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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

A2 Barn Owls and their requirements

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 convert the stables into a dwelling, 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 in 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 no reports of bats in this Tetrad NX9614 (4km square) with Brown Long Eared, Noctule & Pipistrelle bats in adjoining tetrads and Daubenton, Natterers & Whiskered bats within 6km. A survey carried out in May 2019 found active Brown Long Eared, Pipistrelle & Myotis bats 1.2km to the north along the roadway to Sandwith Newtown.

Tyto alba (barn owl) is considered widespread but scarce. The Breeding Birds for Cumbria Atlas 2007-2012, indicates the species breeding in Tetrad NX9614, a barn owl nest site is known to the north of Sandwith village.

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 stables internally & externally, surrounding buildings were also observed.

C5 Habitat description

The stables are at grid ref. NX962131 in the centre of Rottington, 5km to the south of Whitehaven and 2km north of St Bees village, Rottington Beck is 30m to the east it flows south into the Irish Sea at St. Bees, it is mainly tree lined. Boundaries are dry stone walls or fences and hedges and large trees and shrubs with the woodland of Abbey wood to the east. The RSPB sea cliff reserve of St Bees Head lies 2km to the west.

Site description

The stable sit on the east end of Calf Nook a converted barn south of Rottington Hall in the centre of Rottington, the roof is in the process of being replaced in blue slate on timber battens, rafters & purlin with timber fascia, barge boards & soffit, walls are cavity stonework with rubble fill, floors are concrete.

C6 Field survey

C6.1 Methods:

The building was surveyed on 5th March 2021 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 not carried out it being outside bats active season, maintenance work had already commenced replacing the roof.

C6.3 Weather conditions-

temperature was 7degC conditions were dry with a light northeast breeze & 50% cloud cover.

C6.4 Personnel- survey was conducted by Steve Wake.

C7 Results:-

There was no sign of any barn owls, other birds or bats in the stables.

Potential

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

In wall gaps around roof timbers and under eaves & barge boards.

In openings in walls (stone cavity walls with stone rubble infill)

A large converted barn immediately to the west has an owl window and some bat potential.

C8 Interpretation and evaluation

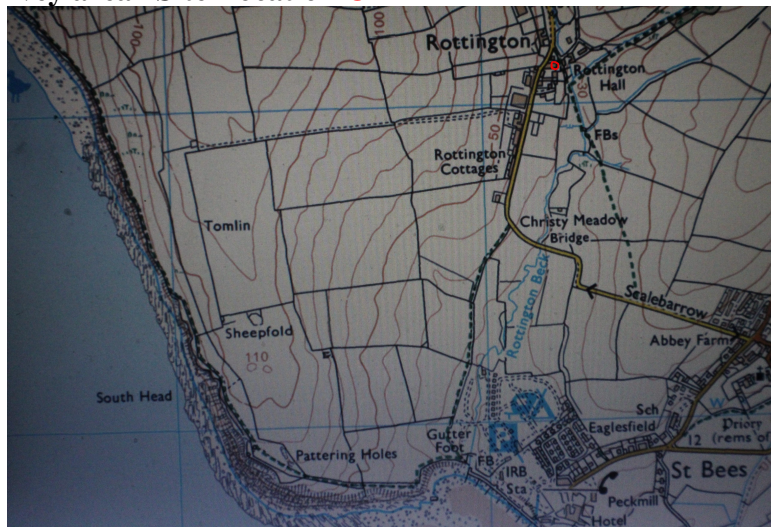
C8.1 Presence/Absence:

There were no field signs to indicate the presence of barn owls other birds or bats.

C8.2 Population size class assessment: None present.

C8.3 Site status assessment: In their present condition, the site has a low status in the ecology of owl, other bird and bat populations.

C9 Map of survey area Site Location O



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Site View

H Hall

CN Calf Nook converted barn

S Stable courtyard



Impact assessment

- D1 Pre- and mid- activity impacts:** None for Barn Owls, slight for other birds or bats.
- D2 Long-term impacts:** access to new fascia/eaves boxing & walls will improve local bat roosting.
- D3 Post activity interference impacts:** none likely
- D4 Other impacts:** External lighting to be low level & output..
- 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, potential bat roosts to be created in fascia eaves boxing with 15x50mm access gaps left for bats on each elevation .

E2 Replacement roost site selection: None required, potential bat roosts to be retained.

E2.1 Existing species status: Pipistrelle & Brown Long Eared bats are common and widespread, Barn Owls and Myotis bats are less common but widespread.

E2.2 Location, ownership and status: The stables are at grid ref. NX962131 in the centre of Rottington, 5km to the south of Whitehaven and 2km north of St Bees village, Rottington Beck is 30m to the east it flows south into the Irish Sea at St. Bees, it is mainly tree lined. The property is owned by Mr M Leech.

E3 Habitat creation, restoration and/or enhancement:

Bat roosts can be created by:-

Allowing 15x25mm bat access created to fascia /eaves boxing on each elevation.

Allowing access to stone wall cavities with sloping mortar tubes.

Habitat can be enhanced by encouraging insect life and:

Planting night-flowering species for insects

Planting flowering species for insects in courtyard

External lighting to be ideally low level and output so as not to disturb bat feeding areas.

E3.1 Terrestrial habitats: Rural farmland & domestic gardens.

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 in a small village within a rural agricultural landscape with 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 2021/22, any sign of bat activity in the building during works should be notified immediately!

F1 Summary of development and mitigation:

The interior of the building had no field signs of barn owls other birds or bats.

The survey took place outside the bat active period, the existing roof finish was being replaced and walls re-used & rebuilt.

There is potential for bats to be present in the areas that were inaccessible to the survey. These were in gaps around beam sockets & behind timber fascia & barge boards and in stone cavity wall gaps.

Extreme care must be taken when working on these areas. Crevices should be checked with a torch prior to pointing to ensure no bats are entombed, downward facing pvc tubes will allow any bats to escape, while mortar tubes will allow them escape and re-enter externally, where permitted.

Bats will be encouraged on site by allowing them access to the building post-works into new fascia & barge boards and stone cavity walls, an activity survey on completion will confirm where bat roosts are being used.

If birds begin to nest and then lay eggs, they should be allowed to raise their chicks to fledging, undisturbed by the building process.

Provided works are carried out in accordance with this report and directed by ecologist then an EPS (European Protected Species) licence should not be required.

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

References

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



View south east over inner courtyard showing fascia & bargeboard boxing with bat roost potential



View looking north west with Calf Nook barn behind



Timber wall sockets with possible roost cracks



North wing looking west with new roof on existing truss



View looking south with north elevation

