



BAT SURVEY AT -HYDRO LODGE SAWLEY ROAD

GRINDLETON

DATE AND TIME OF VISIT
28th June 2019 9.30 pm - Emergence survey
11th July 2019 10.00 am - Scoping survey

WEATHER CONDITIONS

Sunny 15 mph easterly wind 20 C Overcast, light breeze 17 C

REFERENCE NO. 5834

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UK BAT ECOLOGY

- It is thought that there are 18 native species of bats in the UK, most of which have seen declines in numbers over the last century.
- As insect feeding species the preferred habitats include woodland, grassland, agricultural land, wetland and rivers which provide good foraging potential.
- Bats typically roost close to foraging sites and use linear features such as hedgerows, tree lines and
 rivers to navigate. It is important to maintain these features, as removal is thought to contribute to the
 decline in numbers.
- Bats will roost in a wide variety of sites and built structures, including underground structures (caves, bridges) and trees. Types of roost and times of year used.

Hibernacula - November to March
Temporary roosts - March to April and August to October
Maternity roosts - May to August
Summer roosts - Used by Males and immature females
Mating roosts - September and October

Disturbance to a Hibernacula or Maternity roost is the most damaging for any local bat population.
 The same <u>Maternity roosts</u> are typically used year after year commencing between May to early June and are colonised with mature females and their young, any disturbance can lead to abandonment of the young and loss of the roost will have a significant impact on the bat population.
 <u>Hibernacula roosts</u> typically consist of underground sites caves, cellars etc or buildings which maintain cool and fairly constant temperatures. Bats hibernate (deep sleep , torpor) to survive the winter months when insects are in short supply so they hibernate to conserve energy and survive on their fat stores.
 Any disturbance which wakes the bats can result in unnecessary use of the energy reserves and thus reduces the chance of survival over the winter months.

THIS SURVEY HAS BEEN CARRIED OUT BY: LYNNE RUSHWORTH WHO HAS COMPLETED THE BAT CONSERVATION TRUST'S 'BATS AND BAT SURVEYS' FOUNDATION COURSE FOR CONSULTANTS, AND 'PLANNING AND PREPARATION OF BAT SURVEYS' COURSE

EMERGENCE SURVEYS ARE CARRIED OUT WITH A SECOND SURVEYOR WITH ELEVEN YEARS EXPERIENCE OF ASSISTING ON EMERGENCE SURVEYS

THE BRIEF

In conjunction with the submission of an application for planning approval, this survey was commissioned to identify if bats are currently present in the building, to assess if it has been used in the past or if there is any future use potential of the building.

All British bats and their roosts are legally protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2010, the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006

BAT LEGISLATION - Summary of offences under the law:

Bats and the Law Wildlife and Countryside Act 1981,

Principally those relating to powers and penalties, have been amended by the Countryside and Rights of Way Act 2000 (CRoW Act). The CRoW Act only applies to England and Wales.

Section 9(1) It is an offence for any person to intentionally kill, injure or take any wild bat.

Section 9(4)(a) It is an offence to intentionally or recklessly* damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. (*Added by the CRoW Act in England and Wales only) This is taken to mean all bat roosts whether bats are present or not.

Section 9(4)(b) It is an offence to intentionally or recklessly* disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection. (*Added by the CRoW Act in England and Wales only)

The Conservation (Natural Habitats, &c.) Regulations 1994

Section 39(1)

It is an offence to

- (a) Deliberately to capture or kill any bat
- (b) Deliberately to disturb any bat
- (c) Damage or destroy a breeding site or resting place of any bat. The difference between this legislation and the Wildlife and Countryside Act 1981 is the use of the word 'deliberately' rather than 'intentionally'. Also disturbance of bats can be anywhere, not just at a roost. Damage or destruction of a bat roost does not require the offence to be intentional or deliberate.

Countryside and Rights of Way (CRoW) Act (2000) Part III Nature conservation and wildlife protection 74 Conservation of biological diversity

(1) It is the duty of (a) any Minister of the Crown (within the meaning of the Ministers of the [1975 c. 26.] Crown Act 1975), (b) any Government department, and (c) the National Assembly for Wales, in carrying out his or its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biological diversity in accordance with the Convention.

The Natural Environment and Rural Communities Act (2006) PART 3, (40): Duty to conserve biodiversity

- (1) Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- (2) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.

If it is discovered that development may impact upon bat roosts (thus leading to an offence being committed) a mitigation plan should be devised and a Bat Mitigation Licence applied for from the relevant government department (i.e. Natural England). Gaining a licence will depend on many variables, such as the bat species present, roost type, roost size and its local/regional/national importance

LIMITATIONS OF REPORT

NOTE: The absence of bats is near impossible to prove. The bats' high mobility means it is virtually impossible to rule out bats using any type of structure for roosting or habitat for foraging or on a flight path.

- External walls and internal rooms inspected from ground level.
- Roof spaces, attics and lofts will only be inspected if safe access is possible.
- Winter surveys will provide limited results. However internal inspection should determine if bats have used the building in the previous year.
- Any building whose structure is considered dangerous can only be inspected from a safe distance.
 Crevice- roosting bats ie. Pipistrelles, some Myotis species and Brown long eared bats can remain unseen even after close inspection in small spaces ie. cavity walls, roof structures soffits or cladding.
- Bat roosting evidence ie. Droppings or insect remains can be removed by weather conditions or sweeping/ cleaning internally so this lack of evidence cannot always prove undoubtedly that bats are absent.

EQUIPMENT USED ON SURVEY

- 'MAGENTA 5' BAT DETECTOR
- BINOCULARS
- HIGH POWERED TORCH
- LADDERS FOR HIGH LEVEL INSPECTION
- CAMERA
- ENDOSCOPE

PROPOSED DEVELOPMENT

Demolition of existing two storey side extension and single storey garage with roof terrace over, and removal of conservatory. Prior to constructing new two storey side extension.

Impact of development in relation to potential bat habitat:-

The main roof of the house will not be affected. The extensions, conservatory and greenhouse will be demolished, potentially removing bat habitat.



TYPE OF BUILDING

The building is detached dwelling with a conservatory and double garage to the rear. The front elevation is 2 storey and the rear elevation is 3 storey. The original part of the house dates from 1910 and was built as a lodge for a hotel which was on the site where Bowland school now stands. The house has been extended on the north east elevation and a large conservatory to the south east elevation. A further detached glazed (greenhouse type) building is located adjacent to the north east elevation.



Rear south east elevation





North east gable extension



elevation

Original house. South west and north west

METHODOLOGY

The survey methodology follows the guidelines published in the Bat Conservation Trust (BCT- Bat surveys, good practice guidelines 2nd Edition)

Scoping survey; (Non invasive) carried out by one surveyor to assess if the site has any potential value for protected species and determine if bats are currently or have historically used the building.

Emergence survey; are conducted 20 minutes before sunset and up to two hours after. Emergence surveys are conducted between the months of April through to end of September (weather dependant).

October to April (winter months) bats are inactive during the hibernation period.

All surveyors used have many years experience in conducting bat emergence surveys

CONSTRAINTS

Building accessible for scoping survey and emergence survey carried out during the activity period.

AIMS OF THE SURVEY

To ensure the proposed development will not affect any protected species

The survey will, Identify past, current or potential use of the site by protected species.

Assess any impact of the proposed development on these species

Outline a mitigation scheme for any species affected by the development (if required)

LOCATION SD: 767460 99 m elevation

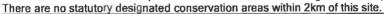
The House is located on Sawley road at the junction of Bowland high school access road, approx half way between Sawley and Grindleton remote from both the settlement areas.



FORAGING POTENTIAL IN THE LOCATION

The front elevation of the house (north west) is located directly on the access road to Bowland school. The mature planted garden is adjacent to the south east elevation, mature trees line the west and north east boundary of the garden and extend in a north easterly direction along the access road towards the school. A small group of mature trees surround a neighbouring house 45 m to west. The greater locality extends to large acreage pastureland bound by hedgerow.

The nearest area of standing water is 960m to the north east and the river Ribble is 440m to the south east. The location is considered to provide a reasonable level of forage and roost potential.





WALL CONSTRUCTION

The extension walls are pebbledash render with stone quoins, the south west and south east elevations of the main house are random natural stone.





BAT ACCESS POINTS IN WALLS
The walls have no access points all are in excellent condition with no cracks or crevices.

ROOF CONSTRUCTION

Rear south east elevation showing main roof, conservatory and extension roof. doors.





Paved roof and small mono pitch over garage and



Mono pitch over garage doors



The extension roof is a lean to pitch with a full and half hip, blue slate finish. The timber fascia's are fixed flush to

The main roof is pitched with an eaves and gable overhang. The roof finish is tile with a small roof window.



Paved flat roof over the garage.



Polycarbonate Conservatory roof

BAT ACCESS POINTS IN ROOF
The tiled and slated roofs are in good condition with no loose or slipped slates/tiles all are tight fitting.



The exposed rafters to the

eaves overhang are very well pointed with no gaps or crevices. All lead flashings are in good condition and tight fitting.

The conservatory and greenhouse room are well sealed with no access points.

The extension roof has flush timber fascia's which are tight fitting and do not have any gaps behind. The blue slate is tight fitting and in reasonable condition with no access points.



ROOF SPACE

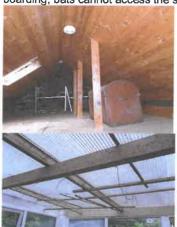
Extension roof void, timber rafters and hips with felt and quilt insulation between. All timbers in excellent condition as is the felt. The quilt is clean with no dropping or insect remain evidence. The space does not provide any high value roost habitat, bats are not present.





The main roof void has a boarded floor and rafters which are lined to the underside with t and g boarding. The space is light due to a roof window.

The floor is clean with no evidence of droppings or feeding remains. There are no cracks or crevices in the boarding, bats cannot access the space





There is not an enclosed roof space in the greenhouse. The timber rafters are in reasonable condition without any crevices or cracks. The roof does not provide any potential habitat for bats.



The paved garage roof is lined on the underside with plasterboard which is very well sealed, if there is a void between the lining and structure, there are no access points into it.

BAT SIGNS, EXTERNAL SEEN DROPPINGS MAGENTA BAT5 DETECTOR RESULT

Yes	No
Х	
	Х
Х	

The external features of the property and the roofs were the main focus of the scoping survey. The lead flashings, eaves overhang, ridge slates, walls and any sills were visually examined for droppings, staining, grease marks or feeding remains. No evidence was found.

The evening emergence survey commenced at 9.45pm and continued until it was too dark to see, approx. 10.45pm.

The weather conditions were ideal for bat foraging activity.

Two surveyors located at the front and rear of the property with detectors covering all elevations. During the survey the detectors picked up some activity in the trees some time before the first siting of a single bat on the edge of the tree line at 10.05pm the activity continued in the tree line (indicated by the red line below). There was no emergence from the house.



BAT SIGNS, INTERNAL

SIGHTED **DROPPINGS DETECTOR RESULTS** STAINING/GREASE MARKS SUSPECT SUMMER ROOST SUSPECT WINTER HIBERNACULA INSECT OR MOTH FEEDING EVIDENCE

Yes	No
	X
	X
	X
	X
	X
	X
	X

There were no signs of bats being present currently or historically in the building.

The lack of evidence and potential access points or crevices at this property together with the negative results of the emergence survey indicate that the demolition and extension will not impact adversely on any local bat population, nor is it likely that any bats will be uncovered or disturbed during the work. A mitigation scheme is not required.

It is however a good opportunity to enhance the roost habitat in the area by incorporating the following measures in the new extension roof structure.

METHOD 2: PROVIDE 2 No RIDGE ACCESS TILES ALONG THE ROOF RIDGE, SPACE RIOGE ACCESS SLATES EVENLY ALONG LENGTH OF ROOF.

RECOMMENDED BY NATURAL ENGLAND: either reseed ridge tiles programs or leaving access gaps under tiles to enable bets to arrier the ridge tiles:

Pipietrellies and long-sered bets will enter roofs vis narrow gaps under the ridge tiles, additional benefits are provided when small gaps are provided brough the roofing felt or sarring membrane thus enabling bits to enther any retained roof vidids.

Ridge access tile Detail 4A (below)

RIPGE TILE ACCESS DETAIL 4A OPTION BY OPTION A. ROOF RIDGE SET ON TOP OF GENERAL RIPGE TILES TO FORM BAT ACCESS GAP. MAINTAIN ZOMM MORTAR ENGLISH NATURE idijānija A. ur jeddinas cilijojul cijoj cili sa alpokuladā SLA uprumaspiras. P.a disāli cilik piecess Album, (Author Lines, Chambelon Hoga I bundā ("AP (116). 18) plijoja 188601. Jude (1907. 1986).

All contractors should be made aware of the heir responsibilities to protected species and work should proceed with due diligence and in the unlikely event that any bats are discovered work must be stopped immediately and a licensed bat worker must be contacted for advice on how to proceed

RISK ASSESSMENT

(The level of probability that bats are using the property is calculated on the evidence found.)

Low

NOTES:

The precautions below should be incorporated in the unlikely event that any bats are found to be present in the intervening time between surveys and work commencing on site. When bats are found to be present in a building:

- A NATURAL ENGLAND licence will be required before any building work is undertaken.
- Pointing work should not be undertaken during winter months as hibernating bats might be entombed.
- Work to roof structure should not be undertaken between late May, June, July and August.
- Small areas of wall could be left un -pointed to encourage potential roosting sites.
- Care must be taken when removing existing roof timbers, and any new timbers or treatment of
 existing timbers must be carried out using chemicals listed as safe for bat roosts.
- NOTE: The onus lies with the applicant to satisfy themselves that no offence will be committed if the development goes ahead.

If bats are ever found during building work, stop work immediately and contact the Bat Conservation Trust or Natural England.

The Bat Conservation Trust 15 Cloisters House 8 Battersea Park Road London SW8 4BG 0845 1300 228 Natural England Cheshire-Lancashire Team Cheshire-Lancashire Team Pier House Wallgate Wigan WN3 4AL

LIVING WITH BATS

- Bats are not rodents, and will not nibble or gnaw at wood, wires or insulation.
- Bats do not build nests and therefore do not bring bedding material into the roost; neither do
 they bring their insect prey into the roost.
- All bats in the UK eat insects, so they are a great form of natural pest control!
- Bat droppings in the UK are dry and crumble away to dust. As a result, there are no known health risks associated with them.
- Female bats usually have only one baby a year, so properties do not become 'infested'.
- Most bats are seasonal visitors to buildings they are unlikely to live in the same building all
 year round, although they are loyal to their roosts and so usually return to the same roosts year
 after year.
- Bats are clean and sociable animals and spend many hours grooming themselves,