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FAO: Mr Ivan Wilson

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19 January 2012

Job ref: B 1077

Re: Protected Species Survey (Bats and barn owls): Barn at Witton Farm, Anna Lane, Bolton-by-Bowland.

Introduction

You have requested a protected species survey on behalf of your client Mr S. Flanagan as a condition of a planning application to Ribble Valley Borough Council for conversion of an existing barn at Witton Farm.

The Local Planning Authority must take account of the impact of a development on protected species in accordance with PPS9. RVBC requires an appraisal of the likely impact of the proposed scheme on protected species in addition to any precautionary mitigation measures that may be required.

A scoping survey and daylight inspection was undertaken on Wednesday 18 January between 10.00 and 12.00. The weather at the time of the inspection was mild, damp and largely overcast (max. temperature: 9.5°C; cloud cover: 100%, wind: light to moderate south-westerly; precipitation: initially heavy drizzle and mist becoming brighter and dry) providing satisfactory conditions for carrying out a winter daylight scoping survey.

Survey methodology

The aim of the scoping survey is to make a daylight assessment of the potential value of the site for European Protected Species (EPS) and to establish whether bats (and barn owls) have ever been active within any part of the property that will be affected by the development.

The survey methodology follows the recommended monitoring guidelines published by the Bat Conservation Trust (*BCT – Bat Surveys, Good Practice Guidelines, 2007*), Natural England (*Survey Objectives, Methods and Standards as outlined in the Bat Mitigation Guidelines, 2004*) and Survey and Monitoring Methods, (*Bat Worker's Manual, JNCC, 2004*).

Recommended survey methods (Natural England / Barn Owl Trust) were used to assess the use of the building by barn owls and other nesting birds; normal search procedures include inspecting a site for evidence such as droppings, pellets, discarded prey items, feathers and nest debris. Barn owl guidelines are those recommended by Natural England: *Barn Owls on Site – A guide for developers and planners, 2002*.

Non-intrusive survey methods were used to assess the use of the property by bats. The search was made using a high-powered lamp (Clu-lite CB2 - 1,000,000 candle power), close-focussing binoculars (Leica Trinovid), a digital camera (Kodak MD41) and 900mm endoscope (ProVision 300) to view all likely areas of the building for the presence of bats, ie. droppings and urine and grease staining, feeding remains such as discarded moth and butterfly wings and other insects fragments typically found in a feeding and resting area.

Personnel

The survey was carried out by David Fisher (Earthworks Environmental Design) - an experienced ecological consultant with more than 25 years experience of bat ecology and field survey work and a Natural England licence holder since 1989; current NE licence No: 20113901, (Conservation, Science and Education).

Constraints (limitations of the survey)

The inspection was carried out using 'non-invasive' survey techniques to determine bat activity within the buildings. (reference: *Bat Surveys*, BCT, 2007, p23).

The survey is designed to determine the likely presence of bats within the building and does not necessarily prove absence.

The inspection was undertaken in mid-January and is therefore outwith the optimal survey period for carrying out a roost emergence or dawn re-entry survey.

National Biodiversity Network (NBN Gateway) database records, whilst indicative of the bat species that are likely to occur within a 10km square, do not confirm presence or absence of a species or habitat.

Absence of records does not imply that a particular bat species is not present within the recording area.

Evidence of bat roosting activity such as bat droppings and grease staining on external walls and surfaces is removed by the action of wind and rain; lack of evidence of bat activity is always evaluated with caution.

Bats are highly mobile animals and frequently change roost sites; crevice-roosting species are able to hide within small cavities inside walls or under roofing materials and cannot be located by visual inspection alone.

Data search

A desktop study was carried out before the site survey was undertaken to review previously published data on bats and other European Protected Species within the recording area (ie. a 2.5km radius of the property).

The local search includes records from several data sources including: (1) National Biodiversity Network (NBN) - recording square SD75; (2) East Lancashire bat Group; (3) North Lancashire Bat Group; (4) EED.

The following bat species have been recorded within the district since 2010:

Brandt's bat	(<i>Myotis brandtii</i>)
Whiskered bat	(<i>M. mystacinus</i>)
Natterer's bat	(<i>M. nattereri</i>)
Daubenton's bat	(<i>M. daubentonii</i>)
Brown long-eared bat	(<i>Plecotus auritus</i>)
Common pipistrelle	(<i>Pipistrellus pipistrellus</i>)
Soprano pipistrelle	(<i>P. pygmaeus</i>)
Noctule bat	(<i>Nyctalus noctula</i>)

NBN uses mammal datasets (*Terrestrial mammals – Chiroptera*) provided by the Bat Conservation Trust (*National Bat Monitoring Programme – Colony Counts Survey and Daubenton's Bat Waterway Survey*), Natural England's Bat Sites Inventory for England, Mammal Records for Britain (Mammal Atlas 1993 with additions), and some local and regional biological record centres.

Pre-existing information on protected species at the survey site

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There are no published records of bat activity at this location – (SD 776523) or within 500m of the property.

Photographs of the existing property (taken 18.01.12)

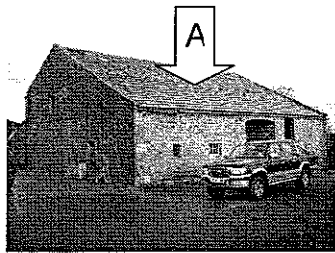


Figure 1: Barn 'A'

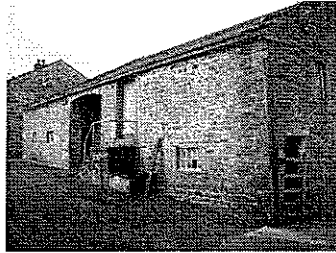


Figure 2:

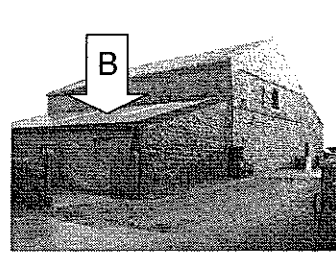


Figure 3: Lean-to shippon 'B'

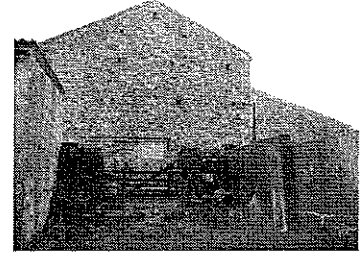


Figure 4:

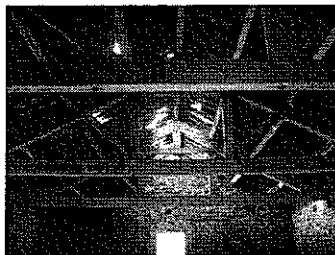


Figure 5:

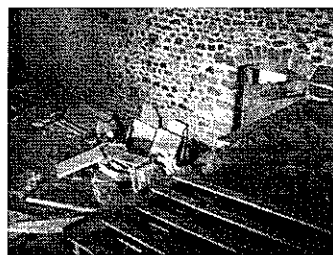


Figure 6:



Figure 7:



Figure 8:

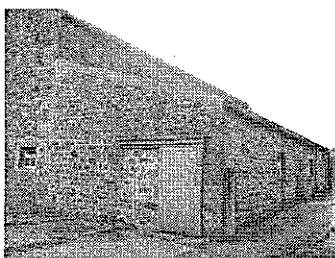


Figure 9:



Figure 10:

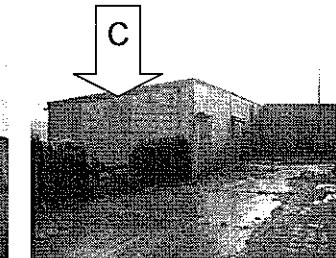


Figure 11: out-building 'C'

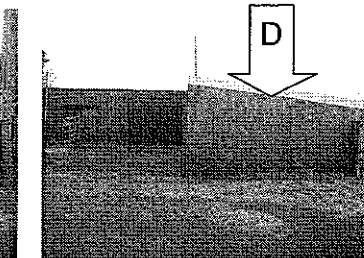


Figure 12: out-building 'D'

Description of the property

Building 'A':

Detached stone barn (Figure1) with random stone rubble-infill wall construction and duo-pitched stone slate roof. The barn has a traditional large wagon door with a loft area above the entrance; there is also a first floor workshop, a main hayloft and a number of small under-crofts / shippons.

There is also a single storey lean-to shippon at the rear with mono-pitched box profile roof (Building 'B').

The barn roof has a timber post and truss frame with 4 bays (figure 5); the stone slate roof is unlined and the barn is open to eaves. The roof is partly damaged and there is considerable ingress of water; approximately 10% of the roof and ridge board is insecure / damaged near to the gable apex at the west end of the building.

The main loft area is also damaged by water (figure 6); a small loft over the main wagon door entrance supports a large iron water tank; there is no safe access into this loft area.

Below the main loft is an under croft with 6 animal cubicles; the room is east-facing with minimal natural light despite two small glazed windows. At the front of the barn, to the right of the wagon door are steps leading

into a first floor workshop (figure 7) with undercroft below. To the left of the wagon door are two small undercrofts with glazed windows.

Externally, the roof is clad with stone slates, stone ridge tiles and stone coping stones over the roof verges; two glass slip skylights on the south pitch of the roof provide some natural light within the building. The external stonework is mortar-pointed and relatively secure.

Building 'B':

Single storey lean-to structure; this is an old shippon with mono-pitch roof, timber rafters and purlins and clad with profiled alloy sheeting including sky lights (figures 8 and 9). The building is north-facing with two glazed windows providing good natural light to the building.

Two additional out-buildings / stables were also inspected:

Building 'C':

A single storey stable / shippon comprising two areas divided by an internal block work wall; the building has block wall construction and a mono-pitch roof clad with corrugated cement fibre sheeting and two opaque sky-light panels; the structure is cold and damp and there is some damage to the roof allowing ingress of rainwater. The building is currently empty and unused.

Building 'D':

Single storey stable / shippon with two separate areas divided by an internal block work wall. The building has block wall construction with mono-pitched sheet metal roof. The building is used mainly as a fuel store and is dry, cool and well-ventilated.

Site location and habitat description

The property is located at NGR: SD 776523 at an elevation of approximately 160 metres; the farm is surrounded by open countryside with extensive grazing land with an open aspect overlooking the valley at Skirden Beck to the east. The surrounding landscape is largely B4 improved grassland / B2.2 semi-improved neutral grassland - (Phase 1 habitat categories).

There are no extensive broadleaved woodlands adjacent to the site and the district is not particularly well-wooded although there are several small wooded cloughs within the district and significant riparian habitat along the Skirden Beck approximately 0.6km east of the property.

The site is not adjacent to open standing water or any significant water channel.

There are no designated nature conservation sites immediately adjacent to the property – ie. Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Biological Heritage Sites (BHS), National Nature Reserves (NNR's), Local Nature reserves (LNR's) or Regionally Important Geological and Geo-morphological Sites (RIGS).

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All parts of the property were inspected for evidence of bat droppings, discarded insect prey and other indicative signs of roosting, perching, feeding and flight by bats. The buildings were inspected both internally and externally for signs of bat and barn owl activity and roosting potential.

The buildings were assessed as follows:

Building 'A' (barn): LOW RISK / LOW POTENTIAL*

A small quantity of discarded butterfly wings scattered over the floor within the larger under-croft (beneath the main hayloft); 12 small tortoiseshell wings were found, including 3 fresh wings (recent) and 9 faded wings (old). It is also worth noting that 34 hibernating (torpid) small tortoiseshell butterflies were present on the underside of the main hayloft.

There were no accumulations of insect wings or bat droppings within any part of the barn and no evidence of regular perching, resting or roosting activity in the building.

Externally there were no signs of bat activity.

Building 'B' (single story out-building): NEGLIGIBLE / LOW RISK / LOW POTENTIAL*

There were no signs of bat droppings or discarded insect prey in any part of the building.

Building 'C' (out-building / stable): NEGLIGIBLE / LOW RISK / LOW POTENTIAL*

There were no signs of bat droppings or discarded insect prey in any part of the building.

Building 'D' (out-building / stable): NEGLIGIBLE / LOW RISK / LOW POTENTIAL*

There were no signs of bat droppings or discarded insect prey in any part of the building.

*risk categories are shown in Table 1 below:

Negligible risk: it is highly unlikely any bat species have been present at this site.

Low risk: there is only low risk of disturbance to solitary bats or small numbers of common and widespread bat species

Low / moderate risk: caution required; activity of common / rarer species is possible, including the presence of occasional / regular night perching and feeding activity or the presence of small numbers of rarer species (but not a maternity or hibernation site)

Moderate risk: caution required; there is moderate risk of disturbance to common bat species; activity may include the presence of regular / significant feeding perches and signs of feeding, a regularly used day / night roost or a maternity site of a common and widespread species or the likely presence of low numbers of rarer species ('rarer' as defined within the local context).

Moderate / high risk: considerable caution is required; this category may include a maternity site of rarer species.

High risk: considerable / extreme caution is required; there is a significant risk of causing disturbance to roosting bats at this site including large numbers of common species, a maternity site of locally rare or rarest UK species or a significant hibernation site for rare or rarest species; this is likely to be a site meeting the SSSI guidelines.

Table 1: Risk categories (adapted from Guidelines for proportionate mitigation - Bat Mitigation Guidelines (2004) figure 4, page 39)

The presence of discarded insect wings within the undercroft of the barn (Building 'A') indicates very occasional or sporadic perching and feeding activity by brown long-eared bat (*Plecotus auritus*) in this part of the building. It is likely that low numbers of bats (1 or 2 individuals) are occasionally entering the building; the presence of several fresh insect wings indicates recent feeding activity within the previous 3 – 6 months.

Brown long-eared bats frequently visit barns, lofts and agricultural buildings to night perch and feed; the species tends to be active throughout the entire year when milder conditions allow. This species is known to feed opportunistically on over-wintering (hibernating) insects, typically small tortoiseshell butterflies.

There is no evidence of regular or significant perching or feeding activity by bats and the absence of significant accumulations of insect wings or bat droppings within the buildings suggests only low frequency use of the site, probably by solitary bats.

Current status of the brown long-eared bat (*Plecotus auritus*)

The species is frequently recorded throughout the Ribble Valley and Forest of Bowland. The brown long-eared bat has a widespread but localised distribution within the region and is largely confined to buildings close to woodland habitats. The brown long-eared bat is a UK BAP priority species; although its UK status is currently assessed as common, the UK long-term bat population trends for the period 1997 to 2010 indicate a small negative trend. (based on NBMP hibernation and colony counts -9.4% and -3.3% respectively).¹

The landscape surrounding this site provides sub-optimal feeding, foraging and commuting habitat for bats; the farm's location / aspect is relatively open and exposed and there is limited connectivity to high-value feeding and foraging habitats within the wider district.

The potential of this property to support roosting, resting or perching bats is likely to be relatively low.

The potential of either building to support a maternity (nursery) roost is also relatively low.

The building is unlikely to be used as a hibernation site.

The overall conservation significance of the buildings for roosting and breeding bats is negligible or low.²

Likely scale of impact on protected species

The scale of impact of the proposed development on roosting bats is likely to be negligible or low.³

¹ UK bat population trends to 2010 – State of the UK's bats, NBMP trends 2011, JNCC and BCT.

² Guidelines for Proportionate Mitigation - (Bat Mitigation Guidelines – 2004, figure 4, p39),

³ The scale of main impacts at site level on bat populations (BMG, 2004, Table 6.1 - p.37)

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The scale of impact of the proposed development at site level on local bat populations is likely to be negligible or low; consequently the building / demolition works are **unlikely to result in the loss or destruction of a bat roost** or cause disturbance, injury or death of a European Protected Species (EPS).

There is no evidence of regular or significant bat roosting activity at this property. Building works should proceed with reasonable caution for the unexpected presence of solitary roosting bats; if any bats are exposed, work in the area should stop immediately and advice sought from Natural England via BCT.

Mitigation guidance notes are provided below; mitigation is defined as "*measures to protect the bat population from damaging activities and reduce or remove the impact of development*".

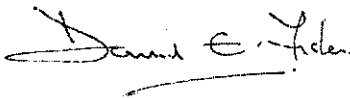
Mitigation refers to the practices adopted to reduce or remove the risk of disturbance, injury or death of a protected species or damage to a bat roost.

There is no evidence of roosting or nesting barn owls at this site.

Barn swallows are likely to be present within the buildings between April and September.

Please note: I do not provide a copy of this report to the local planning authority, therefore it is your responsibility to forward the report to Ribble Valley Borough Council.

Yours sincerely



David Fisher

ACTION:	METHOD:
1. Timing constraints	None required
2. Risk of disturbance	Although it is unlikely that roosting bats will be disturbed during the proposed development, there remains a low risk of exposing solitary bats during building or demolition operations The risk of exposing roosting bats cannot be entirely eliminated by visual inspection alone. Crevice-roosting species such as pipistrelles and brown long-eared bats are able to hide within very small cavities and gaps deep within wall cavities or beneath roofing materials. If bats are exposed or vulnerable to harm during any stage of the proposed operations, stop work in that particular location and seek further advice immediately.
3. Removal of roofing materials	There is a low risk of accidentally exposing roosting bats at this property; be aware that isolated bats are occasionally found hidden beneath roofing materials and wall claddings
4. Accidental exposure of bats	Stop work immediately if bats are exposed and are likely to be disturbed; eg. if you find live or dead bats or expose obvious accumulations of bat droppings under roofing materials. In the unlikely event of bats being exposed or vulnerable to harm at this property, all work in that area must stop immediately. Cover the exposed bats to reduce further risk of harm and seek further advice by calling the Bat Conservation Trust (BCT) helpline on 0845 1300 228.
5. Avoid handling bats	Contractors should avoid handling bats but where there is no alternative, use gloves or a small container to move them to a dark and quiet area, preferably without causing them to fly in daylight.
6. Legal protection	All contractors and project managers should be made aware of the legal protection afforded all species of bat in the UK and procedures should be in place to mitigate for the potential impact on bats before any building or demolition work is undertaken. The onus lies with the applicant to satisfy himself that no offence will be committed if the development goes ahead, regardless of whether planning permission has been granted.
7. Further advice	If you require further advice on bats during the proposed building operations or if you find an injured or resting bat, call BCT immediately; they will normally contact a qualified bat worker in the local area who will visit the site and provide further advice free of charge.
8. Additional survey effort	Not recommended unless required by Natural England or the local planning authority.
9. Nesting wild birds	BASIC PROTECTION: All birds, their nests and eggs are protected by law The barn swallow is an AMBER LISTED SPECIES (ie. a species of medium conservation concern) In cases where a development requires exclusion of birds during the building operations, the closure of any access points should ideally be carried out between October and February. If you wish to deny access to nesting wild birds you are advised to close off all window openings, ventilation holes and portals before the birds return in mid-April or early May.

1. Wildlife legislation – Bats and the law

All bat species in the UK receive full protection under the Wildlife and Countryside Act 1981 (amended by the Environment Protection Act 1990). The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. All species of bats are listed on Schedule 5 of the 1981 Act, which makes it an offence to:

- *intentionally kill, injure or take any wild bat*
- *intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.*
- *intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for shelter or protection.*

The protected status afforded to bats means planning authorities may require extra information (in the form of surveys, impact assessments and mitigation proposals) before determining planning applications for sites used by bats. Planning authorities may refuse planning permission solely on grounds of the predicted impact on protected species such as bats. Recent case law has underlined the importance of obtaining survey information prior to the determination of planning consent¹.

*"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by a development proposal, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."*²

All British bat species are included in Schedule 2 of the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, (also known as Habitats Regulations) which defines 'European Protected Species' (EPS).

¹ Bat Mitigation Guidelines, AJ Mitchell Jones, Joint Nature Conservation Committee, (2004) ISBN 1 86107 558 8

² Planning Policy Statement (PPS9) (2005) Biodiversity and Geological Conservation ODPM

2. Protected species (Bats) and the planning process¹

For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important 'material planning consideration'. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and, if necessary, to design mitigation and compensation. Similarly, adequate survey information must accompany an application for a Habitats Regulations licence (also known as a Mitigation Licence) required to ensure that a proposed development is able to proceed lawfully.

The term 'development' [used in these guidelines] includes all activities requiring consent under relevant planning legislation and / or demolition operations requiring building control approval under the Building Act 1984.

Natural England (Formerly English Nature) states that development in relation to bats "covers a wide range of operations that have the potential to impact negatively on bats and bat populations. Typical examples would be the construction, modification, restoration or conversion of buildings and structures, as well as infrastructure, landfill or mineral extraction projects and demolition operations".

(Mitchell-Jones, 2004)

¹ 2.2.3 - Planning for development, p10, Bat Surveys, Good Practice Guidelines, BCT (2007).

3. Information / data sources

The following sources were consulted during the preparation of this report:

1. National Biodiversity Network (NBN) database, (terrestrial mammals - chiroptera)
 2. Bat Conservation Trust (BCT)
 3. Department for Environment Food and Rural Affairs (Defra)
 4. Joint Nature Conservation Committee (JNCC)
 5. North Lancashire Bat Group
 6. East Lancashire Bat Group
 7. East Lancashire Ornithologist's Club (Annual Bird Reports)
 8. Lancashire and Cheshire Fauna Society (Lancashire Bird Reports / Atlas of Breeding Birds)
 9. Lancashire Biodiversity Partnership
 10. Biological Heritage Sites Partnership (LCC, NE and LWT)
 11. EED dataset (Lancashire bat records 2000 - 2011)
 12. Multi-Agency Geographical Information Centre (www.magic.gov.uk)
 13. Natural England - Nature on the map (www.natureonthemap.org.uk)
 14. Multimap
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4. Other references / contacts:

Bats, development and planning in England, (Specialist support series) - Bat Conservation Trust, 5th Floor, Quadrant house, 250 Kennington Lane, London, SE11 5RD, 0845 1300 228

Clarification of the legal duty of Local planning Authorities' to European Protected species: High Court Judgment June 2009: (Wooley v Cheshire east Borough Council) - Bat Conservation Trust

Defra Circular 01/2005 (to accompany PPS 9) - Department for Environment, Food and Rural Affairs. www.defra.gov.uk

Natural England, 1 East Parade, Sheffield, S1 2ET, Enquiry Service: 0845 600 3078 enquiries@naturalengland.org.uk

Natural England, Cheshire to Lancashire Team, Electra Way, Crewe, Cheshire, CW1 6GJ Tel: 01270 754227