



Alexander Mackay
Manton Property

By email only

24th September 2023

Our ref: SW23/0016/AML1

Gables Cottage, Churchill –Bat Survey

Dear Mr Mackay,

Further to our recent correspondence I have pleasure in setting out below the results of the bat survey carried out at the above property. I understand that planning consent is to be sought for the addition of a single storey extension to Gables Cottage itself and the refurbishment of two of the outbuildings to habitable space. No work is proposed to the garage.

Methodology

There were two elements to the bat survey. Firstly, in order to investigate the potential use of the buildings by bats for roosting, an internal and external survey was carried out. The methodology used was based on that outlined in the recently updated Bat Conservation Trust¹ (BCT) good practice guidance. Internally this involved checking each building for evidence of bats including droppings, feeding remains, staining, and any bats themselves. Following this, features on the exterior of the buildings that bats could potentially exploit for roosting were also identified, and where accessible, also checked for evidence using a torch. Such features, can include gaps behind fascia/ barge boards and soffits, loose, missing or hanging coverings such as roof tiles and lead flashing, cracks in brickwork or panelling, and where weatherboarding has warped allowing potential access behind.

An assessment of the overall suitability of the buildings to support roosting was then carried out based on the presence, number and suitability of interior and exterior features that bats might use for roosting.

The building survey was carried out by Samuel Watson who is registered on Natural England's Bat Survey Class Licence WML-CL18 registration ref: 2015-1152.

Following the building survey, a dusk emergence survey was also undertaken. This involved the surveyor monitoring the two outbuildings continually from 15 minutes before sunset until approximately 1.5 hours after sunset. The surveyor was equipped with an Echo Meter Touch 2 Pro detector attached to a Samsung galaxy smartphone. A Canon XA40 camcorder set to IR

¹ Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition). The Bat Conservation Trust, London.

mode was also used. This was paired with an Anabat scout detector and two IR floodlights directed at the buildings. The field of view for the camera is shown on Photo 1. The buildings could not be monitored from the south and west due to them abutting the boundary of the property.

Results – building survey

The proposed location for the extension to Gables Cottage is shown on Photo 2. It has no potential to support roosting bats and no evidence of bats was found.

The two outbuildings both have brick exterior walls and old, possibly natural, slate tiles on the roof. They were both assessed to have medium roosting potential. The larger building (Building 1, Figure 1. See also Photo 3) is part of a longer structure that extends out of the site and into the adjacent property. That part surveyed is internally divided into two rooms. Both rooms were noted to be open to the roof and therefore lacked a contained roof void. The roof tiles were noted to be lined with traditional F1 type bitumen roofing felt. Within the smaller room there was a heavy buildup of cobwebs along the internal ridge beam indicating there a lack of recent activity in this area and no evidence of bats was found in this part of the building. By contrast, the interior of the larger room was noted to be largely free of cobwebs and a single long-eared bat was seen located between a rafter and the ridge beam (see Photo 4). A search of the floor below the bat found 3-4 droppings and a sample of these was collected for DNA analysis to confirm which long-eared species was seen.

The other outbuilding (Building 2, Figure 1. See also Photo 5) is of a similar construction internally, although the internal walls do not go above the eaves, meaning the roof is open along the length of building. A small number of small mammal droppings were found at the western end of this building, together with 3-4 yellow underwing moth wings. This would suggest the presence of a night feeding perch, but the droppings were not clearly identifiable as being produced by a bat, so a sample of these was also collected for DNA analysis. The results of analysis of both dropping samples will be provided once available.

Externally, the two outbuildings are also similar. The slate roof tiles appear to be old, natural slate tiles and numerous gaps between these were noted. The brickwork also has gaps where mortar is missing. Due to the relatively low height of the buildings, it was possible to carry out a thorough inspection of the exterior of both buildings and no further evidence of bats was found.

Results – dusk emergence survey

The first dusk survey planned for 14th September had to be aborted due to the risk of rain, with the survey then carried out on 18th September. The survey commenced at 19:00 and concluded at 20:40. Sunset was at 19:14. The ambient temperature was 11 °C and there was a light breeze measuring 3-4 on the Beaufort scale. A short period of light rain occurred immediately after sunset, but had stopped by 19:43. Bats were detected following this and it is likely that the only effect this had (if any) was to delay emergence slightly. It is not considered to have affected the overall result of the dusk survey.

In summary, no bats were seen or recorded emerging from or re-entering the building during the dusk survey. A check of Building 1 at the end of the survey, found the long-eared bat to be present and so it had not left the roost during the survey.

Although the current survey guidance recommends that two dusk surveys are carried out on buildings with medium roosting potential, it was possible to complete a thorough check of the exterior of Buildings 1 and 2 due to their low height. As such, a second dusk survey is not likely to identify anything that would materially change the assessment of the use of these two buildings by bats or their value to the local bat population.

Conclusion and implications

All bat species and their roosts are afforded full protection under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (as amended). Regulation 43 of these states:

“43.—(1) A person who—

- (a) deliberately captures, injures or kills any wild animal of a European protected species,*
- (b) deliberately disturbs wild animals of any such species,*
- (c) deliberately takes or destroys the eggs of such an animal, or*
- (d) damages or destroys a breeding site or resting place of such*

an animal, is guilty of an offence.

(2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

(a) to impair their ability—

- (i) to survive, to breed or reproduce, or to rear or nurture their young; or*
- (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or*

(b) to affect significantly the local distribution or abundance of the species to which they belong.”

It is also an offence under the Wildlife and Countryside Act 1981 (as amended) to intentionally or recklessly disturb a bat, whilst it is occupying a place of shelter or protection, and to obstruct access to such a place.

Confirmation of the presence of a long-eared bat roosting in Building 1 means that the above provisions apply and a derogation licence issued by Natural England must be obtained before any work can be carried out to this building that could infringe the above protection. The presence of a single bat and relatively small number of droppings in Building 1 would indicate that it is a non-maternity day roost. In accordance with Table 3.2 of the

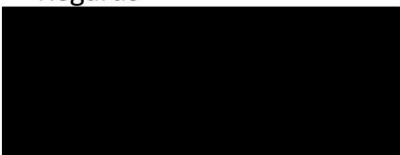
recently published UK Bat Mitigation Guidelines², the value of a roost used by a small number of a widespread species is restricted to the lowest geographic level. The roost in Building 1 is therefore assessed to have value at the site level only.

In order to reduce the regulatory burden for developments that affect a low value roost of this type, Natural England operate a specific licence known as the Low Impact Class Licence for bats. This operates to allow development affecting a low value roost, to be licenced using a more streamlined and faster process. This in turn reduces delays and costs for the development. Sam Watson Ecology is registered with Natural England to operate under the Low Impact Class Licence for bats, registration ref: RC102. Under this licence there is flexibility over the provision of compensatory roosting provision and the installation of a bat box on a tree or building would meet the requirements of the low impact class licence. The Schwegler 1FF bat box is known to be used by long-eared bats and would therefore be suitable in this instance.

At this stage it is unclear if the droppings within building 2 indicated the presence of a roost in this building as also. The results of the DNA analysis of the dropping sample collected will follow once available.

I hope the above is of assistance and please do not hesitate to contact me to discuss anything further if necessary.

Regards



Sam Watson MCIEEM
Director

² Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield.

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5





Alexander Mackay
Manton Property

By email only

6th October 2023

Our ref: SW23/0016/AML2

Gables Cottage, Churchill – Addendum Information

Dear Mr Mackay,

Further to my previous report which set out the results of the building and dusk bat surveys carried out at the above site; I have now received the results of the DNA analysis of the two dropping samples obtained from the buildings. The analytical report is attached and confirms that the bat seen in Building 1 (see Figure 1) was a brown long-eared bat *Plecotus auritus*. As detailed in the previous report, the roost is of site value and compensation for an impact on this roost can be in the form of a bat box.

The other dropping sample, obtained from Building 2, has been identified as lesser horseshoe *Rhinolophus hipposideros*. The small accumulation of droppings found in this building together with a few moth wings would suggest it is most likely used as a night feeding roost or possibly infrequently as a day roost. No bats of this species were detected during the dusk survey or seen in Building 2. Table 3.1 of the updated UK Bat Mitigation Guidelines¹ indicates that this species is rare or has a restricted distribution in south-west England. Based on Table 3.2 a feeding perch or non-breeding day roost of such a species is of value at the 'site' level, falling short of 'local' value on the basis that the evidence would indicate that it is used infrequently and by no more than an individual bat.

As the roost in Building 2 cannot be retained as part of the proposal, compensation in the form of an alternative roost is to be provided. The design is shown on the attached drawing provided by Woodfield Brady Architects. In order to meet the roosting requirements of lesser horseshoe bats, an enclosed void will be created in the garage (location shown on Figure 1) by 'boxing in' the western half of the roof above eave height. The building has a clear span truss design (see Photo 1) and so would provide an open and uncluttered roost location. An access 250x500mm in size will be created in the gable to allow free flight access into the void for lesser horseshoe bats. The roof lining in the garage is plastic and so there is no entanglement risk, but a location for a lesser horseshoe bat to hang will in any event be provided in the form of a piece of roughened board (e.g. ply) attached at the underside of the rafters.

¹ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

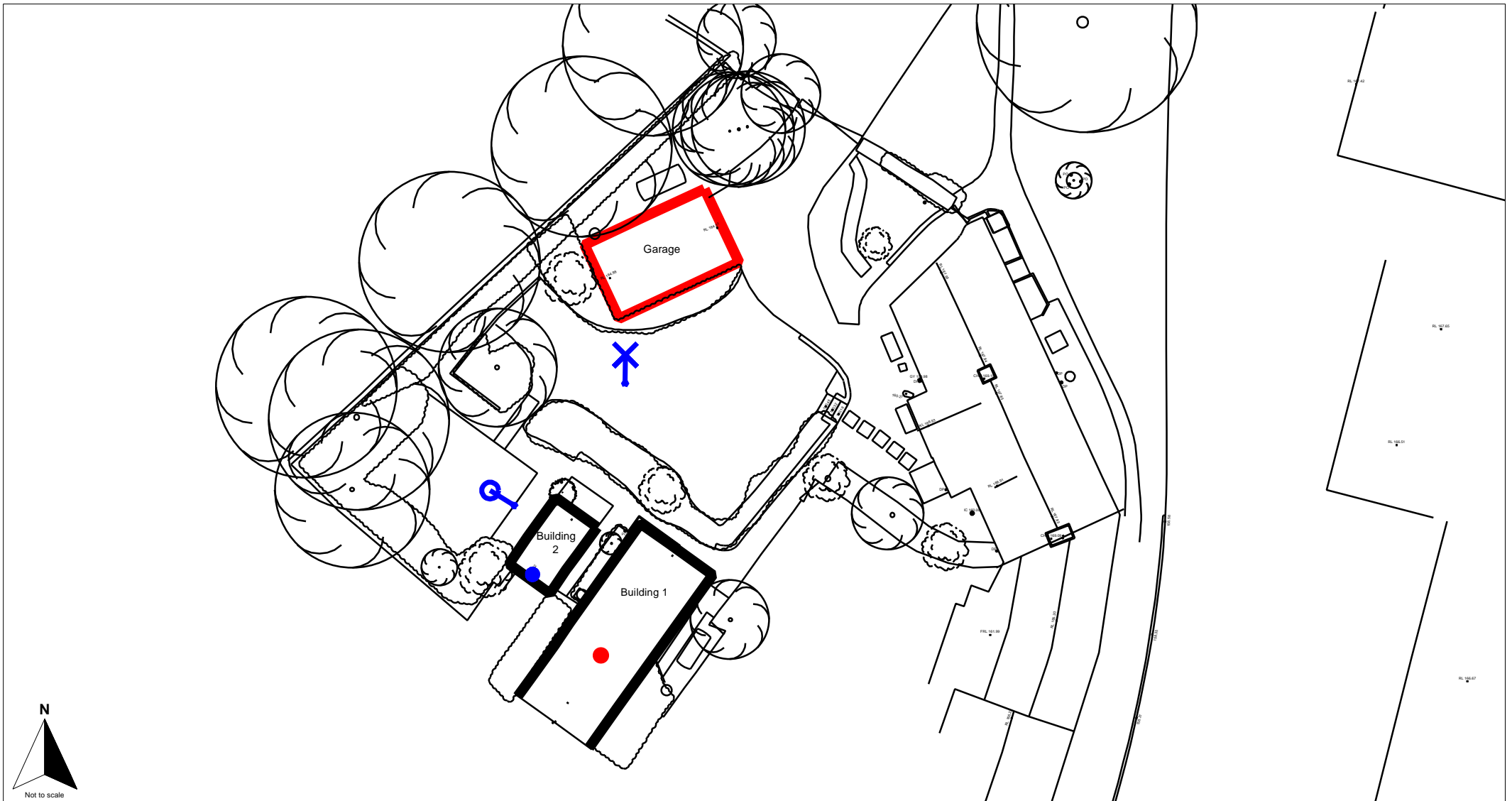
With the above compensation provided as part of the development, the favourable conservation status of the local brown long-eared and lesser horseshoe populations can be maintained. Furthermore, once planning consent has been granted, it is considered likely that the development would be granted a derogation licence by Natural England.

I hope the above is of assistance and please do not hesitate to contact me to discuss anything further if necessary.

Regards



Sam Watson MCIEEM
Director



- Brown long-eared bat *Plecotus auritus*
- Location of lesser horseshoe *Rhinolophus hipposideros* dropping evidence
- X Location of Canon XA40 camcorder and IR floodlight
- Location of second IR floodlight
- Garage building to be used for new lesser horseshoe roost

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|-------------------------------------|---------|
| Project - Gables Cottage, Churchill | |
| Client - Manton Property | |
| Drawing - Survey results | |
| Date - October 23 | |
| Reference - Figure 1 | Rev - B |



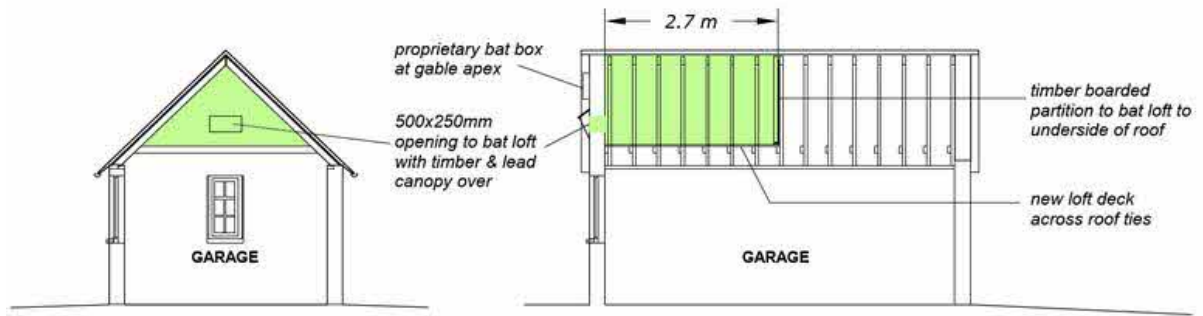
Samples submitted

| Sample Code | Multi-species? | Sample Type | Date Sample Found | Species Group | Site postcode/ post town /grid ref | Site description / comments (Optional) | Suspected identity of species |
|-------------|----------------|-------------|-------------------|---------------|--|--|-------------------------------------|
| SEL-2314-1 | Yes | Faecal | 18/09/2023 | C. Bats | Churchill, Chipping Norton | | |

Analysis Results

| Sample Code | DNA Extraction Code | Species Identified | ID Method | Ct value | % match |
|-------------|------------------------|---|-----------|----------|---------|
| SEL-2314-1 | EG-2023-1418 | Plecotus auritus (Brown long-eared bat) and Rhinolophus hipposideros (Lesser horseshoe bat) | qPCR | 21/19 | |

Lesser horseshoe bat roost creation



GARAGE SECTIONS
scale @ 1:100



SOUTHWEST ELEVATION
scale @ 1:100

€
1

Photo 1

