Preliminary Bat Survey Report for 6, Ridgeway, Farnsfield, Nottinghamshire

20th January 2024

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SUMMARY

At 6 Ridgeway in Farnsfield, Nottinghamshire, planning permission is being sought for an extension/alteration to the property.

As this could impact on features typically used by bats as roosting and/or hibernating places, a diurnal inspection was undertaken on 10th January 2024, to assess the building for signs of bat occupation.

A desk study revealed a small number of bat records within 1.0 km of the site; these including Common Pipistrelle *Pipistrellus Pipistrellus*.

This suggested that if any suitable features were present on/within the building, they could be utilised by roosting and/or hibernating bats within the area.

All the internal and external structures, especially those associated with the roofs and walls of the building were examined.

The inspection revealed no signs of recent or historical bat activity or occupation.

The suitability of 6 Ridgeway in Farnsfield, for roosting pipistrelles *Pipistrellus sp* and/or other bat species was considered to be negligible, as there was an absence of any suitable external features, whilst the roof voids were fully sealed.

At the time of the survey, the property was not identified as bat roost or hibernation site and as such, no further surveys or mitigation are required.

It is recommended that the proposed development seeks to provide biodiversity enhancements in line with the NPPF. Suitable measures will include the provision of a bat box (e.g. Vivara Pro Woodstone Bat Box), hung on or built into the exterior wall of the building.

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No signs of, or potential for nesting birds was found.

1. INTRODUCTION

At 6 Ridgeway in Farnsfield, Nottinghamshire, planning permission is being sought for an extension/alteration to the property.

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All the internal and external structures, especially those associated with the roofs and walls of the building were examined.

The result of the survey is contained in this report.

1.1 Bat Legislation

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- *Intentionally or deliberately kill, injure or capture (or take) bats*
- *Deliberately disturb bats (whether in a roost or not)*
- *Recklessly disturb roosting bats or obstruct access to their roosts*
- *Damage or destroy roosts*
- *Possess or transport a bat or any part of a part of a bat, unless acquired legally*
- *Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal…uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

1.2 Bird Legislation

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- *Killing, injuring or capturing them, or attempting any of these;*
- *Taking or damaging the nest whilst in use;*
- *Taking or destroying the eggs.*

Barn Owls are on Schedule 1 of the Act. Schedule 1 species carry special penalties and it is an offence to even disturb these near the nest.

2. METHODOLOGY

2.1 Desk study

A desk study was undertaken to determine bat species that had been recorded within a 1.0km radius of the site. This involved a search of NBN Atlas and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- National Biodiversity Network Atlas website.

2.2 Building Survey

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2023) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal emergence surveys.

The preliminary roost assessment (PRA) is usually in the form of a diurnal walkover and can be carried out at any time of the year. It provides an opportunity to check for signs of bat occupancy and/or the suitability for bat roosting.

Evidence of bat activity includes droppings, scratch marks, feeding remains, carcasses, or even roosting animals, whilst suitability is determined by the type and number of potential roost features (PRFs) typically used by bats.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats Plecotus auritus, Myotis bats (Natterer's Myotis nattereri and Whiskered/Brandt's M. mystacinus/M. brandtii), and Lesser Horseshoes Rhinolophus hipposideros, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, a roost characterisation survey is undertaken. The results are used to inform the impact assessment and design of mitigation measures. Roost characterisation includes nocturnal emergence surveys, unless sufficient information has already been collected using robust survey methods with no significant constraints.

Nocturnal emergence surveys allow numbers and species of bats to be confirmed, and should only be undertaken when bats are out of hibernation and in their summer roosts.

The bat active period is generally considered to be between April and October, although particularly cold weather will affect the level and extent of bat activity. Indeed, the air temperature at the start of each survey should be at least 10°C or above, with no strong wind or heavy rain. The survey starts 15 minutes before sunset and continues for one and a half to two hours after sunset.

Visits will be a minimum of three weeks apart, and the number of surveys and timing is dependent on the evidence found or the suitability of the site to bats. This will be determined by the ecologist. In general, at least two emergence nocturnal surveys will be carried out, but a third visit may be necessary if the results are inconclusive or further information is required.

Nocturnal emergence surveys are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but the suitability for bat roosting is considered to be low, moderate or high.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the period May to August.

For moderate suitability a minimum of two visits are needed between May and September, of which one must be in the period May to August.

With high suitability, three visits will be necessary between May and September, of which two must be in the period May to August.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

The number of surveyors and/or the use of night vision aids (NVAs) is determined by the ecologist, and is dependent on the complexity of the structure. For simple structures just one surveyor using an appropriate number of NVAs will be sufficient, but for larger sites

and/or more complex or irregularly shaped structures, e.g. those with multiple elevations and/or roof slopes, more surveyors will be required.

On the 10th January 2024, a thorough inspection of the building was made by Matt Liston (working under Natural England bat licence No. 2015-16489-CLS-CLS), including the exterior and interior walls, roof coverings, roof space, eaves, gables, roof and ceiling timbers, fascias, window casements and door frames.

10x42 Nikon binoculars and a Clulight CB2 torch were used for the inaccessible/unreachable areas. On this occasion an endoscope was not used, as there were no out of reach crevices and cavities that could not be inspected with a torch and binoculars.

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Barn Owls and Little Owls *Athene noctua* too, are commonly encountered in or near farm buildings. Being non-migratory species, they can be searched for at any time of year and if a bird is in residence the signs are usually obvious.

Indicators of owl occupation include pellets, droppings and feathers. As pellets can be aged relatively easily, the frequency and recentness of occupation can be determined.

Barn Owl breeding is indicated by large, flattened piles of guano on top of a shelf, wall plate or internal fixture, and the accumulated droppings are often dotted with broken egg shells or food remains. If nesting, the female often sits tight on eggs or young birds and will defend the brood by attacking any would-be predator. Caution should therefore be exercised if checking the tops of high shelves or platforms.

Little Owls tend to nest in a cavity of some kind, usually high up.

Both Barn and Little Owls are also very vocal at night, and can be heard up to half a kilometre away.

Barn Owls are most active at dusk and dawn, but can be observed hunting in full daylight, especially during the winter. Little Owls are primarily diurnal predators.

Birds using buildings are easily disturbed, so care should be taken to minimise the length and impact of the visit.

The inspection findings are detailed in Section 3.

3. RESULTS

3.1 Location

The site is located at 6 Ridgeway, Farnsfield, Nottinghamshire at Ordnance Survey Grid Reference SK 65049 56581 (Appendix 1).

3.2 Desk study

A desk study revealed a small number of bat records within 1.0 km of the site; these included Common Pipistrelle.

This suggested that if any suitable features were present on/within the building, they could be utilised by roosting and/or hibernating bats within the area.

3.3 Site Description

The site comprised a detached bungalow with pitched tiled roof, with small rear, shallow pitched roofed extensions (Figs. 1 and 2).

Figs. 1 & 2 6 Ridgeway, Farnsfield

The property was set on a moderate plot with formally landscaped rear garden, and hard standing car parking area to the front. Residential houses and gardens along with roads dominated surrounding habitats.

The layout of the site is shown in the aerial photograph in Appendix 2.

3.4 Building Survey

The daytime inspection was carried out on 10th January 2024, commencing at 2.30pm. The weather conditions during the time of the survey were recorded and are presented in Table 1 below.

Parameter	Value
Temperature (ºC)	12.0
Cloud cover (%)	70
Precipitation	None
Wind speed (Beaufort scale)	F0

Table 1 Weather conditions during the diurnal survey

Externally, the inspection of revealed an absence of any suitable gaps or crevices; the roof was in good condition throughout, with all of the pitched tiles tightly fitting, along with fully sealed main ridges (Figs. 3 and 4).

Figs. 3 & 4 External roof detail– no gaps/crevices present

All of the roof overhangs/UPVC eaves detail were fully sealed and fitting tightly to the brickwork, whilst gable ends were fully sealed mortar (Figs. 5, 6 and 7 - overleaf)

Additionally, all of the windows and doors fitted tightly within casements.

Figs. 5 & 6 Eaves fully sealed/soffits tightly fitting

Fig. 7 Gable ends sealed with mortar

All of the external walls were in good condition, with no crevices or gaps noted anywhere externally.

Internally, the inspection revealed three connected voids were present, all of which were lined with tightly fitting bitumen felt (Figs. 8 and 9).

Figs. 8 & 9 Roof voids lined with bitumen felt

No light penetration was observed anywhere within the roof voids, which were evidently fully sealed internally.

The inspection of the buildings (both interior and exterior) revealed no signs or evidence of recent or historical bat activity and/or occupation.

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties, and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October.

Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so likelihood for roosting was also assessed.

The suitability of 6 Ridgeway in Farnsfield, for roosting pipistrelles *Pipistrellus sp* and/or other bat species was considered to be negligible, as there was an absence of any suitable external features, whilst the roof voids were fully sealed.

The inspection revealed no signs of recent or historical bat activity or occupation.

Another bat frequently encountered in buildings is the Brown Long-eared. This is also a common species, but unlike pipistrelles, they prefer the dry, warm space of the loft or roof void, and can often be found hanging from roof timbers, especially rafters and the ridge board next to chimney breasts.

No signs of Brown Long-eared Bat activity or indeed any other bat species that regularly use buildings were found.

At the time of the survey, the building was not identified as bat roost or hibernation site, and no further surveys or mitigation is required.

It is recommended that the proposed development seeks to provide biodiversity enhancements in line with the NPPF. Suitable measures will include the provision of a build in bat box (e.g. Vivara Pro Woodstone Bat Brick), built into the exterior wall of the building.

*

No signs of, or potential for nesting birds was found.

5. REFERENCES

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APPENDICES

Appendix 1: Location plan

Appendix 2: Site layout

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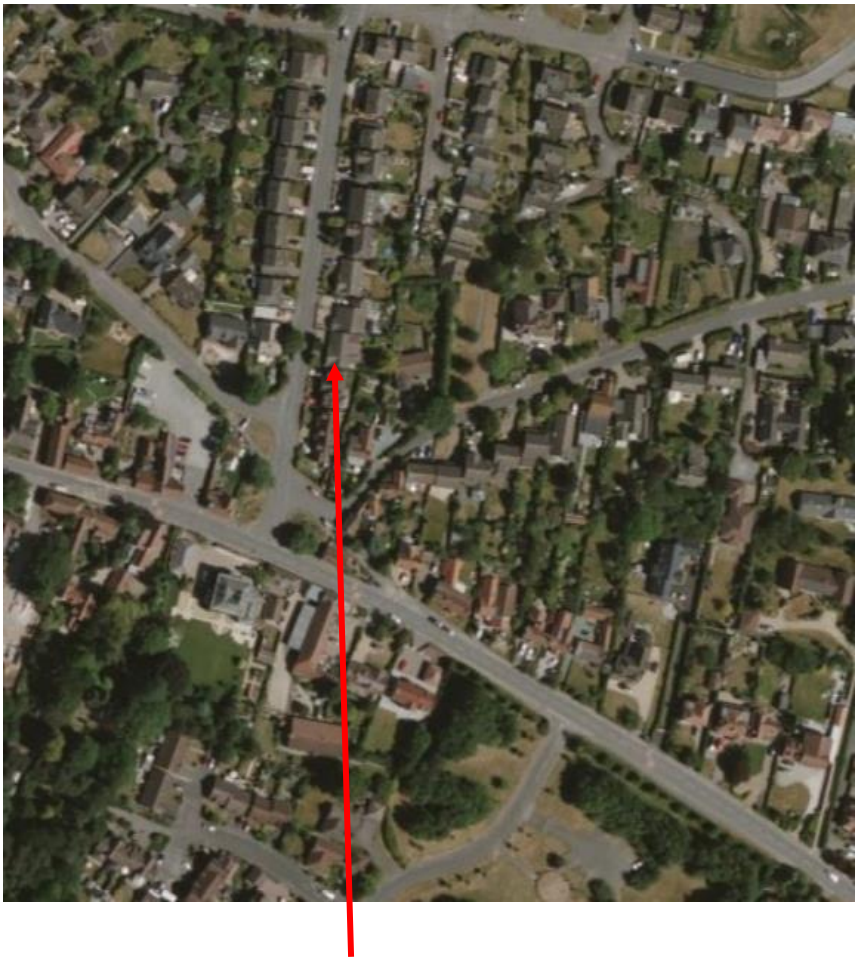

6 Ridgeway, Farnsfield

Appendix 2: Site layout

6 Ridgeway, Farnsfield

Application building

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