WILDLIFE SURVEY FOR BATS

AT

4 Broad Meadow
Chipping
Preston
Lancs
PR3 2GH
BAT SURVEY & REPORT

Commissioned By:
Mr M Butters

Address:
4 Broad Meadow
Chipping
Preston
Lancs
PR3 2GH

Tel No:
01995 61586

Instruction Method:
Verbal

Bat Survey Address:
4 Broad Meadow
Chipping
Preston
Lancs
PR3 2GH

Visit Date/Time:
17th October 2012 @ 17.30hrs

Weather Conditions:
A very light cloud covering and a gentle breeze with a temperature of 11°C

Document Reference:
1457

e-mail
mb.butters@btinternet.com
Survey Brief

1. To inspect buildings, assess the value of the site for bats, and compile a report prior to a Planning Application being submitted.

2. The report will identify if bats have ever used the buildings at any time, or not as the case may be.

3. If bats have used the buildings, assess the importance of the site for bats and bat conservation.

Limitations of the report

1. The aim of the survey is to prove use by bats, but does not guarantee their absence.

2. Surveys undertaken when bats are hibernating, may have to be re-assessed during summer months when bats are most active.

3. External walls and internal rooms are inspected from ground level only. Roof voids, attics and lofts will only be inspected when safe access is possible.

4. Building’s whose structure is unsafe in any way, will only be inspected from a safe distance with the use of a pair of binoculars.

5. A bat detector will be used in all cases but daytime visits may only produce limited success.

6. When buildings are inspected during winter months, a bat detector will have very limited results.

7. Buildings with no signs of bats on the date of the survey, may be used by individuals or small numbers of bats, in subsequent weeks, months or years.

8. Thorough inspection should reveal whether bats have been present during previous years.

9. Small bats, e.g. pipistrelles, leave evidence of occupation in small inaccessible crevices which may be extremely difficult to detect if the bats are not present when the survey is being conducted.
Objectives of the report:

1. To thoroughly inspect all buildings, and record any findings indicating the presence or absence of bats.

2. To make recommendations when the presence of bats are found.

Survey Guidelines

This survey follows guidelines recommended by:

Bat Conservation Trust (BCT Bat Surveys, Good Practice Guidelines, 2007)

Natural England (Survey objectives, methods and standards- Bat Mitigation Guidelines, 2004)

JNCC Bat Workers Manual.

Survey Methods

The purpose of the survey is to look for evidence confirming that bats use, or have used the buildings for resting, feeding, roosting or winter hibernacula, or not as the case may be.

Evidence of use will include the following;

1. Presence of live or dead bats.
2. Bat droppings.
3. Moth and inset wings and remains.
4. Faint scratch marks on roof timbers.
5. Grease staining marks on roof timbers.
6. Odour of bats.

Evening Surveys

For evening surveys, an ultra-sound receiver is used, tuned to different frequencies to pick up the noises emitted by flying bats.

Bat emergence time may start half an hour before sunset, to one hour after.

Fine tuning the ‘bat detector’ can be a very accurate way of identifying the presence of bats emerging from roof areas where human access is limited or impossible.

Time spent on suitable evenings, will confirm or not the presence of bats, and bat species identification should be possible if bats are present.

Surveying Equipment

Re-chargeable torches, 1 million and ½ million candlepower.
10 x 43 Hawke binoculars.
Bat box ‘duet ‘bat detector, a heterodyne type sonar receiver.
Bat Scanner, a heterodyne type instrument which actively scans ultrasound for bats.
Petzl headlamp torches.
A variety of folding aluminium ladders.
Telescopic inspection mirrors, large and small.
Bat detection methods

The size of the site or the complexity of the buildings may make daytime searches for bats very difficult. Subsequently, the detection of the presence of bats is often undertaken at bat emergence time on evenings when bats are likely to be flying. The use of a bat detector, an instrument that detects ultra-sound emitted by bats into sound audible to the human ear is always used during bat emergence surveys. Species may be identified by the frequency on which they 'transmit' and by the sonar graph of their sounds.

Evening surveys

Any survey is reliant on the scope and depth of the information sourced. In an attempt to obtain more detail, an evening survey may be conducted around the site or buildings. To give greater coverage and scope, the survey is normally conducted by two persons. Ultra-sound bat detectors were used at varying frequencies throughout the duration of the survey, to pick up noises emitted by different species of bats.

Analysis of results

Dependent on the results indicated by the bat detector, further inspection of the site may be required within the buildings to confirm any findings. Negative results from the bat detector will only indicate that bats are not present at the time of the survey.

Bat habits

Bats frequently use trees and building for feeding. Insects are found at all sites, and their presence attracts bats, which may travel up to five kilometres or more, to feast in insect rich habitat. The presence of feeding bats does not indicate that the roost is close by, and this survey is undertaken to establish whether bats use any of the structures on the site as a roost.

Adverse weather

Adverse weather conditions affect the ability to collect data on night visits. Cold nights, strong wind and heavy rain may prevent bats from flying, and numbers of insects may be likewise very limited. Subsequent visits should provide sufficient data and prove positive or negative results.

Risk Assessment

The level of probability that Bats are using the property is calculated on the evidence found.

High risk:
Identifies that Bats use the property, droppings are found and a roost is confirmed or suspected, even if bats are not present at the time of the survey.

Medium risk:
Implies that the presence or use by Bats has been identified, and the building is probably used as a feeding site.

Low risk:
No evidence of use by bats was found.
### External Survey Results

<table>
<thead>
<tr>
<th>Property type</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>House</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Extension:</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Conservatory</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Comments: The building is a dormer bungalow with attached garage.

<table>
<thead>
<tr>
<th>Construction</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Timber</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bat Access Places</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Comments: All walls are rendered with no bat access points.

<table>
<thead>
<tr>
<th>Roof</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slate</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Tile:</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bat Access Places</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Comments: The roof of the building is apex with no visible bat access places. Dormer windows have been added to the front and rear of the roof. Hanging mineral felt tiles protecting the sides of the dormers have lifted in places, possibly creating bat roosting places.

<table>
<thead>
<tr>
<th>Bat Signs</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bats seen</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Droppings</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bat Detector Results</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Comments: A careful search could find no clues or evidence of bats to the outside of the building.

### External Conclusions:

No signs of bat use could be found.

A further survey at bat emergence time may reveal further information.

### Risk Assessment:

Low
## BAT SURVEY & REPORT

### Internal Survey Results

**Building use:** The house is occupied.

<table>
<thead>
<tr>
<th>Construction</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other/plaster</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bat Access Places</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Comments:**

### Roof space, attic or loft

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beams</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Cracks in beams</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lined roof: Underfelt</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bat Access Places</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Comments:** There was no access into any loft or attic spaces, so no survey work could be undertaken inside the property.

### Bat signs

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bats seen</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Droppings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bat Detector Results</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Staining on beams</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Moth + insect wings present</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Suspect summer roost</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Suspect winter hibernacula</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Comments:**

### External Conclusions:

No signs of bat use could be found.

A further survey at bat emergence time may reveal further information.

### Risk Assessment:

**Low**
**BAT EMERGENCE SURVEY & REPORT**

**Date:** 17th October 2012

**Start Time:** 17.30 hours

**End Time:** 19.15 hours

**Sunset:** 16.10 hours

**Weather:**

The evening had 10% cloud cover with a light breeze, and a temperature of 11°C.

**Bat Suitability Evening:**

The evening was good for foraging bats, with flying insects and midges annoying the surveyor and the client.

**Survey Details:**

The survey was conducted using a ‘bat detector’ set at 45 KHz. The bat detector was occasionally tuned to 55 KHz to allow for different species of bat sonar.

Continuous observation was achieved by moving around the property.

**Survey Findings:**

At 18.38 hrs a bat emitting sonar on 45 khz was picked up by the bat detector foraging around the neighbouring house.

It proceeded to feed between the two properties and then moved to feed over adjacent gardens.

At 18.40 hrs a second bat was detected and observed flying onto the site up the access road followed by a third at 18.43 hrs.

The three bats continued to forage around all the houses and the tree lined access road.

All the bats were Common Pipistrelle, emitting sonar on 45 KHz.

No other bats were recorded during the evening and the survey concluded at 19.15hrs

No bats were seen or detected emerging from the property under surveillance.

**Evaluation of the Survey Results:**

The survey could find no evidence of bats using the property for any purpose.

**Risk Assessment:**

Low.
SURVEY SUMMARY

Proposed Development

The proposal is to replace the dormer windows.

Site Description

The house is sited to the side of a small rural village and is surrounded by agricultural land. Other residential properties form a ribbon development along the access lane.

Survey Results

The survey found no evidence of any part of the building being used as a roost site or as a hibernacula.

Importance of the Site

The building has not and is not being used by European Protected Species and is of no special wildlife importance.

Conclusions

The survey could find no evidence of previous or present occupation by bats.

Risk Assessment

Low

Mitigation and Enhancement

No mitigation or habitat enhancement will be necessary.

Author: Denis Lambert

Signed: Denis Lambert

Dated: 19th October 2012

SURVEYOR’S DETAILS

Denis Lambert is a registered and licensed Bat Warden No. 20120533 for Natural England, since 1981. Dedicated to conservation and environmental issues, he has been a keen bird watcher and mammal specialist all his life and was involved with the formation of the Lancashire Badger Group and acted as its chairman for ten years. Working as a qualified arborist (tree surgeon) he has been actively involved in protecting many species of flora and fauna over the years. Richard Bowden, a retired ex-licensed Bat Warden assists with surveillance where two persons are needed.
**BAT LEGISLATION AND RECOMMENDATIONS**

**Bats and the Law**

Deliberate disturbance during the breeding season, the exclusion of bats and the destruction of a bat roost is now a criminal offence under the Conservation (Natural Habitats &c.)(Amendment) Regulations 2007.

The onus lies on the applicant to satisfy him/her that no offence will be committed if and when the development goes ahead.

Natural England now advises, “*Operations to known breeding sites should be timed to avoid the months of June, July and August if possible, the best times for building or re-roofing operations are spring and autumn*.”

**Need for a Survey**

A survey of the external and internal fabric of the building may identify the presence of bats.

An evening or dawn survey may confirm the presence of bats overlooked in the previous search.

It may not be possible to determine whether the building is used as a maternity roost or just a resting place.

The fact that bat activity has been recorded means that any work that disturbs or impacts on the colony within the buildings will require a license.

Additional survey work may be necessary, especially in the evenings or early morning to determine the exact extent of use by bats and the access points that are used.

**How to proceed when bats are found**

Depending on the extent of the proposed works, a license may be required before any work can start.

If the work does not impact on the bats in any way, ie, bats are not present and the habitat and access points are not being affected, then the work may probably be done without a licence.

Each site has different requirements and Natural England have the final say.

When European Protected Species are present and the works have to be done at a time when bats are resident, a Licence will be required.

As a licensed bat person, I can apply on your behalf for a licence to enable the works to proceed. Natural England requires a minimum six weeks to process any licence application.

The granting of a license is not guaranteed, but when the application is a matter of health and public safety and supporting mitigation enhances the habitat for continued use by bats, there is a good likelihood that the license will be approved.

Mitigation will include detailed information for the retention, enhancement and preservation of the population of European Protected Species in the locality.
BAT LEGISLATION AND RECOMMENDATIONS

General recommendations:

Being aware of how bats move from site to site, and the possibility that bats may occur in any building at any time of year, the following points should help developers.

1. Bats may use buildings at any time of the year for feeding or refuge.

2. Work to the roof should be undertaken when bats are free flying, generally early March to late November.

3. Care must be taken when removing existing roof beams and associated stonework.

4. During completion of roof works, bat access points may be built into the new structure.

5. Pointing of walls should not be carried out between mid-November to early March to avoid entombing bats, which may be hibernating within.

6. When hibernating, bats become torpid and appear lifeless, do not assume they are dead. It may take up to two hours before a bat has warmed up sufficiently to be able to move or fly.

7. If any timber treatment is carried out, only chemicals safe for bats should be used. Any new timber used should be treated using the CCA method (Copper, Chrome Arsenic), which is safe for bats.

I shall be available to advise and oversee the above points at any time, if requested.

Should bats be found, work must cease immediately in that area and then please contact: Denis Lambert on 01772 783322 or 07813 140682 for advice.