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

**Reasonable Avoidance and Mitigation Measures**

**Barn at Higher Lickhurst Farm,**
**Bowland With Leagram,**
**PR3 2QT**

**30.09.2022**

**Report prepared by:**
**Dave Anderson**
**Batworker.com**
**dave@batworker.com**
**07894 338290**

**Executive summary**

In December 2021 Batworker consultancy was commissioned to undertake a survey of a barn at Higher Lickhurst Farm, Bowland With Leagram, PR3 2QT to assess the potential for use by bats and breeding birds.

A daytime survey was carried out on 16th December 2021 to support residential development plans.

Evidence was recorded to suggest bats were present within the building with scattered droppings and feeding remains observed in the southern hay loft.

The building, when assessed in combination with location and surrounding habitat, had been observed to have a moderate level of bat roost potential.

Static bat detector monitoring was carried out from 10th May to 25th May 2022. Low levels of common pipistrelle, soprano pipistrelle and Natterer's bat foraging activity were recorded throughout the survey period.

One emergence survey was carried out on 25th May 2022. No bats were observed emerging from or returning to roost within the building, however the barn was observed to have foraging common pipistrelle, soprano pipistrelle and Natterer's bats entering the barn before dispersing into the wider landscape.

A dawn survey carried out on 22nd June 2022 confirmed no bats returning to roost within the barn.

Survey effort is considered appropriate to characterise the roost potential of building and that the presence of a significant or low conservation value bat roost is unlikely on site.

*"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.

It is also considered unlikely that low conservation value roosts are present within the building, however reasonable avoidance measures are recommended within this report.

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**
Higher Lickhurst Farm, Bowland With Leagram,  PR3 2QT
NGR: SD6370045913


**Surrounding Habitat**

The property is located in an exposed rural position with surrounding habitat a mosaic of improved, semi improved, and rough in-bye grassland with hedgerow present on field boundaries, with riparian semi natural deciduous clough woodland cover present to the north.

Connectivity to the wider landscape is good. Bat foraging potential is moderate.

**Survey summary and site assessment**

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

A search of the MAGIC website revealed no EPS licence applications within a 1km radius.

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** |
|---|---|---|
| Preliminary Roost Assessment | 16.12.2021 | 1 Hour |
| Static Bat Detector Monitoring | 10.05 – 25.05.2022 | Sunset to Sunrise |
| Emergence survey | 25.05.2022 | 3 Hours |
| Dawn Survey | 22.06.2022 | 3 Hours |

**Survey constraints**

Access to all areas of the interior and 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.

**Static Bat Detector Monitoring - 18th to 25th August 2022**

An Anabat Express zero crossing static bat detector was placed within the barn to monitor bat activity for a period of eight nights. The detector was programmed to record bat activity from 30 minutes prior to sunset until 30 minutes after sunrise. Bat activity was analysed post survey using AnalookW to identify species recorded and record timing of bat activity.

Low levels of common pipistrelle, soprano pipistrelle and Natterer's bat foraging activity were recorded throughout the survey period. Timig of bat activity was consistant with bats emerging from nearby roosts.

**Emergence Survey 25th May 2022**

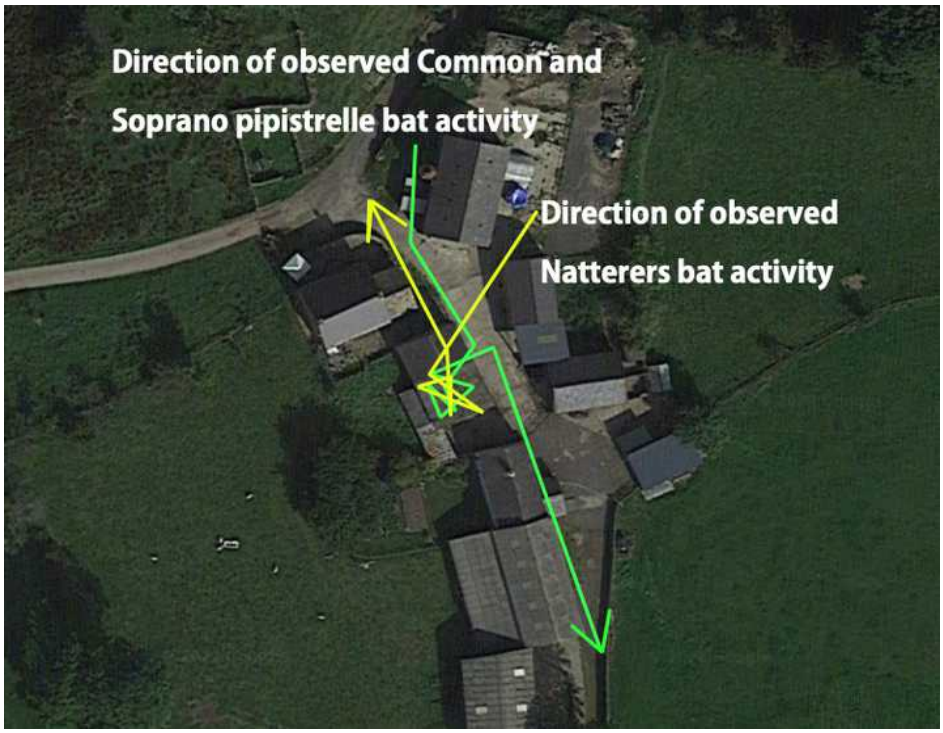
Start Temp: 13.2c Finish Temp: 12.6c 100% Clear sky Wind: Bfd1 Westerly
Start: 21.00 Sunset: 21.20 Finish: 22.50

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.

Between 21.51 and 22.50 low levels of foraging common and soprano pipistrelle bats were recorded entering the barn and foraging within the hay loft before dispersing into the wider landscape. Two Natterer's bats were observed to fly onto site from the north east and forage within the hay loft and around buildings at 22.26 and 22.29 respectively.

No bats were recorded emerging from the barn.



**Dawn Survey 22nd June 2022**

Start Temp: 14.5c Finish Temp: 14.0c 100% Clear sky Wind: Bfd0
Start: 03.00 Sunrise: 04.37 Finish: 04.52

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.

Low levels of common and soprano pipistrelle foraging activity was recorded around buildings on site from 03.00 to 03.47. No bats were recorded entering the barn to roost.

**Interpretation of results**

Static bat detector monitoring was carried out from 10th May to 25th May 2022. Low levels of common pipistrelle, soprano pipistrelle and Natterer's bat foraging activity were recorded throughout the survey period.

One emergence survey was carried out on 25th May 2022. No bats were observed emerging from or returning to roost within the building, however the barn was observed to have foraging common pipistrelle, soprano pipistrelle and Natterer's bats entering the barn before dispersing into the wider landscape.

A dawn survey carried out on 22nd June 2022 confirmed no bats returning to roost within the barn.

Survey effort is considered appropriate to characterise the roost potential of building and that the presence of a significant or low conservation value bat roost is unlikely on site.

*"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.

It is also considered unlikely that low conservation value roosts are present within the building, however reasonable avoidance measures are recommended within this report.

**Impact Assessment**

Short-term impacts – Disturbance Low risk:

Roof stripping where necessary will be undertaken by hand and under supervision.

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.

Common pipistrelle bats are considered an opportunistic species and it is possible for individuals to be found during works, even where surveys have had negative results during preliminary and activity surveys.

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.

**Timing of works**

**Roof work should take place following an evening temperature of +5c**

Work to affected roof areas will take place under supervision, with the batworker 'on call'.

Roof slates should be removed by hand and under supervision where necessary.

In the unlikely event bats are found during works. The area should be carefully covered and work stop until the batworker can attend to assess the appropriate way forward.

Compensatory bat boxes  (Two Greenwood Eco Habitats two crevice boxes) will be placed on site prior to work commencing. Bat boxes will remain on site as part of proposed biodiversity enhancement.

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.