded in 2019);
- Grass snake *Natrix helvetica* (35 records, the closest of which is located 0.3km north-west of the site, the most recent recorded in 2015); and
- Common lizard *Zootoca vivipara* (one record, located 1.1 km south-east of the site and recorded in 2014).

Bat Species

The following bat species were identified within 5km of the site boundaries by the data search:

- Daubenton's bat *Myotis daubentonii* (11 records, the closest of which is located 3.5km north-west of the site, the most recent recorded in 2021);
- Natterer's bat *Myotis nattereri* (19 records, the closest of which is located 3.5km north-west of the site, the most recent recorded in 2020);
- Noctule bat *Nyctalus noctula* (nine records, the closest of which is located 1km east of the site, the most recent recorded in 2021);
- Nathusius's pipistrelle *Pipistrellus nathusii* (one record, located 5km north-east of the site, recorded in 2021);
- Common pipistrelle *Pipistrellus pipistrellus* (nine records, the closest of which is located 1km east of the site, the most recent recorded in 2021);
- Soprano pipistrelle *Pipistrellus pygmaeus* (nine records, the closest of which is located 1km east of the site, the most recent recorded in 2021);
- Brown long-eared bat *Plecotus auritus* (12 records, the closest of which is located 1km east of the site, the most recent recorded in 2021); and



- Serotine bat *Eptesicus serotinus* (two records, the closest of which is located 3.8km east of the site, the most recent recorded in 2015).

Bird Species

Approximately 99 bird species have been recorded within 2km of the site and are shown on the NBN Atlas; however, none of these records are within the site boundaries.

3.2 Phase 1 Habitat Survey

The site is located on Bearwood Road in Barkham and is approximately 0.3 hectares in size, comprising an area of amenity grassland, broadleaved woodland, amenity planting/introduced shrub and dense areas of rhododendron.

To the north and east there are areas of broadleaved woodland and dense rhododendron. To the south there is a residential property and to the west there is Bearwood Road, beyond which are residential properties.

There are five Phase 1 habitat types, including boundary features, recorded on the site, namely:

Phase 1 Vegetation Category	UKHab Vegetation Category
J1.2 Amenity grassland	G4 Modified Grassland
J.4 Bare ground	510 Bare ground
A.3.1 Parkland/scattered trees (broad-leaved)	32 Scattered trees
J3.6 Building	u1b5 Building
A1.1 Broadleaved woodland (Semi-natural).	5f Broadleaved woodland

J1.2 Amenity grassland (G4 Modified Grassland)

The majority of the site is dominated by an amenity grassland that is managed through regular mowing and at the time of the survey had a low sward height. Species present include perennial rye-grass *Lolium perenne*, yarrow *Achillea*



millefolium, clover *Trifolium sp.*, dandelion *Taraxacum officinale agg.*, spear thistle *Cirsium vulgare* and creeping buttercup *Ranunculus repens*.

1.4 Bare ground (510 Bare ground)

The site is accessed via a gravel driveway with hard standing/bare ground access to the lodge building.

A3.1 Parkland/scattered trees (Broad-leaved) 32 Scattered trees))

Within the amenity grassland there are scattered trees of varying ages including oak *Quercus robur*, apple *Malus x domestica*, cherry *Prunus avium L.*, yew *Taxus baccata* and silver birch.

Photograph 1: showing a view of the trees present within the amenity grassland





It is understood that none of the existing trees will be removed during the redevelopment of the site and that all existing trees will be protected during the works at the site.

3.6 Building (u1b5 Building)

A residential property is present within the site and is further discussed in section 3.5.

A1.1 Broadleaved woodland (Semi-natural) 5f Broadleaved woodland))

Woodland is present around the northern and eastern boundary of the site with silver birch, Scot's pine *Pinus sylvestris* and occasional alder *Alnus glutinosa*, sweet chestnut *Castanea sativa* and oak present. The understory is dominated by rhododendron *Rhododendron ponticum*.

3.3 Invasive Non-Native Species (INNS)

Rhododendron was noted to be present around the site boundary forming dense areas. Without management this will continue to colonise the habitat to the detriment of native plant species.

Photograph 2: showing a view of rhododendron within the woodland habitat





3.4 Preliminary Protected Species Walkover

The site is low in its suitability to support protected species due to it being well maintained and the presence of regular human activity, which will deter protected species from utilising the area. Trees and dense scrub provide the most suitable habitat to support protected species, namely nesting birds.

The site has been inspected for signs of protected species during the walkover and the results are outlined below.

3.3.1 Protected Species

Birds

The trees present within the site and around the boundaries provide suitable habitat for nesting birds. The survey was conducted at the end of the breeding bird season and no bird nests were noted to be present.

The mature trees present are suitable to support large bird species such as buzzard *Buteo buteo*; however, no nests of large bird species were found to be present.



Otter

Ponds present to the west of the site provide foraging opportunities for otters however the ponds are isolated in the landscape with no connective habitat for commuting otter. Furthermore, the habitats present are regularly disturbed through human activity, and this will deter otter. No slides or spraints were found during the survey to indicate otter presence.



Water vole

The ponds present to the west of the site do not provide suitable to support this species and no evidence was found during the survey.

Great Crested Newt (GCN)

The grassland present within the site is heavily managed with a low sward height which reduces the suitability for GCN to be present and no evidence was found during the survey. The dense scrub within the site may provide some foraging and commuting habitat for this species. no evidence was found during the survey.

The ponds to the west of the site are limited in their potential to support GCN as Pond 1 was found to be dry at the time of the survey and is understood to dry out completely during the summer months which would limit the suitability of the habitat for breeding amphibians. No suitable vegetation was present around the pond that would provide breeding habitat for this species.

Pond 2 was noted to have fish present which would predate amphibians and larvae reducing the suitability for GCN.

No evidence of GCN was found during the survey. it should be noted that the site is within a Great Crested Newt District Licence Red Risk Zone and that this species is known to be present locally.

3.3.2 Notable Species

Brown hare

The habitat within the site provides limited foraging habitat for this species and no field signs, such as tracks or droppings, were noted during the survey. It is therefore considered that this species is not present within the area; however, adjacent habitats may support this species.

Common reptiles and amphibians

The habitats present within the site provide limited suitable habitat for foraging common reptiles and amphibians. The grassland within the site is kept at a low sward



height, thus reducing the suitability for these species which use vegetation as cover for predator avoidance.

Dense scrub and log piles present within the boundaries of the site provide suitable refugia for these species; however, no evidence was found during the survey.

Hedgehog

The habitats present within the site provide limited suitable habitat for foraging hedgehog. The grassland within the site is kept at a low sward height, thus reducing the suitability for these species. The boundaries of the site provide suitable foraging and commuting habitat for hedgehog and log piles and compost heaps present in the boundaries of the site provide suitable den habitat for this species; however, no evidence was found during the survey.

3.5 Preliminary Roost Assessment

A residential properties is present within the site. The building is located to the east of the site and is a modern wooden-framed building covered with wooden slats and a pitched roof. No gaps or crevices were noted in the external surfaces of the building where bats could roost and no loft space is present.

The building present on site is not considered to be bat roost and no evidence of bat activity was found during the survey. The building is assessed as providing negligible roost potential for bats and no further surveys are recommend.

The trees present in the site are not suitable to support roosting bats. No features such as cracks, crevices or hollows were noted that are suitable for bats and the trees are assessed as providing Negligible Roost Potential. No further surveys for bats are recommended.



Photograph 3: showing a view of the building present on site (looking north)



Photograph 3: showing a view of the building present on site (looking east)





4. Conclusions

4.1 Conclusion

The site is located on Bearwood Road in Barkham and is approximately 0.3 hectares in size, comprising an area of amenity grassland, scattered trees, broadleaved woodland, amenity planting/introduced shrub and dense areas of rhododendron.

The main area of the site is dominated by amenity grassland that is managed through mowing and at the time of the survey had a low sward height. This habitat is not suitable to support protected species and no evidence was found. Evidence of rabbit was noted within the site with droppings present across the amenity grassland. No burrows were noted during the survey.

Mature trees within the site and broadleaved woodland around the boundary of the site provide the most suitable habitat to support protected species, namely nesting and foraging birds. However, no nests were identified in the trees around the site at the time of the survey.

The building present on site is not considered to be a bat roosts and no evidence of bat activity was found during the survey. The buildings are assessed as providing negligible roost potential for bats and no further surveys are recommend.

The trees present in the site are not suitable to support roosting bats. No features such as cracks, crevices or hollows were noted that are suitable for bats and the trees are assessed as providing negligible roost potential. No further surveys for bats are recommended.

Overall, the site is assessed as providing low suitability to support protected species. No evidence of protected species was identified during the survey and none can realistically be anticipated here.



4.2 Mitigation

Nesting Birds

The privet hedge and trees within the site provide suitable habitat for breeding birds; therefore, if clearance is required, this should be undertaken out with the breeding bird season (March – August, inclusive) as all nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended).

If works are undertaken within this period, a nesting bird survey would be required no more than 24 hours prior to the works. If nesting birds were found, these areas of the site would need to be protected from disturbance until the young have fledged naturally.

4.3 Biodiversity Net Gain and Enhancements

The following recommendations are made for modest post-construction ecological enhancements at the site which are proportionate with the low level of environmental impact from the proposed development:

- Bird nesting boxes (both small-hole and open-fronted) should be placed within the site or incorporated within the new buildings where practicable. This will create nesting opportunities for small bird species as part of the overall design;
- Bat boxes should be placed on or around the site boundaries or incorporated within the new buildings where practicable. This could create roosting opportunities for bat species as part of the overall design; and
- Lighting within the site should be in accordance with *Bats and Artificial Lighting* (Institute of Lighting Professionals, 2018) and the lighting layout will be advised and agreed by an ecologist prior to installation. In order to lessen the effects of external lighting, the following should also be applied to lighting used within the site:
 - Hoods or baffles should be used to direct the light downwards to reduce light pollution of the night sky; and
 - Low-intensity lighting and warmer hues (i.e., warm white, yellow, or amber) should be used where practicable as they emit a dull glow.



Measures to reduce negative impacts of lighting on wildlife are also likely to be beneficial in reducing adverse impacts on people.

It is important that, where possible, opportunities to create new ecological features or enhance existing ones are fully explored. The following measures would benefit the development by introducing ecological enhancements and should be encouraged:

- Planting of native shrubs in appropriate areas of the site will bolster the existing habitat and provide connectivity between existing habitats. Species beneficial to wildlife include hawthorn, hazel *Corylus avellana*, holly *Ilex aquifolium* and cherry *Prunus avium* L.. Climbing plants such as honeysuckle *Lonicera periclymenum* could also be used to provide an early food source for pollinators; and
- The remaining areas of grassland could be managed as a species-rich/wildflower grassland. Appropriate management will be required to encourage wildflowers to establish within the grassland sward and additional seeding may be required. This will provide habitat for pollinating insects as well as foraging birds and bats.

It is recommended that an ecologist contributes to any detailed landscape designs, planting lists and post-construction management to ensure a biodiversity net gain for the site.



5. Target Notes

5.1 Botanical Target Notes (TN)

TN1 – Broad-leaved woodland around the boundary of the site. A dense area of rhododendron scrub is present at the woodland edge and throughout much of the understory.

TN2 – An area of amenity grassland with scattered trees present.

TN3 – A residential property if located to the east of the site.

TN4 – Broad-leaved woodland around the boundary of the site. A dense area of rhododendron scrub is present at the woodland edge and throughout much of the understory.

TN5 – An area of amenity grassland with scattered trees present.

TN6 – An area of amenity grassland.

5.2 Animal Target Notes (AN)

AN1 – Woodland habitat provides foraging and nesting habitat for bird species.

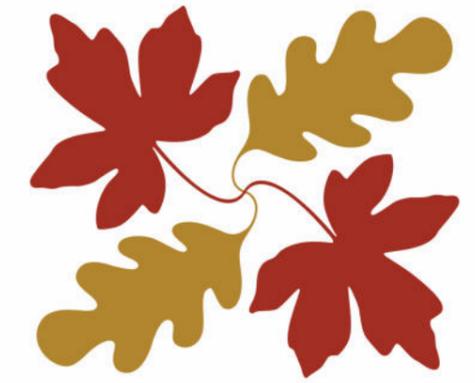
AN2 – No evidence of bats was found in the building, and it is not considered to be a bat roost.

AN3 – Amenity grassland is limited on its potential to support protected species, and no evidence was found during the survey. Scattered trees provide habitat for nesting birds.

AN4 – Amenity grassland is limited on its potential to support protected species, and no evidence was found during the survey. Scattered trees provide habitat for nesting birds.



6. Extended Phase 1 Habitat Map



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Drawing Title;
The Lodge, Bearwood Road, Wokingham
Extended Phase 1 Map

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Target Note

● TN

Animal Note

● AN

Woodland and Scrub

● Broadleaved Tree

■ Broadleaved Woodland

■ Dense Scrub

Built-up Area

— Fence

■ Building/Structure

■ Hard Standing

Miscellaneous

■ Amenity Grassland

■ introduced Shrub/Amenity Planting

Water

■ Standing Water