



Calder Town End, Cumbria

Update Preliminary Ecological Appraisal (2022)

AVISON YOUNG

VERSION 2

Final

24 March 2022

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Document History and Status

Version	Date	Reviewed By	Approved By	Date	Comment
1	24/03/2022	RM			Draft for technical review
2	24/03/2022	RM	RM	24/03/2022	Final

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Client	Avison Young
Name of Project	Calder Town End, Cumbria
Name of Document	Update Preliminary Ecological Appraisal (2022)
Document Version	2
Document Status	Final

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1. Introduction

BiOME Consulting Ltd was commissioned by Avison Young in November 2018 to undertake a Preliminary Ecological Appraisal (PEA) (including a desk study)¹ of a site proposed for demolition. Following this PEA, dedicated bat² and Barn Owl *Tyto alba*³ surveys were completed.

Works have been delayed and due to the time that has elapsed since the completion of these surveys, and in line with relevant guidelines⁴, an update PEA was deemed necessary to inform a demolition application.

1.1. Site Description

The site is located between the village of Gosforth and Sellafield Nuclear Power Station, western Cumbria (**Figure 1**).

The site layout is shown on **Figure 2**. The house was fabricated in stone with a rendered outer wall and a slate roof. The stone barn was constructed in stone with an unlined cement-bound asbestos roof. To the south of the site a number of agricultural buildings/stables were present, fabricated in metal sheeting.

External areas were largely amenity grassland and hardstanding.

¹ BiOME Consulting Ltd (2018). *Calder Town End, Cumbria. Preliminary Ecological Appraisal*

² BiOME Consulting Ltd (2020). *Calder Town End, Cumbria. Bat Survey Report; 2020*

³ BiOME Consulting Ltd (2019). *Calder Town End – Update Barn Owl Tyto alba Survey*

⁴ CIEEM (2019). *Advice Note on the Lifespan of Ecological Reports & Surveys*

Figure 1. Site Location

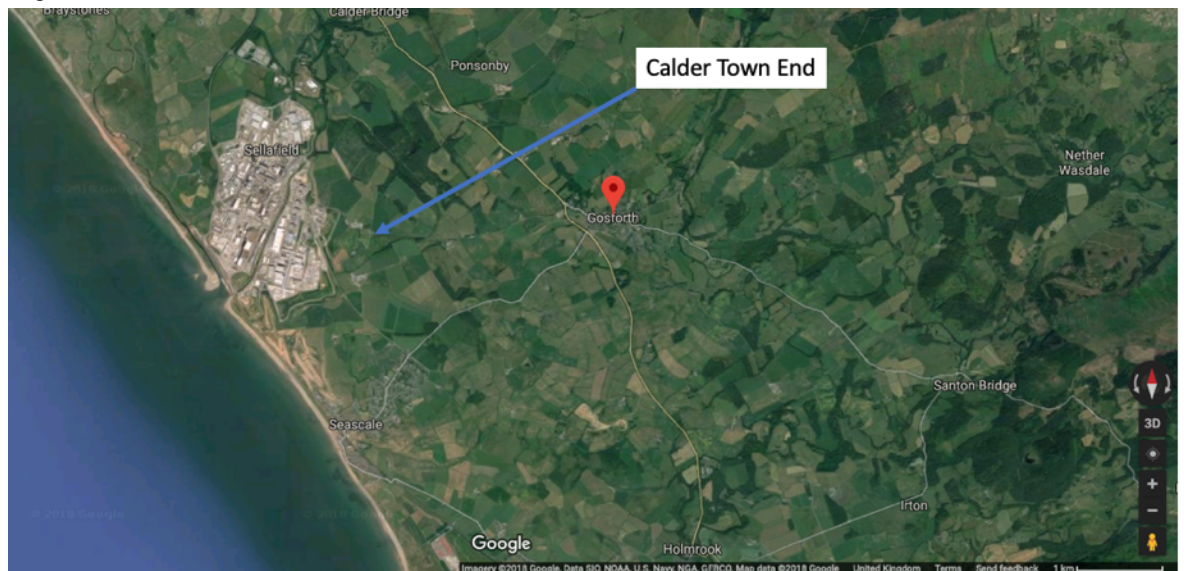
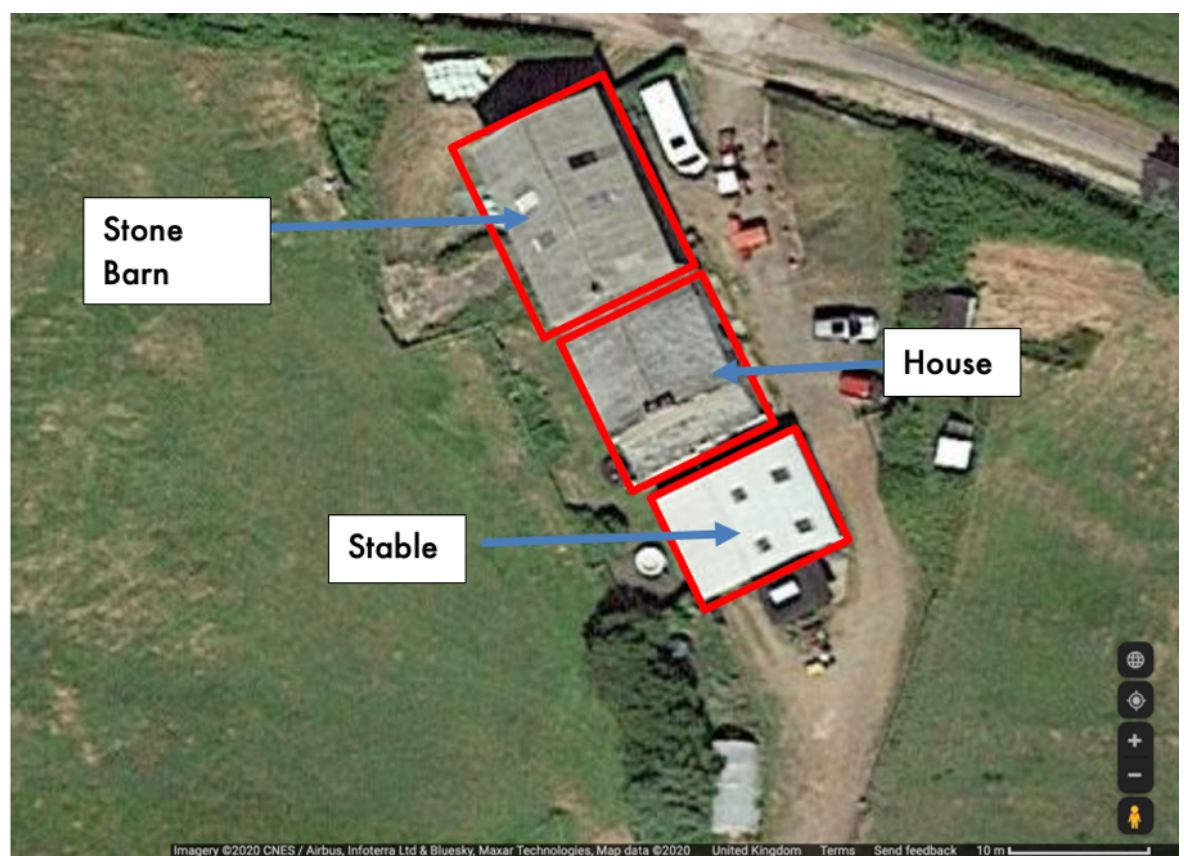


Figure 2. Site layout



2. Existing Survey Data

The key results of the previously completed surveys are detailed below.

2.1. PEA – 2018

In relation to the proposed works, the following potential issues were identified, with consequent recommendations:

- Features with the potential to support roosting bats were identified. Further bat surveys were completed (see below).
- Although no Badger *Meles meles* evidence was noted, the occasional presence of foraging Badgers was considered possible and precautions to ensure that this species is protected from harm during construction operations were recommended.
- The potential presence of breeding Barn Owls (in addition to other, non-Schedule 1 bird species) was identified.

No other legally protected species or species of particular nature conservation value were considered likely to be present or represent a potential constraint to the proposed works.

2.2. Barn Owl Survey – 2019

A comprehensive survey of the barn was completed. Prior to this survey anecdotal information in relation to Barn Owl was obtained from the site tenant at that time (Mr Penman), who provided the following information:

- Barn Owl had not used the site for around 11 months (since February 2019), with no observations in the area during this time.
- The barn was largely cleaned of pellets around 11 months ago (in February 2019).
- There had been two nest sites within the barn in the past, in the Barn Owl box and on top of the northern gable wall (or potentially within a ventilation shaft on this wall).

Within the barn, around 50 mixed-aged Barn Owl pellets were present although none appeared recent⁵ (i.e. within the previous eight months). Two Tawny Owl *Strix aluco* pellets were also present. Three Barn Owl feathers and much dropping evidence was also observed. No Barn Owls were present.

To provide additional information, a survey of the nearby Calder Farm was also completed. No evidence of Barn Owls was identified, although the tenant stated that Barn Owls do use their buildings but that none had been seen for around a year.

It was recommended that two Barn Owl nest boxes were erected to compensate for the loss of nesting opportunities within the Stone Barn.

2.3. Bat Survey – 2020

The nocturnal bat surveys, completed in 2020, recorded day-roosting bats within all buildings with the site:

House– peak count of one Soprano Pipistrelle *Pipistrellus pygmaeus*.

Stone Barn– peak count of three Soprano Pipistrelles.

Stables– peak count of two Soprano Pipistrelles.

The confirmation of the day-roosting bats detailed above meant that for works on site to proceed legally to these buildings, a European Protected Species (EPS) mitigation licence, issued by Natural England (NE), would be required.

The proposed works would likely to cause disturbance to the roosting bats, including the likely destruction of roosting sites, which would be deemed a legal offence without a licence.

⁵ English Nature (2002). *Barn Owls on site; a guide for developers and planners*

3. Methodologies

3.1. Desk Study

A comprehensive desk study was completed in 2018. Further desk study was not considered necessary to inform this 2022 update PEA.

3.2. Preliminary Ecological Appraisal Survey

An update PEA site survey⁶ was undertaken on 24 March 2022 by an experienced ecologist, Martyn Owen MCIEEM. The survey was completed in suitable weather conditions (overcast and dry).

During the survey all areas within the proposed development site 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, as well as noting habitats considered to have the potential to support protected species.

The ultimate purpose of this update PEA was to reassess the habitats presence, and to complete an updated assessment in relation to the presence and/or potential for protected/controlled species.

3.3. 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.

No access was possible to the interior of the buildings on site.

⁶ CIEEM (2017) *Guidelines for preliminary ecological appraisal* [online] available at: <https://www.cieem.net/guidance-on-preliminary-ecological-appraisal-gpea-> (accessed 23 March 2022)

4. Results

The site was in identical condition to during the 2019 PEA site survey, although the buildings were now unoccupied.

4.1. Bats

The buildings were in identical condition to during the original PEA and nocturnal bat surveys. No bat evidence was found on the building exteriors, including around the identified roost entrances.

4.2. Barn Owl

A number of fresh as well as older Barn Owl pellets were found around the building exterior, confirming the continued usage of the site by this species.

4.3. Badger

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

4.4. Other Species

The results of the update PEA in relation to other species/habitats remained consistent from the previous surveys in 2019.

5. Conclusions and Recommendations

An updated PEA survey has been completed. Prior to demolition the further additional survey/assessment works are required.

5.1. Barn Owl

No works should take place within the building during the Barn Owl nesting season (March to August, inc.) unless further survey work is completed to assess the potential presence of active nests. Any further surveys should be undertaken by a surveyor with an appropriate Schedule 1 licence.

Two Barn Owl nest boxes should be erected prior to site works:

- on a tree located approximately 30m south of the Stone Barn (**Photograph 1**), and
- on a tree on the shelterbelt to the north of the site (**Photograph 2**).

Photograph 1. Tree on which Barn Owl box to be sited



Photograph 2. Shelterbelt on which Barn Owl box to be sited on northern side



If possible, demolition of the Stone Barn should occur outside the Barn Owl breeding season. If this is not possible, prior to demolition works, a survey will be required to ensure that no Barn Owls are present within the building. If active nests are present work will need to be delayed until the nesting attempt reaches its natural conclusion.

During demolition, no steep-sided containers of water should be left uncovered, to avoid the risk of Barn Owls drowning.

5.2. Other Nesting Birds

Due to the likely presence of nesting birds within all buildings on site, demolition works should be completed outside the bird nesting season (1 March to 31 August). Should an occupied bird nest (of any species) or a nest in the process of being constructed be encountered, works must cease in this area and should only

re-commence once the birds have fledged or the nest is abandoned. If demolition 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 surveyor with an appropriate Schedule 1 licence due to the likely presence of breeding Barn Owls.

5.3. Bats

The previous confirmation of day-roosting bats within the buildings to be demolished means that for works to proceed legally, a European Protected Species (EPS) mitigation licence, issued by Natural England (NE), will be required.

Due to the age of the survey data, at least one updated nocturnal survey will be required to enable the licence application. This survey can only be completed during the bat-active period (May to September inc.).

Assuming results remain consistent to previous surveys, given the relatively low conservation significance of the buildings as bat roosting sites⁷, no restrictions on the timing of the works are considered necessary. The destruction of the roosting sites should be completed by hand, under the supervision of an appropriately licenced ecologist.

There may also be a need to provide compensation for the loss of bat roosting sites. A full program of mitigation would be finalised at the licence application stage.

5.4. Badger

No Badger setts were present within the site or adjacent accessible areas. Nevertheless, the occasional presence of foraging Badgers is considered possible; it would therefore be prudent to consider Badgers during demolition 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.

⁷ Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature

5.5. Report Validity

The findings of this report are considered valid for up to 12 months from the date of this report⁸. If the project is delayed beyond this period, an updated assessment of potential impacts will be required.

⁸ 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>