



5 Kites Nest Lane, Stroud, GL5 3NR

Preliminary Roost Assessment (Bats)



November 2023

All Ecology Ltd

Tel: [REDACTED]

Email: [REDACTED]

Web: www.allecollogy.co.uk

© ALL ECOLOGY 2023

Document Control

Site: 5 Kites Nest Lane, Stroud, GL5 3NR

Title: Preliminary Roost Assessment

For: [REDACTED]

Project Number: 2058

Document Version: 2.0

Survey Date(s): 22nd May 2020 and 29th November 2023

Document Date: 30th November 2023

Version	Date	Version Details	Prepared by	Reviewed by	Approved by
1.0	08/06/20	-	JG	VP	JG
2.0	30/11/23	-	JG	VP	JG



England and Wales Office

All Ecology Ltd,
Haw Street,
Coaley,
Dursley,
Gloucestershire,
GL11 5AY.

Scotland Office

All Ecology Ltd,
Bowfield Road,
Howwood,
Renfrewshire,
PA9 1BZ.

Tel: [REDACTED]
Email: [REDACTED]
Web: www.allecolony.co.uk

All Ecology is the trading name of All Ecology Ltd. Registered in England and Wales, Company Number 8306310

Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

Contents

Contents	1
1.0 Introduction	2
Background	2
Objectives and Aim	2
Site Location	2
Building Location	3
2.0 Legislation and Status	4
Bats	4
3.0 Methodology	6
Personnel	6
Preliminary Roost Assessment	6
Equipment	7
Assessment	7
Limitations	8
4.0 Results	9
Preliminary Roost Assessment	9
5.0 Impacts and Recommendations	15
Impacts	15
Further Surveys	15
Legal Compliance	15
Provision for Bats	16
6.0 References	17

1.0 Introduction

Background

1.1 In May 2020 and November 2023 All Ecology was commissioned to undertake a Preliminary Roost Assessment with respect to bats of a house at 5 Kites Nest Lane, Stroud, GL5 3NR. The house is vacant and parts of it are in a poor state of repair. It is surrounded by areas of paving to the south and west where Kites Nest Lane and Hill Close Estate border the property. There is a small area of overgrown land situated immediately to the rear (east) of the house. The site is bordered by residential properties and gardens on all aspects, extending away in all directions isolating the site within an area of dense housing. The closest areas of open countryside are located 210 m to the west, 340 m to the east, and 250 to the south with built-up areas extending to the north.

1.2 The building is proposed for demolition.

Objectives and Aim

1.3 The main objectives and aim of the survey was to establish the following:

Presence/absence of bat roosts.

Status of roosts if present.

Whether additional surveys are required.

Whether a European Protected Species (EPS) licence is required to ensure legal compliance.

Which type of mitigation measures would need to be employed.

Site Location

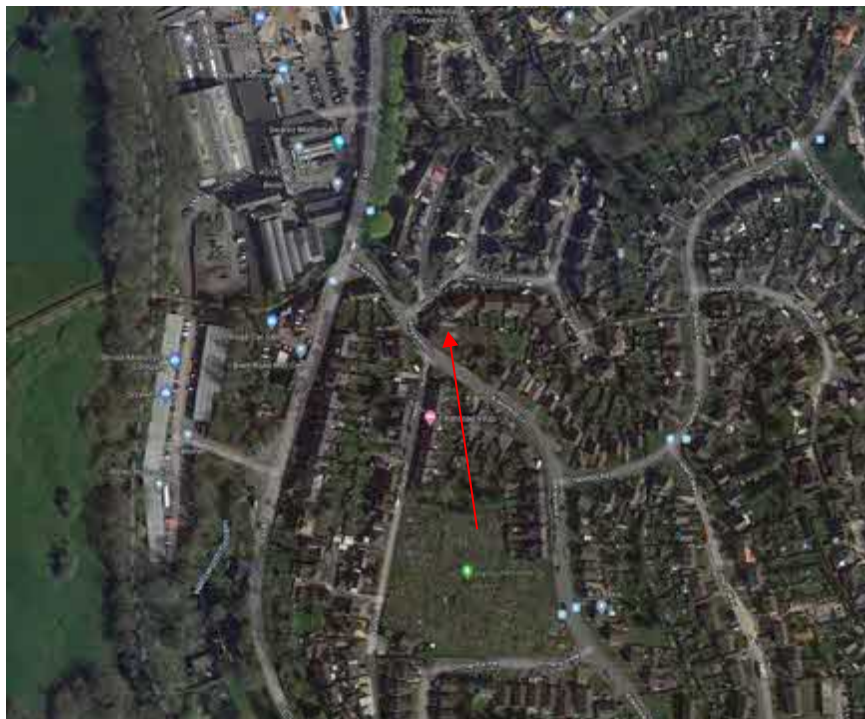


Figure 1: Site location plan (building indicated).

Building Location



Figure 2: Building location.

2.0 Legislation and Status

Bats

- 2.1 All species of bat are listed on Schedule 5 of The Wildlife and Countryside Act (1981) and as such receive protection under Section 9 of this Act. This has been amended several times, most recently by the Countryside and Rights of Way Act 2000, which added 'or recklessly' to Section 9(4) (a) and (b). In summary, it is a criminal offence to:

Intentionally kill, injure or take a wild bat.

Be in possession of, or control, any live or dead wild bat or part of, or anything derived from a wild bat.

Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection.

Intentionally or recklessly disturb any wild bat whilst it is occupying a structure or place that it uses for shelter or protection.

Transport for sale or exchange, or offer for sale or exchange, a live or dead bat or any part of a bat.

- 2.2 The Conservation of Habitats and Species Regulations 2010, consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is an offence to possess, sell or offer or transport for sale any European species of bat or any part derived from such a species. These Regulations also remove the 'incidental result defence'. In other words, it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity. Natural England can grant European Protected Species (EPS) licenses in respect of development to permit activities that would otherwise be unlawful.

- 2.3 Under Section 40 of the Natural Environment and Rural Communities Act (2006) public bodies, including Local and Regional Planning Authorities have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England. This is known as The England Biodiversity List, all of which make up the UK BAP Priority Species. This list forms the basis of the UK Biodiversity Framework, and in England, Biodiversity 2020: A strategy for England's wildlife and ecosystem services (Defra, 2011). Regional Planning Bodies and Local Planning Authorities will use it to identify the species that should be afforded priority when applying the requirements of the National Planning Policy Framework (NPPF) to maintain, restore and enhance species and habitats.

- 2.4 Seven bat species are NERC Priority Species (JNCC, 2007). These are:

Barbastelle *Barbastella barbastellus*

Bechstein's *Myotis bechsteinii*

Noctule *Nyctalus noctula*

Soprano Pipistrelle *Pipistrellus pygmaeus*

Brown Long-eared *Plecotus auritus*

Greater Horseshoe *Rhinolophus ferrumequinum*

Lesser Horseshoe *Rhinolophus hipposideros*

- 2.5 Greater Horseshoe, Lesser Horseshoe, Barbastelle and Bechstein's, are afforded greater protection under European legislation, being listed under Annex II of the EC Habitats Directive which lists species whose conservation requires the designation of Special Areas of Conservation (SACs).

3.0 Methodology

Personnel

- 3.1 The survey was carried out by [REDACTED] BSc Hons MCIEEM, an ecologist with over 13 years' experience working as a consultant. [REDACTED] has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. [REDACTED] holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2016-20363-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites

Preliminary Roost Assessment

- 3.2 An internal and external inspection of the building was conducted on the 22nd May 2020 and 29th November 2023.
- 3.3 All bat species resident in the UK have been recorded using buildings and built structures as roosts at some time during the year (Collins, 2016). The various sections of the building were inspected externally and internally following the methodology set out in the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd Ed (Collins, 2016).
- 3.4 In summary, the building was searched externally and then internally, where access was available, for any evidence of use by bats and notes were made on the following:
- Location and number of any live bats.
 - Location and number of any corpses or skeletons.
 - Location and number of droppings.
 - Notes on relative freshness, shape and size of droppings.
 - Location and quantity of feeding remains.
 - Location of clean, cobweb-free timbers, crevices and holes.
 - Location of characteristic staining from urine and/or grease marks.
 - Location of known and potential access points to the roost.
 - Location of the characteristic smell of bats if no other evidence is recorded.
- 3.5 Notes were also made on the characteristics and features of the building as follows.
- Type, age and aspect.
 - Wall construction, in particular the type of brick or stone used to build the walls and whether it has cavity walls or rubble- filled walls.

Form of the roof, in particular the presence of gable ends, hipped roofs, etc. and the nature and condition of the roof covering.

Presence of hanging tiles, weather boarding or other forms of cladding.

Nature of the eaves, in particular if they are sealed by a soffit or boxed eave and the tightness of the fit to the exterior walls.

Presence and condition of lead flashings.

Gaps under eaves, around windows, under tiles, lead flashings etc.

Presence and type of roof lining.

Presence of roof insulation.

Presence of water tanks in loft (note if covered or uncovered).

Structure of the roof including the truss type, age and nature of timber work.

Information or evidence of work having been undertaken that could affect use of the structure by bats.

3.6 The presence or evidence of nesting birds was also recorded.

Equipment

3.7 Equipment used to aid the inspection survey included low and high-powered torches, ladders, endoscope, mirrors, binoculars and a camera.

Assessment

3.8 The surveyed building has been evaluated to assess which of the following categories it falls into, if any (Mitchell-Jones, 2004 & Collins, 2016):

Transitional roost (April-September/October) - On waking from hibernation or in the period prior to hibernation, bats search for roosts in which they stay for only a few days or on some occasions several weeks. These transitional roosts can be occupied by a few individuals or occasionally small groups. The transitional roosts used prior to hibernation are generally cool and thus may allow bats to reduce their energy requirements before going into hibernation.

Maternity roost (May-August) - Breeding females gather together around the beginning of May to form nursery colonies. During this period gestation begins with births typically occurring between June and July. The females and their young remain within the maternity roost until the young are weaned and independent (late July-August). These roosts tend to break up between August and September. Adult males are rarely found within these colonies. However, the adult males of long-eared bats, Daubenton's, Natterer's, and horseshoe bats can be found roosting within maternity colonies with their numbers increasing throughout the active season.

Satellite roost (May-August) - Breeding females may have alternative roost sites in close proximity to the main nursery colony. These are referred to as 'satellite roosts'. The numbers of bats using these roosts can vary greatly, from a few individuals, to small groups.

Mating roost (September-November) - All British bats are polygynous i.e. males mate with several females. Mating generally takes place from late summer and can continue through the winter. A number of different mating strategies are used by bats, though males of some species establish mating roosts, whereby they defend territory and display/call to females to mate.

Hibernation roost (October-March) - Depending on the weather and food availability, bats tend to move to hibernation sites from October. Hibernation roosts can vary greatly in terms of the number of individuals and the diversity of species that occupy them. However, they tend to have a constant cool temperature and high humidity, which allows the bats to use less energy regulating their temperature. Bats will wake occasionally during hibernation to drink and feed.

Night roost (March-November) - Bats may use roosts other than traditional day roosting sites to rest in during the night. These roosts vary in their conservation significance. Night roosts may be used by a single individual on occasion or they could be used regularly by the whole colony. Studies have shown that night roosts may be of particular importance to some species i.e. the Lesser Horseshoe, providing key resting places within core foraging areas.

Day roost (March-November) - These roosts are used during the day to rest in. Males of most British species spend the summer roosting alone or in small groups with other males in such roosts. Bats may regularly use a number of day roosts, switching between them on a daily basis, though conversely, they may occupy the same roosting site for several weeks.

Feeding roost (May-November) - These roosts can be occupied by a single animal or a few individuals throughout the active season. They vary in their significance as they may be used by the whole colony or just a few individuals to feed, to shelter from the weather or to rest temporarily. Feeding roosts are often used by long-eared and horseshoe species.

Other considerations, Swarming sites - Swarming takes place between August and November, whereby large numbers of bats from several species gather, generally around caves and mines. They are often dominated by the *Myotis* species and appear to be important mating sites with some bats travelling several kilometres to reach these areas. A proportion of the bats that travel to these sites will remain to hibernate.

Limitations

- 3.9 The building was fully accessible and the only part of the building that could not be fully inspected were parts of the voids between the tiles and roof linings although these areas did not appear to be accessible to bats.

4.0 Results

Preliminary Roost Assessment

Surrounding Habitat

- 4.1 The building is surrounded by open urban roads to the south and west, a neighbouring house and garden to the north, and a very overgrown former garden/patch of greenspace to the east. This is a small area but a potentially a good source of invertebrates for foraging bats; however, the site is likely to be subject to light spill from street lights and other light sources associated with the houses. Any potential is likely to be limited to small numbers urban species such as pipistrelles. The site itself is unlikely to be important for foraging or commuting bats and any value is that associated with any potential for roosting.

Building

- 4.2 External – Two storey house with single storey pitched roof section to the side and large flat roof extension to the rear. The building is unoccupied and has been for a number of years and was in a poor state of repair in 2020 with further deterioration noted during the 2023 survey. Mix of brick and rendered block walls with pan tiles on the gable roofs of the main house and the extension, and bitumen felt covering the flat roofs. Chimney with lead flashing on the main roof. Timber fascia boards and soffits throughout.

Internal – Two storey section is a typical house with mostly well-lit living space. Loft hatch on the landing provides access to the roof void which spans the footprint of the building with a height of just over one metre. Roof supported by rafters and purlins with a central ridge board. Thin layer of granular insulation on the ceiling of the rooms below. Galvanised water tank present. The single storey gable section is an old work shop with further store rooms extending back into the large flat roof section. Some darker areas and roof void in the gable section where the roof is supported by rafters, purlins, posts and a central ridge board although the ceiling had mostly collapsed.

Access for Bats – The two storey part of the building is well sealed, with intact verge mortar and well-sealed soffits and fascia boards. The tiles are tight fitting with no gaps in the ridge mortar. The gaps under the bottom row of pan tiles are blocked with mortar. There is a small gap under the flashing around the chimney; this was accessed from the flat roof and was found to be minor and did not extend into further voids. The single storey sections have gaps where soffits have rotted allowing direct access into the building as well as the void between the felt and pantiles on the gable roof section, although the felt in these areas has largely disintegrated.

Potential Roosting Sites – The main building interior is not accessible to bats. The roof void in the main house is undisturbed but low and not accessible by bats. No evidence was found and any potential is negligible. The roof void in the single storey section is exposed to the room below through the collapsed ceilings although it is dark within with the windows boarded. This roof void and the workshop below, as well as the adjoining rooms to the rear in the flat roof section, are accessible through the missing soffits but are generally poor for bats. Internal gaps and crevices were few and the main potential roosting area, between the felt and the tiles, was generally exposed through the disintegrating felt. The likelihood of bats using this part of the

building for roosting is negligible and no evidence of bats was recorded. No other external gaps or services were recorded.



Photograph 1: West elevation.



Photograph 1a: West elevation (2023).



Photograph 2: South elevation.



Photograph 2a: South elevation (2023).



Photograph 3: North elevation.



Photograph 3a: North elevation (2023).



Photograph 4: North elevation.



Photograph 5: View of the flat roof.



Photograph 6: Main house roof space.



Photograph 7: Single storey interior.



Photograph 8: Single storey section roof space.



Photograph 10: Well sealed verges on the main roof.



Photograph 11: Tight fitting tiles. Minor gap under the flashing – no evidence of use.



Photograph 12: Missing fascia board and soffit providing direct access into the single storey section interior.

Other species

4.3 There was no evidence of any use by nesting birds or any other protected species.

5.0 Impacts and Recommendations

Impacts

- 5.1 The building is proposed for demolition.
- 5.2 In the absence of mitigation, the following impacts and potential impacts with regard to bats have been identified:

Building 1

Demolition of the building resulting in the loss of dark undisturbed roof spaces but which were otherwise poor for bats, and the accessible internal areas of the single storey section. No evidence of presence after a full inspection of the interior. No impact.

Demolition of the building resulting in the loss of minor external gap under chimney flashing and minor gaps around disintegrating felt and missing front and rear soffits on the single storey section. No evidence of presence after a full inspection and any potential is negligible. No impact.

Temporary/permanent minor disruption of areas of potential sub-optimal bat foraging habitat through potential increase/changes in external lighting. Impact unknown but mitigation likely to be possible.

Further Surveys

- 5.3 It has been concluded that roosting bats are absent from the building and in accordance with the Bat Conservation Trust – Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Ed (Collins, 2016), where an absence of bats can be determined with a high level of confidence, no further surveys to determine presence/absence are required.
- 5.4 Given the nature of the features, the potential for future use is regarded as negligible and no pre-works checks are recommended.
- 5.5 No evidence of nesting birds was recorded but there is potential for them to nest in the future. No further surveys for birds are required at this time. All nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). The building demolition should ideally be scheduled to take place outside the nesting season of March to August. Works during this time should be preceded by a nesting bird survey to confirm they are absent. If nesting birds are discovered then the nest and surrounding habitat must be left undisturbed until the young have fledged. Roosting bats were found to be absent from the interior and as such it would be possible to seal the building against bird entry to avoid any future delay should they begin nesting, provided none are nesting when the building is sealed.

Legal Compliance

- 5.6 The Wildlife and Countryside Act 1981 as amended by The CRoW Act 2000 and The Conservation of Habitats and Species Regulations 2010 makes it illegal to recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection, whether the bat is occupying the shelter at the time or not.

- 5.7 European Protected Species (EPS) Licences to permit the above for the purposes of development must be obtained from Natural England. To gain a licence the scheme must have been issued with detailed planning permission and must not result in a loss of conservation status of the species concerned. It has been concluded that roosting bats are absent from the building and licence to permit the demolition will therefore not be required.

Provision for Bats

Care and Vigilance

- 5.8 All works should be carried out with care and vigilance for bats and the contractor advised to adhere to the following procedures in the highly unlikely event that bats are found during works:

If the roost is still in the structure and bats are not injured, stop work and contact a licensed ecologist. If help is not available, allow bats to fly out of harm's way.

If material containing a roost has been removed, the roost is not exposed and the bats are not injured, temporarily seal and isolate the roost, stop work and seek advice from a licensed ecologist. If advice is not readily available, re-open it and allow bats to relocate of their own accord.

If the roost has been exposed, and especially if bats have been injured, stop work, collect bats in a secure box or bag (using a glove) and contact a licensed ecologist.

Habitat Creation

- 5.9 No roosting bats were recorded during the survey. No specific provision for roosting bats is required but the following options are given in line with best practice and the local planning authority will usually expect to see some enhancements included. Any bats foraging on and around the site are likely to be crevice dwelling species and there are a number of ways in which the new building on site could be enhanced to provide roosting opportunities for these species to generally enhance the site. This could easily be achieved through the installation of bat boxes/panels on the walls, ideally at the apices of the gable ends.

6.0 References

Collins (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 3rd Ed. The Bat Conservation Trust: London.

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, SI 2007/1843, London: HMSO.

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Defra (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*. Defra.

JNCC (2007). *UK BAP Priority Species*. [Online]. Available at: <http://jncc.defra.gov.uk/page-5717> [accessed on 30th November 2023]

██████████ (2001). *AIDGAP: A Guide to British Bats*. Field Studies Council/The Mammal Trust.

██████████. (2004). *The Bat Mitigation Guidelines*. English Nature: Peterborough.

Wildlife and Countryside Act 1981 (and amendments), (c.69), London: HMSO.