Bat Survey Report



Kirklands of Cluny steading and house Cluny Inverurie AB51 7RS

Grid Reference: NJ68331262

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Client: Gordon and Lesley Murray Date: 15/6/2021





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Summary

- A bat survey was requested in relation to a planning application to convert the steading to dwelling accommodation and build a single storey extension on the adjacent house.
- A dusk survey was carried out, followed by a dawn survey. A previous survey was carried out on the house in 2011.
- Bat roosts were identified.
 - 5 soprano pipistrelle (*Pipistrellus pygmaeus*) non-breeding roosts of at least 4 bats
 - In 2011 a soprano pipistrelle (*Pipistrellus pygmaeus*) maternity roost was present. It was not active during the 2021 surveys but should still be regarded as a roost for the purposes of mitigation.
- A bat licence from NatureScot will be required. It is imperative that licence conditions are complied with to ensure the protection of the bats and also to avoid any legal liabilities. Mitigation and compensation is outlined in this document (Section 7).

1. Introduction

A bat survey was requested in relation to plans to convert the steading into dwelling accommodation and build a small extension onto the south gable of the house.

All British bats are protected by law. It is an offence to intentionally or recklessly, kill or injure a bat, disturb a roosting bat or damage, destroy or obstruct access to any bat roost. Both summer and winter roosts are protected and activity which may disturb or damage a bat roost requires a licence from NatureScot.

2. Site description

The main building is a two and half storey stone and slate house in very good condition. In recent years there has been roof repairs and extensions on the west and north of the house. There are likely to be bat accessible gaps associated with dormers, wall heads and a small number of slates.

The steading is a U-shaped, stone and slate building how used for storage and as a garage which is in moderate condition. There are heavy Scottish slates with large, bat accessible gaps and bat accessible wall heads.

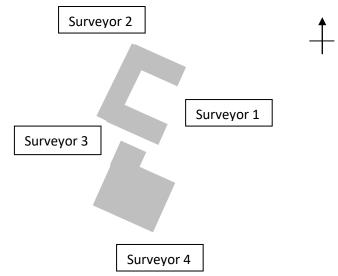
The site is next to mixed woodland which links on to the policy woodlands around Cluny Castle. There are a series of large ponds 230m to the north and east. The site is very well connected to good habitat and there is bat potential in the buildings. The bat potential is moderate to high.

3. Methodology

A desk study referred to data available through the NBN database and referred to a previous bat survey carried out on the house.

The aim of the study was to establish if bats were present and if so, which species. The buildings were checked for signs of bat use, such as droppings, staining or moth wings with a strong torch. Emergence and dawn surveys were carried out by 4 surveyors using BatBox Duets, and Anabat Express static detectors. The location of the surveyors is shown below. Bat calls were analysed using Anabat Insight.

Dusk and dawn surveyor locations



4.1 Desk study

4. Results

NBN records identify the presence of the following species within 5km:

- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Common pipistrelle (Pipistrellus pipistrellus)
- Brown long eared bat (*Plecotus auritus*)
- Daubenton's bat (Myotis daubentonii)

A bat survey was carried out in 2011 by Isobel Davidson. A soprano maternity roost of 234 bats was present in the most southerly dormer on the east side of the house. The roof has been renewed and an extension has been constructed since this survey. The report stated that the roost entrance would be maintained by careful planning and supervision of the roof repair work. As far as the bat surveyor is aware the bats have not been excluded.

4.2 Survey undertaken

Emergence survey		
1/6/2021	8.40 – 11.40pm	Aileen Salway, Rachael Thwaites, Rachel Salway,
		Richard Salway
Sunset at 9.53pm		Weather: dry, still, 5% cloud, temperature 11°C

The house had no external evidence of a bat roost. There are no attics, so the house itself was not accessed. The steading was checked internally for signs of bats, including accessing two loft areas, both with high light levels. The only signs of bats were found on the west side of the steading where there were three bat droppings on the exterior of a window ledge with a more extensive scatter of old droppings in the corresponding area inside the steading.



Roost E - droppings on sill below bat accessible gap at top of window. There are droppings in the area inside.

The emergence survey heard bats flying from 3 minutes after sunset. Common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) were foraging but none were seen to emerge. Activity at the site was very low except for some activity along the woodland edge.

Signs of a pipistrelle roost were found in the steading.

Time	Species	Notes
10.00 and 10.01pm	Soprano pipistrelle	Heard on east side of steading but not seen
10.00 – 11.37pm	Soprano pipistrelle	Occasional foraging along edge of woods and over steading, very
		few passes near house
10.22pm	Common pipistrelle	Flying over steading
11.13 – 11.21pm	Common pipistrelle	Occasional foraging around site

Dawn survey		
15/6/2021	2.30 - 4.30am Aileen Salway, Rachael Thwaites, Robin Pakeman,	
	Alex Pakeman	
Sunrise at 4.13am	Weather: dry, clear, gentle breeze, temperature 8°C	

Bats were active until 8 minutes before dawn. Common and soprano pipistrelles were foraging along the woodland edge and over the steading but activity levels were quite low. Three soprano pipistrelles went to roost at three points in the steading and one soprano pipistrelle went to roost in a dormer in the house.

Four soprano pipistrelles went to roost in four separate non-breeding roosts.

Time	Species	Notes
2.32 – 4.04am	Common and soprano pipistrelles	Irregular foraging mainly around steading/woodland edge
2.49am	Brown long eared bat	Faintly heard at woodland edge
3.37am	Soprano pipistrelle	Went to roost under slates in steading – Roost A
3.43am	Soprano pipistrelle	Went to roost in house dormer – Roost C
4.01am	Soprano pipistrelle	Went to roost under gutter in steading – Roost B
4.05am	Soprano pipistrelle	Went to roost at wall head in steading – Roost D



Roost A – non-breeding soprano pipistrelle roost of one bat. Under slate 6 down from top

Roost B – non-breeding soprano pipistrelle roost of one bat. Behind gutter by gutter bracket.

Roost C - non-breeding soprano pipistrelle roost of one bat. Back right of dormer.

Roost F – soprano pipistrelle maternity roost identified in 2011 on left hand side of dormer but not currently active

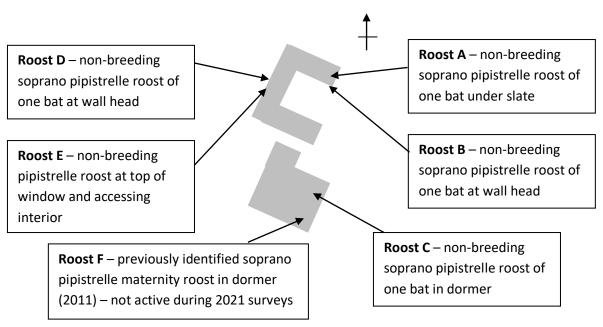
Roost D - non-breeding soprano pipistrelle roost of one bat. At wall head next to downpipe

Roost E - non-breeding pipistrelle roost accessing top of window and interior – not active during surveys

4.3 Constraints on survey

All areas were accessed and there were no constraints.

4.4 Roost sites identified



5. Hibernation

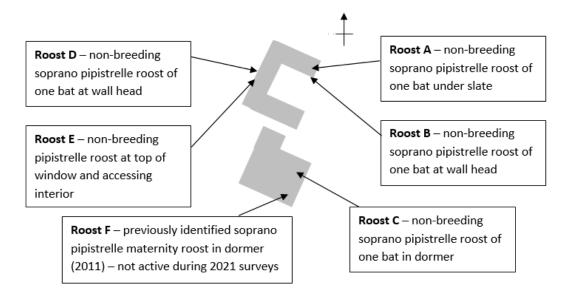
The house is occupied with an open aspect. There is relatively low hibernation potential as temperature fluctuations are likely to be large and the roost very dry. However, a maternity roost was found at the site in 2011 and in some cases a few bats will overwinter in the same building. The maternity roost was not active during the 2021 survey. The steading has closed doors so the interior will be stable in temperature. There is a possibility that bats will hibernate but this is also relatively low.

6. Assessment of impacts

The proposed development involves the conversion of the steading into dwelling accommodation. This will involve stripping out and re-roofing. A small single storey extension is planned for the house.

- Converting and re-roofing the steading will lead to the loss of Roosts A, B, D and E.
- Compensatory bat roosts can be erected following bat worker advice
- Roosts C and F will be unaffected by works to the house. No mitigation is required for these roosts.
- A bat licence from NatureScot will be required to allow the works to proceed, based on an agreed bat species protection plan see Section 7 on page 9.

7. Bat Species Protection Plan - Kirklands of Cluny steading, Cluny, Inverurie, AB51 7RS This method statement details the measures required to protect five non-breeding soprano pipistrelle (*Pipistrellus pygmaeus*) roosts used by four or more bats and a previously recorded soprano pipistrelle maternity roost of over 200 bats.



Avoidance of harm to the bats

- 1. <u>A bat licence must be issued by NatureScot ahead of the works</u>. A BLIMP licence through the surveyor will take around a week and a full licence direct from NatureScot may take six weeks to come through. Please give plenty of notice for the start of works and bear in mind that bat surveys are valid for 18 months.
- 2. Erection of one Schwegler 2F bat box (or equivalent) on nearby tree before work starts. This will allow the safe relocation of bats under licence.
- 3. A pre-works check should be carried out by a bat worker immediately before work starts
- 4. There is no timing constraint for work but if possible it is advised to avoid a Dec-Feb start on stripping slates in the steading, which is the main bat hibernation period.
- 5. **Steading** Roofing materials to be removed carefully by hand with a bat worker present for the stripping of materials on the vicinity of roosts, at least until such time as they are satisfied that bats are unlikely to be found.
- 6. House no works to be carried out on roof without seeking advice from bat worker.
- 7. Workers to be briefed on what to do if bat is found. Gloves must be worn if handling a bat.
- 8. A procedure will be put in place to ensure that this method statement is adhered to.

Roost retention and enhancement

- 1. Two Schwegler 2F bat boxes (or equivalent) to be erected as replacement roosts.
- 2. Bat boxes should be retained in long term.
- 3. External lighting should not shine on bat boxes.

8. Licensing tests

There are two routes to gaining a licence in this case. Either:

- Apply directly to NatureScot for the bat licence; or
- Use a bat surveyor with a BLIMP (Bat Low Impact licence) who will register the site with NatureScot. This is a streamlined method which allows for quicker issuing of a licence and avoids the requirement for an application form.

9. Survey validity

Bat surveys are normally valid for a period of 18 months after this time an update survey is likely to be required.

10. NESBReC data

The client is happy for data to be shared with the records centre.

Surveyors: Aileen Salway - Bat licence 122703 Rachael Thwaites Richard Salway Rachel Salway Alex Pakeman Robin Pakeman

Appendix 1 - surveyor qualifications and report references

Aileen Salway MCIEEM

- Freelance ecologist since 2010
- Previously worked as Ranger/Naturalist with the National Trust for Scotland for 13 years
- MSc Rural and Regional Resources Planning (Aberdeen 1993)
- MA (Hons) Geography (Aberdeen 1992)
- Committee member of North East Scotland Bat Group
- Bat Low Impact (BLIMP) bat licence holder

Rachael Thwaites MCIEEM

- Professional ecologist for over 20 years including working for the Centre for Ecology and Hydrology, Scottish Natural Heritage and in recent years as a consultant
- PhD in the area of plant community ecology
- BSc (Hons) Applied Biology (specialising in Ecology)
- Committee member of North-East Scotland Bat Group.
- Bat Low Impact (BLIMP) bat licence holder

Prof. Robin Pakeman MCIEEM CEcol

- MA (Hons) Natural Sciences (specialising in ecology)
- PhD in the area of plant ecology
- Professional ecologist since 1991 for the Centre for Ecology and Hydrology, the Macaulay Land Use Research Institute and the James Hutton Institute, where he is currently a senior ecologist.
- Visiting Professor at the University of Liverpool
- Honorary Professor at the University of Aberdeen

Alex Pakeman

- Bat survey assistant with 3 previous seasons of bat survey experience
- Has attended bat training events

Richard Salway

- Bat survey assistant for two survey seasons
- Experienced volunteer for BTO bird and BCT bat surveys
- MSc Earth Science and the Environment (Kingston University 1991)
- BSc (Hons) Geography (North London Polytechnic 1986)
- Member of North East Scotland Bat Group

Rachel Salway

- Bat survey assistant with 1 previous season of bat survey experience
- Member of North East Scotland bat group

Appendix 2 - Bat species and lifecycles

In the north-east of Scotland there are five species of bats generally found: common and soprano pipistrelle, brown long eared and two species of Myotis bats, namely Daubenton's and Natterer's. Leisler's bats and Nathusius's pipistrelle are less commonly encountered.

Both common and soprano pipistrelle use man-made structures to roost and can be found in both a rural and urban context. Brown long eared bats often roost in old buildings with large attics, preferring buildings associated with mature woodland in which they can forage. Daubenton's roost close to still or running water bodies, either in trees or structures such as bridges. Natterer's have a similar habit to brown long eared bats but are less common in the north east of Scotland.

Female bats roost together as a colony from May until the autumn. They usually have one baby in June which is reliant on its mother for two months and will remain in the roost while the mother goes out to feed. In the autumn the colony will move from their warm summer roost, often in buildings, to a cooler winter roost which may be in trees, unheated buildings with thick stone walls, caves and similar places. In their winter roost they become torpid as the weather cools and they hibernate.

Male bats live in smaller groups or individually in cooler roosts such as steadings or tree holes but can be found in maternity colonies in the early autumn when mating takes place.

While bats are hibernating they are particularly vulnerable to disturbance. Each time they wake it uses up their energy stores and with repeated disturbance the result can be their death.

Appendix 3 - The legal status of bats

All British bats have been protected by law under the Wildlife and Countryside Act 1981 (as amended) and more recently by the Conservation (Natural Habitats, &c) Regulations 1994 (as amended) (the Conservation Regulations). These Regulations implement, the European Habitats Directive ((EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna) in Great Britain. All species of bat found in Britain are listed in the Conservation Regulations as European protected species.

In Scotland you may be committing an offence if you, deliberately or recklessly:

- Capture, injure or kill a bat;
- Harass a bat or group of bats;
- Disturb a bat while it is rearing or otherwise caring for its young;
- Obstruct access to a breeding site or resting place (bat roost or hibernation site), or otherwise

deny a bat use of a breeding site or resting place;

- Disturb a bat while it is occupying a structure or place used for shelter or protection;
- Disturb a bat in a manner that is, or in circumstances which are, likely to significantly affect

the local distribution or abundance of the species to which it belongs; or

• Disturb a bat in a manner that is, or in circumstances which are, likely to impair its ability to

survive, breed or reproduce, or rear or otherwise care for its young; or

obstruct, damage or destroy a breeding site or resting place (whether or not the damage or

destruction is carried out deliberately or recklessly).

It is important to note that bat roosts are protected, even when the bats are not present. An offence does not need to be intentional, as seen by the term "recklessly", which covers any damaging action regardless of intention.

Appendix 4 - Licensing

There may be occasions where work is required which may be contrary to these regulations, such as tree surgery or the re-roofing of a house which has a bat roost. In this case a licence from NatureScot is required before any work can commence and any conditions imposed must be met. There is no guarantee that such a licence will be granted.

Three tests from the Conservation Regulations must be satisfied before SNH can grant a licence:

1. the licence relates to one of the specified purposes, including preserving public health or public safety or other imperative reasons of overriding public interest; preventing the spread of disease; preventing serious damage to property. Supporting evidence for any assertions about the significance of the project, such as its social or economic importance will be required by the licensing authority.

2. there is no satisfactory alternative to carrying out the work which will affect bats or their roosts; and

3. the work will not adversely affect the local bat population.

An application for a licence will fail if these three tests are not met.

Further guidance on bats in houses can be found at:

Licence information and application forms

https://www.nature.scot/professional-advice/safeguarding-protected-areas-andspecies/licensing/licensing-forms-and-guidance https://www.nature.scot/professional-advice/safeguarding-protected-areas-andspecies/licensing/species-licensing-z-guide/bats-and-licensing

Licensing Team NatureScot Great Glen House Leachkin Road Inverness IV3 8NW 01463 725364 licensing@nature.scot

Bat mitigation guidelines: https://cieem.net/resource/bat-mitigation-guidelines/ Information on all aspects of bats www.bats.org.uk