Longlands Farmhouse and Cottage
Cumbria

AVISON YOUNG

Update Ecological Constraints Study; 2023

Final

VERSION 2

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1. Introduction

BiOME Consulting Ltd was commissioned by Avison Young in August 2023 to undertake an update Preliminary Ecological Appraisal (PEA) and nocturnal bat survey in relation to the proposed demolition of Longlands Farmhouse and Cottage (**Figure 1**) (the *'site'*).

Previous ecological surveys have been completed in relation to this site in 2021[1] (with the 2021 nocturnal survey results summarised in **Section 4.2.1**). Works have been delayed and due to the amount of time that has elapsed since the completion of these surveys, and in line with relevant guidelines[2], an update PEA/Ecological Constraints Study (ECS) was deemed necessary to inform the proposed works.

This report details the methods employed, results obtained and recommendations to enable the lawful progression of the project from an ecological perspective.

1 BiOME Consulting Ltd (2021). *Longlands Farmhouse and Cottage; Ecological Constraints Study*
2 CIEEM (2019). *Advice Note on the Lifespan of Ecological Reports & Surveys*

1.1. Site Description

The site, located between the village of Gosforth and Sellafield Nuclear Power Station in western Cumbria (**Figure 1**), included a farmhouse (**Photograph 1**) and attached cottage (**Photograph 2**). A yard area was present to the north, with garden to the south and pasture to the east and west.

The site layout is shown on **Figure 2**.

Figure 2. Site layout, buildings to be demolished in red

1.2. Development Proposal

It is proposed to demolish all buildings within the site (**Figure 2**).

2. Methodologies

2.1. Preliminary Ecological Appraisal Survey

An update PEA survey[3],[4] was undertaken on 26 August 2023 by an experienced ecologist, Martyn Owen MCIEEM, in excellent weather conditions. Martyn holds survey licenses in relation to GCN (2016-19752-CLS-CLS), bats (2022-10620-CL18-BAT) and a variety of Schedule 1 birds (including Barn Owl *Tyto alba*). During the survey all areas within the site and site boundaries were walked and habitat types assessed. Signs of protected species, invasive plants (*i.e.* those included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)) and other notable species were also searched for during the survey, as well as noting habitats considered to have the potential to support protected species.

2.2. Bats

2.2.1. Preliminary Roost Assessment

An update Preliminary Roost Assessment (PRA) survey[5] was undertaken concurrently with the PEA by Martyn Owen MCIEEM. Prior to the completion of the site survey, aerial imagery was reviewed[6].

The survey involved an inspection of the interior and exterior of the buildings within the site to identify potential or actual bat access points and roosting sites, and to locate any evidence of bats such as live or dead specimens, bat droppings, urine splashes, fur-oil staining and/or squeaking/scratching noises. It should be noted that sometimes bats leave no visible sign of their presence on the outside of a building (and even when they do wet weather can wash away evidence).

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

4 CIEEM (2017) *Guidelines for preliminary ecological appraisal* [online] available at: https://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea- (accessed 25 August 2023)

5 Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn.). The Bat Conservation Trust, London

6 Google Maps [online] available at: https://www.google.co.uk/maps (accessed 25 August 2023)

The inspection was facilitated by the use of ladders, binoculars, a high-powered torch, endoscope and small dental mirrors to inspect accessible crevices with the potential to support bats.

2.2.2. Emergence/Re-entry Surveys

One update nocturnal survey of the House and Cottage was completed (**Table 1**).

To ensure coverage of all areas which could support bats the nocturnal surveys were completed by five surveyors (**Table 1**) (Martyn Owen (NE bat licence no. 2022-10620-CL18-BAT), Richard Moores MCIEEM (NE bat licence no. 2015-12257-CLS-CLS), Samuel Dreux QCIEEM, David Lee and Steve Forrester) all of which are highly experienced nocturnal bat surveyors.

Surveyors were equipped with electronic bat detectors (EM Touch Pro 2) and sound files were analysed with appropriate bat analysis software (Kaleidoscope) once the surveys were completed. InfraRed cameras were also used, covering all elevations and the footage reviewed at the conclusion of the surveys.

The nocturnal bat survey was undertaken in weather conditions considered appropriate for surveys of this kind (**Table 1**).

Table 1. Survey details

Date	Surveyors	Sunset/ rise	Time		Cloud (octets)	Wind (Beaufort/ Direction)	Temp (°C)	Precip.
			Start	Finish				
26/08/23	MO/SF/ RM/SD/DL	20:09	19:56	22:00	2-3	1SW	14	Nil

2.3. Limitations

The findings presented in this study represent those at the time of survey and reporting, and data collected from available sources. Ecological surveys are limited by factors which affect the presence of plants and animals, such as the time of year, migration patterns and behaviour.

Access to all areas outwith the site boundary was not possible; however, it was possible to adequately assess these areas from within the site or from public rights of way.

The inspection of buildings and built structures for evidence of bats can be conducted at all times of year. The daytime inspection was completed in the main period of bat activity (May-September inclusive) but it is possible that previous evidence of low-level bat usage may have not been apparent. However, the buildings were not in regular use and any bat evidence inside the buildings would very likely have been visible to the surveyor, if present.

3. Results

3.1. Update PEA

The updated PEA conducted on 26 August 2023 did not suggest any significant changes to the observations made during the previous PEA conducted on 6 April 2021[7].

The sole change was the removal of semi-mature trees and scrub to the south of the house.

3.2. Update PRA

Full access to the interior of the House and Cottage was achieved. The buildings were unoccupied. The roof of the house was lined with bitumen felt **(Photograph 1)** while the roof of the cottage was half unlined with the northern section lined with bitumen felt **(Photograph 2).**

Within the void above the house scattered pipistrelles-type droppings (50+, include some fresh) were present along with two Common Pipistrelles **(Photograph 3)** day-roosting. No other bats/evidence of other species was encountered.

One long-dead bat (likely a pipistrelle species) was present within the bathroom of the Cottage **(Photograph 4)**. No bats/evidence of bats was encountered within the Cottage.

7 Mid Tarn Farm, Sellafield, Cumbria (27 September 2021); Ecological Constraints Study, BiOME Consulting Ltd

Photograph 1. Void above the house

Photograph 2. Void above the cottage

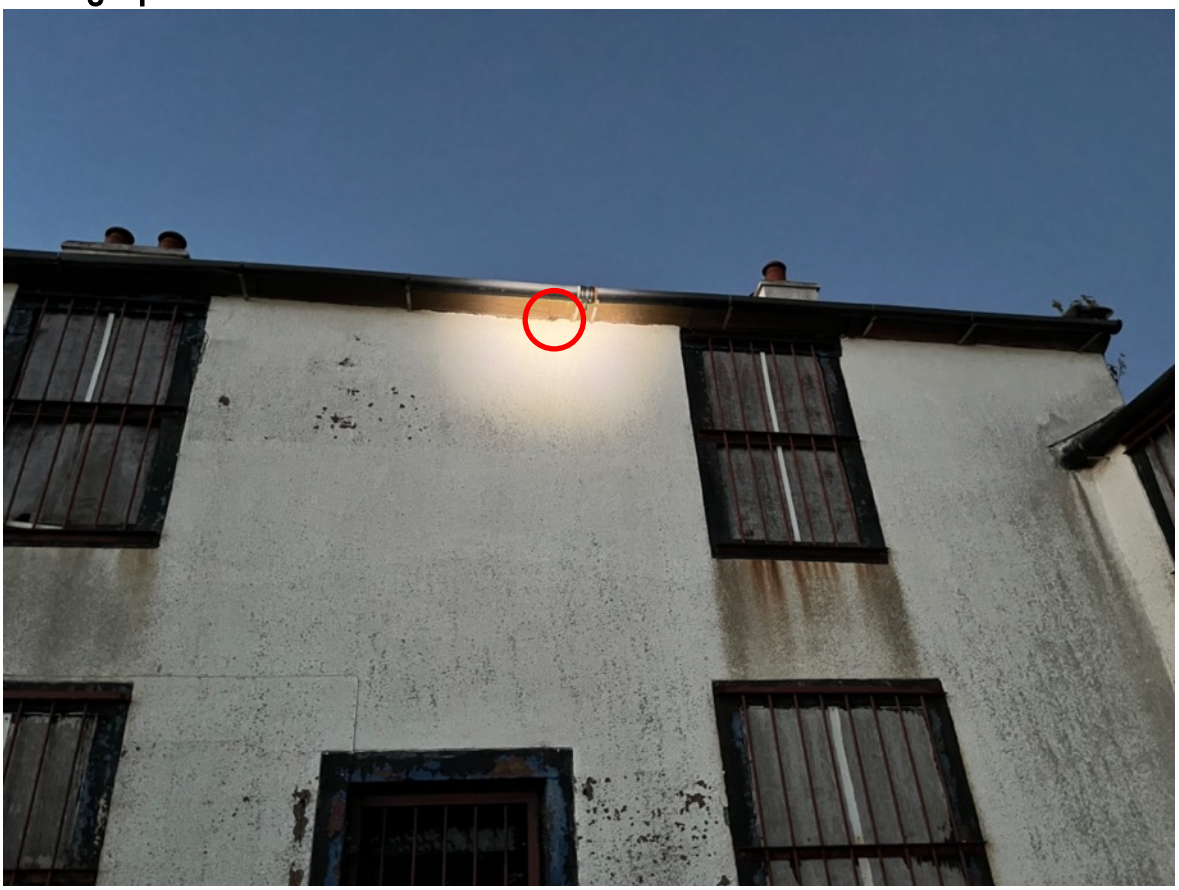
Photograph 3. Common Pipistrelle within void above House

Photograph 4. Long-dead bat within Cottage

3.3. Bats – Update Emergence Surveys

Three Common Pipistrelles exited a day-roost via a gap at the eaves on the southern elevation of the House (**Photograph 1)** (Roost Access Point (RAP) 5).

Photograph 5. RAP 5



No bats roosted within the Cottage.

Activity was low, with infrequent passes of Common Pipistrelle and Soprano Pipistrelle *Pipistrellus pygmaeus* along with four passes of Brown Long-eared Bat.

4. Conclusions and Required Actions

4.1. Designated Sites

Six non-statutorily designated sites are present within 2km of the site (see 2021 report for details). Taking into account the nature of the proposed works, no effects to these locally designated sites are predicted, assuming all works strictly follow pollution prevention best practice.

4.2. Bats

4.2.1. Results Summary

Table 2 summarises the results of the bat surveys completed in relation to Longlands Farmhouse and Cottage. The likely roost type based on the surveys completed is included below, along with an assessment of roost value[8].

Table 2. Bat survey results summary

Roost Access Points	Species	Maximum Number Recorded Roosting	Likely Roost Type (Maximum Value)	Roost Value	Impacted by Development?
1, 2 (2021) and 5 (2023)	Common Pipistrelle	3	Day Roosts	Local	Yes
3 & 4 (2021)	Brown Long-eared Bat	2	Day Roosts	Local	Yes

The specific roost sites of the species detailed within **Table 2** during 2021 could not be determined. However, the Common Pipistrelle roosts were likely within the roof fabric and the Brown Long-eared Bats are likely to have roosted within the roof void near to the ridge. In 2023 the Common Pipistrelles roosted within the void (free hanging).

8 Wray, S., Wells, D., Long, E., Mitchell-Jones, T., (2010). *Valuing Bats in Ecological Impact Assessment.*

4.2.2. Impacts

The proposed works will result in the loss of all roosts.

No works to the building that may disturb roosting bats, or prevent access to a potential bat roost should be completed until a mitigation licence is in place.

4.2.3. Natural England Licencing

The confirmation of roosting bats within the site means that a licence from Natural England will be required to enable the proposed works to proceed lawfully. Given the identified roosts are of low conservation status, the site can be registered under the Bat Mitigation Class Licence (BMCL) scheme through a Registered Consultant (RC). Following submission of appropriate forms, the application takes up to ten working days to be assessed by Natural England.

4.2.4. Timing of Works

There are no restrictions with regards to when (e.g. certain months of the year) works can take place, although it would be best practice to avoid low winter temperatures when bats may be in torpor (pipistrelles and BLE can use the same roosts year-round). A BMCL can only be obtained a maximum of four months prior to the start of works to the area of the roost and the licence covers a maximum timeframe of six months (i.e. works to destroy/modify the roost must be completed in six months, NOT that the project must be completed within this six-month window). All permissions are required to have been obtained before the site can be registered under the BMCL scheme.

To inform the BMCL application surveys must have been completed during the most recent bat active season. Consequently, if works do not occur before May 2024 at least one update survey will be required.

4.2.5. Supervision of Works

Works in the area of the roosts will need to be supervised by an RC (or accredited agent). Prior to works commencing, the RC would provide a 'toolbox talk' to those contractors on site in which details of e.g. best working practices and what to do in the event of discovering a bat would be discussed.

During supervised works to the area of the roost the RC would capture any bats that do not fly away and move them to a temporary bat box (erected on a nearby tree/structure prior to works commencing).

These works (when capture/handling and exclusion of bats is possible) should ideally take place in conditions suitable for bats to be active (spring-autumn inclusive). However, works can also be undertaken in the winter as long as weather conditions allow (sunset temperature of at least 8˚C on preceding 2+ days).

4.2.6. Compensation

Although there is no requirement for any compensatory roosting features to be installed under the BMCL scheme (favourable conservation status is maintained without any compensation), it is recommended that two Schwegler 2F[9] bat boxes with double-front panels are installed on trees around the periphery of the site and a 1FF Schwegler[10] bat box with built-in wooden rear panel is installed on a nearby retained building.

4.3. Habitats and Other Species

None of the **habitats** identified on-site were considered to be of significant ecological value and are not considered to represent a constraint to the proposed works.

Retained trees on/near site should be protected in line with BS 5837:2012[11]. Where vegetation clearance is required, vegetation should be reinstated on at least a like-for-like basis. Standard pollution control measures should be implemented during construction to protect all habitats.

No **Badger** setts were present within the site or adjacent accessible areas. Nevertheless, the occasional presence of foraging Badgers is considered possible;

9 https://www.nhbs.com/2f-schwegler-bat-box-with-double-front-panel
10 https://www.nhbs.com/1ff-schwegler-bat-box-with-built-in-wooden-rear-panel
11 British Standards Institute BS 5837:2012. Trees in relation to design, demolition and construction.

it would therefore be prudent to consider Badgers during renovation works, this may include (if relevant):

- covering trenches at the conclusion of each working day, or include a means of escape for any animal falling into excavations, and
- any temporarily exposed open pipe system should be capped in such a way as to prevent Badgers gaining access.

If possible, any vegetation clearance/building works should be completed outside the **nesting bird** season (1 March to 31 August), although it should be noted that the nesting period may extend beyond these dates (for example, pigeons can breed in any month of the year in the UK). Should an occupied bird nest or a nest in the process of being constructed be encountered during works, clearance must cease in this area and should only re-commence once the birds have fledged or the nest is abandoned.

If works must be undertaken during the nesting season, a survey to identify any nests which may be impacted will be required. This survey should be undertaken by a SQE. Again, should an occupied nest or nest under construction be found, works must cease in this area until the birds have fledged or the nest has been abandoned.

4.4. General Mitigation

No further works in relation to other species are considered necessary at this time.

All works should be undertaken in accordance with *Guidance for Pollution Prevention (GPP5) and PPG1 Understanding your Environmental Responsibilities*.

If any protected species are encountered during the works, all works in the vicinity should stop immediately and a SQE contacted for advice on how to proceed.

4.5. Opportunities for Enhancement

The National Planning Policy Framework (NPPF) sets out national planning policies for the protection of biodiversity (and geological) conservation through the planning system. A key principle of NPPF is that, '*Opportunities to incorporate*

biodiversity in and around developments should be encouraged'. Taking the requirements of NPPF into account, opportunities should be sought where possible for nature conservation enhancement at this site, potentially including:

- The creation of habitat areas through landscape planting using native, locally sourced plants/trees.
- The planting of native fruiting species to provide a food source for invertebrates, birds and mammals.
- The installation of bird and bat boxes on retained tree/s. S41 priority species such as the House Sparrow (which were noted in the area) and Barn Owl *Tyto alba* could potentially benefit from the provision of appropriate boxes.
- Pond creation.

Such measures would be beneficial to nature conservation and show compliance with the latest policy guidance. It would be prudent to include details of enhancements within an Ecological Enhancement Plan.

4.6. Report Validity

The findings of this report are considered valid until 1 May 2024 from the date of this report[12]. If the works are delayed beyond this period, update survey/s will be required.

12 CIEEM (2019). *Advice Note on The Lifespan of Ecological Reports and Surveys* [online] available at: https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf