



Hillier Ecology

**Buildings Survey for Bat *Chiroptera*, Bird Aves and Barn Owl
Tyto alba at Pilton Road, Wadenhoe**



The Wadenhoe Trust

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Site Name	Pilton Road, Wadenhoe
Report Type	Buildings Survey for Bat, Bird and Barn Owl
Client	The Wadenhoe Trust

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VALIDITY

Due to the dynamic nature of ecological conditions the results of the survey(s) and related conclusions and recommendations as contained within this report should only be considered valid for up to 24 months from the date the last survey was undertaken.

Any alterations to the site proposals may invalidate the recommendations contained within this report.

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1.0 Summary

1.1 A bat *Chiroptera* sp., bird *Aves* and Barn Owl *Tyto alba* survey was carried out on a barn at Pilton Road, Wadenhoe.

1.2 The building inspection recorded evidence of bat usage in the form of low numbers of droppings and feeding remains. The barn consisted of three sections; Section A had roosting features present, there was a small, boarded and inaccessible area of the upper level that may have held signs of bat usage, Section B had no evidence of bat usage and little in the way of internal roosting features, Section C had evidence of bat usage in the form of low numbers of droppings and feeding remains, suitable roosting features were also present. Overall, the building is considered to have moderate potential to support roosting bats.

1.3 It is recommended that two emergence/activity surveys are carried out to establish the presence or absence of bat species and how they are using the building during the active bat season 2021.

1.4 No bird species were recorded during the survey.

1.5 No further bird surveys are required.

1.6 There was no evidence of Barn Owl using the building.

1.7 No further Barn Owl surveys are required.

2.0 Introduction

2.1 Hillier Ecology Limited were commissioned by The Wadenhoe Trust to carry out building surveys.

2.2 The survey was carried out to support the planning application to convert the barn.

3.0 Site Details

3.1 The site is located at NGR TL0122283538 (Appendix 1).

3.2 The site is situated in the village of Wadenhoe; the site and its surrounds are made up of the following habitats.

- Barn
- Hardstanding
- Dovecote
- Dwellings
- Gardens

3.3 The diversity of habitats found is thought to be suitable habitat for bat and bird species including Barn Owl.

3.4 The building is constructed as follows and shown in the photographs below and (Appendix 2).

Building Name/Number	1			
Building Grid Reference	TL0122683541			
Type of Building	Barn			
Age of Building	18 th century			
Condition of Building	Good			
Wall Construction	Stone			
Roof Construction	Collyweston slate			
Roof Type	Gable			
Potential Access Points for Bats	Gaps in tiles, broken window			
Roof Void	Yes		No	X
Insulation	Yes		No	X
Structure of Roof	Not Applicable			
Roof Lining	Felt			
Dimensions of Roof Void	Not applicable			
Suitable Roosting Features	Gaps in stone walls (internal and external), gaps in and under beams			
Evidence of Bats	Droppings and feeding remains			
Evidence of Birds	None			
Evidence of Barn Owl	None			
Potential to Support Roosting Bats	Moderate			
Suitable for Hibernating Bats	No			



Plate 1 Section A



Plate 2 Section A Internal



Plate 3 Section A Internal



Plate 4 Section A Internal



Plate 5 Section B



Plate 6 Section B Internal



Plate 7 Section B Internal



Plate 8 Section B Internal



Plate 9 Section C



Plate 10 Section C Internal



Plate 11 Section C Internal



Plate 12 Section C Internal



Plate 13 Section C Dropping and Roosting Feature



Plate 14 Section C Feeding Remains

4.0 Survey Methodologies

Bats (Buildings)

4.1 The building was assessed as to its potential to hold bat roosts.

4.2 The building survey involved a thorough external and internal search of all suitable cavities, holes and crevices, all suitable areas and floors were inspected for the following signs:

- Bat droppings
- Stains around roosting places and entrance points
- Urine marks
- Prey remains
- Areas devoid of cobwebs
- Live or dead bats
- Suitable cracks and crevices for bats to enter

4.3 The building was categorised using the criteria below.

Assessment of Potential to Support Roosting Bats - Categories for Buildings	
Negligible potential	Buildings with no features capable of supporting roosting bats. Often these buildings are of a 'sound' well-sealed nature or have a single skin and no roof void. They tend to have high interior light-levels, and little or no insulation. Buildings without any roofs may also fall into this category.
Low potential	Buildings with limited features for roosting bats (e.g. shallow crevices where mortar is missing between building blocks/bricks). They may have open locations which may be subject to large temperature fluctuations and bat-access points may be constrained. No evidence of bats found (e.g. droppings / staining). Buildings may be surrounded by poor or sub-optimal bat foraging habitat. No evidence of bats found.
Moderate potential	Buildings with some features suitable for roosting bats. Buildings usually of brick or stone construction with a small number of features of potential value to roosting bats e.g. loose roof / ridge tiles, gaps in brickwork, gaps under fascia boards, and/or warm sealed roof-spaces with under-felt. Evidence of bats found a small scattering of droppings or urine staining. Could be suitable for summer day roost.
High potential	Buildings with a large number of features or extensive areas of obvious potential for roosting bats. Generally, they have sheltered locations, with a stable temperature regime and suitable bat-access points. Evidence of bats found droppings/urine staining. Could be suitable for a maternity roost or summer day roost.
Confirmed roost	Bats discovered roosting within the building or recorded

	emerging / entering the building at dusk / dawn. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
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Birds

4.4 An assessment of the buildings suitability to support breeding birds has been carried out.

4.5 All birds seen and heard were recorded.

Barn Owl

4.6 The building has been inspected for the following signs:

- Owl pellets (feeding remains)
- Feathers
- Faecal deposits
- Live sightings

5.0 Survey Results

Bats (Building)

5.1 The building surveys were carried out by Howard Hillier who holds Natural England Bat Survey Licence Number 2016-21564-CLS-CLS who was assisted by Deborah Hillier.

5.2 The building survey was carried out on 28th October 2020 in the following weather conditions; rain, Beaufort Windscale 4 and a temperature of 8°C.

5.3 Overall, the building offered suitable roosting features both internally and externally. There were low numbers of droppings and feeding remains recorded in Section C. The building is considered to have moderate potential to support roosting bats.

5.5 The building was not considered suitable for hibernating bats.

Birds

5.6 There was no evidence of birds using the building.

Barn Owl

5.7 There was no evidence of Barn Owl using the building.

6.0 Conclusions

Bats

6.1 Evidence of bats was recorded during the building inspection and suitable roosting features were present; the building is considered to have moderate potential to support roosting bats.

6.2 Two emergence/activity surveys to determine the presence/absence of roosting bats will be required, these will be carried out between May-September.

Birds

6.3 There was no evidence of birds using the building.

Barn Owl

6.4 There was no evidence of Barn Owl using the building.

6.5 Bat and bird boxes are already installed on the site.

7.0 Legal Protection

Bats

7.1 The Conservation of Habitats and Species Regulations 2017 transpose into UK law Council Directive 92/43/EEC of 1992 (often referred to as the Habitats Directive). All bats are listed under Annex IV and some (horseshoe bats, Bechstein's and Barbastelle) are also listed under Annex II which relates to Special Areas of Conservation. These Regulations make it an offence to:

- Deliberately capture, injure or kill a bat.
- Deliberately disturb bats in a way as to be likely significantly to affect the ability of any significant groups of bats to survive, breed, rear or nurture their young, or to affect the local distribution of abundance of that species.
- Damage or destroy a breeding site or resting place of a bat.
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

7.2 In addition the Wildlife & Countryside Act 1981 (as amended) makes it an offence to:

Intentionally or recklessly

- Disturb any bat whilst it is occupying a structure or place which it uses for shelter or protection.
- Obstruct access to any structure or place which any bat uses for shelter or protection.

7.3 Penalties are fines of up to £5000 per bat and up to a 6 month custodial sentence.

Birds

7.4 All common wild birds are protected under The Wildlife and Countryside Act 1981 (as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird.
- Take, damage or destroy the nest of any wild bird while it is in use or being built.
- Take or destroy the egg of any wild bird.

7.5 Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

Barn Owl

7.6 The Barn Owl is fully protected under Schedules 1 and 9 of the Wildlife and Countryside Act (1981) as amended.

7.7 The Act makes it illegal to:

- Kill or injure a Barn Owl.
- Catch a Barn Owl.
- Take or destroy any egg of a Barn Owl.
- Damage or destroy the active nest site with eggs or young or before

- eggs are laid.
- Disturb the dependant young of a Barn Owl.
 - Possess, offering for sale or selling a Barn Owl.
 - Release or allow the escape of a Barn Owl into the wild.

The Natural Environment and Rural Communities Act (2006)

7.8 Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) sets out a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The list (including 56 habitats and 943 species) drawn up in consultation with Natural England, provides a guide to local and regional authorities when implementing their duty as defined in Section 40 of the NERC Act 2006;

- “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.” - Section 40(1).
- “Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat”. - Section 40(3).

National Planning Policy Framework (2019)

7.9 National Planning Policy Framework (NPPF) (2019) sets out Government Policy on Biodiversity and Nature Conservation and places a duty on planners to give material consideration to the effect of a development on legally protected species when considering planning applications. NPPF also promotes sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

8.0 References

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9.0 Appendices

Appendix 1 Site Location



Appendix 2 Survey Area

