

Clarke Webb Ecology Limited
ECOLOGICAL SURVEYORS & CONSULTANTS



Box Hedge Farm, Coalpit Heath

Proposed redevelopment

Preliminary Ecological Appraisal

Survey date: 22nd May 2020

Surveyor: Dr Peter Webb MCIEEM

1 Background and site description

- 1.1 This survey relates to the proposed redevelopment of various existing buildings at Box Hedge Farm, Coalpit Heath.
- 1.2 A satellite image of the site location can be found at Figure 1 with a plan of the site at Figure 2 and photographs at Figure 3.
- 1.3 Brief descriptions of potentially affected buildings (refer Figure 2) are as follows:
 - A1/A2 Two-storey, stone building with double-pitched roof fitted with clay pantiles. Used for lettings. Upper floor ceilings vaulted?
 - A2 Large, attached, single-storey, timber clad garage with a gently pitched roof fitted with inter-locking metal tiles on a modern breathable roofing membrane.
 - B1 Single-storey stone building used for lettings. Divisible into the following sections:
 - B1a Stone-built with pitched roof fitted with double Roman clay tiles, mostly on a bitumen felt underlay (small central section with a modern breathable roofing membrane). Four small roof spaces present; two of around 0.5 m height and two of around 1.5 m height.
 - B1b Timber-clad lean-to with a mono-pitched roof fitted with inter-locking metal tiles on a modern breathable roofing membrane. Low roof space of up to c 0.5 m in height open at east end to roof space above B1c.
 - B1c Stone-built. Previously flat-roofed but now with a 'false' pitched roof fitted with double Roman clay tiles on a modern breathable roofing membrane. Single, large roof space of around 2.2 m in height at the ridge – connects with those above B1b and B1d.
 - B1d Stone-built with pitched roof fitted with double Roman clay tiles on a bitumen felt underlay. Single, large roof space of around 2 m in height at the ridge – connects with those above B1b and B1c.
 - B2 Single-storey stone building used for lettings. Pitched roof fitted with double Roman clay tiles on a bitumen felt underlay. Roof space present of around 0.7 m in height at the ridge.
 - B3 Two-storey height, metal-clad shed with a pitched roof fitted with sheet metal with no underlay. Mostly open to the roof though with small central upper floor office space. Used for light industrial/storage/office space.
 - D Single-storey timber-clad building with a gently pitched roof fitted with inter-locking metal tiles on a modern breathable roofing membrane. Ceilings vaulted. Used for lettings.
- 1.4 The site is otherwise given over almost entirely to gravel yard/parking/access with small garden areas (mostly lawn) associated with buildings A1/A2 and D. There is a small area of 'agricultural yard' in the northwest corner given over to a mixture of improved grassland, disturbed/bare ground and/or tall ruderal vegetation (nettles/bramble – Target note 1, Figure 2). The site also contains a single, short, isolated section of tall native hedgerow (Target note 2, Figure 2).

- 1.5 The site is surrounded by the associated farmhouse and farmhouse garden to the east, a field of improved grassland to the north and area maintained as amenity grassland to the west and south. Tall native hedgerows lead west from the sites western boundary and east from the sites eastern boundary.
- 1.6 The location is rural with surrounding land mostly given over to fields of improved pasture with a good representation of mature hedgerows (see Figure 1).
- 1.7 We understand that the proposed works are confined to retention, refurbishment or rebuilding of the existing buildings.

2 Survey method

- 2.1 A walkover survey of the site and accessible immediately adjacent areas was carried out during fair weather by day on the 22nd May 2020. The intent of the survey was to identify:
- i. the presence of any habitats of conservation importance or other features of ecological interest likely to be directly or indirectly affected by the proposed works;
 - ii. the presence or possible presence of protected species likely to be affected;
 - iii. any need for further ecological survey.
- 2.2 The survey covered:
- i. the site as indicated on Figure 2;
 - ii. immediately surrounding accessible land where thought appropriate;
 - iii. any other accessible adjacent land or features thought to be of potential relevance.

Habitats

- 2.3 Habitat survey followed the guidelines given in the Handbook for Phase 1 Habitat Survey (JNCC 1993). Target notes were used to identify specific areas on a plan, cross-referenced where appropriate in the text. Detailed species lists were not compiled.

Protected species

Bats

- 2.4 Buildings were thoroughly searched, inside (where appropriate) and out, for any sign of use by bats including:
- the presence of free-hanging bats or bats within crevices;
 - bat droppings, urine stains or feeding remains on horizontal and vertical surfaces (eg floors, walls, foliage) within and around them;
 - the presence of potential access routes for bats into likely roosting sites and indications (where accessible for survey - such as scattered droppings or urine staining around or within entrances) of use of such potential access points by bats;
 - any other sign of use by bats.
- 2.5 There are no trees present.
- 2.6 Where appropriate, survey was aided by the use of binoculars, a powerful hand torch, an endoscope, a mechanics mirror, a penlight torch and a 5 m ladder.
- 2.7 With reference to the Bat Conservation Trusts 'Bat Surveys for Professional Ecologists - Good Practice Guidelines 3rd Edition' (the Bat Survey Guidelines), A subjective assessment was made of the potential or the presence of roosts being present but unapparent (= 'unresolved potential') in buildings or trees.
- 2.8 A subjective assessment was otherwise made of likely use of the site by commuting/foraging bats.

2.9 All survey was carried out by the long-time holder of a Natural England bat survey licence.

Barn owl

2.11 Buildings were searched for sign of use by Barn owl including the presence of Barn owls themselves, their pellets, feathers or any other sign.

Nesting birds

2.12 Buildings were checked for sign of birds having nested recently within or upon them. Habitats otherwise present were assessed as to their potential for use as nest sites by birds though a thorough search for old birds nests was not carried out.

Reptiles

2.13 An assessment was made of the suitability of the site for use by reptiles.

Great crested newts

2.14 An assessment was made of the risk of use of the site by terrestrial great crested newts based on habitats present and likely accessibility from any local ponds (potentially suitable for use by such newts).

Other

2.15 Any other sign of use by protected species and/or the presence of habitats with a reasonable potential to support protected species was noted.

Data search

2.16 The Magic website was checked for the local presence of statutory or non-statutory wildlife sites.

3 Survey results

Habitats

- 3.1 The site consists of several stone, timber or metal clad building set within/around areas of gravel yard/parking (see Figure 2). Also present are various small areas of amenity/improved grassland, tall ruderal vegetation and/or shrubbery and a short, isolated section of native hedgerow (Target note 2, Figure 2).
- 3.2 The site is surrounded by the associated farmhouse and farmhouse garden to the east, a field of improved grassland to the north and area maintained as amenity grassland to the west and south.
- 3.3 The location is rural with surrounding land mostly given over to fields of improved pasture with a good representation of mature hedgerows (see Figure 1).
- 3.4 According to the Magic website, the site does not contain, form part of or abut any statutory or non-statutory wildlife sites.

Protected species

Bats - buildings

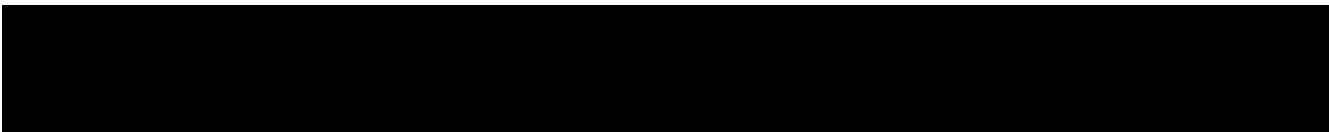
- 3.5 No evidence was found for use of any of the buildings by bats.
- 3.6 Further to the above the following table summarises the potential suitability of each building for use as a roost (with reference to Table 4.1 in the Bat Survey Guidelines):

Building	Details	Potential suitability
A1/A2	Interior only partly accessed No flying access No sheltered internal voids (eg roof spaces)? Various gaps in external stone-work Various gaps in roof below lifted tiles, along the eaves etc	High
A3	Fully accessible for survey No flying access No sheltered internal voids (eg roof spaces) Timber cladding tight Roof fitted with interlocking metal tiles	Negligible
B1	Fully accessible for survey No flying access Stone-work sound Sections of timber cladding tight Several roof spaces, all accessible for survey Various gaps in roofs below lifted roof tiles, behind timber fascias/soffits, in edge tile bedding mortar (on gable ends) etc. Ridge tiles appear well-bedded	High

B2	Fully accessible for survey Awkward flying access into low roof space via arrow slit opening in east gable end wall Roof space accessible for survey Various gaps in roofs below lifted roof tiles, behind timber fascias/soffits, in edge tile bedding mortar (on gable ends) etc. Ridge tiles appear well-bedded	High
B3	Fully accessible for survey No flying access No sheltered internal voids (eg roof spaces) Walls clad in preformed sheet metal Roof fitted with metal sheeting Fibre-concrete bargeboards loose fitting	Negligible
D	Fully accessible for survey No flying access No sheltered internal voids (eg roof spaces) Timber cladding tight Roof fitted with interlocking metal tiles Ridge metal	Negligible

Bats - other

- 3.7 Given the rural location, various species of bat are likely to forage and/or commute to at least some extent locally. However, the site itself is largely devoid of vegetation or tall, connected linear features with potential for material use by foraging/commuting bats. With reference to table 4.1 in the Bat Survey Guidelines we therefore judge the site to be of 'Negligible' potential suitability for foraging/commuting use by bats.



Barn owl

- 3.9 No evidence was found for use of any of the buildings by Barn owls.

Nesting birds

- 3.10 Evidence was found for Jackdaws and House sparrows nesting currently with A1/A2 and of historic nesting by Jackdaws within the roof space of B2.
- 3.11 There is a risk of common birds nesting within limited areas of taller vegetation present (principally the hedgerow at Target note 2)

Reptiles

- 3.12 The site does not appear suitable for material use by reptiles (the vast bulk being given over to buildings, gravel or short amenity/improved grassland).

Great crested newts

- 3.13 There are no ponds present upon the site itself and the site (in its current state) does not appear suitable for material use by terrestrial great crested newts even if accessible to them (the vast bulk being given over to buildings, gravel or short amenity/improved grassland).
- 3.14 Notwithstanding the above we note that there are two ponds within c 100 m of the site - a garden pond at Target note 6 and a farm/woodland pond at Target note 7. The former does not appear suitable for material use by great crested newts while the latter may be.

Other

- 3.15 No other evidence was found for use or likely significant use of the site or immediately adjacent land by protected species.

4 Interpretation and recommendations

Habitats


- 4.1 According to the Magic website, the site does not constitute, fall within or lie adjacent to any statutory or non-statutory wildlife site. We note that the Magic website does not necessarily list all non-statutory sites. Nevertheless, given the character of the site (buildings/gravel/amenity grassland) we judge it highly unlikely to be included within any such sites.
- 4.2 Native hedgerow is a Biodiversity Action Plan priority habitat. There are no other such habitats or other habitats of particular ecological interest or conservation concern present within or adjacent to the site
- 4.3 Given the above we recommend that, to maximise the biodiversity value of the developed site:
 - i. **the existing short section of native hedgerow at Target note 2 be retained.**

Bats - buildings

- 4.4 No evidence was found for the use of any building by bats. However, several of the buildings presented at least some unresolved potential for use as roosts.
- 4.5 It is an offence to damage, destroy or block access to a bat roost, or to cause material disturbance to bats whilst they are within such a roost, even if done unknowingly but recklessly.
- 4.6 As regards the above, the Bat Survey Guidelines provide guidance as to the level of survey normally considered sufficient to adequately establish the presence/absence of bat roosts within buildings of a given potential suitability.
- 4.7 Given the above and with reference to the table at paragraph 3.6 above and Tables 7.1-7.3 in the Bat Survey Guidelines we recommend that:
 - i. **prior to the commencement of any material works to the roofs or eaves of buildings A1, A2, B1 or B2 the presence/absence of bat roosts within any such roof/eaves be more adequately established by the carrying out of at least 3 (no.) separate watches for bats coming/going from them over dusk/dawn in fair weather sometime between May and September inclusive. The bulk of such watches on any one building should be completed before end August. Consecutive watches on any one building should be at least 2 weeks apart. For further details of acceptable methodology reference should be made to the Bat Survey Guidelines;**
- 4.8 With regard to the above we note that should no, or limited, works be proposed to roofs/eaves then the above recommendation may not apply, or a reduced level of survey may be acceptable. In such a scenario a licensed bat worker should be further consulted.
- 4.9 We note that the Local Planning Authority is likely to insist that any additional bat survey of buildings be completed prior to their granting a relevant consent.
- 4.10 The site was judged to be of 'Negligible' potential suitability for foraging/commuting use by bats. With reference to Tables 7.1-7.3 in the Bat Survey Guidelines, no further bat activity survey is therefore warranted.

4.11 Notwithstanding the above we recommend as standard that:

- i. **any external lighting is such as to minimise any light spill onto existing or new boundary hedgerows (within or adjacent to the site).**



Barn owl

4.13 No evidence was found for use of any of the buildings by Barn owls.

Nesting birds

4.14 It is an offence to damage or destroy the nest of any wild bird while that nest is being built or in use. We therefore recommend that:

- i. **should birds commence nesting within or upon any of the buildings then all works liable to impact upon such nests are delayed until the nests are no longer occupied. Any significant removal of vegetation be carried out between October and February inclusive (so as to avoid the nominal bird nesting season) or otherwise only following a thorough check to confirm that no active birds nests are present at the time.**

Reptiles

4.15 The site does not appear suitable for material use by reptiles.

Great crested newts

4.16 It is an offence to harm a Great crested newt even if done so unknowingly but recklessly.

4.17 There are no ponds within the site but there are two ponds nearby (within 100 m) of which at least one **may** have some potential for low-level use by Great crested newts. However, in its current state, the site does not appear suitable for material use by Great crested newts, even if accessible to them. As we understand it works will be confined to existing buildings.

4.18 Given the above we judge that no further Great crested newt survey is warranted but recommend that:

- i. **as a sensible precaution against the low risk of Great crested newts being a) present locally and b) straying onto the site and becoming harmed during works, any storage of materials during demolition/construction be done so on areas of gravel or short amenity grassland on the western side of the site (eg to the west of B1). Should there be a need to carry out any material excavation (eg digging of foundations) a licence great crested newt surveyor should be first consulted as to whether or not any further precautions (eg temporary newt-proof fencing) might be appropriate.**

Other

4.19 No evidence was found for significant use, or likely significant use, of the site or immediately adjacent land by any other protected species.

4.20 Other than the above, we see no need for any further ecological survey in relation to the proposed works.

Disclaimer. All reasonable effort was taken to ensure an accurate assessment of the situation at the time of the survey. However, the absence of recorded sign should not be taken as an absolute guarantee that the site was not being used by a particular species. There is also no guarantee that any particular species will not use the site at any time in the future. Survey results may be weather or seasonally dependent.

Figure 1. Site location



Based on imagery from Google Maps

Figure 2. Existing site plan.



Target notes

- 1 Tall ruderal vegetation dominated by Common nettle (*Urtica dioica*) with significant Bramble (*Rubus fruticosus*).
- 2 Short section of native hedgerow to around 4-5 m in height includes Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Elm (*Ulmus* sp) etc.
- 3 Post and wire fence engulfed in Bramble scrub (*Rubus fruticosus*) to around 1.5-2 m in height.
- 4 Tall native hedgerow to around 5-6 m in height.
- 5 Overgrown conifer hedgerow inside garden boundary wall.
- 6 Small, raised garden pond/water feature. Netted.
- 7 Farm pond within small area of tall scrub/trees. Fully shaded. Fully covered in duckweed (*Lemna* sp) at time of survey. Not accessible for survey.

Figure 3. Photographs.



P1 and P2. Building A1-A3 as viewed from the northeast and the northwest respectively.



P3 and P4. Building B1 as viewed from the northeast and the southwest respectively.



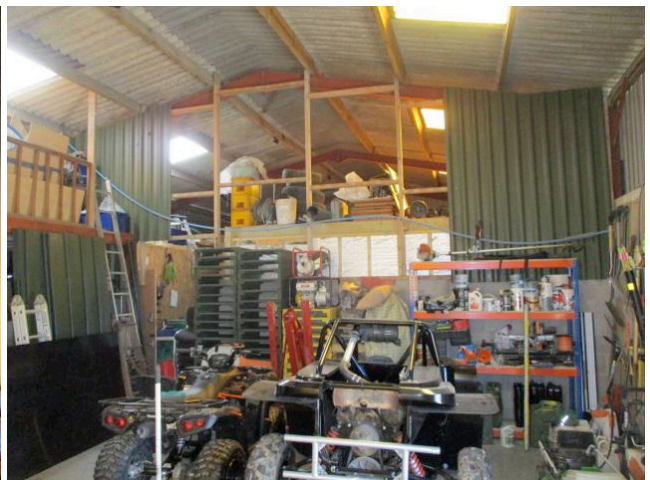
P5 and P6. Examples of roof spaces within Building B1.



P7 and P8. Building B2 as viewed from the northeast and the southeast respectively.



P9 and P10. Building B3 as viewed from the southeast and the northwest respectively.



P11 and P12. The interior of Building B3.



P13 and P14. Building D as viewed from the southwest and the southeast respectively.



P15. Typical view south across the main body of the site. Building B3 can be seen to the rear.



P16. Looking east along the grass track just to the north of Building D.