Buildings at The Barn, Paddock Farm, Marsden

Bat Survey Report

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1. Summary

1.1.1 A bat survey of buildings at The Barn, Paddock Farm, Marsden was commissioned by the client Rosie Lonnon on 30th April 2024. The survey was undertaken to inform demolition of the existing barns/sheds and their replacement with a new agricultural building including a kitchen and office.

1.1.2 The site was located on Park Gate Road, between Slaithwaite and Marsden in West Yorkshire.

1.1.3 Five buildings were present in the survey area. One was a large storage shed, one was used as a composting toilet, the third was a poly tunnel and the other two were greenhouses. The large storage barn was assessed as having low suitability to support roosting bats and the other buildings identified as having no or negligible bat roost suitability.

1.1.4 Although B1 was considered to have low suitability to support roosting bats the endoscope inspection was considered to be sufficiently thorough to ensure there was no chance that bats were present at the time of survey. Bat survey guidance states if all areas have been inspected and no evidence found, then no further surveys are required.

1.1.5 Nesting birds were noted to be present within B1 but were not recorded within the other buildings. It is recommended that the demolition either avoids the nesting bird season, or a check for active nests is undertaken prior to the start of demolition.

1.1.6 It is considered that the proposed works could proceed without further survey. However, a single bat can roost almost anywhere, so care should be taken during the process of the work. It is recommended that the building contractors are given a toolbox talk to ensure they are aware of the areas within the building that a bat roost could be present, and what to do if a bat is found during the course of their work.

1.1.7 In the event an unexpected bat is found during work, the work in that area should cease and a suitably qualified ecologist should be contacted for further advice.

1.1.8 To mitigate the loss of nesting bird habitat, and to provide additional enhancement, two integrated bat boxes should be installed within the new building, and two open fronted bird boxes installed elsewhere on site. If possible, an additional two swallow nest cups should be installed if a suitable location could be identified or created.

1.1.9 The recommendations included in this report are considered valid for 24 months from the survey date.

2. Introduction

2.1.1 A bat survey of buildings at The Barn, Paddock Farm, Marsden was commissioned by the client Rosie Lonnon on 30th April 2024. The survey was undertaken to inform demolition of the existing barns/sheds and their replacement with a new agricultural building including a kitchen and office.

2.1.2 The site was located on Park Gate Road, between Slaithwaite and Marsden in West Yorkshire.

2.1.3 The preliminary roost assessment was conducted on 29th May 2024. The survey aimed to determine the presence or likely absence of roosting bats and, if present, the roost locations, potential access points, species present, and the level of use, where possible.

2.1.4 The legislative context to the survey and assessment reported here is included in Appendix 1.

3. Habitat Assessment

3.1.1 The site was located on a south facing hillside. The immediate surrounding area consisted of a market garden which included small areas of woodland, wildflower meadow, dwellings and gardens. A small garden pond was present to the north. The Slaithwaite to Marsden rail line was located to the north, on the hillside above the site, and The River Colne was located in the valley below. Hedgerows and tree lines bounded most of the fields and Nether Wood was present to the northwest (Figure 1).

Figure 1. Site location, outlined red

3.1.2 The habitat in the survey area was considered to be above average in terms of its suitability for use by bats, with both good foraging opportunities and good connectivity to other habitat in the wider area. The level of street lighting and lighting from other sources was anticipated to be relatively low within the local area. The abundance and variety of bat species was considered likely to be relatively high. Table 1 summarises the habitats present within, and adjacent to the red line boundary.

Table 1. Location and habitat table

Name and address: The Barn, Paddock Farm, Park Gate Road, Slaithwaite, HD7 5XA			
OS Grid Ref. SE 05760 12767		Altitude. 172 m	
Local Planning Authority: Kirklees Council			
Features on site and adjacent to site			
Feature	On site	Adjacent	Comments
Buildings	✔	✔	Barns and nearby dwellings.
Watercourse bordered by trees			Tributary of the River Colne present approximately 100 m east.
Standing water		✔	Small pond approximately 10 m north of the site.
Bridges tunnels and culverts			Associated with the rail line.
Trees		✔	Young and semi-mature trees were present within the garden and surrounding area.
Woodland			Woodland was present in the wider area.
Grassland	✔	✔	Lawns and pasture were present.

3.2 Aims

3.2.1 The survey was conducted to help determine the:

- Presence/absence of roosting bats.
- Potential roosting areas and roost access/egress points.
- Level of bat roost suitability associated with the buildings.
- Current or historic use of the building by nesting birds.
- Further survey work or mitigation requirements.

4. Methodology

4.1 Data Consultation

4.1.1 A desk study was undertaken with West Yorkshire Bat Group and West Yorkshire Ecology to request bat records for locations within 2 km of the site.

4.1.2 A search of the Multi-Agency Geographical Information for the Countryside (MAGIC) website was undertaken to identify historic European Protected Species licences obtained for locations within 2 km of the site.

4.2 Field Survey

Internal and External Visual Inspection

4.2.1 The survey of the building was conducted on 29th May 2024 by Greg Slack (MCIEEM; Class licence WML-A34-Level 4, 2017-28068-CLS-CLS).

4.2.2 The following activities were carried out during the survey:

- An examination of all parts of the survey area to record structural features and condition, and features that may be suitable for use by roosting bats. Particular attention was paid to any holes, crevices or gaps in walls, lintels, gaps/holes in cladding and soffits and to the possibility of finding droppings stuck to walls, floors or other surfaces (including below any insulation), or insect remains below features.
- Any signs indicative of a bat roost presence including live or dead bats, droppings, feeding remains, scratch marks and staining were recorded.
- An assessment of the building's bat roost suitability (negligible, low, moderate, high or confirmed roost).

4.2.3 The following equipment was used during the survey:

- a Clulite high powered torch;
- binoculars;
- an endoscope; and
- a camera.

4.3 Survey Limitations

4.3.1 No limitations were encountered.

5. Results

5.1 Data Consultation

5.1.1 West Yorkshire Bat Group provided 13 bat records for locations within a 2 km radius. Species positively identified in the data consultation comprised common pipistrelle *Pipistrellus pipistrellus*, Daubenton's bat *Myotis daubentonii*, and noctule *Nyctalus noctula*. Additional records of bats identified as unidentified *Pipistrellus*; and unidentified bat species were also provided.

5.1.2 West Yorkshire Ecology provided 88 bat records for the area. Additional species comprised soprano pipistrelle *Pipistrellus pygmaeus*, Natterer's bat *Myotis nattereri*, whiskered bat *Myotis mystacinus*, and Leisler's bat *Nyctalus leisleri*.

5.1.3 None of the records related to the site, the closest was a record of an unidentified *Pipistrellus* bat roost record approximately 125 m northeast of the site. The roost count was identified as two bats in July 2012, and one bat in September 2012.

5.1.4 Three bat EPS mitigation licences had been issued within 2 km of the site. The details of the licences are given in Table 2 below.

Table 2. Bat EPS mitigation licences within 2 km

Species listed on the licence	Licence start date	Licence end date	What does the licence cover?	Approximate distance (m)	Direction
Common pipistrelle, and soprano pipistrelle	05/08/2015	01/08/2020	Destruction of a resting place.	280	South
Common pipistrelle	17/03/2016	30/06/2021	Destruction of a resting place.	1920	Southwest
Common pipistrelle	01/01/2019	31/12/2020	Destruction of a resting place.	1920	Southwest

5.2 Field Survey

Internal and External Visual Inspection

5.2.1 Five buildings were present in the survey area. One was a large storage shed (B1), one was used as a composting toilet (B2), the third was a poly tunnel (B3) and the other two were greenhouses (B4 and B5). The large storage barn was assessed as having low suitability to support roosting bats and the other buildings identified as having no or negligible bat roost suitability.

Building description – B1

5.2.2 The large storage barn comprised a brick and stone built original barn with a more recent extension to the southeast (Plate 1). The original section of the building had a two-pitched roof partially covered with bituminous felt. The wooden sarking on the uncovered areas was exposed to the elements.

5.2.3 The extension to the southeast was constructed from hollow concrete blocks with a

metal and timber frame. The extension was open fronted (to the southeast). The extension had a shallow, single-pitched roof, covered with plastic sheeting. The extension had itself been extended by the addition of a wood store to the northeast. The woodstore had an open wooden frame and a lean-to roof which stepped up in the middle. The roof was covered with sedum and colonising grasses and herbs.

Plate 1. The original brick and stone barn viewed from the north

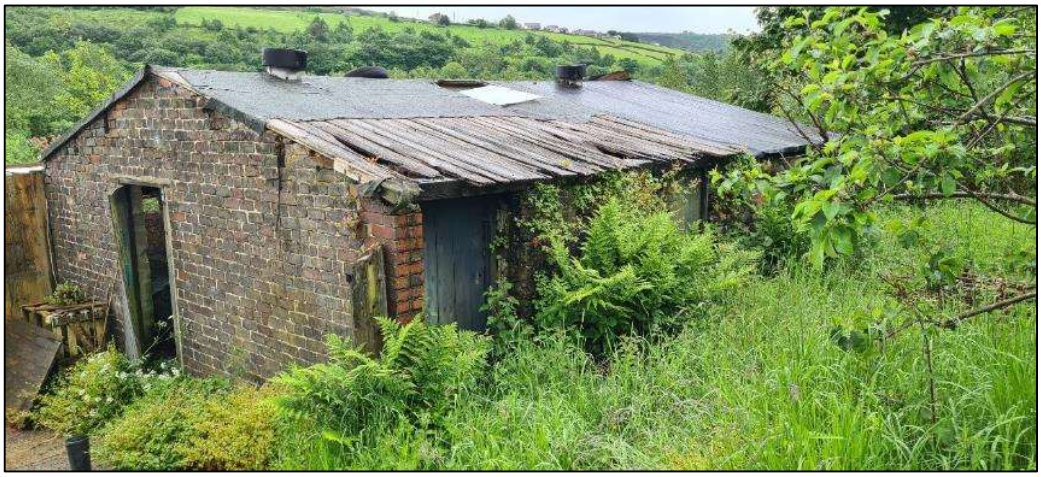


Plate 2. The woodstore and original extension with the original brick building in the background (viewed from the east)

Potential Roost Features – B1

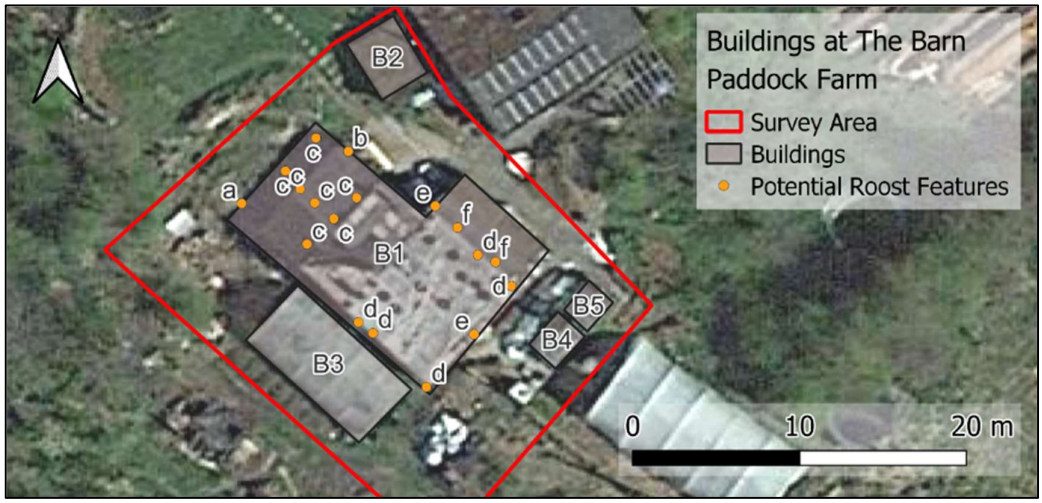
5.2.4 Potential bat roost features present comprised only gaps between stonework on the northwestern elevation, gaps providing access into hollow concrete blocks, and a gap between the timber frame of the woodstore and the blockwork wall behind. Bats could also enter the structure via the open front of the extension and the woodstore, gaps around a wooden door in the original section of the building, and via holes in the roof (including around a glass skylight). The potential roost features and access points (PRFs) are shown in Table 2 and Figure 2 below.

Table 2. Potential Roost Features (PRF) and Access Points Recorded

PRF	Photo	Description
A		Gaps between stonework.
B		Gaps between wooden door and frame.
C		Holes in the roof.
D		Holes allowing bats access into hollow concrete blocks.
E		Open sides to the building.
F		Gap between timber structure and the blockwork wall behind.

PRF	Photo	Description
G		A shallow / open crack in the brickwork.

Figure 2. PRF Locations



Bat Roost Evidence – B1

5.2.5 No bats or signs of bats were recorded within B1. The gaps in the stonework, and the five access points leading into the hollow concrete blocks (PRFs a and d) could be relatively well inspected. All of the entrance could be seen as well as what was considered to be the majority or all of the internal cavity. Many of the cavities had cobwebs inside the cavities that held small amounts of debris, indicating that the web had been present for at least a little while. No bat droppings were present inside these cavities despite a relatively thorough search and dry internal conditions.

Plate 3. The hole in the hollow concrete blockwork wall being inspected

Birds

5.2.6 Two bird's nests were recorded within the original section of B1. One was located on the wall top (Plate 4) and a second was located within an old swallow nest cup (Plate 5). The client confirmed that wrens *Troglodytes troglodytes* and robins *Erithacus rubecula* were known to nest within the building and that swallows had nested in the past but now rarely did.

Plate 4. Bird's nest on the wall top at the northwestern end of B1

Plate 5. Bird's nest in an old swallow nest cup inside the northwestern end of B1

Building description – B2

5.2.7 B2 was a composting toilet. The building comprised a wooden frame constructed over an old coal bunker which had been constructed from concrete blocks (Plate 6). The building had a shallow-pitched green roof (Plate 7).

5.2.8 The walls were clad in timber and profiled metal sheets. The eaves were exposed and the building was set into the sloping hillside.

Plate 6. The composting toilet (B2) viewed from the south

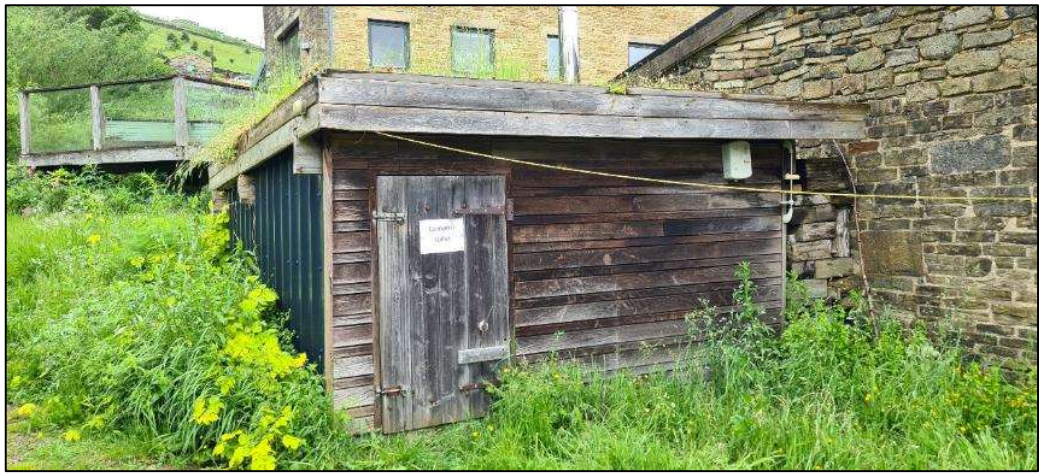


Plate 7. The composting toilet (B2) viewed from the west

5.2.9 The building was not considered to have any obviously suitable potential bat roost features on the exterior, or access points which would allow roosting bats to reach the interior.

Building description – B3

5.2.10 B3 was a poly tunnel measuring approximately 9 m by 4 m (Plate 8). No potential bat roost features were present on this building.

Plate 8. The polytunnel viewed from the south

Building description – B4 and B5

5.2.11 B4 and B5 were adjacent greenhouses (Plate 9). No potential bat roost features were present on these buildings.

Plate 9. The two greenhouses viewed from the north

6. Assessment

6.1 Summary and Evaluation of Findings

6.1.1 No bat evidence was present within the buildings. B1 was considered to have low bat roost suitability and B2 – 5 were considered to have negligible or no suitability to be used by roosting bats.

6.1.2 Although B1 was considered to have low suitability to support roosting bats the endoscope inspection was considered to be sufficiently thorough to ensure there was no chance that bats were present at the time of survey. Bat survey guidance for structures with low suitability states "*if all areas (including voids, cracks and crevices) of a structure have been inspected and no evidence found (and it is unlikely to have been removed by weather or cleaning or be hidden), then further surveys are not appropriate"* (Collins 2023).

6.1.3 Nesting birds were noted to be present within B1 but were not recorded within the other buildings. As a precaution it is recommended that the demolition either avoids the nesting bird season, or a check for active nests is undertaken prior to the start of demolition.

6.2 Further Survey, Recommendations and Enhancements

<u>Bats</u>

6.2.1 No further bat survey is required.

6.2.2 In accordance with the aims of the National Planning Policy Framework, it is recommended that two Vivara Pro UK (or similar) build in bat boxes are installed within the southern elevation of the replacement building. These can be integrated into

wooden cladding as shown in Plate 10. A suitable location for the boxes is given in Figure 3.

Plate 10. Two adjacent bat boxes installed within the wall of a wooden clad extension

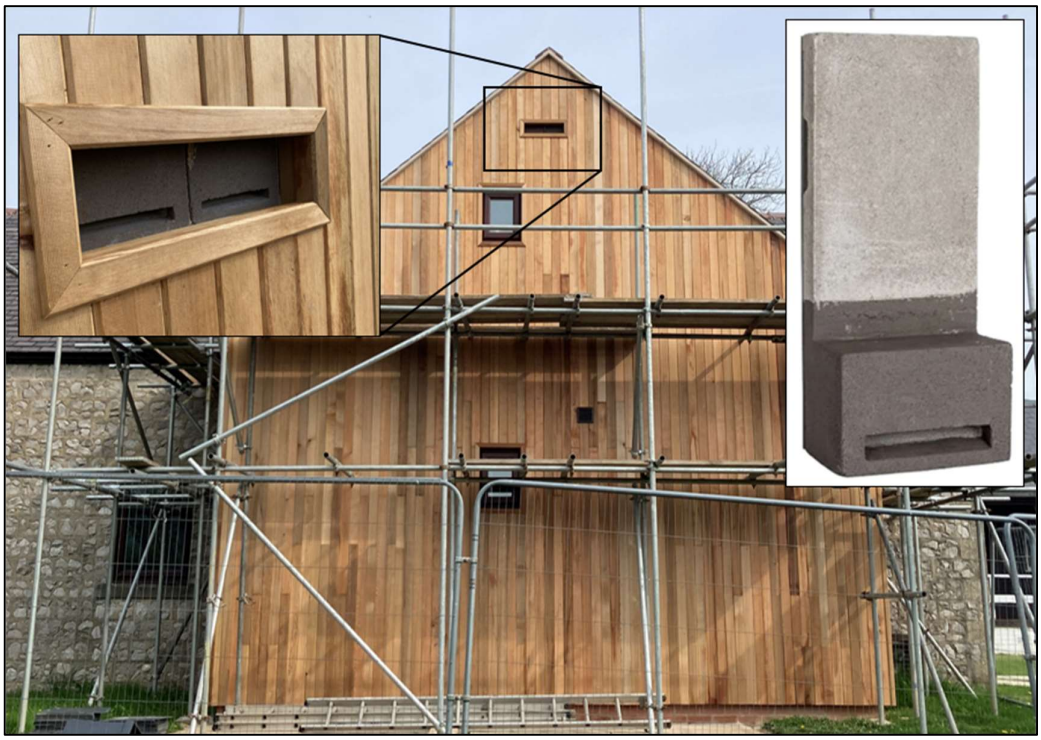
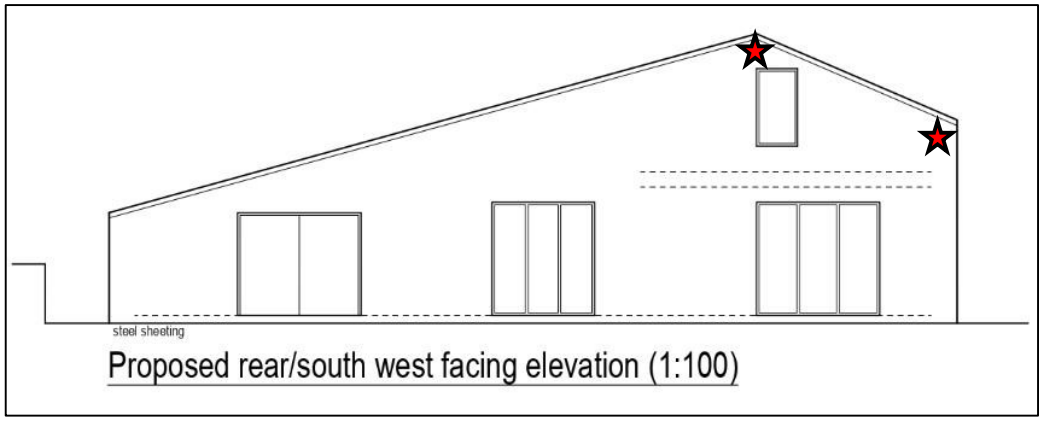


Figure 3. Suitable location for the bat boxes



Birds

6.2.3 Nesting birds were identified within Building 1, the client confirmed that robins, wrens, and swallows have been known to nest there. It is therefore recommended that the demolition either avoids the nesting bird season (March to September), or a check for active nests is undertaken prior to the start of demolition. If an active nest is present, it must be retained in-situ until the young have fledged.

6.2.4 To compensate for the loss of nesting sites it is recommended that two open-fronted robin nest boxes (which are suitable for wrens and robins) are installed elsewhere on the site. Plans for the construction of a suitable open fronted nest box are available on the BTO website[1] with boxes available to buy from a wide range of shops. The boxes should be sited on a north, northeast, or northwest aspect, approximately 2 m high, under overhanging vegetation.

6.2.5 If a suitable location can be found two swallow nest cups should also be installed. The swallow nest cup should ideally be covered by an overhang of at least 1 m with 6 cm of space above the cup and a drop of approximately 2 to 3 m below the cup which would allow the swallows to fly away comfortably. Swallow nests cups are available from NHBS and a range of other shops[2].

6.3 Conclusion

6.3.1 It is considered that the proposed works could proceed without further survey. However, a single bat can roost almost anywhere, so care should be taken during the process of the work. It is recommended that the building contractors are given a toolbox talk to ensure they are aware of the areas within the building that a bat roost could be present, and what to do if a bat is found during the course of their work.

6.3.2 In the event an unexpected bat is found during work, the work in that area should cease and a suitably qualified ecologist should be contacted for further advice.

6.3.3 Demolition should be timed to avoid the nesting bird season, or a check for nesting birds completed prior to the start of demolition.

6.3.4 To mitigate the loss of nesting bird habitat, and to provide additional enhancement, two integrated bat boxes should be installed within the new building, and two open fronted bird boxes installed elsewhere on site. If possible, an additional two swallow nest cups should be installed if a suitable location could be identified or created.

6.3.5 The recommendations included in this report are considered valid for 24 months from the survey date.

7. References

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. The Bat Conservation Trust.

[1] Robion nest box plans: https://www.bto.org/sites/default/files/bto-robin-nest-box-plan.pdf [accessed 5th June 2024)

[2] Swallow nest cups are available from: https://www.nhbs.com/woodstone-swallow-nest-bowl

Appendix 1. Legislation and Policy Guidance

Bats

Bats receive protection under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981 (as amended).

It is an offence to:

- Deliberately capture (or take), injure or kill a bat.
- Intentionally or recklessly disturb bats whilst they are occupying a structure or place used for shelter or protection or obstruct access to any such place.
- Damage or destroy the breeding or resting place (roost) of a bat.
- Possess a bat (live or dead), or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.
- Sell (or offer for sale) or exchange bats (dead or alive), or parts of parts.

The Convention on Biological Diversity, signed in Rio de Janeiro, Brazil in 1992, requires member states to develop national strategies and to undertake a range of actions aimed at maintaining or restoring biodiversity. The UK Biodiversity Strategy was produced in response to the Convention.

In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, “to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”. It notes that “conserving biodiversity includes restoring or enhancing a population or habitat”. Barbastelle *Barbastella barbastellus*, Bechstein’s bat *Myotis bechsteinii*, brown long-eared bat, greater horseshoe bat *Rhinolophus ferrumequinum*, lesser horseshoe bat *Rhinolophus hipposideros*, noctule *Nyctalus noctula* and soprano pipistrelle *Pipistrellus pygmaeus* are included as priority species within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. At a more local level there are Local Biodiversity Action Plans for smaller geographical areas which may cover a greater or lesser range of bat species.

Where it is proposed to carry out works which will have an adverse impact on roosting bats a European Protected Species (EPS) license must first be obtained from Natural England. This requirement applies even if no bats are expected to be present when the work is carried out.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure or take any wild bird.
- Take, damage or destroy the nest (whilst being built or in use) or eggs of any wild bird.

National Planning Policy Framework

The National Planning Policy Framework for England was revised in 2023. This document states that plans should 'promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity'.