



**CRONEY BANK FARM,  
BAGNALL, STAFFORDSHIRE**

**FURTHER BAT SURVEYS**

**Prepared for  
P.A. TAYLOR PLANS DESIGN AND CONSTRUCT**

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## **1. INTRODUCTION**

- 1.1 This report has been prepared for P.A. Taylor Plans Design and Construct. It presents the results of a series of bat activity surveys carried out at Croney Bank Farm, Bagnall, Staffordshire during 2021.
- 1.2 The proposals are for three extensions to be added to the two farm buildings on site. One extension will be constructed at the southwest of the farmhouse and another at the southwest of the shippen, the third extension will link the two buildings. The proposals are illustrated on the drawing *Proposed Site Location Plans PLANNING* prepared by P. A. Taylor Planning (drawing number: 6806.15, dated January 2021).
- 1.3 A Preliminary Roost Assessment (PRA) was undertaken during May 2021. The results of the survey are detailed in our report *Croney Bank Farm, Bagnall, Staffordshire Preliminary Roost Assessment of Buildings* (dated June 2021, report reference NW/210621). It is recommended this report be read in conjunction with the previous ecological report.
- 1.4 The PRA identified several potential roost features within the fabric of the building. Features identified include holes in the stonework and ventilation holes at the gables, gaps between common and ridge tiles, gaps in mortar beds, between fascia boards and wall plates. The building was therefore deemed to hold high potential for use by roosting bats and consequently, in accordance with best practice further assessment was undertaken consisting of three surveys to watch for emerging bats and re-entering bats. The results of these further surveys are detailed below.
- 1.5 The buildings comprise of a shippen (with a small, attached pigsty) and the 'L' shaped farmhouse; arranged around a small yard and forming a U-shape in plan view. The shippen is single storey and constructed of stone with a gable ended, tiled roof. The pigsty is brick-built with a pitched tiled roof which follows the same orientation and abutting the southwest gable of the shippen. Both the shippen and pigsty will from herein be termed the shippen. The farmhouse is mainly two storeys with a small single storey section at the north. The farmhouse is constructed from stone apart from the northeast section which is partially brick-built. The farmhouse is gable ended with pitched tiled roofs. A number of other associated buildings are present including two large wooden sheds, a small outbuilding and a barn converted into a separate residential property. The farmhouse is unoccupied at present and the shippen is unused and bare.
- 1.6 The buildings are located in the rural parish of Bagnall. They are surrounded by agricultural land, characterised by pasture bordered by hedgerows and drystone walls with several pockets of woodland. Several ponds and waterbodies are present locally, including a large pond within the property's garden to the east. A brook runs 80m to the northeast and feeds Stanley Pool 1.2km to the north. The OS grid reference for the centre of the buildings is SJ 92907 50419.

- 1.7 The report describes the methods used for the surveys and any constraints encountered, along with the results of the surveys. The findings are then assessed in light of the proposals, impacts are considered and recommendations for further survey or action are given where appropriate.
- 1.8 The legislation relating to the protected species discussed in this report is given in Appendix I.

## **2. METHODOLOGY**

- 2.1 One evening emergence survey and two pre-dawn re-entry surveys were carried out on the buildings. The surveys were undertaken between August and September 2021.
- 2.2 The surveys were completed by Max Robinson, Helen Ball, Neil Watkin, Rosemary Godwin, and Carrie Alcock. Max, Helen, Neil, and Rosemary are licensed by Natural England to survey for and handle bats.
- 2.3 The evening emergence survey commenced approximately 0.5 hour before sunset and finished 1.5 – 2 hours after sunset. The dawn survey commenced 1.5 - 2 hours prior to sunrise until 15 minutes after sunrise. The surveys followed standard methodologies set out in *Bat Surveys for Professional Ecologists – Good Practice Guidelines*, Bat Conservation Trust (Collins, 2016).
- 2.4 The surveyors positioned themselves externally around the buildings to watch areas which were identified as potential roost features. During the surveys the surveyors watched for bats emerging from and for bats 'swarming' (gathering and 'circling') around the entrance to a roost before dawn.
- 2.5 The surveyors used bat detectors (Bat Box Duet, Stag Electronics) to identify the presence and identity of bats. This model of bat detector has two modes of detection. In addition, Anabat Scout Detectors (from Titley Electronics, Australia) were placed around the exterior and internally in the buildings to constantly record any bat activity (such as emerging/re-entering or foraging bats). Bat calls picked up by the Anabats were written onto a compact flash card and, where necessary, analysed on a PC to confirm species. An Echometer Touch 2 was also used to identify bat calls.
- 2.6 The table below summarises the weather conditions during the evening surveys.

| Date                                 | Survey Type          | Weather Conditions                                  | Temperature                  |
|--------------------------------------|----------------------|-----------------------------------------------------|------------------------------|
| 11 <sup>th</sup> August<br>2021      | Evening<br>Emergence | Light rain, complete cloud cover and light air (1). | Start: 17.4°C<br>End: 16.1°C |
| 26 <sup>th</sup> August<br>2021      | Pre-dawn<br>Re-entry | Dry and still (0), partial cloud cover.             | Start: 15.7°C<br>End: 14.5°C |
| 9 <sup>th</sup><br>September<br>2021 | Pre-dawn<br>Re-entry | Dry, clear skies and light air (1).                 | Start: 16.9°C<br>End: 16.0°C |

### **Constraints**

- 2.7 No constraints were encountered during the surveys.

### **3. SURVEY FINDINGS & INTERPRETATION**

#### **Survey Findings**

- 3.1 The buildings and potential roost feature locations are shown on Figure 1 and features of the buildings are depicted in the Plates.
- 3.2 No bats were seen to emerge from the buildings during the evening surveys.
- 3.3 During the first survey on 11<sup>th</sup> August bat activity began at 20:59 with two common pipistrelles *Pipistrellus pipistrellus* emerging from the off-site converted barn to the west of the buildings and proceeded to forage around the nearby tree canopy. A third common pipistrelle joined the two which were foraging to the north and west along the tree lines. Foraging continued by one and at times two or occasionally three bats, although the passes became more intermittent as the survey progressed. Two brief dry passes of a *Myotis* bat were also noted at 21:29 and 21:37.
- 3.4 On the second visit, 26<sup>th</sup> August, foraging activity was evident from the start of the survey with almost constant activity from two and at times three common pipistrelle bats foraging over and around the buildings and around the tree canopies surrounding them. At 5:50 the three bats began displaying swarming behaviour towards the off-site converted barn to the west of the buildings and shortly after two of these re-entered the building.
- 3.5 The final visit on 8<sup>th</sup> September saw similar levels of activity from the beginning of the survey with two common pipistrelles which were recorded foraging around the buildings and adjacent tree canopies, although on this occasion the bats also regularly emitted social calls until the activity ended at 5:59.

#### **Interpretation**

- 3.6 No evidence that bats make use of buildings for roosting was recorded during these surveys.
- 3.7 The surveys were well spaced out during a time of year when bats are most active and were carried out during good weather conditions reducing the likelihood that a maternity roost (where females gather together to give birth and raise their young) in particular has been missed.
- 3.8 The building provides high potential to support roosting bats associated with gaps under common and ridge tiles, gaps in failed mortar beds, also with opportunities between fascia boards and wall plates, holes in the stonework and ventilation holes at the gables. Thus, recommendations for precautionary working practices are given in the following chapter.

#### **4. RECOMMENDATIONS**

- 4.1 No signs that bats make use of the buildings for roosting have been found during the emergence and re-entry surveys. As the buildings provide high potential it is advised a precautionary approach to be undertaken during the extension and conversion works to reduce the likelihood of an offence being committed. The contractors/builders undertaking the work would need to be made aware of these requirements and any works should be undertaken using precautionary methods as per below.
- 4.2 During works the stripping of ridge and common tiles on the single storey section of the farmhouse would need to be carefully undertaken by hand to avoid injury to any bats that may be present. The tiles would then need to be lifted outwards and the exposed void below inspected for bats or signs of bats. The tiles reverse surface should be inspected as bats can cling to rough surfaces. Similarly, when repairing cavities or mortar in the stonework and any work involving the fascia any cavity in the brickwork should be inspected for bats prior to the cavity being blocked or sealed.
- 4.3 Should bats be found to be present, they would need to be left *in situ* and not handled or touched. If a bat is disturbed and it wishes to fly, then it should be allowed to do so. If a bat is uncovered, for example by lifting of a tile, then the tile should be gently placed back with care taken not to crush the bat below. Alternatively, if the circumstances allow a plastic or cardboard box with ventilation holes could temporarily be placed over the bat to protect the bat or if circumstances allow the bat placed into the box.
- 4.4 In the unlikely event that bats, or evidence of roosting bats (such as bat droppings) be found, works would need to be temporarily suspended and the licensed bat ecologist contacted to help resolve the situation and consulted as to the best method to proceed. A statutory licence from Natural England may need to be obtained and, as part of this, additional surveys may be necessary (which may be seasonally constrained), along with mitigation and compensation, such as the provision of replacement roosting where appropriate.
- 4.5 During the initial assessment of the buildings birds were recorded nesting. Works to the buildings and clearance of any surrounding trees and vegetation should take account of the potential presence of nesting birds. The presence of nesting birds can be avoided as a constraint to the proposals by timing relevant works to avoid the bird nesting season. Should the works need to be carried out during the bird nesting season then surveys and a watching brief would need to be carried out during works to check for the presence of nesting birds. The findings of the surveys and watching brief would be used to ascertain the best method to proceed to avoid impacting upon nesting birds. The bird nesting season is generally deemed to run from March to July/August inclusive, although some species can nest outside this period.

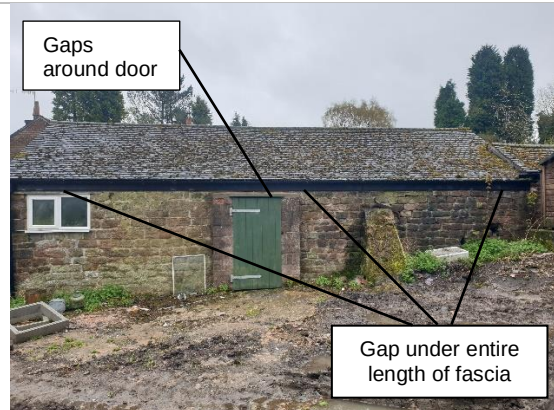
## **5. REFERENCES**

Collins, J. (ed). (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 3<sup>rd</sup> Edition. Bat Conservation Trust, London.

## **PLATES**



**Plate I. Farmhouse and Shippen viewed from the southwest.**



**Plate II. View of northern western elevation of the shippen.**



**Plate III. Northwest elevation of shippen.**



**Plate IV. Northeast gable of shippen and northwest gable of single storey section of farmhouse.**



**Plate V. Gap under fascia on south-eastern elevation of shippen.**



**Plate VI. Missing mortar around the blocked ventilation hole at southwest gable of shippen.**



**Plate VII. Raised ridge tile on single storey section of farmhouse.**



**Plate VIII. Hole in stonework under eaves on north-western elevation of farmhouse.**



**Plate IX. Gaps under common tiles around flue vent on south-eastern pitch of farmhouse.**



**Plate X. South-western gable wall of shippen within the pigsty, showing gaps in stonework.**

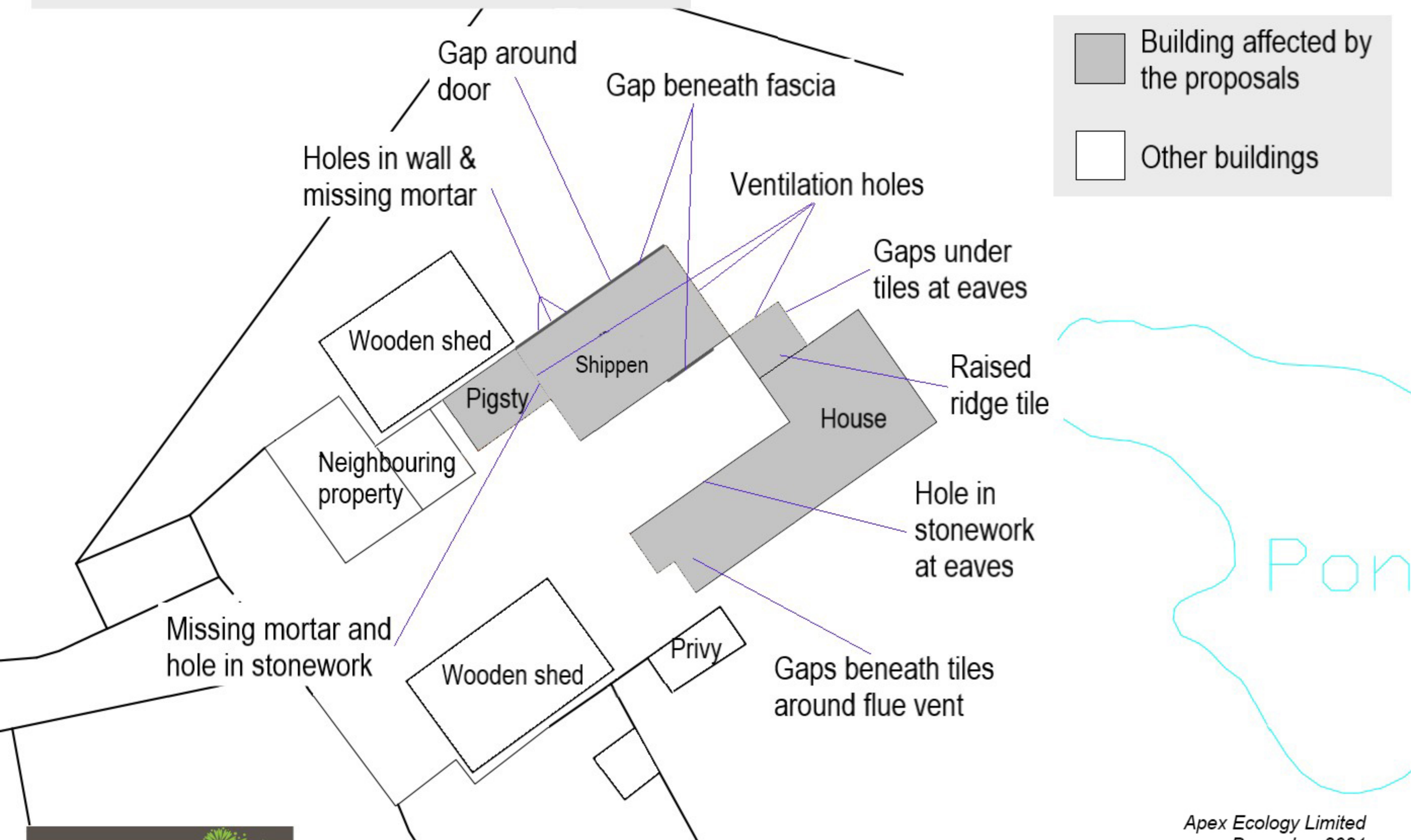


**Plate XI. Internal view of the shippen.**



**Plate XII. Roof section of the shippen.**

Figure 1. Layout of Buildings and Locations of Potential Roost Features



## **APPENDIX I - LEGISLATION RELATING TO PROTECTED SPECIES DISCUSSED IN THE REPORT**

The information below is intended only as guidance to the legislation relating to these species and relates solely to England and does not purport to provide legal advice. It is recommended that the legislative documents be referred to for the full legal wording and the services of a relevant specialist sought where legal advice is required.

### **Bats**

There are seventeen different species of bat in the UK; some are very rare whilst others are widespread. However, because the populations of most species have declined in past decades, all British bats have been protected by law.

Bats are protected in England under European Legislation via the Conservation (Natural Habitats and Wild Flora and Fauna (92/43/EEC)) or 'The Habitats Directive'. The Directive is transposed into UK law via the Conservation of Habitats and Species Regulations 2010 (Statutory Instrument 2010/0490 known as the Habitats Regulations), which came into force on the 1<sup>st</sup> April 2010. The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") consolidate and update the Conservation (Natural Habitats, &c.) Regulations 1994 (Statutory Instrument 1994/2716) and amendments. Due to their inclusion on Schedule 2 of the Habitats Regulations, bats are considered 'European Protected Species'.

In summary, this legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat;
- damage or destroy a breeding site or resting place of any bat;
- possess a bat (alive or dead) or any part of a bat.

Disturbance of bats includes in particular any disturbance which is likely:

(a) to impair their ability:

- (i) to survive, to breed or reproduce, or to rear or nurture their young; or
- (ii) to hibernate or migrate; or

(b) to affect the local distribution or abundance of the species to which they belong.

Bats are also protected under the Wildlife and Countryside Act 1981 (as amended), which has also been amended by the Countryside and Rights of Way (CROW) Act, 2000.

In summary, this legislation makes it an offence to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
- intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection.

## **Birds**

All wild birds, their nests and eggs are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is, therefore, an offence (subject to certain exceptions) to:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird whilst it is in use or being built;
- take or destroy the egg of any wild bird.

In addition to the above, in accordance to amendments of the Wildlife and Countryside Act by the Countryside and Rights of Way Act 2000, it is an offence to:

- intentionally or recklessly disturb any species listed on Schedule 1 of the Wildlife and Countryside Act whilst building a nest, or whilst it is on, in or near a nest containing eggs or young; and
- disturb the dependent young of a Schedule 1 bird.

For example, barn owl is protected under Schedule 1 of the Wildlife and Countryside Act, protecting them from intentional or reckless disturbance during the breeding season (which is normally considered the time from when the female makes the first nest 'scrape' and lays the first egg until the time when the last dependent young stops returning to the nest (English Nature, 2002/3)).

## **NERC ACT AND BIODIVERSITY**

A number of UK habitats and species are also included on the list of habitats and species which are of principal importance for the conservation of biodiversity in England as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act. The NERC Act came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.

The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of NERC Act to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. They include terrestrial habitats such as upland hay meadows to lowland mixed deciduous woodland, and freshwater and marine habitats such as ponds and subtidal sands and gravels.

There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities

under the UK Post-2010 Biodiversity Framework. In addition, the Hen Harrier has also been included on the list because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England. In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

The impact that this legislation has on the Planning system is also outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their Impact within the Planning System. This states:

*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. Local authorities should consult English Nature [now Natural England] before granting planning permission. They should consider attaching appropriate planning conditions or entering into planning obligations under which the developer would take steps to secure the long-term protection of the species. They should also advise developers that they must comply with any statutory species' protection provisions affecting the site concerned.*