

Ecological Survey and Assessment for Ivy House Barn Stanway Green Worlingworth

On behalf of:

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1) Summary

As part of a planning proposal involving an outbuilding at Ivy House, Stanway Green, Worlingworth, Suffolk IP13 7NY, a site visit was conducted on 7th February 2023 to determine whether the site had the potential to be occupied by protected species, which would be affected if any proposed development were to go ahead.



Photo 1: Northern elevation

The survey building is a large detached, brick barn with a corrugated asbestos roof and cladding to the walls. The building is aligned approximately N-S. The survey found that the building was divided along the roof apex, with an open-fronted lean-to store for farm machinery to the west and a secure part of the building on the eastern side. The lean-to store received daylight illumination via the open front, conditions in which bats seek out dark areas or crevices in which to roost. The lack of such features in the brick walls and machine cut rafters made the building less suitable as a roosting place for bats. Externally, there were no cavities that might offer potential roosting places for bats.

There is no vegetation affected by the project that has crevices, loose bark or woodpecker holes that might be colonised by bats. **No** evidence of their presence was found at this site.

The only vegetation at the site is a strip of short, maintained grass along the eastern side of the building.

The lack of potential roosting places and absence of any evidence of the presence of bats means that **no** further surveys are required for this building. The building was considered to have **negligible potential** as a roosting place for bats.

Since there was no evidence of bats at the site, a European Protected Species Licence will **not** be required for this project.

The lack of suitable buildings at the site and the absence of tree cavities meant that the site was unsuitable for occupation by barn owls and no evidence of this species was found.

The site is bordered to the north by a road with a residential property with a maintained garden beyond; to the west by a road with redundant farm buildings beyond; to the south by grain silos and a copse and to the east by a field. The main area of the site comprises concrete hardstanding and there are no features that might be attractive to basking by reptiles, and, with the site bordered by a field, a copse and redundant farm buildings there is no suitable habitat nearby from which the site could be colonised by reptiles. A pond to the south-west was formerly a slurry pit when pigs were present at the farm. However, it is now visited by wildfowl and, with the site bordered on two sides by roads and set on concrete hardstanding, there is no suitable terrestrial dispersal habitat for great crested newts.

There were no latrines or digging by badgers found at the site, or within 30m of its boundaries.

Although no evidence of bats was found, it is probable that bats from nearby roosts will forage over the site and in the gardens of adjacent properties. This foraging behaviour would be expected to continue after the completion of the building work and therefore it is considered that the proposal for this site will not have a detrimental effect on the local bat population, or on protected species.

According to the latest guidance (December 2017) from CIEEM, the following is advised:

Very occasionally it might be possible to carry out a robust Preliminary Ecological Appraisal without obtaining LERC/NBDC/CEDaR data; this will usually only apply to low impact or small-scale projects (e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis. In all cases, the decision not to obtain these data should be justified in the report. The following is not intended to be an exhaustive list, but gives examples of the type of sites where such data might not be needed:

- a field in active arable cultivation where there is no impact on any hedges, trees or waterbodies;
- small areas of cultivated garden/amenity grassland, as above; or
- small urban sites comprising mostly asphalt or compacted hardstanding.

CIEEM (December 2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

The survey area just relates to the survey site. It comprises a redundant barn set on an area of concrete hardstanding. This is a low impact project that will have no impact on any designated sites.

2) Introduction

Essex Mammal Surveys was requested to carry out a survey at Ivy House, Worlingworth to investigate for signs indicating the presence of protected species. The identification of protected and priority species is vital in the proposed development of a site to comply with existing legislation and also allows any work that may otherwise be detrimental to these species to be appropriately scheduled.

The objectives of the survey were to:

- assess the habitats on the site (noting any Priority habitats) including the potential of the site to support protected species (bats, reptiles, water voles, great crested newts and badgers) or any other species that may act as a constraint on development eg Priority species (s41 NERC Act 2006)
- determine any impact of development on any wildlife of conservation concern within the area
- produce a strategy for avoiding, mitigating and compensating for any potential impacts identified with reasonable enhancements for biodiversity.

John Dobson, a bat worker and trainer licensed by Natural England (Licence No. 2015-15258-CLS-CLS), and author of *Mammals of Essex* (Essex Field Club, 2014) carried out the survey on 7th February 2023. John Dobson has been elected a Fellow of the British Naturalists' Association and received the David Bellamy Award for natural history in 2015. The site is located at Grid Reference: TM238701.

This report has been compiled in accordance with the Bat Conservation Trust's *Bat Survey Guidelines for Professional Ecologists: Good Practice Guidelines*.

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

However, the first page of all three editions includes the following: *The guidelines should be interpreted and adapted on a case-by-case basis according to site-specific factors and the professional judgement of an experienced ecologist. Where examples are used in the guidelines, they are descriptive rather than prescriptive.*

3) Legislation and planning policy relating to bats, badgers, barn owls, reptiles and NERC 2006 and s41 Priority species and habitats

All bat species in Britain are protected under the Wildlife and Countryside Act 1981 through inclusion on Schedule 5. They are also protected under the Conservation (Natural Habitats &c.) Regulations 1994 (which were issued under the European Communities Act 1972), through inclusion on Schedule 2. From January 31st 2020 these Regulations were

consolidated into the Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019.

European protected animal species and their breeding sites or resting places are protected under Regulation 39. It is an offence for anyone to deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs. It is an offence to damage or destroy a breeding or resting place of such an animal. It is also an offence to have in one's possession or control, any live or dead European protected species.

The threshold above which a person will commit the offence of deliberately disturbing a wild animal of a European protected species has been raised. Now, a person will commit an offence only if he deliberately disturbs such animals in a way as to be likely significantly to affect (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution of abundance of that species. However, please note that the existing offences under the Wildlife and Countryside Act (1981) as amended which cover obstruction of places used for shelter or protection (for example, a bat roost), disturbance and sale still apply to European protected species.

This legislation provides defences so that necessary operations may be carried out in places used by bats, provided the appropriate Statutory Nature Conservation Organisation (in England this is Natural England) is notified and allowed a reasonable time to advise on whether the proposed operation should be carried out and, if so, the approach to be used. The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The Fundamental Obligations of Article III of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.

Paragraph 98 of Circular 06/2005 states that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'*.

Section 15 of the National Planning Policy Framework 2018 (NPPF) states that *'the planning system should contribute to and enhance the natural and local environment byminimising impacts on and providing net gains for biodiversity....'*

Since August 2007, building development that affects bats or their roosts needs a Protected Species Licence under The Conservation (Natural Habitats &c.) (Amendment) Regulations 2007 administered in England by Natural England.

Schedule 12, paragraph 13 of the CROW Act (2000) makes an offence under Section 9 of the Wildlife & Countryside Act (1981) an arrestable offence. As a result, the police gain additional power to aid the investigation and enforcement of the legislation protecting bats.

In relation to the badger, the Wildlife and Countryside Act (1981) and its subsequent amendment (1985) made it an offence to take, kill, injure or ill-treat a badger. The badger gained further protection under the auspices of The Protection of Badgers Act (1992) which consolidates all former protective legislation in relation to badgers, except their inclusion on Schedule 6 of the Wildlife and Countryside Act 1981.

Under the 1992 Act, the badger sett is protected against obstruction, destruction, and damage; furthermore the animal's access to and from the sett must not be impeded. It should be noted that the concept/definition of the sett extends beyond the main sett to include annexe, subsidiary and outlying setts. However, it must be noted that although the badger and its sett are protected (including access to the sett), the wider habitat and foraging ground is not.

With legal responsibilities and planning implications, it is essential that any ecological assessment of a potential development site, including the area of this report, must determine the possible presence or absence of any protected species as part of any planning development consideration.

Without this assessment the potential developer would be unable to demonstrate due diligence in his responsibilities. Furthermore the local planning authority would not have been provided with sufficient information for a planning decision to be made. This could result in the application being designated incomplete and not determined, or simply refused.

The barn owl is protected under Schedule 1 and Schedule 9 of the Wildlife and Countryside Act 1981. It is therefore an offence to injure, kill or capture the bird, to disturb nesting birds, to take eggs, and to release captive owls into the wild without a licence. The barn owl is also recognised by the UK Biodiversity Group as a "Species of Conservation Concern".

Reptiles such as common lizard, slowworm, grass snake or adder (the species recorded in East Anglia), are protected under Section 9 of the Wildlife & Countryside Act (1981) as amended. The legislation makes it illegal to deliberately or recklessly kill or injure any native reptile. This protection therefore requires that reasonable effort be made to avoid harm to reptiles during developments on land occupied by reptiles.

Priority species likely to be present and affected by this development and therefore require consideration are Common Toad and Hedgehog.

There is no habitat at the site that would support Otter, Hazel Dormouse, Harvest Mouse or White-clawed Crayfish.

4) Methods

4.1 Bats

The exterior surfaces of the building were examined for any signs of use as bat roosts, such as the presence of droppings on walls, windows or staining around roost entrances. The use of a crevice by a colony of bats produces droppings on brickwork and adjacent surfaces close to the crevice, together with an accumulation of droppings beneath the roost entrance. However, upon examination, many surfaces will have one or two droppings, randomly placed, caused by bats seeking out new roost sites.

The internal survey was conducted using a powerful torch. The roof of the building was searched for evidence of roosting, the floor areas for droppings and the beams for crevices and staining indicative of the presence of roosting bats. An Xtend & Climb Pro Ladder and a ProVision 300 endoscope were available to inspect crevices in brickwork and around beams.

The trees at the site were examined for loose bark, holes and crevices that could potentially be used by roosting bats. The presence or past usage of a crevice by bats can be detected by the presence of droppings on bark adjacent to the hole and sometimes by a dark urine stain on the trunk of the tree below the roost entrance. Trees with such evidence can then be observed at sunset during the summer and emerging bats recorded. In warm weather and prior to evening emergence, roosting bats may also be detected by squeaking or “chattering” noises which can be heard from several metres distance.

4.2 Badgers

The survey area (extending 30m beyond the site boundary into visible areas of neighbouring gardens) was investigated for evidence of badgers such as setts, well-worn paths, footprints, guard hairs caught on wire or vegetation and latrines.

4.3 Reptiles

The site was inspected for any feature that might support reptiles such as sheltered refuge features (e.g. logs, compost heaps) open sunny areas for basking and varied habitats such as rockeries and grassy areas for feeding.

4.4 Barn owls

The buildings were inspected for cavities that might form potential nesting sites. The floor areas were searched for feathers, nest debris and pellets – the remains of small mammals and other prey items that are regurgitated from a perch. Where owls are present, there is usually splashing of excreta on beams and floors as this is expelled whilst perching.

4.5 Priority species

Hedgehog and Common Toad are likely to be present as the adjacent garden habitat is compatible.

5) Results

5.1 Bats



Photo 2: Western elevation

The survey building is a large detached, brick barn with a corrugated asbestos roof and cladding to the walls. The building is aligned approximately N-S. The survey found that the building was divided along the roof apex, with an open-fronted lean-to store for farm machinery to the west and a secure part of the building on the eastern side. The lean-to store received daylight illumination via the open front, conditions in which bats seek out dark areas or crevices in which to roost. The lack of such features in the brick walls and machine cut rafters made the building less suitable as a roosting place for bats. Externally, there were no cavities that might offer potential roosting places for bats.



Photo 3: Southern elevation



Photo 4: The south-west corner



Photo 5: Eastern elevation



Photo 6: lean-to store on western side



Photo 7: The roof of the store had no features that might be occupied by bats



Photo 8: Looking S-N in the building



Photo 9: Looking N-S in the building



Photo 10: The walls and roof had no features that might be occupied by bats



Photo 11: The walls had no features that might be occupied by bats

There is no vegetation affected by the project that has crevices, loose bark or woodpecker holes that might be colonised by bats.

No evidence of their presence was found at this site.

The only vegetation at the site is a strip of short, maintained grass along the eastern side of the building.

5.2 Badgers

There were no latrines or digging by badgers found at the site, or within 30m of its boundaries.

5.3 Reptiles



Photo 12: Showing road and extent of concrete hardstanding to north

The site is bordered to the north by a road with a residential property with a maintained garden beyond; to the west by a road with redundant farm buildings beyond; to the south by grain silos and a copse and to the east by a field. The main area of the site comprises concrete hardstanding and there are no features that might be attractive to basking by reptiles, and, with the site bordered by a field, a copse and redundant farm buildings there is no suitable habitat nearby from which the site could be colonised by reptiles. A pond to the south-west was formerly a slurry pit when pigs were present at the farm. However, it is now visited by wildfowl and with the site bordered on two sides by roads and set on concrete hardstanding, there is no suitable terrestrial dispersal habitat for great crested newts.



Photo 13: Grain silos to south



Photo 14: Showing road and extent of concrete hardstanding to west



Photo 15: Showing strip of maintained grass to the east



Photo 16: Redundant farm buildings to north-west



Photo 17: View from north-west showing extent of hardstanding



Photo 18: Showing proximity of silos to southern end of barn

5.4 Barn owls

The lack of suitable buildings at the site and the absence of tree cavities meant that the site was unsuitable for occupation by barn owls and no evidence of this species was found.

5.5 Priority species

Both Hedgehog and Common Toad are likely to be present in the area.

6) Discussion

Bats are inquisitive, highly mobile animals, which constantly investigate their surroundings, evaluating good feeding areas and potential roosting opportunities. Where suitable habitat such as woodland, woodland edge or sheltered pasture occurs, bats will travel up to several kilometres to take advantage of this resource. To reach favoured sites, small bats will follow linear landscape features such as hedgerows, streams and lanes etc. The absence of such features can make an otherwise suitable site inaccessible to bats. In addition, new roosts will become established in such areas - examples being the rapid colonisation of artificial roost boxes placed in conifer forests or the occupation of new houses by nursery colonies of pipistrelle bats within a year or two of their completion.

Since there was no evidence of protected species at the site, a European Protected Species Licence will **not** be required for this project.

Although no evidence of bats was found, it is probable that bats from nearby roosts will forage over the site and in the gardens of adjacent properties. This foraging behaviour would be expected to continue after the completion of the building work and therefore it is considered that the proposal for this site will not have a detrimental effect on the local bat population, or on protected species.

7) Assessment of impacts

The site is entirely covered by concrete hardstanding and maintained grass and has no Priority habitats. However, it is possible that Hedgehogs and Common Toads are present in the area. It is therefore recommended that any trenches dug during the construction phase are covered at night, or, if open, that sloping planks are left in the trench such that any mammals and amphibians are able to escape. All open trenches should be checked for mammals and amphibians each morning.

There is no habitat at the site that would support Otter, Hazel Dormouse, Harvest Mouse or White-clawed Crayfish.

8) Recommendations for reasonable biodiversity enhancements

1: It is recommended that the existing gaps along the site boundaries are retained to allow hedgehogs and common toads to forage across the site as, potentially, at present. However if boundary fences are to be introduced, see below:

Hedgehogs travel around **one mile** every night through our parks and gardens in their quest to find enough food and a mate. If you have an enclosed garden this can prevent hedgehogs from dispersing throughout their territory. It is now known that one of the main reasons why hedgehogs are declining in Britain is because our fences and walls are becoming more and more secure, reducing the amount of land available to them. Developers can make their life a little easier by removing the barriers within their control – for example, by making holes in or under our garden fences and walls for them to pass through.

A gap 13cm by 13cm is sufficient for any hedgehog to pass through. This will be too small for nearly all pets.



Photo 19: Hedgehog pathway at base of fence

Alternatively:

- Remove a brick from the bottom of the wall
- Cut a small hole in your fence if there are no gaps
- Dig a channel underneath your wall, fence or gate

2: Two bird nesting boxes to be sited on trees or buildings at the site.

3: A Hedgehog nesting box to be sited at the base of a boundary.

4: Two solitary bee hives to be sited on the developed site.