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**Bat Activity Survey for Bats, Barn Owls & Breeding Birds,  
Former Chapel & Pub, Main Street, Distington, Cumbria.**



View of former Pub & Chapel from the south, with **house sparrow**, **swallow** & **jackdaw** entries

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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.

#### **The Barn Owl Year**

Barn Owls have been recorded as breeding in every month although the usual breeding season is March to August. Ideally any work should be carried out between September and February, always ensure that a suitable roosting place is available close to site, establish this well before the commencement of work.

<b>January to March</b>	<b>Courtship and choosing nesting sites.</b> Mate for life, traditional nest sites can be occupied for 100 years, in wet areas (western Britain & uplands) nest in barns, dry areas in tree holes.
<b>April to June</b>	<b>Eggs laid and incubated.</b> 4-6 white eggs, no nest structure, laid at 2-3 day intervals, female incubates for 33 days, male may stand off in a separate roost.
<b>July to September</b>	<b>Feeding and fledging.</b> Food short tailed field voles, shrews, bank voles, wood mice & young rats, fledge at 50days, fly at 55 days, fully fledged 67days. (normally produce 2 pellets a day)
<b>October to December</b>	<b>Territory dispersal and winter survival.</b> Owlets driven out of birth territory, only 30% survive 1 <sup>st</sup> winter, some starve or perish in bad weather, 50% are road casualties.

### **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 properties and develop the site, 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
<b>Noctule</b> <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.
<b>Daubenton's bat</b> <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.
<b>Natterer's bat</b> <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.
<b>Whiskered bat</b> <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.
<b>Brandt's bat</b> <i>Myotis brandtii</i>	Widespread but uncommon; breeding roosts & hibernacula recorded. 'Swarming' sites recorded.	Similar to Whiskered.
<b>Brown Long-eared bat</b> <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
<b>Common Pipistrelle</b> <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
<b>Soprano Pipistrelle</b> <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
<b>Nathusius Pipistrelle</b> <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.

<b>Leisler's bat</b> <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.
<b>Alcathoe's bat</b> <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) no bats are reported in this Tetrad NY0022(4km square), while Pipistrelle bats are found in adjoining tetrads and Brown Long Eared, Daubenton & Natterer's bats within 6km. In 2018 a site 500m to the north east, Common & Soprano Pipistrelle and Myotis bats were found. Tyto alba (barn owl) is considered widespread but scarce. The Breeding Birds for Cumbria Atlas 2007-2012, indicates the species breeding in this Tetrad.

### 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 former pub and chapel both internally and the externally, other properties alongside were also observed.

### C5 Habitat description

The former pub and chapel are at Grid Ref. NY006235 in the centre of Distington village, on the corner of Main & Church Street, it is 4km to the south of Workington, it sits 2km west of the Solway Coast an Area of Outstanding National Beauty. Distington beck is 200m to the east it flows southwest into the Lowca Beck and the Irish Sea at Parton Bay, both have mainly deciduous tree margins. The former pub & chapel sit alongside domestic dwellings & gardens with stone & brick walls, hedge and fenced boundaries and interspersed mature trees, Moresby Moss lies 4km to the south.

### Site description

The former pub and chapel are attached, the roofs are blue slate with a stone & tiled ridge on battens, felt, rafters, purlin & truss, lean-to roofs are/were tiled & felted, walls are mortared local stone, block & brick part rendered and part plastered, floors are concrete or boards & joists. There are four lean-to extensions to the pub and a part demolished store in the rear yard.

### C6 Field survey

#### C6.1 Methods:

The building was surveyed on 16<sup>th</sup> June 2019, 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-** an emergence/activity survey was carried out on 17<sup>th</sup> June 2019.

**C6.3 Weather conditions-** temperature was 13degC with 30% cloud cover, dry with a light southwest breeze, sunset was approx. 21:50.

**C6.4 Personnel-** survey was conducted by Steve Wake & Rob Mansbridge using Magenta Bat5 and Duet detectors.

## **C7 Results:-**

No signs of a Barn Owl roosting were found, no sign of bats were found within the building, a swallow nest was observed & house sparrow activity, jackdaw nesting activity was bringing down the ceiling in the former chapel making it dangerous. Most ceilings of the former pub had been removed the central loft space was still intact.

21:25 Survey Commenced.

23:00 End of survey.

23:05 a Common Pipistrelle was observed foraging along the tree lined former railway cutting to the north west.

The interior of the buildings were monitored throughout the survey, no bat activity was observed.

## **Potential**

No signs of bats were found inside or emerging from the buildings, there is potential for them to roost:-

Under the slates & flashings if access gaps are present.

In joints or between gaps in roof timbers.

In gaps in walls and lintels or around window/door openings .

In roof spaces where access was not available.

There is opportunity or smaller birds to nest around the buildings.

## **C8 Interpretation and evaluation**

### **C8.1 Presence/Absence:**

There were no signs to indicate the presence of barn owls roosting. A nest built by barn swallows was evident and evidence of house sparrow and jackdaw activity. No evidence of bats were seen inside or outside the buildings, no large bat roost was evident.

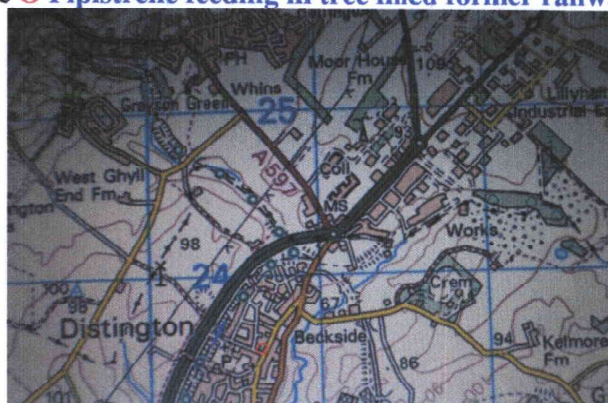
**C8.2 Population size class assessment:** Small numbers of individual bats are possible, with no sign of a Barn Owl, a single swallow nest, with house sparrow & jackdaw activity.

### **C8.3 Site status assessment:**

In their present condition the buildings have a low status for local bat & barn owl populations & a medium status for other birds .

## **C9 Map of survey area**

**Location Plan Site O Pipistrelle feeding in tree lined former railway cutting**



**Bat activity. A Former Pub. B Former Chapel**



**Impact assessment**

- D1 Pre- and mid- activity impacts:** Swallows & House Sparrow chicks should be allowed fledge and leave the nest before demolition.
- D2 Long-term impacts:** None anticipated.
- D3 Post activity interference impacts:** None anticipated
- D4 Other impacts:** New external lighting should be low level and output to protect possible bat feeding areas, especially to the darker areas west of the main street.
- 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:** Two Bat cavity wall roosts to be placed on the west walls of new buildings, area is darker and will encourage bat use.
- E2 Replacement roost site selection:** Not anticipated.
- E2.1 Existing species status:** Locally Pipistrelle bats are common and widespread, Barn Owls & Myotis bats are widespread but scarce.
- E2.2 Location, ownership and status:** The former pub and chapel are at Grid Ref. NY006235 in the centre of Distington village, on the corner of Main & Church Street, it is 4km to the south of Workington, it sits 2km west of the Solway Coast an Area of Outstanding National Beauty. Distington beck is 200m to the east it flows southwest into the Lowca Beck and Irish Sea at Parton Bay, both have mainly deciduous tree margins. The properties are owned by Mr A Modinsky.
- E3 Habitat creation, restoration and/or enhancement:**  
Bat roosts can be created by:-  
Constructing bat wall roosts on new buildings.  
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.  
Any external lighting to be low level and output so as to encourage bat feeding areas.

**E3.1 Terrestrial habitats:** Future dwellings & gardens.

**E4.1 Timing , effort, methods, capture/exclusion methods:** See Bat year for demolition and roof work.

**E5 Post development safeguard.** None.

**E5.1 Habitat management and safeguard:** the site is located in a urban area with no increased threat to the surrounding habitat.

**E5.2 Population monitoring:** N/A

**E5.3 Mechanism for ensuring delivery:** work to be carried out in 2019/20, any sign of bat or bird activity in the building during works should be notified immediately!

**F1 Summary of development and mitigation:**

The buildings had no signs of a barn owl roosting, and no evidence of a large bat roost was found, swallow, house sparrow & jackdaw activity was seen, no bats showed any interest in the buildings during the emergence survey.

There is potential for bats to be present in the areas that were inaccessible to the survey. These were, under any gaps in roof junctions and under slates and flashings and behind roof beams, in wall gaps & in the chapel loft space.

Extreme care must be taken when working on these areas and on the roof. Crevices should be checked with a torch prior to demolition to ensure no bats or birds are killed.

Two bat wall roosts will be placed new development, the ecologist should be informed if any bats found during the works.

Bats can be encouraged on site by allowing them access to the new building, and by erecting bat boxes. If at any point during the works bats or barn owls or other nesting birds are seen or suspected within the building, work must stop and further advice sought.

A European Protective Species Licence will not be required provided all requirements of this report are adhered to.

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The Barn Owl Trust



Former chapel & pub from the southwest with swallow entries



Interior view of roof looking south east.

