Bat Survey Report and Method Statement
European Protected Species (Bats)

Reasonable Avoidance and Mitigation Measures

Gill Syke Barn,
Bell Busk,
BD23 4DU

03.08.2022

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Executive summary

In July 2022 Batworker consultancy was commissioned to undertake a preliminary bat roost assessment of Gill Syke Barn, Bell Busk, BD23 4DU to assess the potential for impact on protected species.

A daytime survey was carried out on 12th July 2022 in order to support plans to develop the building for residential use including re-roofing works. This was followed by static bat detector monitoring for 9 nights which recorded common pipistrelle and natterer's bat at times consistent with bats emerging from and returning to roost.

A dusk activity survey on 16th July recorded natterer'sbats emerging from a roost within the barn. Soprano and common pipistrelle bats were observed flying into the barn from a nearby roost to forage before dispersing into the wider landscape.

A dusk survey on 1st August recorded Natterer's bats emerging from a roost within the barn and repeatedly light sampling prior to emergence.

Surveys carried out on site have found evidence to suggest use of the barn by a small maternity roost of natterer's bats.

"The presence of a significant bat roost (invariably a maternity roost) can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others". - Mitchell-Jones, A (2004) Bat mitigation guidelines. English Nature

The roost consists of a small number of a common species and can be characterised at of medium conservation value. Survey effort is considered appropriate to characterise the roost potential of buildings and design suitable mitigation for works.

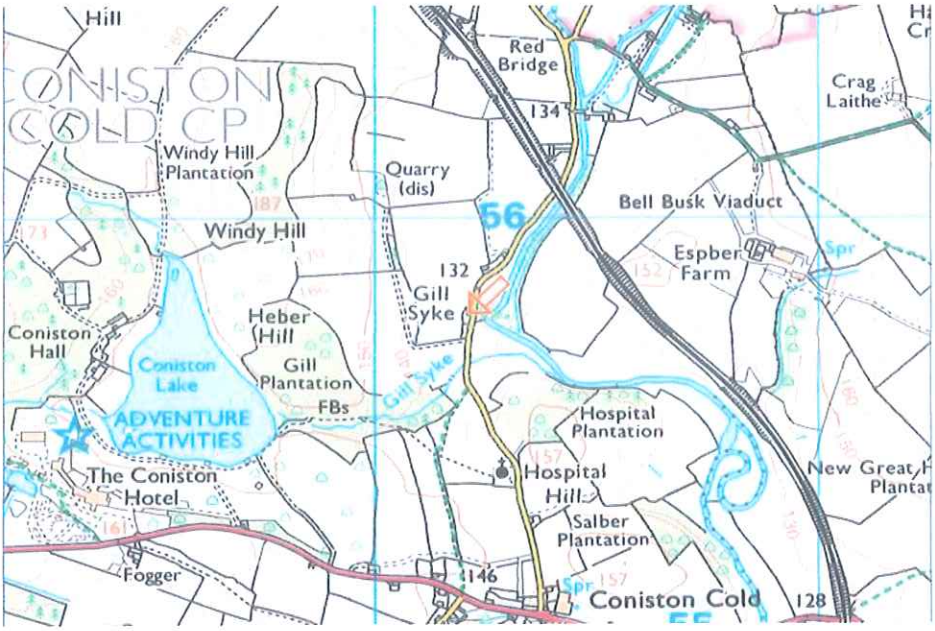
It is considered that a precautionary approach to development with suitable reasonable avoidance measures with mitigation in the form of timing of works, compensatory bat loft and bat boxes would be an appropriate approach to roost compensation commensurate with that expected by Natural England for the purposes of licencing should it be necessary.

Compensatory bat boxes (Two Greenwood Eco Habitats two crevice boxes) will be placed on trees on site prior to work commencing and construction of a bat loft within the development will form suitable commensurate mitigation for any necessary EPS licence application.

The overall purpose of the Method Statement is to ensure that bats and their roosts are fully protected to ensure the 'favourable conservation status of the species'.

This method statement is designed to minimise or remove any potential disturbance to bats. By following the Reasonable Avoidance Measures and mitigation included in this document the work can take place, ensuring the Continued Ecological Functionality of the site.

Site Location
Gill Syke Barn, Bell Busk, BD23 4DU
NGR: SD9020055747



Site Layout

The property is located in a rural position with surrounding habitat dominated by a mosaic of semi improved and improved grassland, semi natural deciduous woodland, scrub, and scattered riparian semi natural deciduous tree cover associated with the River Aire approximately 200m to the east of the barn.

Connectivity to the wider landscape is considered to be moderate. Foraging potential for bats can be considered to be moderate.

Survey summary and site assessment

Pre-existing information on the bat species present at this site.

Bat record data: records were obtained from Magic.gov.uk. A search of the MAGIC (www.magic.gov.uk) website revealed no bat EPS licence applications within a 1km radius.

The surveyor holds records of a brown long eared bat and Brandt's bat swarming and hibernation site within 1km of the site.

From personal experience of surveying for and researching bats in Lancashire, Yorkshire and Cumbria, the following species were considered.

Common Pipistrelle – known to roost on sites where suitable foraging habitat is available.

Soprano Pipistrelle – known to roost on sites where suitable foraging habitat is available.

Whiskered/Brandt's – species often found roosting in buildings close to woodland.

Natterer's – a typical upland bat with foraging bats being recorded high on heather moorland. Often roosting in barns.

Daubenton's – a species commonly associated with aquatic habitats.

Long Eared bat – a woodland species which has been recorded foraging over in bye meadows and rough grassland sites. Often roosting in barns.

Survey Personnel.

Personnel on surveys included: David Anderson, an experienced ecologist and bat researcher with 25 years experience of fieldwork and bat ecology, a founder member of the East Lancashire Bat Group and 'Batworker.com', formerly a Natural History Curator and manager of the East Lancashire Biological Records Centre. (Natural England licence No:2015-15784-CLS-CLS, Conservation, Science and Education).

Survey Summary

Survey	Date	Timings
Visual	12.07.2022	1 Hour
Static detector monitoring	12.07 – 22.07.2022	Sunset to sunrise
Emergence Survey	16.07.2022	3 Hours
Emergence Survey	01.08.2022	3 Hours

Survey constraints

Access to all areas of the exterior of the building was possible and good visual inspection at ground level was possible. 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. In many situations it is not possible to inspect every locations where bats are present therefore it should be assumed that an absence of bat evidence does not necessarily equate to evidence that bats are absent. Some species such as pipistrelle sp bats are opportunistic and it is possible for individuals to be found during works, even where surveys have had negative results during preliminary and activity surveys.

Visual Inspection - Bats

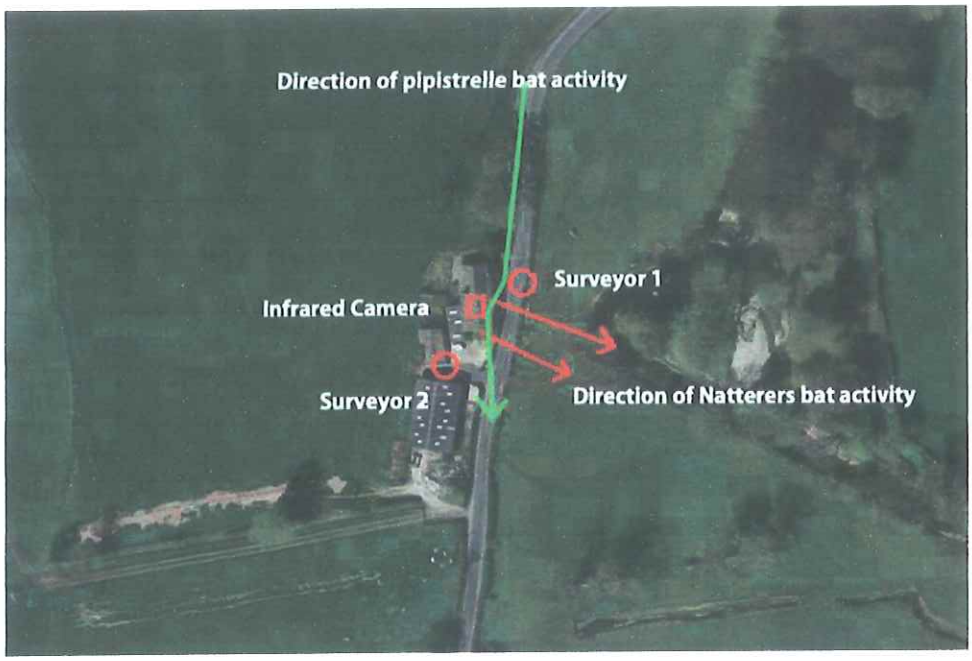
The building was surveyed with no physical evidence of bats being recorded during inspections. The barn had multiple undisturbed horizontal surfaces, however no evidence of bats in the form of droppings, feeding remains or urine splashing was observed.

Static Bat Detector Monitoring
12th July to 22nd July 2022

An Anabat Express static bat detector, programmed to record bat activity from 30 minutes before sunset to 30 minutes after sunrise was placed within the barn for a 15 night period. Bat activity was subsequently analysed post survey using AnalookW to determine timings of activity and identify species recorded.

During the survey period continuous bat activity was recorded, with social calling recorded at dusk and dawn. Species included soprano pipistrelle, common pipistrelle and natterer's bats at times consistent with bats emerging from and returning to roost.

Emergence Survey - 16th July 2022
Start:21.00 Sunrise: 21.30 Finish:23.00 **Start temp 16.7c / Finish temp 15.4c**
60% Clear Sky / Wind Bft 0



Surveyors equipped with Anabat Walkabout and Anabat Scout full spectrum detectors aided with Canon XA50 and XA25 infrared video cameras with infrared flood and spot lights were positioned around the building to monitor for emerging bats.

Recorded bat calls were analysed post survey using Anabat Insight software. Video footage was reviewed on a 42" 4K monitor at realtime post survey.

Approximately 17 Natterer's bats were recorded and observed flying within the barn from 20 minutes post sunset. Soprano and common pipistrelle bats were observed flying from the north east of the site and entering to the barn to forage before dispersing into the wider landscape.

Emergence Survey - 1st August 2022
Start:20.50 Sunset: 21.05 Finish:22.35 Start temp 19.8c / Finish temp 18.7c
100% Cloud Cover/ Intermittent light rain/ Wind Bft 0

Surveyors equipped with Anabat Walkabout and Anabat Scout full spectrum detectors aided with Canon XA50 and XA25 infrared video cameras with infrared flood and spot lights were positioned around the building to monitor for emerging bats.

Recorded bat calls were analysed post survey using Anabat Insight software. Video footage was reviewed on a 42" 4K monitor at realtime post survey.

14 Natterer's bats were observed flying within the barn before emerging through open windows to head east towards the River Aire.

Interpretation of results

Dusk activity surveys recorded Natterer's bats emerging from roosts within the barn. Soprano and Common pipistrelle were observed flying into the barn from a nearby roost to forage before dispersing into the wider landscape.

Surveys carried out on site have found evidence to suggest use of the barn by a small maternity roost of Natterer's bats.

"The presence of a significant bat roost (invariably a maternity roost) can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others". - Mitchell-Jones, A (2004) Bat mitigation guidelines. English Nature

The roost consists of a small number of a common species and can be characterised at of medium conservation value. Survey effort is considered appropriate to characterise the roost potential of buildings and design suitable mitigation for works.

It is considered that a precautionary approach to development with suitable reasonable avoidance measures with mitigation in the form of timing of works, compensatory bat loft and bat boxes would be an appropriate approach to roost compensation commensurate with that expected by Natural England for the purposes of licencing should it be necessary.

Impact Assessment

Short-term impacts – disturbance Low risk:

Roof stripping where necessary will be undertaken by hand and under supervision following a precautionary further emergence survey work carried out between May and September and installation of compensatory roost boxes.

Long-term impacts - Roost loss: No impact on a local bat population.

Long-term impacts - Fragmentation and isolation:

Minimal risk, the impact of the proposed development on local bat species will be insignificant.

Predicted scale of impact

No loss of roosting sites of a common and relatively widespread species.

Method Statement and Reasonable Avoidance Measures

The overall purpose of the Method Statement is to ensure that bats and their roosts are fully protected to ensure the 'favourable conservation status of the species'. The Method statement is designed to minimise or remove any potential disturbance to roosting bats.

A Method Statement is normally required by the local planning authority to ensure that procedures are in place before the development works are carried out and will form part of the EPS Licence application where necessary.

No work should commence without contractors receiving a toolbox talk.

All contractors will be made aware of the legal protection afforded all species of bats in the UK and procedures will be in place to mitigate for the potential impact on bats before any building work is undertaken.

Compensatory bat boxes (Two Greenwood Eco Habitats two crevice box) will be placed on trees on site prior to work commencing and will be used to house any bats found during works.

A bat loft will be created within the northern gable to a height of not less that 2m in height, and measuring 5m in width. An access hatch will allow long term monitoring.

Position of compensatory bat loft.

Roofing Membranes

In keeping with Natural England guidance Type 1F roofing felt should be used where presence of bats is confirmed.

Timing of works – No work will take place until a Natural England EPS Development licence has been gained.

Roof work must take place between October 1st and March 31st, unless an EPS licence has been applied for and issued.

Work to affected roof areas will take place under supervision of the bat worker.

Removal of roof slates will be carried out by hand and under supervision where necessary.

Enhancement Roosts

Compensatory bat boxes (Two Greenwood Eco Habitats two crevice boxes) will be kept on trees on site post development.

A copy of the Method Statement should be available to site / project managers in advance of any works being carried out.

The existence of a Method Statement helps to establish a defence against prosecution for intentional (WCA), deliberate (Habitat Regulations.) or reckless (WCA) disturbance of bats or damage to roosts. All work should take place under the supervision of the ecologist.

Accidental exposure of bats - EMERGENCY ADVICE

In the unlikely event of bats or their roosts being exposed or vulnerable to harm, suspend further work in that area. Cover the exposed bats to reduce any further risk of harm and seek advice immediately. Call Dave Anderson (Batworker) on 07894 338290 (mobile); a site visit will be arranged to assess the situation and recover any bats / safely remove them from site.