

Bat and Barn Owl Scoping Survey Report

**Sawley Lodge,
Sawley.**

17.08.2013

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

A Summary

In July 2013 Batworker consultancy was commissioned to undertake a survey of Sawley Lodge, Sawley to assess the potential for its use by bats and barn owls prior to demolition of the building and associated outbuildings and subsequent redevelopment of the site.

A visual daytime survey was carried out on the 6th August 2013.

Signs of roosting bats within the Lodge roof spaces were recorded during the survey. Droppings are currently being analysed for DNA to identify species.

Signs of free flying by bats within the roof space were recorded, consistent with use by Natterer's and/or Brown Long Eared bats.

Two activity surveys were carried out at dusk and dawn on the 16th and 17th August 2013. Three species of bat (Soprano pipistrelle, Long Eared bat and *Myotis* sp) were recorded emerging from and re-entering the lodge at several points.

No signs of use of the site by Barn Owl were recorded.

The surveyor considers that the proposed works are likely to result in a breach of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) therefore the proposed development requires an European Protected Species Licence (EPSL) to proceed lawfully.

In light of the findings in this report it is recommended that:

No further remedial works, especially the use of self expanding foam, are carried out in any roof spaces, on lead flashing or any other crevice without supervision by an ecologist due to the risk of affecting roosting bats.

Additional survey work to support the application for a European Protected Species licence is carried out.

No demolition work is commenced until a mitigation plan is developed and a European Protected Species licence applied for.

That external lighting associated with the development should be directional and designed to avoid excessive light spill.

In the event bats are discovered or disturbed during building works, work must be halted until a bat licence holder can attend the site and give further advice as necessary.

B Introduction

In August 2013 Batworker consultancy was commissioned to undertake a survey of Sawley Lodge and associated outbuildings to assess the potential for its use by bats and barn owls prior to demolition and redevelopment of the site.

The buildings proposed for development remains structurally sound.

A central grid reference for the site is SD779471



Main Lodge building southern aspect



Double garage

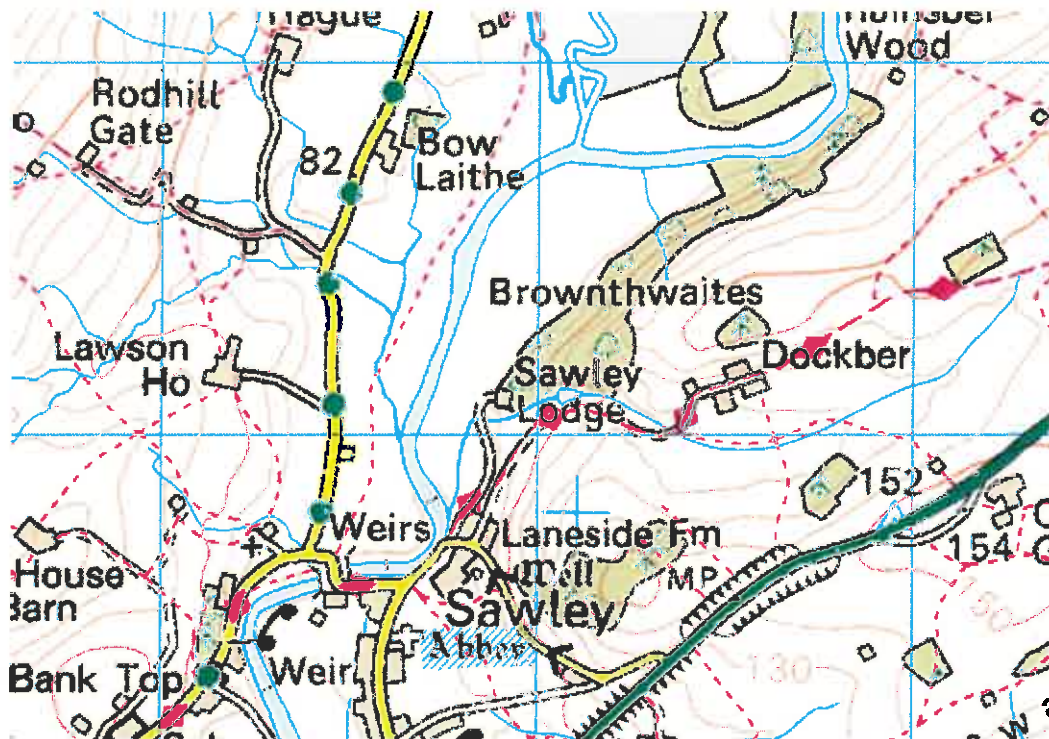
C Survey and Site Assessment

Objectives of the survey

The survey was carried out to determine current usage by barn owls, both current and historic bat use of the site and to establish status of the bat species using the building prior to development work.

C1 Survey site location

The site is located at SD779471



Aerial View showing surrounding habitat



C2 Site/Habitat description

Sawley Lodge is located approximately $\frac{1}{4}$ of a kilometer east of the River Ribble. To the immediate north east, east and south east of the site Brownthwaites wood, a mixed deciduous woodland, offers high foraging potential for bats.

Trees to the west and southwest of the site between the lodge and the river had been felled before this survey commenced.

The habitat surrounding the Lodge can be considered of moderate to high potential for hunting Barn Owl.

Sawley Lodge is a traditional stone built building with multi pitched roofs made up of traditional stone slate. There are multiple gaps behind lead flashing, missing pointing below ridge tiles and gaps below roof slates which offer potential roosting opportunities for bats.

The lodge has multiple outbuildings which were assessed for roosting potential:



- | | |
|-----------------------------|----------------------------|
| 1) The main Lodge | (High Roost potential) |
| 2) A double garage | (High Roost potential) |
| 3) A shed | (Low Roost potential) |
| 4) Greenhouse | (Low Roost potential) |
| 5) Outbuilding | (High Roost potential) |
| 6) Kennels and outbuildings | (Moderate Roost potential) |
| 7) Timber Stables | (Low Roost potential) |

C2.1 Pre existing information on local species

A data search with East Lancashire Bat Group (actively researching bat activity in the Bowland area) was carried out, this revealed only one recorded bat roost within 1km of the site.

| | | | |
|------------|----------|----------------|-------------|
| 05.12.2010 | SD776465 | Natterer's bat | Hibernating |
|------------|----------|----------------|-------------|

C3 Field Survey

C3.1 Visual inspection

An inspection was carried out to search for and identify potential access points, roosting opportunities and signs of bat use both internally and externally.

Equipment used included:

- ▣ Cluson CB-1 1M candle power lamp
- ▣ SeeSnake CA 300 video endoscope
- ▣ Opticron close focusing binoculars

All buildings, roof spaces, rafters, beams and cladding were investigated. Crevices likely to provide roosting opportunities were also targeted.

Evidence searched for included:

- ▣ Presence of bats both free hanging and within crevices
- ▣ Audible squeaking from within cavities/behind cladding
- ▣ Scratch marks below and around openings
- ▣ Bat droppings, urine staining, feeding remains and rub marks.

In addition an inspection was carried out to assess potential for use by Barn Owl

Evidence searched for included:

- ▣ Feathers
- ▣ Owl pellets
- ▣ Lime
- ▣ Nestling fluff
- ▣ Signs of nesting

Activity surveys

Two surveys were undertaken by means of observation of the lodge and outbuildings to monitor activity., one at dusk and one at the following dawn.

Equipment used included a Pettersson D240x time expansion bat detector and a Wildlife Acoustics EM3 realtime full spectrum detector and recorder.

To supplement the observers an infrared lighting array combined with Sony Nightshot HDR-SR5 HD video camera was used to monitor the roof south of the courtyard in front of the double garage (between buildings 2 and 5) for activity by bats.

C3.3 Personnel

All surveys were conducted by:

Dave Anderson MSc, Natural England Science, Education and Conservation bat licence holder (NE licence no.20123170) a bat surveyor and ecologist with 20 years experience.

A survey assistant Sharon Anderson, with experience in the use of bat detectors and bat surveys.

Surveyor 1, located north west enabling clear views of the north and west elevations of the main Lodge plus buildings 2 and 5.

Surveyor 2 was located south east enabling clear views along the south and eastern elevations of the lodge plus the rear of building 2.

C3.4 Survey Summary

| Survey | Date | Timings |
|-------------------------------|--|---------------------------------|
| Visual | 6 ^h August 2013 | 2 hours |
| Dusk Survey Sunset: 20.35 | 17 th August 2013 Temp:19c Cloud cover: 30% | 20.00 – 22.10 Calm, no rain. |
| Dawn Survey Sunrise: 05.52 | 18 th August 2013 Temp:15c Cloud cover: 40% | 04.00 – 06.00 Calm, no rain. |

C3.4 Survey constraints

Access to all areas of the lodge and associated outbuildings was possible and with good visual inspection possible, therefore there were considered to be no survey constraints.

Timing and weather conditions were considered optimal for activity surveys.

C4 Results

C4.1 Visual Inspection

Bat droppings were found throughout the loft spaces of the main Lodge building although these were scattered rather than concentrated in any particular area.



Bat droppings in loft insulation

Dropping size, shape and texture were consistent with use of the loft spaces by at least three species of bat; Pipistrelle sp, Long Eared and Myotis sp. Positioning of the droppings suggested bats free flying through the loft spaces prior to emergence. Samples were collected for DNA analysis for species ID.



Bat droppings on boarding within loft space

No signs of roosting bats were identified from any other building.

Of concern was the use of expanded foam to block gaps in several roof spaces, given the presence of roosting bats. No further work should be carried out without advice of an ecologist being sought first.



Lead flashing on eastern wing of main building showing obstruction by foam.



Gaps below ridge tiles suitable for roosting bats



Gaps below ridge tiles and missing slates.

C 4.2 Dusk survey

The dusk survey identified bats emerging from several points around the Lodge main building.

Soprano Pipistrelle, Long eared bat and *Myotis* sp (probably Natterer's) were recorded.

Surveyor 1

| Time of activity | Species: | Notes: |
|------------------|--|--|
| 20.52 | <i>Noctule</i> | 2 bats emerging from woodland heading west |
| 20.57 | <i>Soprano pipistrelle.</i> | Emerged from under slate west aspect of roof |
| 21.16 | <i>Myotis sp</i> | 2 bats emerged from roof above garage |
| 21.18 | <i>Soprano pipistrelle.</i> | Emerged from under slate west aspect of roof |
| 21.22 | <i>Myotis sp</i> | 1 bat foraging in courtyard |
| 21.26 | <i>Soprano pipistrelle</i> | Emerged from under slate west aspect of roof |
| 21.33+ | <i>Common and soprano pipistrelle. Myotis sp</i> | General foraging around building. |

Surveyor 2

| Time of activity | Species: | Notes: |
|------------------|---------------------------------------|--|
| 20.52 | <i>Noctule</i> | 2 bats emerging from woodland heading west |
| 21.06 | <i>Soprano pipistrelle.</i> | Emerged from under flashing corner of |
| 21.09 | <i>Myotis sp..</i> | Emerged under eaves above doorway, southern aspect |
| 21.15 | <i>Brown Long Eared</i> | Emergence near chimney, southern roof |
| 21.31 | <i>Common pipistrelle.</i> | Foraging in garden |
| 21.31 | <i>Common and Soprano Pipistrelle</i> | General foraging around building. |

C4.3 Dawn Survey

Bats were identified re-entering at several points around the main Lodge building.

Soprano Pipistrelle and Myotis sp. (probably Natterer's) were recorded.

Surveyor 1

| Time of activity | Species: | Notes: |
|------------------|-----------------------------|---------------------------------------|
| 04.30am | <i>Myotis sp.</i> | General foraging around building. |
| 04.33am | <i>Common pipistrelle.</i> | General foraging around building. |
| 04.43am | <i>Soprano pipistrelle</i> | Social calling around building. |
| 04.57am | <i>Myotis sp.</i> | 4 bats swarming around double garage. |
| 05.17am | <i>Soprano pipistrelle.</i> | 3 bats swarming in courtyard. |
| 05.32am | <i>Soprano pipistrelle.</i> | Entered below eaves northern/west. |

Surveyor 2

| Time of activity | Species: | Notes: |
|------------------|-----------------------------|---|
| 04.37am | <i>Common pipistrelle.</i> | General foraging around building. |
| 04.45am | <i>Soprano pipistrelle.</i> | General foraging around building. Social calling. |
| 04.51am | <i>Myotis sp</i> | Swarming rear of double garage |
| 05.03am | <i>Myotis sp.</i> | 4 bats entered eastern wing roof above double garage |
| 05.07am | <i>Soprano pipistrelle.</i> | 1 bat foraging and social calling |
| 02.26am | <i>Soprano pipistrelle.</i> | 2 bats swarming eastern wing |
| 05.37am | <i>Soprano pipistrelle.</i> | Entered behind flashing eastern corner of southern aspect |

C4.4 Barn Owl Survey

No signs or evidence of use of the site by Barn Owls was identified.

D1 Evaluation of the survey results

There is evidence of long term use of the main Sawley Lodge building by at least three species of roosting bat.



Roosts identified during activity surveys

SP – Soprano Pipistrelle M – Myotis BLE – Brown Long Eared

Roosting bats are spread throughout the roof and loft spaces of the main building, and given the 'porous' nature of the roof with multiple gaps and crevices offering entry to and exit from roosting positions, could be encountered anywhere in the main Sawley Lodge roof and loft space.

Roosts identified during the survey are unlikely to be the only ones present, with bats utilising different roosting points dependent on weather, temperature and seasonal variations.

There is a low risk of bats occasionally roosting in outbuildings, especially given the mobile nature of Pipistrelles, although no evidence was found during the survey.

D2 Conclusion

The surveyor considers that the proposed works are likely to result in a breach of the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) therefore the proposed development requires an European Protected Species Licence (EPSL) to proceed lawfully.

A mitigation plan offering compensatory roosting opportunities for all species recorded will need to be drawn up to support an application for an EPSL.

Further survey work will need to be carried out to support any EPSL application.

The client has identified space within existing woodland and close to a pond as a possible location for any replacement roost to be constructed. Given the high quality foraging potential this should be a suitable position for compensatory works to be carried out.

Bat access could also be designed into any planned replacement buildings once demolition is complete.

The presence of foraging bats, particularly long eared and natterer's requires some mitigation works to be built into development plans with regard to lighting to ensure post development use of the site is not affected.

D3 Recommendations

In light of the findings of this report it is recommended that:

No further remedial works, especially the use of self expanding foam, are carried out in any roof spaces, lead flashing or any other crevice without supervision by an ecologist due to the risk of affecting roosting bats.

Additional survey work to support the application for a European Protected Species licence is carried out.

No demolition work is commenced until a mitigation plan is developed and a European Protected Species licence applied for.

That external lighting associated with the development should be directional and designed to avoid excessive light spill.

In the event bats are discovered or disturbed during building works, work must be halted until a bat license holder can attend the site and give further advice as necessary.

E Bibliography

- | | |
|--|--|
| Barn Owls and Rural Planning Applications | Barn Owl Trust 2009 |
| Barn Owl Survey Methodology and Techniques for use in Ecological Assessments | Shawyer, C. August 2011 |
| Bat Mitigation Guidelines | Natural England 2006 |
| Bat Survey Guidelines 2 nd Edition | Bat Conservation Trust 2011 |
| Bat Workers Manual 3 rd Edition | JNCC 2004 |
| Bats and Lighting in the UK | Bat Conservation Trust and Institution of Lighting Engineers guidance 2008 |

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

(a) deliberately to capture or kill any bat

(b) deliberately to disturb any bat

(d) to 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.

Barn Owls and the Law

Part 1 of the Wildlife and Countryside Act (1981)

(1) Subject to the provisions of this Part, if any person intentionally (or recklessly as amended by the CRoW Act, 2000) (a) kills, injures or takes any wild bird; (b) takes, damages or destroys the nest of any wild bird while

that nest is in use or being built; or (c) takes or destroys an egg of any wild bird. he shall be guilty of an offence.

(5) Subject to the provisions of this Part, if any person intentionally- (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is at, on or near a nest containing eggs or young; or (b) disturbs dependent

young of such a bird, he shall be guilty of an offence and liable to a special penalty.

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.

SCHEDULE 12 AMENDMENTS RELATING TO PART I OF WILDLIFE AND COUNTRYSIDE ACT 1981

1. In section 1(5) of the 1981 Act (offence of intentional disturbance of wild birds) after "intentionally" there is inserted "or recklessly".

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.

(3) Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat.