

3 Meadowlands, Low Moor, Clitheroe. Lancashire. BB7 2ND 01200 425113 M: 07709 225783 earthworksuk@yahoo.co.uk

Alice Edmondson

Stanton Andrews Architects 44 York Street Clitheroe BB7 2DL

15 May 2015

Job ref: B 1506

Dear Alice

Re: Protected Species Surveys: New Hall Barn, Blackburn Road, Ribchester, Lancashire. PR3 3ZQ

You have requested a Protected Species Survey (European Protected Species) on behalf of your clients Mr and Mrs Gaffing in support of a planning application to Ribble Valley Borough Council for a development at New Hall Barn. The existing property is shown in figures 1 to 12 of this report.

Introduction

The Local Planning Authority must take account the impact of a development on protected species in accordance with current planning policy (National Planning Policy Framework). The planning authority requires an appraisal of the likely impact of the proposed development on all bat species that are present or likely to be present at the site, in addition to any mitigation and enhancement works that may be necessary.

An initial scoping survey was undertaken on Wednesday 15 April 2015 between 10.30 and 12.30 hrs. The weather was cool and damp (minimum temp: 8°C, cloud cover: 100%, wind: fresh SW, rain: light drizzle).

An evening emergence survey was carried out on Monday 11 May between 20.00 and 22.30. The weather was mild and dry (minimum temp: 12°C, cloud cover: 40%, wind: light westerly, rain: nil).

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*.

*Bat Surveys, Good Practice Guidelines, BCT, (2007).

Personnel

The survey was carried out by David Fisher (Earthworks Environmental Design) - an ecological consultant with more than 25 years of experience in field survey work and development issues relating to protected species. The surveyor has held a licence with Natural England since 1989.

Natural England Class Licence Registration Number: CLS03502 (April 2015 – April 2016)

Class Survey Licence WML CL15 (Volunteer Roost Visitor Level 1)

Class Survey Licence WML CL18 (Bat Survey level 2)

Aims of the scoping survey

The scoping survey is designed to assess the potential value of the site for European Protected Species (EPS) and to establish whether bats, barn owls or other protected species have been active within any part of the building that is likely to be affected by the proposed development.

Aims of the dusk emergence survey

The main purpose of carrying out an evening emergence survey is to gather additional information such as: (a) bat species, (b) numbers of bats, (c) roost status, (d) location of access points, (e) bat activity in the area.

From the developer's perspective, the primary objective of a survey for protected species is to ensure that a development can proceed lawfully without breaching the Habitats Regulations.

The overall aim of surveying at a proposed development site is to collect robust data to allow an assessment of the potential impacts the proposed development will have on the bat populations present on and around the site. . . The data allow the developer to decide whether to proceed with the proposal as it stands, or whether to modify it. Proposals for appropriate mitigation, compensation and enhancement should be based on the survey data and impacts.*

*page 17 - Bat Surveys, Good Practice Guidelines, 2nd Edition, BCT, (2012)

Survey methodology

Non-invasive survey methods were used to assess the use of the property by protected species.

The survey protocol requires that a full visual inspection of the property is carried out; the site inspection includes the internal and external features of the property that are likely to be affected by the proposed works.

The survey methodology follows the recommended guidelines published by the Bat Conservation Trust - *Bat Surveys: Good Practice Guidelines, 2nd Edition, Hundt, L (2012),* Natural England *(Survey Objectives, Methods and Standards as outlined in the Bat Mitigation Guidelines, 2004)* and Chapter 3 - Survey and Monitoring Methods, *(Bat Worker's Manual, JNCC, Mitchell-Jones AJ and McLeish, AP, 3rd Edition 2004).*

The search was made using a high-powered lamp (*Clu-lite CB2 - 1,000,000 candle power*), close-focussing binoculars (*Leica Trinovid 10 x 32 BN*) and digital camera (*Sony Cyber-shot HX300*) were used to view all likely areas of the building for the presence of bats - ie. droppings and urine spots, bat corpses, bat fly larvae, roost staining or evidence of feeding remains such as discarded moth and butterfly wings or other insects fragments typically found in a perching and feeding area.

Survey constraints / limitations of the data

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

National Biodiversity Network (NBN) and other data sources, whilst indicative of the bat species likely to occur within a 10km-grid square, do not confirm presence or absence of a species or habitat.

Local bat records are obtained from a variety of sources gathered over several years; the accumulated records may include unverified public data or records provided by ecological consultants and local bat groups.

Crevice-roosting bat species are able to roost within very narrow gaps, frequently less than 25mm wide; solitary roosting bats are sometimes overlooked during daylight inspections, particularly in situations where bats have gained access within rubble-infill walls and roofing materials.

Evidence of bat activity such as bat droppings or staining on external walls and surfaces is frequently removed by the action of wind and rain; apparent absence of evidence is therefore evaluated with caution.

Page 2 of 11

Pre-survey data search

The pre-survey data search includes the following sources:

- (1) European Protected Species (EPS) ie. species records of local, regional or national significance.
- (2) EPS surveys undertaken at this site and other properties within 2km of the site.
- (3) Important wildlife and nature conservation designations within the wider area.
- (4) National Biodiversity Network (NBN) terrestrial mammal records (chiroptera) for the 10km grid square.
- (5) Local bat records East Lancashire Bat Group (ELBG)
- (6) Interactive maps: *Natureonthemap* (Natural England) and *Magic.gov.uk*.
- (7) East Lancashire Ornithologist's Club (ELOC) Annual Bird Reports.

The following bat species are recorded within the 10km grid squares - SD 63 / SD 73:

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

Pre-existing information (NGR: SD 661 353)

An online data search has found no additional information regarding EPS surveys or species records.

Location of the property

National Grid Reference: SD 661 353 - Elevation: approx. 30 metres.

The property is located 1km east of Ribchester within the Parish of Clayton-le-Dale. The site is adjacent to New Hall, a Grade II listed property and is close to the public highway (B6245) known locally as Barker Brow.

The location of the New Hall Barn property is essentially rural in character and is close to open countryside. The adjacent farmland is permanent pasture comprising improved grassland (Category B4 Phase 1 habitat) and semi-improved neutral grassland (Category B2.2 Phase 1 habitat).

New Hall Barn is situated on a river terrace within 100 metres of the River Ribble approximately 5 metres above the river channel.

The site is not adjacent to woodland habitat although extensive broadleaved and mixed plantation woodlands are located approximately 200 metres south-west of the site. There are also several deeply wooded watercourses in the area around Osbaldeston Hall at Old Park Wood, Mire Wood and Flashers Wood – these sites are designated Biological Heritage Sites (BHS).

There are no designated nature conservation sites immediately adjacent to the property ie. Special areas of Conservation (SACs), Sites of Special Scientific Interest (SSSI), Biological Heritage Sites (BHS), National

Nature Reserves (NNR's), Local Nature Reserves (LNR's) or Regionally Important Geological and Geomorphological Sites (RIGS).

Description of the property

Page 3 of 11

The property includes New Hall Barn in addition to a number of timber out-buildings / agricultural units within the site boundary; the main structures are described as follows:

- (1) New Hall Barn A six-bay agricultural barn with stone and rubble-infill wall construction and duo-pitched rafter-with-purlin roof; the building has a floor area of 158m². The barn has a north-west / south-east orientation. The barn has 3 roof bays at the northern end of the building and is open to the roof. There is a main wagon door on the front elevation (currently boarded up) and earth floor. Six glazed skylights on the south-west slope provide good natural light. The roof has been previously lined with a bitumen and hessian roofing felt, this membrane is now perished and only fragments of the felt remain (figure 8).
- (2) The central / southern end of the barn has a large hayloft with a large under-croft containing old animal cubicles. The earth floor is covered in bedding material and there are significant accumulations of animal dung. The loft area remains intact and is open to the roof (figure 7).

There is evidence of roosting activity by barn owls within the loft area (figures 10 and 11).

- (3) A stone partition wall at the southern end of the barn encloses a ground floor croft with a small timber loft above (figures 8 and 9). The croft also has an earth floor and is currently used for access to the building and for storage of materials; the roof contains a glazed skylight providing some natural light into the loft.
- (4) At the rear of the barn is a single storey lean-to building (formerly a shippon with 8 animal cubicles and a floor area of 96m²); the shippon has brick construction and a slated mono-pitch roof with 6 roof bays. There is a smaller shippon at the northern end of the structure with a floor area of 26m² containing a further 3 cubicles. The rafter-with-purlin roof is underdrawn with timber tongue and groove boarding. The buildings have concrete floors with considerable accumulations of dung and bedding straw present. These areas are generally dry, although some roof areas have been damaged by rainwater seepage.
- (5) At the extreme northern end of the barn is a single storey lean-to building comprising 3 separate sheds with a total floor area 34m². The building has rendered brick construction and mono-pitch roof (fig. 1). The slate roof is under-drawn with timber boarding. The building is semi-derelict with some oil contamination. The structures are generally cold, draughty and largely unsuitable for roosting bats or nesting wild birds.
- (6) A number of sheds and out-buildings are located to the side and rear of the main barn; the largest structure (shown in figure 6) is a large timber shed with duo-pitched roof; the building is more-or-less derelict and the roof very dilapidated; the building has only minimal conservation value to bats and birds.
- (7) A series of open-portal timber sheds are located to the west and north of the barn; these structures are mostly derelict and all the buildings have low / minimal conservation value for protected species.

Proposed works

It is understood the proposed development will require conversion of the existing stone barn (Building No. 1) to a dwelling. The building alterations will also require demolition of the lean-to shippon at the rear of the barn on the west elevation (Building No. 4) and the lean-to sheds on the north elevation (Building No. 5).

Additionally, the proposal is to remove all remaining out-buildings from the site.

Reference: Drawings / Elevations / Plans and Feasibility Study -

Page 4 of 11 Images: Buildings at New Hall Barn (taken: 15/04/2015)







Figure 3:





Figure 4:



Figure 5:

Figure 2:



Figure 6:



Figure 7:



Figure 10: barn owl castings on loft floor



Figure 8:



Figure 11: Barn owl faeces and castings



Figure 9:



Figure 12: old swallow nests in under croft

Scoping survey results

BATS:

The stone barn and its associated lean-to structures have low to moderate potential for supporting roosting bats. A visual inspection of the walls, floors and other internal / external features found only isolated droppings within loft; there were no accumulations of bat droppings or other indicative signs of bat activity.

There is no clear evidence of roost / feeding activity by bats in any of the buildings.

A small number of discarded insect wings (approximately 5 small tortoiseshell butterfly wings) were found on the floor of the timber hayloft in the main barn close to the north-east gable apex wall.

All the out-buildings and lean-to shippons are considered to be relatively low risk in terms of potential for disturbance to roosting bats and wild birds during the proposed demolition.

BARN OWLS:

There is evidence of roosting activity by barn owls; approximately 70 fresh owl pellets were found scattered across the floor of the timber loft in the main barn (figures 10 and 11); the main accumulations are located below the south gable apex wall and under the large timber tie-beams in the loft. There is also evidence of fresh barn owl splashes (faeces) at the same locations. There are currently no clear signs of nesting activity (ie. presence of downy feathers, quill feathers or egg shells). A further site inspection on 11/05/15 found a further 8 owl pellets in the loft area indicating current roosting activity, albeit only occasional and sporadic.

BARN SWALLOWS:

Old swallow nests were found on a steel joist in the under-croft (figure 12); swallow faeces were present in the main barn on stonework and floors within the loft area. Significantly, there were no signs of roosting or nesting swallows within any of the buildings on 15/04/15 or 11/05/15.

OTHER BIRD SPECIES:

Roosting and nesting doves are present within the barn; heavy accumulations of faeces and feathers are present within the main barn and on the floor of the small timber loft at the south end of the building (fig. 9); a number of birds were present in the main barn during both inspections.

Dusk emergence results

Bat activity was monitored using ultrasonic bat detectors, two devices were used to record echolocation calls;

(I) Batbox Duet - (heterodyne and frequency division)

(2) Anabat SD2 CF detector with a PDA – (HP iPAQ pocket PC); Sony headphones were used throughout.

A video camera was used to record bat activity within the barn.

(3) Sony camcorder with night-vision and infra-red 4 lamp lighting rig.

Page 5 of 11

The dusk survey began 30 minutes before dusk (sunset was approximately 21.00) and continued for a further 90 minutes after sunset.

The surveyor was positioned close to the SE corner of the barn at dusk and later positioned close to the NW corner of the property after 21.50. A Sony camcorder was located within the main barn.

4 bat species were recorded: common pipistrelle, soprano pipistrelle, noctule bat and a myotis species.

First emergence was recorded at 21.24 on the west side of the barn. A common pipistrelle is likely to have emerged from a dilapidated shed at the rear of the shippon; the exact location could not be determined

Page 6 of 11

Emergence and flight activity recorded on 11/05/15 between 21.00 and 22.30

Time:	Species:	Type of activity
21.24	Common pipistrelle	Possible emergence and flight to river
21.31	Common pipistrelle	Low flight over sheds at rear of barn, moving towards river
21.38	Common pipistrelle	Briefly foraging within the dilapidated Dutch barn at rear of shippon
21.42	Noctule bat	Commuting flight high over River Ribble
21.46	Common pipistrelle	Foraging over N end of barn then flight across site to south
21.48	Common pipistrelle	Sustained flight inside barn for 12 minutes until 22.00; a solitary bat flying the entire length of building at all levels – light sampling activity.
21.48	Common pipistrelle	Sustained flight outside barn along NE elevation (out of west wind)
21.56	Myotis sp.	Brief echolocation heard near N. elevation of barn
21.57	Common pipistrelle	Sustained echolocation and flight along N. elevation until 22.05
22.22	Soprano pipistrelle	Echolocation and flight at NE end of barn

Evaluation of results (Bats)

There are no accumulations of bat droppings within any of the buildings. It is likely that solitary bats such as common pipistrelles and long-eared bats occasionally / sporadically enter the main barn to night roost and rest; light sampling activity may also occur as solitary roosting bats emerge at dusk. The presence of a small number of discarded insect wings in the main loft area may indicate infrequent perching by long-eared bat.

The presence of solitary common pipistrelle bats roosting inside the barn is not uncommon; bats are frequently present in very low numbers in buildings of this type. Significantly there is no evidence of a maternity roost in any part of the property. Solitary pipistrelles may also be present within some of the dilapidated out-buildings, however the presence of a maternity roost is highly unlikely in any of the buildings.

Evaluation of results (Barn owls)

Barn owls (solitary birds) are likely to be active inside the main barn occasionally; the accumulation of owl pellets and faeces in the loft area indicate roosting activity above the internal wall and on the timber spars.

There is currently no evidence to indicate breeding activity at the site.

Evaluation of results (Barn swallows)

It is likely that roosting swallows will be present in some of the structures between late April and September.

There is no evidence of nesting activity at present.

Conservation significance of the property to protected species				
Building	Bats	Barn owls	Barn swallow	

Main barn loft area	low	moderate	low
Main barn ground floor	low	low	low
Brick shippon west elevation	minimal	minimal	minimal
Brick sheds north elevation	minimal	minimal	minimal
Out-buildings / sheds	low	minimal	low

Page 7 of 11

Summary and main recommendations			
	BATS	BARN OWLS	BARN SWALLOWS
1.Demolition of out-buildings	No timing conditions required	No timing conditions required	Proceed with caution; a visual check of each building should be made before works are undertaken.
2.Roofing works main barn	Avoid the critical months May to August; the optimal time to carry out roofing works is between 1 September and mid-November or during March and April.	No timing conditions required	No timing conditions required
3. Building works main barn	Avoid the critical period between 1 May and 31 August	No timing conditions required	No timing conditions required
4. Mitigation / compensation	REQUIRED Recommended: (1) 4 no. Bat access slates required on each roof slope of completed development (2) 4 No. ridge access tiles required in the roof of the new dwelling. Incorporate into designs.	REQUIRED Recommended: (1) Barn owl nesting box to be erected on site before any works begin; Boxes may be tree- mounted or pole mounted depending on location. (see notes on siting of barn owl boxes below) (2) check barn owl status before any works begin.	REQUIRED Recommended: Provision of 2 No. artificial nest platforms if possible. Swallows normally require open portal buildings in which to nest and roost. Try to incorporate into design at an early stage.
5. Method statement	A detailed Method statem The method statement ou causing significant disturb appropriate mitigation and	ent will be required before an tlines the required working pr ance, injury or death to a pro compensation measures ne	y works begin. ractices that will avoid tected species including cessary for the scheme.

	The existence of a method statement rather than a development licence is important as it provides a defence against possible prosecution. NB. Natural England advises that "failure to follow the method statement may result in a breach of the law and leave the developer open to prosecution".
6. Mitigation licence	An EPSL development licence is only required where there the proposed works are likely to result in a breach of the Habitats Regulations. Appropriate mitigation and compensation measures should be sufficiently robust to avoid the need for a licence application. The onus lies with the applicant to satisfy himself / herself that no offence will be committed if the development goes ahead, regardless of whether planning permission has been granted.

Siting of the barn owl box

Page 8 of 11



Figure 13: Barn owl nesting and roosting box.



Figure 14: Example of a tree-mounted barn owl roosting box.



Figure 15: Pole-mounted barn owl box



Figure 16: Pole-mount box being fitted (Barn Owl Trust)

Obtaining and erecting a suitable pole

Most electricity or telegraph poles are suitable (figure 16). Minimum length 6 metres. Minimum diameter 150mm. Erection normally requires specialist machinery or a digger. Bury 1.5 metres in the ground leaving a height of 4.5 metres. Wherever possible the box should be secured to the pole before erection. The position in relation to habitat features is not critical but ensure that the main entrance hole is not screened by a building or tree(s).

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

Yours sincerely

ANNEX 1

Jamie E. Fichen

David Fisher Director (EED Surveys)

Page 9 of 11

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).

- 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.

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".

¹ 2.2.3 - Planning for development, Bat Surveys, Good Practice Guidelines, BCT (2007). (Mitchell-Jones, 2004)

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

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

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

ANNEX 2

Page10 of 11

<u>Bibliography</u>

Altringham, JD., (2011) Bats, From Evolution to Conservation. OUP.

- Dietz, C., Helversen, O., Nill, D., (2009) Bats of Britain, Europe and Northwest Africa. A&C Black.
- Gunnell K, Murphy B, Williams C, (2013) Designing for Biodiversity, RIBA Publishing / BCT 2nd Edition.
- Hundt, L., (2012) BCT Bat Surveys, Good practice Guidelines 2nd Edition.
- JNCC, (2010), Handbook for Phase 1 Habitat Survey a Technique for Environmental Survey.
- Mitchell, AJ., McLeish, AP., (2004), JNCC Bat Workers Manual 3rd Edition.
- Mitchell, AJ., (2004), English Nature Bat Mitigation Guidelines, version January 2004

Russ, J., (2012), British Bat Calls, A Guide to Species Identification. Pelagic Publishing.

Additional sources

- (1) National Biodiversity Network (NBN) terrestrial mammal records (chiroptera) for the 10km grid square.
- (2) Local bat records within a radius of 2.5km of the site. (North and East Lancashire Bat Groups)
- (3) MAGIC map Nature on the map Natural England / Defra
- (4) MARIO maps (Lancashire County Council maps and related information online)
- (5) Barn owls and Rural Planning Applications A Guide for Planners, Barn Owl Trust (2009)
- (6) Barn Owls on Site, A Guide for Developers and Planners, Natural England / Barn Owl Trust.
- (7) Lancashire County Council / Lancashire Wildlife Trust / Natural England BHS Partnership site register
- (8) National Planning Policy Framework (NPPF)
- (9) Bats, development and planning in England, Specialist support series (BCT)
- (10) RSPB Advisory Notes

Organisations to contact for further information on protected species

Bat Conservation Trust

5th Floor, Quadrant House, 250 Kennington Lane, London, SE11 5RD, 0845 1300 228

Natural England

Cheshire, Cumbria, Greater Manchester, Lancashire and Merseyside offices are located at:

Natural England, Electra Way, Crewe Business Park, Crewe, Cheshire, CW1 6GJ 0300 060 2922

Natural England. Juniper House, Murley Moss, Oxenholme Rd, Kendal, Cumbria, LA9 7RL 0300 060 2122

Natural England, 3rd Floor, Bridgewater House, Whitworth Street, Manchester, M1 6LT 0300 060 1062

Department for Environment, Food and Rural Affairs. https://www.gov.uk/defra

Page 11 of 11