



The Ecology Co-op

ENVIRONMENTAL CONSULTANTS

Unit 4, Langham Stables, Langham Lane, Lodsworth, Petworth, West Sussex, GU28 9BU

Tel: 01798 861800 - E-Mail: info@ecologyco-op.co.uk - www.ecologyco-op.co.uk

Bat Scoping Assessment and Emergence Survey

**The Shallows, Woodgaston Lane, Hayling Island,
Hampshire, PO11 0RL**

Author: Ryan Walker

Checked by: Paul Whitby

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The Ecology Co-operation Ltd

Registered Office: Greens Court, West Street, Midhurst, West Sussex, GU29 9NQ

Company number: 890552

Report Summary

1. A bat scoping assessment and single bat emergence survey was conducted at a large, detached house and garage called 'The Shallows' on Hayling Island. It is proposed that the house and garage will be demolished to make way for a new build, single residential development. The assessment was undertaken by Dr Ryan Walker on the 21st and 22nd of June 2016, according to best practice guidance as outlined by the Bat Conservation Trust. In addition, other potential protected species constraints were considered within the scoping assessment.
2. It was concluded that the southwest facing roof pitch has a moderate potential to support small numbers of crevice roosting bats between a number of loose fitting roof tiles.
3. The emergence survey did not identify any of these features as an active bat roost.
4. If it becomes necessary to fell any mature trees within the site during the course of the works, then these trees should first be subjected to a bat scoping survey.
5. Breeding birds should be considered if it is necessary to remove any vegetation between the 1st March and 31st of August as part of the proposed works.
6. To account for the often opportunistic nature of roost selection for small numbers or individual crevice roosting bats during the summer, it is suggested that these areas of tiles are subjected to a soft strip prior to demolition.
7. Potential roosting enhancement measures are suggested for incorporation into the proposed new build development.



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1 INTRODUCTION



1.1 Purpose of the Report

A bat scoping assessment, followed by a single bat emergence survey was undertaken at a large, detached residential property called 'The Shallows' on Woodgaston Lane, Hayling Island. It is proposed that the house and garage are to be demolished, to make way for a single replacement residential property. This assessment was undertaken to establish the likelihood of roosting bats using the house and garage within the site, and how the proposed works may potentially impact upon roosting bats.

1.2 Background

A full Preliminary Ecological Appraisal for this development was not deemed to be necessary, due to the small scale of the footprint of the proposed development and the perceived lack of the potential for a significant impact upon other protected species within this locality. However, where any potential impacts upon other protected species was identified, this has been addressed within the findings of the report.



Figure 1. The location of the Shallows, Woodgaston Lane, Hayling Island. Figure orientated north to south.

1.3 Site Description

The property is situated within a largely rural area, with extensive grazing land to the north and east of the property, coastal intertidal zones to the south and east and other similar large properties to the west (see figure 1). The property is situated within large domestic gardens, backing onto an intertidal area to the south. The wider habitat supports good potential

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foraging habitat for bats, owing to this surrounding green space, which may support a variety of invertebrate prey.

1.4 Legal Protection

All species of bats within the UK are protected via The Conservation of Species and Habitats Regulations (2010) and also the Wildlife and Countryside Act (1981), as amended. Therefore, it is an offence to kill or injure a bat or interfere with any roosting or resting site. A bat roost is interpreted as "any structure or place used for shelter or protection by bats" whether or not bats are present at the time. Details of legislation and legal protection afforded to all species of British bats are given in Appendix 1.

The results of this assessment and emergence survey will guide any necessary mitigation to ensure that no individuals or populations of bats and their roosting habitat are negatively affected by the proposed works, and therefore no offence is committed under UK and EU wildlife legislation.



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2 METHODOLOGY

2.1 Scoping Survey

This assessment was undertaken on the 21st of June 2016 by Dr Ryan Walker, MCIEEM, CEnv (Natural England license holder: 12015-16736-CLS-CLS - Bat Survey Level 2) following best practice survey techniques as outlined by the Bat Conservation Trust (BCT)¹.

The survey focussed upon the internal and external features of the property that have the potential to support roosting bats. The internal structures, such as roof voids, were searched for signs of bat use such as scratch marks, staining from bat fur, bat droppings and insect feeding remains (e.g., wing cases) as well as bats themselves. Externally, the structures were surveyed (making use of a high powered torch where necessary) for possible entry points, evidence of staining, scratch marks and bat droppings.

2.2 Emergence Survey

The following dusk bat emergence survey was undertaken upon the following date, under the following conditions:

Date	Survey start time/end time	Temp. degrees centigrade, weather conditions throughout survey	Surveyor
22-06-16	20:50/21:54 (sunset 21:20)	18.6-16.8 degrees C Warm, clear, slight breeze, light rain followed by thunder storm at 2153.	Dr Ryan Walker

The survey work followed best practice survey techniques as outlined by the BCT¹. The survey focused upon the interest features upon the external faces of the property, identified during the initial bat scoping survey, with a particular focus upon the loose fitting roof tiles within the southwest facing pitch of the roof (Fig. 2). It was thought that this area supports a moderate potential to support small numbers of crevice roosting bats such as the *Pipistrelle* species. The surveyor positioned himself accordingly, at an appropriate vantage point in view of these interest features (Fig. 2).

The surveyor recorded any bat activity on or around the potential roosting features identified during the scoping survey, using frequency division and heterodyne, hand held bat detector to identify species through call frequencies.

¹Collins, J.(ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London..

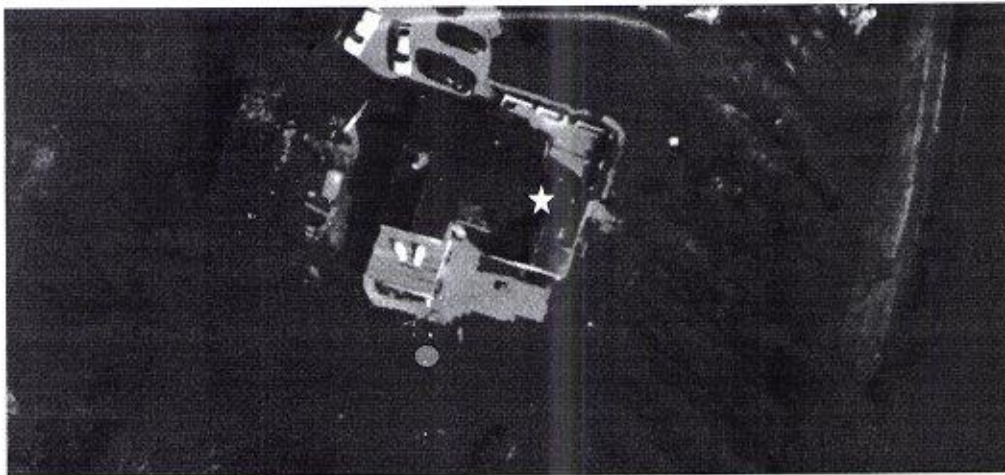


Figure 2. Google Earth screen grab showing the location of The Shallows within the wider landscape, with the location of the surveyor (red dot). The white star represents the location of the loose fitting roof tiles upon the southwest facing roof pitch, supporting a moderate potential to supporting roosting space for crevice roosting bats. Image orientated from north to south.





3 RESULTS

3.1 Scoping Survey

The main house and double garage is set within a large footprint and is surrounded by tightly mown lawns, a patio and a large area of hard standing, parking and turning area to the north of the house (Figs. 3 & 4). The large double garage is to the west of the house.

The house is constructed of brick and is rendered (Figs. 3 & 4). The structure supports largely tight-fitting concrete roof tiles (Figs. 3, 4 & 6), with small areas of hanging tiles upon the east and south facing aspects, fringing small balcony areas (Fig. 5). A small area upon the southwest facing roof pitch, supports a small number of looser fitting tiles (Figs. 2 & 6). These loose roof tiles have a moderate potential to support small numbers of crevice roosting bats. A number of the hanging tiles upon the east and south facing aspects of the house support missing or loose fitting tiles (Fig. 5). These gaps were inspected with an endoscope. There was no evidence to suggest that the gaps between the hanging tiles have been used by bats as roosting space recently.

All of the barge boarding and soffits fringing the house and garage are tight-fitting and devoid of gaps (Fig. 7). In addition, all of the roof tiles upon the garage are tight-fitting interlocking tiles and there is no evidence to suggest that this garage has potential to support crevice roosting bats within any external features. There is no evidence within the internal aspects of the garage to suggest that the structure has been used by bats as roosting habitat within the recent past. This as a negligible potential to support roosting bats.

The house supports a single, three sided large roof void (Fig. 8). The largest portion of the void is within the eastern section of the house and measures approximately 4x12m floor space and 2.8m floor to apex height. The void is timber framed and internally clad in bitumen roofing felt that has deteriorated and fallen away in many areas (Fig. 8). The void is heavily cobwebbed, suggesting that it has not been used by bats within the recent past. There is no evidence to suggest that bats have been using the void space as roosting habitat within the recent past.

It is understood that the foot print of the existing property will be used for the new proposed development footprint, however if it becomes necessary to remove any large trees from the grounds, they must first undergo a scoping survey for their potential to support roosting bats. If any other vegetation removal is required during the construction of the proposed new development, then this clearance should either be undertaken outside of the bird breeding season (1st March to 31st August) or the vegetation should first be checked by a suitably qualified ecologist for potential birds' nests prior to clearance works.



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Figure 3. The north facing aspects of the house and double garage at Shallows, with the parking and turning hard standing to the north.



Figure 4. The south facing aspect of the house at the Shallows.

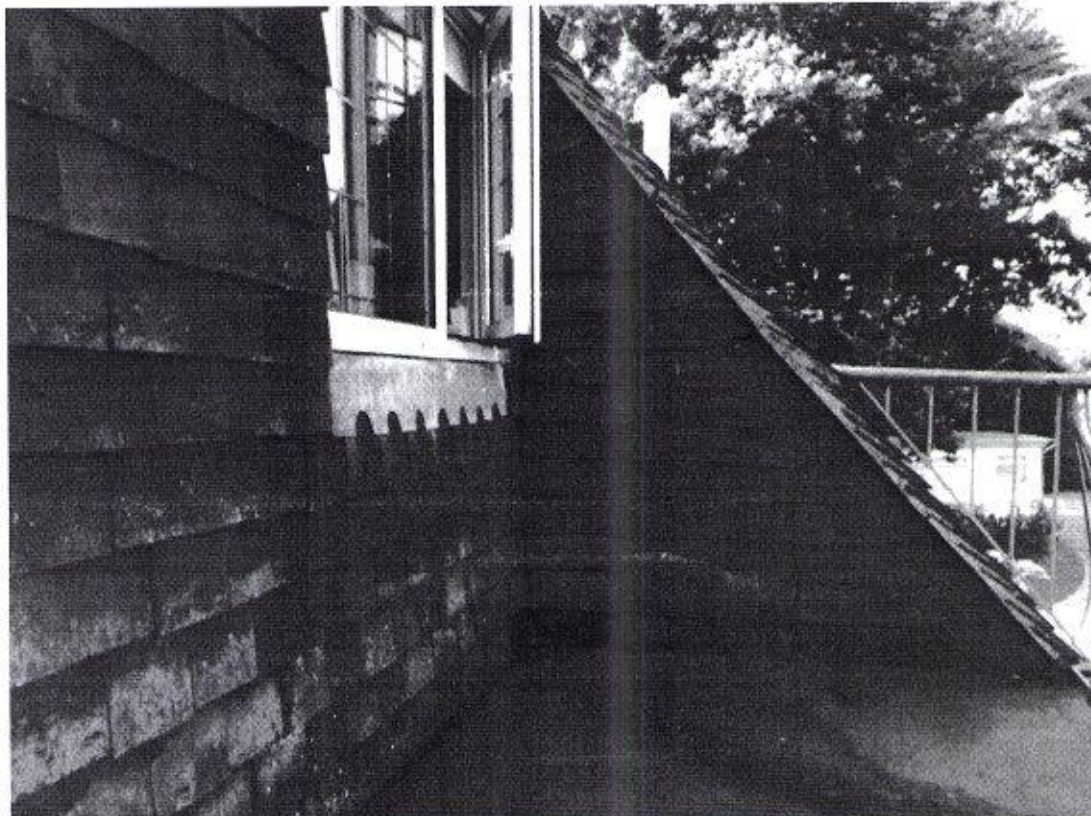


Figure 5. The areas of hanging tiles upon the eastern aspect of the house at the Shallows.

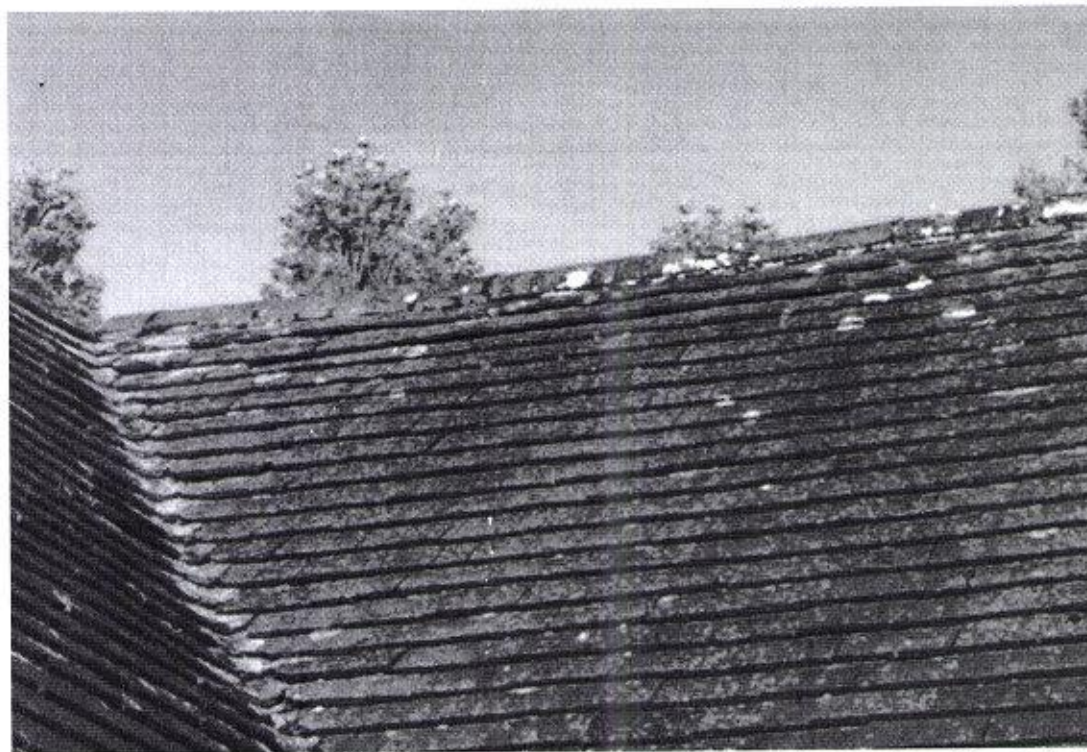


Figure 6. The area of loose fitting concrete tiles upon the southwest facing pitch of the roof at the Shallows.



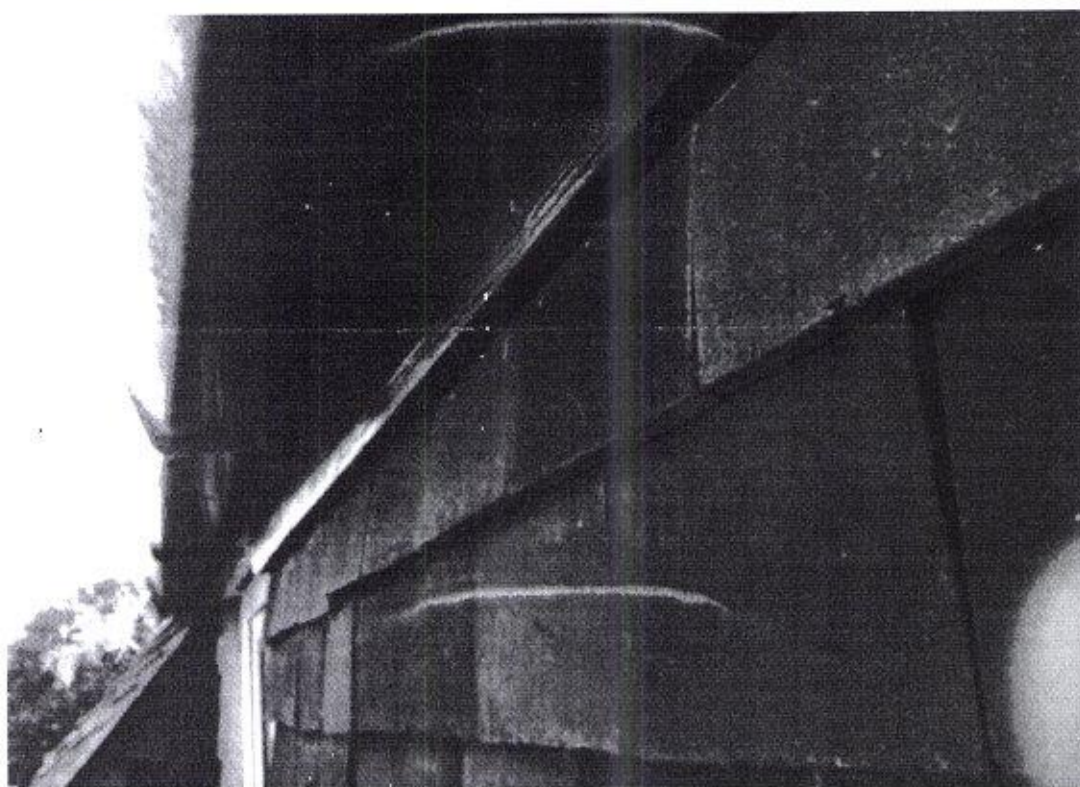


Figure 7. The well fitting barge boarding upon the external aspects of the house at the swallows.

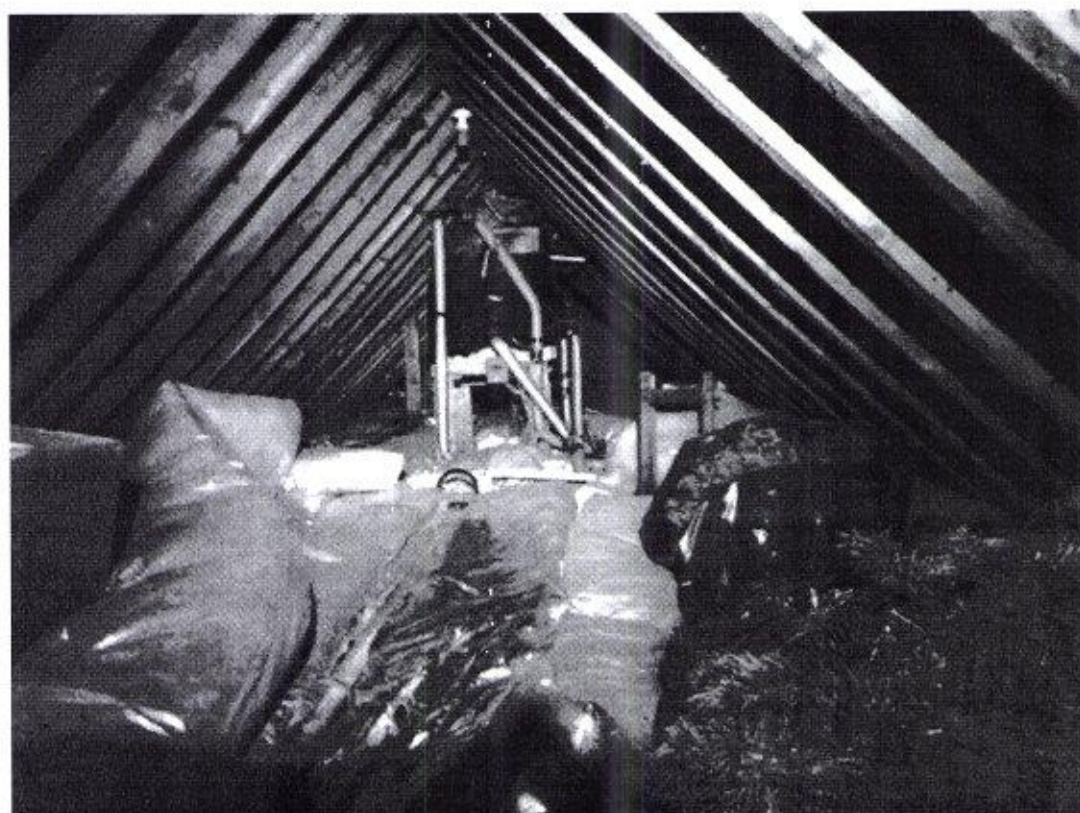
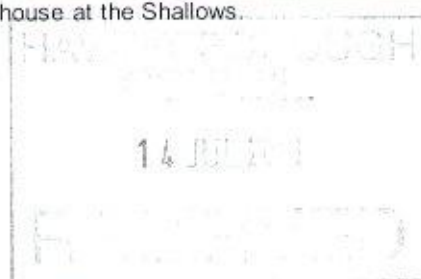


Figure 8. The internal aspects of the roof void within the house at the Shallows.



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3.2 Emergence Survey

No bats were recorded emerging from under the loose fitting roof tiles upon the southwest aspect of the house during the course of the survey. A single soprano pipistrelle bat (*Pipistrellus pygmaeus*) was recorded foraging along the tree line to the southwest of the house (Fig. 2) from 2122 till 2153. Rain curtailed the survey at 2155.





4 CONCLUSIONS

The scoping assessment established a moderate potential for an area of loose fitting roof tiles upon the southwest facing pitch of house at the Shallows to support small numbers of roosting bats. All other internal and external aspects of the house and garage have a negligible potential to support roosting bats.

The results of the emergence survey suggest that this area of loose fitting roof tiles do not currently support roosting bats. Despite the survey being curtailed due to rain, the survey did record a foraging soprano pipistrelle bat, suggesting that at the time of dusk bats were active within the immediate area.

Pipistrelle bats, commonly associated with roosting under loose fitting roof tiles will often use multiple roosts throughout the summer. Therefore, as a precautionary measure it is suggested that this area of loose fitting tiles are removed as part of a soft strip prior to demolition of the house. This will require that this area of tiles are removed by hand, under the supervision of a suitably qualified ecologist. If in the unlikely event any bats are discovered, these can then be removed and placed within a bat box and erected upon a tree within the site.

If there is any requirement to remove any large trees within the grounds of the site, a bat scoping survey should be undertaken prior to felling. In addition, nesting birds should be considered if any vegetation removal is necessary to be undertaken during the summer months during the course of the works.

As a potential bat roosting enhancement measure, artificial bat roosting features could be incorporated within the structure of the proposed new build house. Two bat tubes; <http://www.nhbs.com/title/162812/2fr-schwegler-bat-tube> could be incorporated into a south facing wall at a high of at least 3.5m and away from any artificial light sources.

Should you need any further advice on the information provided above, please do not hesitate to contact us.



APPENDIX 1 - LEGISLATION AND POLICY

Bats

All species of British bat are fully protected under the Wildlife and Countryside Act 1981 as amended through inclusion in Schedule V. All bat species in the UK are also included in Schedule II of the Habitats Regulations 2010 which transpose Annex II of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora ("EC Habitats Directive") which defines European protected species of animals.

Bat species are afforded further protection by the Countryside and Rights of Way (CROW) Act 2000; and the Natural Environment and Rural Communities Act 2006.

Under the above legislation it is an offence to:

- kill, injure or take an individual;
- possess any part of an individual either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by these species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb these species whilst using any place of shelter or protection; or
- deliberate disturbance in such a way as to be likely to impair their ability to:
 - survive, to breed or reproduce, or to rear or nurture their young; or
 - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
 - to affect significantly the local distribution or abundance of the species to which they belong;
- keep (possess), transport, sell or exchange, or offer for sale or exchange, any live or dead bat, or any part of, or anything derived from a bat.

It is also an offence to set and use articles capable of catching, injuring or killing bats (for example a trap or poison), or knowingly cause or permit such an action. In the case all species of British bat there is also protection under *Schedule 6 of The Wildlife and Countryside Act 1981* (as amended) relating specifically to trapping and direct pursuit of these species.

A European Protected Species License (EPSL) in relation to bats is required from Natural England for any work that would result in an otherwise unlawful activity (e.g. damage to a bat roost). A license can only be issued to permit otherwise prohibited acts if Natural England are satisfied that all of the following three tests are met:

- The proposal is for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment';
- There is no satisfactory alternative; and
- The action authorised by the license will not be detrimental to the maintenance of bat populations at a favourable conservation status in their natural range.

A bat roost is defined by the Bat Conservation Trust publication *Bat Surveys—Good Practice Guidelines 2nd Edition* as "*the resting place of a bat*". Generally however, the word roost is interpreted as "*any structure or place, which any wild bat uses for shelter or protection.*"

Bats tend to re-use the same roosts; therefore legal opinion is guided by recent case law precedents, that a roost is protected whether or not the bats are present at the time. This can include for summer roosts, used for breeding; or winter roosts, used for hibernating.

