

**Survey for Bats, Barn Owls & Breeding Birds,
114 Bowthorn Road, Bowthorn, Cleator Moor,
Cumbria, CA25 5JG.**



House viewed from the northwest

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Natural England Licence No.2019-42366

Report commissioned by: Rachel Lightfoot of PFK
on behalf of Saxon Building Services

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Introduction

This report has been produced to identify any protected species of animal in particular, bat, barn owl or any nesting bird from being disturbed in their roost, nest or feeding areas during the proposed work to be carried out on the property.

A1 Bats and their requirements

All British bats and their roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed under Annex IV of the Habitats Directive as in need of protection. NPPF (National Planning Policy Framework) acts as a guide to local authorities in relation to wildlife issues where developments may affect protected species and how conservation and any appropriate mitigation measures should be implemented. Furthermore where the presence of a European protected species (all British bats) may be affected by development then a licence to derogate from the habitats directive 2014 Regulations would be required from the Department of the Environment, Food and Rural Affairs (Defra). Licences are processed by Natural England, the statutory body for nature conservation.

A bat roost may be defined in several ways:

- A) Summer breeding roost
- B) Hibernation roost.
- C) Transitional or temporary roost.

As bats have a variety of roost sites that fulfil different requirements at different times of the year, and these sites are returned to regularly, then the roost is protected even if the bats are not present. Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance. Climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

The Bat Year, indicated below, shows work on trees and roofs is best done in spring or autumn (red) while work on roosting sites are best avoided from June-August and hibernation sites from December- February, this avoids periods when they are particularly vulnerable to disturbance.

January, February	Bats Hibernate, Individually or in small groups.
March, April, May	Occasionally wake. Bats hungry and active, torpid in bad weather. Move roost sites
June, July, August	Females in large maternity groups. Young born, suckle for 6 weeks. Mothers leave roost first, young later.
September, October, November	Mating takes place. Bats put on fat. Look for good wintering sites. Gradually become torpid for longer periods.
December	Hibernate

Table from the Bat Conservation Trust

Barn Owls are listed in Schedule 1 of the Wildlife and Countryside Act (1981) (as amended). Should barn owls be present in the barn then a licence would be required from Defra and licenced by Natural England to derogate from the Act, and mitigation for the disturbance would be required. NPPF acts as a guide to local authorities in relation to wildlife issues where developments may affect protected species, the presence of a protected species is a material consideration when a local planning authority is considering a development proposal which if carried out, would be likely to result in harm to the species or its habitat.

A3 Breeding Birds

All wild birds, their nests, eggs and young are protected under the Wildlife and Countryside Act 1961 (as amended) during the nesting season. Work must not begin if nesting birds are present on site and should occur outside of the bird nesting season (March through to August, although weather dependant). If building works are undertaken during the bird breeding season, a check for any active nest sites should be undertaken by a suitably qualified ecologist. If breeding birds are found during the survey, the nest should not be disturbed and works should be delayed until nesting is complete and any young birds have fledged.

B1 Background to activity

An application to Planning is being made to demolish the house and build three dwellings, a bat and breeding birds survey is being commissioned for the application.

Survey and site assessment

C1 Pre-existing information on species at the site

None.

C2 Status of species in the local/regional area

Species	Local Status	Habitat
Noctule <i>Nyctalus noctula</i>	Widespread but uncommon, mobile populations, breeding roosts recorded.	Tree dweller; predominantly in lowlands. Occupies woodpecker & rot holes. Seldom in buildings. Will utilise bat boxes. Feeds over deciduous woodland, parkland, pasture, water & forest edges.
Daubenton's bat <i>Myotis daubentonii</i>	Widespread; hibernacula & breeding roosts recorded	Bridges, tunnels, caves, mines, stone buildings & trees. Has been found hibernating underground at high altitude (550m). Feeds over rivers, canals & other water bodies. Will forage in riparian woodland.
Natterer's bat <i>Myotis nattereri</i>	Widespread; hibernacula & breeding roosts recorded. Less common than Daubenton's.	Similar to Daubenton's & can be found together; bridges, old buildings, barns, trees & underground sites. Feeds in woodland & parkland. Has recently been recorded in some upland areas, mainly using riparian habitats.
Whiskered bat <i>Myotis mystacinus</i>	Widespread but uncommon; breeding roosts & hibernacula recorded	Older, mainly stone buildings, old churches, trees & often in bat boxes. Feeds mainly in deciduous woodland.
Brandt's bat <i>Myotis brandtii</i>	Widespread but uncommon; breeding roosts & hibernacula recorded. 'Swarming' sites recorded.	Similar to Whiskered.
Brown Long-eared bat <i>Plecotus auritus</i>	Widespread; hibernacula & breeding roosts recorded	Old buildings, churches, barns (often with trees close by), underground sites & trees. Often found in bat boxes. Feeds in deciduous & coniferous woodland often within the canopy, around parkland trees, gardens, along hedgerows

Common Pipistrelle <i>Pipistrellus pipistrellus</i> (45kHz)	Widespread & common; breeding roosts recorded but species recognition only recently recorded.	Wide age range of buildings; favours modern structures, trees occasionally & bat boxes. Feeds over diverse habitat; rural & urban gardens, woodland, farmland or near water. Found hibernating behind wooden cladding on buildings, in soffits, behind fascia boarding & in gaps in wooden window frames. also hibernates in
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i> (55kHz)	Widespread and common; breeding roosts recorded but species recognition only recently recorded	As Common Pipistrelle. Favours riparian habitat & roosts in larger maternity colonies than the Common Pipistrelle. Found hibernating behind wooden cladding on buildings, in soffits, behind fascia boarding & in gaps in wooden window frames, also hibernates in
Nathusius Pipistrelle <i>Pipistrellus nathusii</i>	Rare. Three UK breeding sites known. A single bat detector record of a night roost in Cumbria and several foraging records.	Tree dweller, hollow trees, cracks, bat boxes & buildings. Sometimes shares nursery roost with Pipistrelle or Brandt's bats. Feeds mainly around riparian & woodland edge habitats.
Leisler's bat <i>Nyctalus leisleri</i>	Rare. Unconfirmed bat detector record in Cumbria. Present n adjacent counties (Yorkshire & Dumfries & Galloway)	Woodland bat, similar to Noctule but will roost in buildings. Feeds in open deciduous and coniferous woodland, over water bodies, parkland and around street lamps in suburban areas.
Alcathoe's bat <i>Myotis alcathoe</i>	Rare. Unconfirmed bat detector record for Cumbria. Present in adjacent county (Yorkshire)	Woodland bat, similar to Whiskered. Feeds in mature deciduous woodland with streams. Often uses dead/decaying trees for roosting.

(adapted from the Cumbrian Wildlife Trust BAP report)

The Cumbrian Mammals atlas compiled by Tullie House Museum which records reported sightings of bats (the majority being from populated areas) there are reports of Pipistrelle bats in this Tetrads NY0014 (4km square) with Daubenton, Noctule & Whiskered bats in adjoining tetrads and Brown Long Eared & Natterers bats within 6km.

Tyto alba (barn owl) is considered widespread but scarce. The Breeding Birds for Cumbria Atlas 2007-2012, indicates the species not breeding in this Tetrads NY0014, but are in half of the surrounding tetrads.

C3 Objective of Survey

The objective of survey was to ascertain whether there were any signs of use of the site by bats, barn owls and other breeding birds.

Signs of bats include droppings, insect remains, wear marks on beams, egress points smoothed by continuous use, or the presence of bats. Areas that have potential for bats to roost in, but no actual signs of bats or inaccessible areas to survey are also noted.

Signs of owls include :- pellets, faeces remains ('whitewash'), feathers, dead chicks, prey remains or the presence of owls.

Signs of breeding birds :- bird activity, nest material and eggs/chicks, feathers and faeces.

C4 Survey area

The survey area was the house internally & externally, surrounding environment was also observed.

C5 Habitat description

114 Bowthorn Road is at grid ref. NY013157, 1km to the northwest of Cleator Moor and 2km southwest of Frizington villages, Bowthorn beck is 200m to the east it runs south joining the River Ehan 3km to the south before flowing south into the Irish Sea at Sellafield, all are mainly tree lined. Boundaries are brick walls or fences and hedges and large trees and shrubs with the wooded steep slopes of the former railway cutting and iron works to the south. Longlands Lake on the River Ehan and Clints Quarry a Cumbria Wildlife site is 3km to the south.

Site description

The two storey house is to the south of Bowthorn Road, it and it's neighbour No.112 are the remnants of a larger terrace of properties. There are side lean-to garage and stores. Attic ceilings have already been removed, walls are rendered local stone & brick, main roof is slate & tile with tile ridge on battens, rafters & purlin, parged & felted below, lean-to's have corrugated asbestos cement/metal & slate roofs, floors are concrete & boards on joists.

C6 Field survey

C6.1 Methods:

The building was surveyed on 6th May 2020 with a high-powered torch and ladder. Areas that had potential for bats, owls or other birds but were inaccessible were noted.

C6.2 Timing- the emergence/activity survey was carried on the evening of the 18th May 2020.

C6.3 Weather conditions-

temperature was 14degC conditions were occasional drizzle with 100% cloud cover and a light west breeze, sunset was approx. 21:15.

C6.4 Personnel- survey was conducted by Steve Wake & Joel Emmerson using a Magenta Bat5 & Duet detectors.

C7 Results:-

There was no sign of any barn owls or other bird and no signs of bats roosting.

21:00 Survey commenced.

21:39 a Common Pipistrelle (CP) commuted NE along the wood edge to the S at 4m height, also at 21:43.

21:41 a Myotis bat (M) foraged SW & in rear garden heading NE at 5-3m height.

21:44 a CP commuted SW along wood edge to the S at 4m height.

21:55 a CP was heard foraging beside wood edge to the NE, also at 22:03.

22:14 a M was heard foraging on wood edge to the E.

22:30 survey ended.

CAPITALS refer to bat type and compass directions.

No bats flew close to or showed any interest in the building.

Potential

There is potential for bats to roost in areas difficult to access, such as :-

Under the ridge tiles, slates & flashings.

Behind roof timbers.

In openings in external walls & around door & window frames

There is no opportunity for Owls to roost and slight opportunities for other birds to nest..

C8 Interpretation and evaluation

C8.1 Presence/Absence:

There were no field signs to indicate the presence of barn owls, other nesting birds, there was no indication of a bat roost but there is potential for bats to roost in other areas indicated.

C8.2 Population size class assessment: Common Pipistrelle & a Myotis bat were seen in small numbers.

C8.3 Site status assessment:

In their present condition, the site has a low status in the ecology of the local owl, other bird and bat populations.

C9 Map of survey area

Site Plan Bat flight area **Myotis** & **Pipistrelle**.



Site Location **O**



Impact assessment

D1 Pre- and mid- activity impacts:

None for Barn Owls, slight for other birds and bats.

D2 Long-term impacts: none.

D3 Post activity interference impacts: none.

- D4 Other impacts:** External lighting to be low level and output to protect feeding areas.
- D5 Summary of impacts at the site level:** None, if there are no bats or nesting birds present at the time of works.
- D6 Summary of impacts in a wider context:** none.

Mitigation

- E1 Mitigation strategy:** None required for Barn Owls, smaller birds or bats.
- E2 Replacement roost site selection:** None required, but two bat boxes to be placed on the large trees on woodland edge, these can be used to re-house any bats found.
- E2.1 Existing species status:** Common Pipistrelle bats are common and widespread, Barn Owls and Myotis bats are less common but widespread.
- E2.2 Location, ownership and status:** 114 Bowthorn Road is at grid ref. NY013157, 1km to the northwest of Cleator Moor and 2km southwest of Frizington villages, Bowthorn beck is 200m to the east it runs south joining the River Ehan 3km to the south before flowing south into the Irish Sea at Sellafield, all are mainly tree lined. The property is owned by Saxon Building Services.
- E3 Habitat creation, restoration and/or enhancement:**
 Bat roosts can be created by:-
 Erecting a bat boxes with two on trees on the woodland edge, used to re-house any bats found during the works..
- Habitat can be enhanced by encouraging insect life and:
 Planting and maintaining broad-leafed native tree species.
 Planting night-flowering species such as honeysuckle.
 Planting native flowering species such as dog rose.
 External lighting to be ideally low level and output so as not to disturb bat feeding areas.
- E3.1 Terrestrial habitats:** Edge of Urban area with woodland to south.
- E4.1 Timing , effort, methods, capture/exclusion methods:** See Bat Year.
- E5 Post development safeguard.** None.
- E5.1 Habitat management and safeguard:** the site is located on the edge of an urban area with a wooded landscape to the south and no immediate threat to the surrounding habitat.
- E5.2 Population monitoring:** N/A.
- E5.3 Mechanism for ensuring delivery:** work to be carried out in 2020/21, any sign of bat activity in the building during works should be notified immediately!

F1 Summary of development and mitigation:

The building had no field signs of barn owls, or other birds, bat activity was observed around the property but none approached the building.

There is potential for bats to be present in the areas that were inaccessible to the survey. These were, under any gaps ridge tiles and roof junctions and under slates, behind roof timbers in wall gaps and within adjoining house roof. Extreme care must be taken when carrying out the demolition especially in these areas. Crevices should be checked with a torch prior to demolition to ensure no bats are killed.

Bats can be encouraged on site by allowing them access to the new building post-works, and by erecting bat boxes.

If at any point during the works bats are seen or suspected within the building, work must stop and further advice sought!

Provided work is carried out in accordance with this report then a European Protected Species Bat Licence should not be required.

Bat Conservation Trust. Bats and the Law BCT & RSPB joint publication.

Bat Conservation Trust 2007 Bat Surveys - Good Practice Guide.

Virtual Fauna of Lakeland. Tullie House Museum.

Natural England. Nature on the Map.

The Breeding Birds of Cumbria. A tetrad atlas 2007-2012.

Birds and Wildlife of Cumbria. Annual Reports.

Wildlife Trust for Cumbria. Biodiversity Action Plan.

Woodland Management for Bats. Forestry Commission England

Mitchell-Jones, A J & McLeish. 2004 Bat Workers Manual

Photographs

House viewed from the southwest



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House and garden with woodland edge to the south, looking east



Roof space of house looking east to wall of No.112



Ridge beam of house showing felt & parging

