



Preliminary Roost &  
Nest Assessment



Marae Barn  
Bagg Lane  
St. Germans  
Saltash  
PL12 5PB

SX 34517 57885

August 2023





## Contents

1. Executive Summary of Findings .....	4
Bats .....	4
Birds.....	4
Additional Protected Species/Habitats.....	5
2. Survey Objectives.....	5
3. Methods .....	5
Internal & External Inspection .....	5
Constraints .....	6
4. Site Location.....	6
5. Site Habitat.....	7
6. Proposed Site Works.....	8
7. Building / Structure Descriptions .....	8
8. Results and Assessment.....	9
Site Images/Evidence .....	11
9. Mitigation.....	12
Additional Protected Species/Habitat Constraints.....	14
Impact Avoidance During the Construction Phase .....	14
10. Enhancement.....	15
11. Conclusions .....	16
12. References .....	17
13. Appendices.....	19
Appendix 1: Legislation Bat and Bird Species.....	19
Appendix 2: Why the need for a Bat Scoping Survey? .....	21
Appendix 3: Assessing the Potential Value for Buildings .....	23
Appendix 4: Bat Species.....	25





## 1. Executive Summary of Findings

A preliminary roosting and nesting assessment (PRNA) on the 13<sup>th</sup> of August 2020 of Marae Barn, Bagg Lane, St. Germans and comprising a detached barn (divided into an open half to the north and a closed half to the south) found no evidence pertaining to bat species and no or negligible roosting features pertaining to bats. It was therefore concluded unmitigated works will not cause disturbance/harm or death to bat species.

Evidence of nesting birds was recorded: - a Swallows nest (active) in the open northern portion of the barn. It was concluded that unmitigated proposed development works would cause loss of a nesting site.

The site was revisited 01/08/2023 and resurveyed – There have not been any significant Changes between 2020 and 2023. The reports finding can therefore be considered to remain valid.

### Bats

Structure Assessed	Detached barn
Evidence of Bats in Surveyed Structures	None
Potential for Bat occupation	None or negligible potential
Mitigation	- <b>NOT</b> required.
Enhancement	- Not required for bats. Refer to Bird Enhancement.
Advisory	- Structures should be secured to ensure opportunities for future roosting are unavailable prior to the development.

### Birds

Evidence of Birds in surveyed structure/s	PRESENT Barn = a Swallows nest (active) Confirmed nesting of Swallows species.
Potential for Birds	Barn = additional potential features: at the tops of the walls under the eaves of the barn and upon the exposed beams within the open barn.
Mitigation	- <b>REQUIRED.</b> (see <a href="#">Bird Mitigation</a> )
Enhancement	- <b>REQUIRED:</b> - 1 X Swallow nesting cup (see <a href="#">Bat &amp; Bird provision for Mitigation and Enhancement</a> )
Advisory	Active bird nests are protected by law. Works cannot take place until nestlings have fledged, and nests are no longer in use.

**Additional Protected Species/Habitats**

<b>Habitat/Species</b>	<b>PRESENT</b>
<b>Mitigation</b>	The Hawthorns adjacent to the barn to the north and the west are proposed as retained. The root protection area should therefore be protected.  Of interest, to the south of the renovation site is a mature Oak where the client reports Tawny owls at night. This area will be enhanced for birds (tawny owls).
<b>Further Surveys</b>	NOT required

**2. Survey Objectives**

The survey specifically aimed to identify the following:

- ✓ The presence of, or past use of the site by, any species of bat.
- ✓ The presence of, or past use of the site by, barn owl, or other nesting birds.
- ✓ The site's potential for use by any of the above.
- ✓ Any other ecological issues relating to the proposal.

**3. Methods****Internal & External Inspection**

The aim of the survey was to assess levels of usage of specific structures or potential for usage by bats and birds through the presence of actual animals or their field signs. The survey was conducted with the aid of head and hand-held torches, an endoscope, close-range binocular/monocular, Bat-box Duet and a digital camera. Images and samples (where available) were taken for supporting evidence.

**Interior**

The interior spaces were checked for light ingress and access points for bats and birds. Bat droppings, insect prey remains, urine stains, oil stains from bats repeatedly moving over a small area and polishing the surface and the potential presence of bats either dead or alive was considered. Bird droppings, whitewash, pellets, nesting materials, birds, dead or alive, and potential for nesting was considered, including areas hidden from sight.

**Exterior**

The building exteriors were searched visually using binoculars or a close range monocular and photographed with a digital zoom camera for field evidence of bats or birds, with particular attention being paid to sheltered areas such as window ledges and pipes where bat/bird droppings might lie undisturbed from the weather and areas hidden from sight.



## Constraints

There were no perceived constraints to the survey of the dwelling, with all internal and external surfaces inspected and assessment made of the roof structure. The survey effort was considered sufficient to draw appropriate conclusions. It took into account the time of year (optimal period is April – September) and likely availability of evidence, with appropriate emphasis on suitable roosting or nesting conditions, opportunities for potential access through ingress points, free-flight, crawl spaces externally and internally, and features that may have been hidden from full view.

## 4. Site Location

The Site is set 1.5 km west of St. Germans, 7km west of Saltash on the border with Devon. The site itself is surrounded on all sides by open countryside which offers considerable value for wildlife. There are several areas of woodland, some of which have water bodies within them, within 2km of the site; many of these woodlands have moderate connectivity with the site itself.

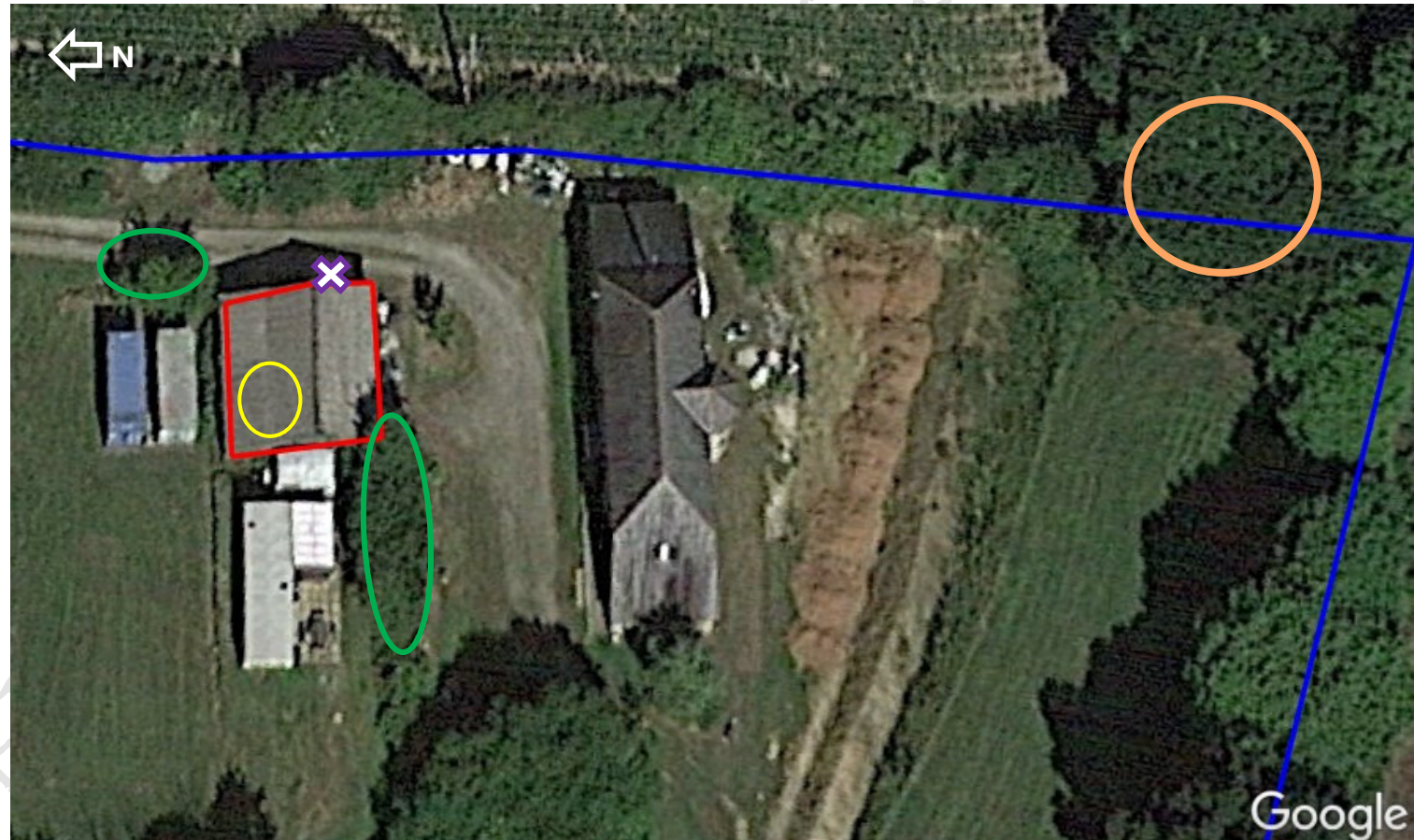




### 5. Site Habitat

The barn surveyed is split into two sections: an open half to the north, and a closed half to the south. An Active Swallows nest was recorded in the open portion of the barn. Swallows cups will be required to mitigate the loss of this nesting site. The hawthorns trees to the north and the west of the barn are being retained by the client. The client reports that there are Tawny owls utilising a mature Oak to the south of the development. This area is to be avoided and enhancement of an owl box is to be applied.

Locations are approx. and not to scale.	
Site boundary	
Dwelling surveyed	
Location of bird nesting	
Hawthorns	



Proposed Mitigation & Enhancement	
Swallow cup on north or eastern aspect	
Protection of root protection area of hawthorn trees.	
Owl box	



## 6. Proposed Site Works

No specific design for the proposed development has been provided for this report. It is understood the intention is to renovate and convert the building into a residential property. Unmitigated works to this site will impact upon nesting features/active nesting feature causing disturbance/harm or death to protected species through the loss of an active nesting site within the open barn.

## 7. Building / Structure Descriptions

The buildings were assessed against the criteria laid out in [Appendix 3: Assessing the Potential Value for Buildings](#).

**Barn**



**Image from 2020**





**Image from 2023**

The barn is constructed of block with render (no cavity). The pitched roof is constructed of corrugated asbestos sheeting. There is no loft void and no lining.

No evidence of bats was recorded within the barn. The barn is in two sections: The northern half is open on one side making it bright and open to the elements which make it unsuitable for bat roosting. However, there is a Swallows nest being actively used in the beams of the roof. The southern half is closed and secure and is kept locked making ingress difficult. Additionally, due to the construction materials the temperatures within will fluctuate making it unsuitable for roosting.

This structure offers negligible roosting features.

Potential nesting features exist: - A Swallows nest which was actively being used was recorded up in the beams of the northern part of the barn.

## **8. Results and Assessment**

### **Confirmed Roost or Nest Site / Structure Suitability**



Structure	Bats		Birds	
	Confirmed Roost Evidence	Potential Roost Ingress/crevices	Nest Present	Potential for Nesting Exists
Barn	No	No	Yes	Yes

<b>Phase 2 Survey</b>	<p><b>Bats:</b> - Emergence Surveys are not required as present works will not disturb/damage/modify/destroy any features considered to offer bat roosting potential.</p> <p><b>Birds:</b> - Not required.</p>
<b>Mitigation</b>	<p>Not required for bats.</p> <p><b>Advisory</b></p> <p>Irrespective of survey findings, contractors should be made aware that there is always the potential presence of bats in association with roofing layers, ridgelines and wall tops. In the event that a bat is found during works, all activities near the discovered bat(s) should cease and advice sought from Ecological Surveys Ltd (Tel: 01503 240846 or 07736 458609) or the Bat Conservation Trust Helpline (Tel: 0345 1300 228). Bats should not be handled (unless with gloves) and only then to protect them from harm, but wherever possible should be left in situ, gently covered until advice is obtained.</p>

### Rationale

- i. There were no ingress points, no missing tiles/slates or other potential roosting points such as gaps behind fascia / bargeboards for bats to secrete themselves. The lack of lining within the roof structure, made surveying the property easier. No evidence of roosting or bat activity was recorded within either section of the barn. The southern half of the structure has negligible potential ingress points and is unsuitable for roosting due to the fluctuations in temperature. It is also in frequent use with ongoing disturbance occurring. The northern half is open on one side, offering free flight access, however, it is bright and open to the elements making it unsuitable for roosting. If bats were present, it would be expected that at least some evidence would be present.
- ii. Whilst no evidence of bats exists at present, it may be possible for bats to become associated with this structure in the future, e.g. free flight access which might be used as a feeding perch. Lack of evidence at point of survey does not discharge the client/agent of their responsibilities to protected species. If a bat is discovered during development, work must immediately cease in this area and professional ecological advice obtained for lawful procedure.



- iii. Nests were recorded. Active bird nests, irrespective of species are protected by law. Works cannot take place until nestlings have fledged, and the nest is no longer in use. If nesting occurs prior to or during development works, and this nest will be impacted by the proposal, work must cease until all chicks have fledged and flown and/or nesting has ceased.
- iv. Where the immediate surrounding habitat of the proposed development may be impacted by the proposal, consideration must be given of this habitat for its potential to support protected species or whether the habitat itself is protected or of significance.

### Site Images/Evidence



The Swallows nest recorded in the northern half of the barn. Not present in 2023



A view of the Hawthorns north of the barn.



View of the northern half of the barn showing how bright the structure is during the day.



View of the interior of the southern half of the barn, frequently used, bright, showing the intact pointing, and the intact roof.



Image from 2023 – essentially the same as 2020

## 9. Mitigation

Under the National Planning Policy Framework (NPPF), Local Planning Authorities (LPAs) have an obligation to promote the preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species as identified under the Natural Environment and Rural Communities Act (2006). Local Planning Authorities will seek to produce a net gain in biodiversity by requiring developers to design wildlife into their plans and to ensure that any unavoidable impacts are appropriately mitigated for. Mitigation is the process of replacing any ecological / biodiversity losses because of development. Bird habitat mitigation requirements are made below.

**Bird Nesting Advisory:** - It is possible that bird nests could be newly established in association with this site during future bird nesting seasons. The bird nesting season generally extends from March to August inclusive. Although, depending upon the species, geographical area and the weather conditions, nesting can extend outside this period and it is the nesting behaviour that must be observed, not the supposed time frame, as collared doves (*Streptopelia decaocto*) and barn owls (*Tyto alba*) have been observed to nest in every month of the year. All British birds and their nests are protected whilst in use; therefore, if a nest is found during construction work, all activity must cease within proximity and ecological advice



(Tel: 01503 240846 or 07736 458609) sought immediately.

### **Bird Mitigation**

As a result of the proposed works, a Swallow nesting site will be lost to this development. Listed buildings may be prohibited from erecting features on the external facings of buildings. If this applies, any mitigation for bird nesting should be applied to any viable structure in the vicinity.

- To mitigate this loss, provide: 1 x swallow cup provision to be erected on the northern or eastern aspect of the new structure.

The recommended provision is highlighted in yellow (see [Bird Brick and Box Designs.](#)).

- Development cannot begin until all bird nests are no longer in use. As such, any work will have to take place outside of the current breeding season: from September to February (approximately).



Swallows:

<http://www.nhbs.com/title/158625/no-10-schwegler-swallow-nest>

<https://www.cornwall.gov.uk/media/3626630/Accommodating-swallows-swifts-and-house-martins.pdf>

The client/agent must:

- Take note of the law regarding birds and their responsibilities for protected species and the sensitive time frame for removing structures: outside of the nesting, breeding and fledging season.
- Incorporate features which support the nesting of birds in the construction of new development.
- Ensure that nesting boxes are of durable and ideally permanent construction. Some account must be taken of the potential need to maintain, and in the case of wall mounted units, replace boxes after a number of years in use.
- Bird boxes which are built into the fabric of a structure are the preferred choice. Generally, only where it is not possible to build a bird nesting box into a structure for construction reasons, will externally mounted boxes be acceptable to the LPA.
- Birds may be accommodated by either adapting the structure of a building to allow access to parts otherwise sealed by modern construction, or through the provision of purpose-built nesting boxes.



- Where incorporating the latter as part of a scheme of enhancement, only boxes of robust or permanent construction – preferably those constructed to be incorporated within the building fabric itself – are likely to be suitable.
- Boxes are best erected on the east or north facings to avoid eggs and chicks overheating.
- For many common song-bird species, where domestic or feral cats may roam, positions of not less than 3m high are preferable.
- It is preferable to site nest boxes in locations that are accessible for maintenance, away from bird feeders, a discrete distance away from other nest boxes and so that they provide some protection from predators and vandalism.

### **Additional Protected Species/Habitat Constraints.**

Where the immediate surrounding habitat of the proposed development may be impacted by the proposal, consideration of this habitat must be given for its potential to support protected species or whether the habitat itself is protected or of significance.

- Further habitats: The client proposes to retain the hawthorn trees which are in the vicinity of the barn. These trees are still fairly young, and it would not be a requirement to retain them. It is therefore recommended that the client observe root protection areas of these trees to avoid damage and avoids the use of heavy machinery within the area of the trees, avoids storage of chemicals or materials or the lighting of fires near to these trees in order to protect them appropriately. .

The Root Protection Area (RPA) of individual standard trees can be put in place. RPAs are calculated as an area equivalent to a circle with a radius 12 times the stem diameter of the tree. RPAs are capped at 707m<sup>2</sup>, represented by circle with a radius of 15 metres where the tree is at the centre.

### **Impact Avoidance During the Construction Phase**

All activities on site should bear in mind the potential for wildlife or the environment being harmed through the process of development from inception to end, with a proactive approach occurring for lawful protection of wildlife and the environment regarding use of materials, machines, chemicals, and human activity on site.

- Prevent invasive non-native plants on development land managed during this time from spreading into the wild or a neighbour's property and causing a nuisance.
- Restrictions apply to mulching and earth moving which may cause the spread of invasive non-native plants and animals.
- Restrictions apply to activities that cause the spread of non-native animals into the wild.



- ✓ Contractors must ensure that no harm can come to wildlife by maintaining the site efficiently, clearing away any material such as wire in which animals can become entangled and preventing access to toxic substances.
- ✓ Trenches or large excavations should be covered overnight to prevent wildlife such as badgers or hedgehogs falling in and failing to escape. If this is not possible then a strategically placed plank may provide a means of escape.
- ✓ Any large bore pipes should be capped at the end of the day to reduce the potential for badgers and other wildlife entering and becoming trapped.
- ✓ Areas that are being retained should be protected from damage during construction by erecting Heras (or similar) fencing around these features. The fencing should be erected outside the line of the canopy as this helps protect the roots from compaction of the soil.
- ✓ Any areas proposed for planting post-development should be fenced off where possible to prevent compaction of the soil through vehicle movements.
- ✓ If there is a substantial delay before development commences, the site should be maintained in a way that would prevent wildlife colonising it and causing constraints in the future. Such management should include mowing grassland at least twice a year and preventing scrub encroachment.
- ✓ Piles of brush wood and or log piles should be carefully inspected for signs of wildlife prior to their removal. This is especially crucial during the period March – September (inclusive) as some species of bird choose such sites to construct their nests. Ideally removal of such features should be done outside of the nesting season. If this is not possible, it is recommended that these features are covered in such a way as to exclude / prevent birds and / or reptiles taking up residence. Should nesting birds or reptiles be discovered, work must cease immediately, and ecological advice sought.
- ✓ All hedgerows / trees / shrubs removal should be done outside of the bird nesting season March – September (inclusive). If removal is not possible during this period, careful checks of such, must be conducted by a suitably experienced ecologist prior to works commencing.

## 10. Enhancement

The National Planning Policy Framework (NPPF) sets out the UK Government's national policies on enhancement of biodiversity and promotion of ecosystem services through the planning system. Under NPPF, Local Planning Authorities (LPAs) have an obligation to promote the preservation, restoration and recreation of priority habitats, ecological and the protection and recovery of priority species as identified under the Natural Environment and Rural Communities Act (2006). LPAs will therefore seek to produce a net gain in biodiversity by requiring developers to design wildlife into their plans and to ensure that any unavoidable impacts are appropriately mitigated for. As a minimum LPAs now expect any new structure to



include bat roost or bird nesting provision.

### **Bat Enhancement**

Bat roosting provision is not required.

### **Enhancement for Birds**

1 x Owl box is to be erected in the mature oak within the sheep field to the south of the development (where the client reports Tawny owls) to enhance this site post development.



Barn owl:

<http://www.nhbs.com/titre/200041/barn-owl-nest-box>

The client must:

- Incorporate features which support the nesting of birds in the construction of new development.
- Ensure that nesting boxes are of durable and ideally permanent construction. Some account must be taken of the potential need to maintain, and in the case of wall mounted units, replace boxes after a number of years in use.
- Boxes are best erected on the east or north facings to avoid eggs and chicks overheating. Additionally, where domestic or feral cats may roam, positions of not less than 3m high are preferable.
- It is preferable to site nest boxes in locations that are accessible for maintenance, away from bird feeders, a discrete distance away from other nest boxes and so that they provide some protection from predators and vandalism.

## **11. Conclusions**

The structures within the application site have been assessed and the conclusion is that this site provides:

- Confirmed bird nesting in 2020, not present in 2023, but nesting potential.

Bird habitat will be impacted by the proposed development:





- The demolition/alteration/renovation of the barn will cause the destruction and loss of a nest site.

Mitigation for birds is detailed in this report.

- Nests are fresh and in use. The development of this site is therefore constrained to occur outside of the nesting and fledging season. Refer to Bird Mitigation.

Enhancement for birds (tawny owls) is given within this report.

Enhancement / Mitigation may be subject to Conditioning within any grant of Planning Permission. LPA 'Building Control' will ensure that Mitigation / Enhancement measures have been implemented as per recommendations.

It should be noted it is possible that bats may on occasion utilise restricted and concealed spaces, such as upon wall tops, within deeper cracks or crevices or even within wall cavities of a structure with their subsequent field signs remaining concealed. Therefore, it is always possible that bat roosts/roosting locations may remain unidentified.

Bird locations and access are usually less concealed, however, in each instance of bats and birds, 'Good Practice' which abides by law and legislation must always be applied prior to and throughout the development procedure. It is also possible that any alteration to the structure or structures on site, might render an unsuitable structure, suitable. Examples could include storm damage or partial completion of works which create opportunities for bats or birds to enter a structure. Please refer to client/agent personal responsibilities: Appendix 1: Legislation, and Mitigation and Enhancement sections.

## 12. References

- Battersby, J. (Edited and compiled; 2005). *UK Mammals: Species Status and Population Trends*. JNCC/Tracking Mammals Partnership 2005. ISBN 1-86107-568-5 <http://www.jncc.gov.uk/page-3311>.
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edn.)*. The Bat Conservation Trust, London.
- Conservation of Habitats & Species Regulations 2010. HMSO.
- Cornwall Council (2018). *Accommodating swallows, swifts and house martins: Guidance notes for developers, builders, surveyors, architects & house holders*. Cornwall Council, Truro. <https://www.cornwall.gov.uk/media/3626630/Accommodating-swallows-swifts-and-house-martins.pdf>.
- Cornwall Planning for Biodiversity Guide (2018) <https://www.cornwall.gov.uk/media/35514048/biodiversity-spd-v7.pdf>



- Countryside and Rights of Way Act 2000. HMSO.
- <http://naturalengland.communisis.com/naturalenglandshop/docs/IN13.6.pdf>
- Mitchell-Jones A.J. & Mcleish A.P. (2004). *The Bat Workers Manual*, 3<sup>rd</sup> Edition. Joint Nature Conservation Committee, Peterborough. <http://www.jncc.gov.uk/page-2861>.
- Mitchell-Jones, A.J. 2004. *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Purbeck Technical Design Guidance Bats and Birds, 2014.
- UK Biodiversity Action Plan. [www.ukbap.org/uk](http://www.ukbap.org/uk).
- Waring, S. (2012). *Bats & Breathable Roofing Membranes*. University of Reading. [www.batsandbrms.co.uk](http://www.batsandbrms.co.uk).
- Wildlife & Countryside Act 1981, as amended. HMSO.

Ecological Surveys Ltd



### 13. Appendices

#### Appendix 1: Legislation Bat and Bird Species

##### Bats

All bat species and their roosts are legally protected in the UK. All bats are listed as European protected species of animals in the European Union's Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the Habitats Directive. This Directive is implemented in the UK by The Conservation of Habitats and Species Regulations 2010 (better known as the Habitats Regulations).

There is also some protection for bats and roosts in England and Wales under the Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). For practical purposes, the protection of bats and their roosts now falls mostly under the Habitats Regulations.

In summary, it is an offence to

- Deliberately, capture, injure or kill a bat.
- Deliberately, disturb in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young.
- Damage or destroy a roost (this is an 'absolute' offence).
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat.

('Deliberately' may be interpreted as someone who, although not intending to injure, kill, etc. performed the relevant action, being sufficiently informed and aware of the consequences their action will probably have.)

A person who needs to carry out actions that would result in an offence being committed should apply for a derogation licence from Natural England. They have powers to grant Habitats Regulations derogation licences in certain circumstances, for certain reasons and with certain terms attached, so that the licence holder remains within the law. Application for a derogation licence should be made in plenty of time, and the services of a bat expert utilised in making the application. It is an offence to make a false statement to obtain such a licence.

This information is not provided as legal advice and before making decisions relating to the law a qualified legal representative should be consulted.

##### Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird,



or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare. In addition to the protection afforded to all wild birds, rarer or particularly vulnerable species listed on Schedule 1 of the 1981 Act, such as the barn owl, receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

If nests, whether completed or in the process of being built, are found on site, any works with the potential to damage or destroy the nest, eggs or young birds, must stop until the birds have completed breeding. This includes any activity that could potentially cause an adult bird to desert the nest resulting in death or egg failure. Nesting sites should be inspected only by experienced ecologists.

Any disturbance of a breeding bird on Schedule 1 is an offence, regardless of whether this impacts upon the breeding attempt. These nests can only be visited by an ecologist with a licence for the specific species concerned.

Birds may nest on machinery or scaffolding and other temporary site structures. If this happens the equipment cannot be used until the birds have finished nesting and such areas may need to be sealed off to prevent disturbance.

Breaking the law can lead to fines of up to £5000 per offence and potential prison sentences of up to six months. Vehicles implicated in an offence can be compounded and both the company, and/or the individual(s) concerned, can be held liable.

Ecological Surveys Ltd.



## Appendix 2: Why the need for a Bat Scoping Survey?

A Bat Survey is ordinarily triggered when there is to be:

Conversion, modification, demolition or removal of buildings (including hotels, schools, hospitals, churches, commercial and derelict buildings) which are:

- Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams.
- Buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water.
- Pre-1960 detached buildings and structures within 200m of woodland and/or water.
- Pre-1914 buildings within 400m of woodland and/or water.
- Pre-1914 buildings with gable ends or slate roofs, regardless of location.
- Located within, or immediately adjacent to woodland and/or immediately adjacent to water.
- Dutch barns or livestock buildings with a single skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears to be particularly suited to bats.
- At the behest of the LPA / County Ecologist.
- Further details of other triggers can be found below.

### Development and Planning Trigger for Bat Surveys

Development and planning trigger list for bat surveys, which can be adapted to local circumstances (taken from the Association for Local Government Ecologists (ALGE) template for biodiversity and geological conservation validation checklists 2007, available from <http://alge.org.uk/publication/index.php>).

**(1) Conversion, modification, demolition or removal of buildings (including hotels, schools, hospitals, churches, commercial premises and derelict buildings) which are:**

- Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams;
- Buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;
- Pre-1960 detached buildings and structures within 200m of woodland and/or water;
- Pre-1914 buildings within 400m of woodland and/or water;
- Pre-1914 buildings with gable ends or slate roofs, regardless of location;
- Located within, or immediately adjacent to woodland and/or immediately adjacent to water;



- Dutch barns or livestock buildings with a single skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears to be particularly suited to bats.
- (2) Development affecting built structures:**
  - Tunnels, mines, kilns, ice-houses, adits, military fortifications, air-raid shelters, cellars and similar underground ducts and structures; unused industrial chimneys that are unlined and brick/stone construction;
  - Bridge structures, aqueducts and viaduct (especially over water and wet ground).
- (3) Floodlighting of**
  - Churches and list buildings, green space (e.g. sports pitches) within 50m of woodland, water, field hedgerows or lines of trees with connectivity to woodland or water;
  - Any building meeting the criteria listed in (1) above.
- (4) Felling, removal or lopping of:**
  - Woodland;
  - Field hedgerows and/or lines of trees with connectivity to woodland or water bodies;
  - Old and veteran trees that are more than 100 years old;
  - Mature trees with obvious holes, cracks or cavities, or that are covered with mature ivy (including large dead trees).
- (5) Proposals affecting water bodies:**
  - In or within 200m of rivers, streams, canals, lakes, reed beds or other aquatic habitats.
- (6) Proposal located in or immediately adjacent to:**
  - Quarries or gravel pit;
  - Natural cliff faces and rock outcrops with crevices or caves and swallets.
- (7) Proposals for wind farm developments**
  - of multiple wind turbines and single wind turbines (depending on the size and location) (NE TIN 051 – undergoing updates at the time of writing)
- (8) All proposals in sites where bats are known to be present<sup>1</sup>**
  - This may include proposed development affecting any type of buildings, structures, features or location.

**Notes:**

<sup>1</sup> : Where sites are of international importance to bats, they may be designated as SACs. Developers of large sites 5-10km away from such SACs may be required to undertake a HRA.



### Appendix 3: Assessing the Potential Value for Buildings

#### Classification Criteria

It should be noted that the grading system below only reports on the situation at the time of survey; should bat activity levels change after the initial survey, or should the buildings be modified (for example if roof tiles are removed or fascia boards develop cracks), the category may need revision.

Category (Potential value)	Description
<i>Please note: Intermediate categories (e.g. Low – Moderate value) may apply.</i>	
<b>No/Negligible value</b>	Buildings with no or very few features capable of supporting roosting bats. Often buildings are of 'sound' well-sealed structure 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.
<b>Low value</b>	Buildings of largely unsuitable construction, but with few features of potential value to bats (e.g. gaps above windows, apparently shallow crevices). No supporting evidence (e.g. droppings / staining) found. Buildings may be surrounded by poor or sub-optimal bat foraging habitat, as is often the case in urban-centre locations.
<b>Moderate value</b>	Buildings usually of brick or stone construction with a number of features of obvious 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.
<b>High value</b>	Buildings with a large number of features of obvious potential value to bats (as above). Bats may be suspected to roost within the building (at least at certain times of year), but no supporting evidence found.



<b>Confirmed roost</b>	Bats discovered roosting within the building or recorded emerging from / entering the building at dusk and / or dawn. Building found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed record (as supplied by an established source such as the local bat group) would also apply to this category.
------------------------	--

Ecological Surveys Ltd





#### Appendix 4: Bat Species

1	Alcathoe	<i>Myotis alcathoe</i>
2	Barbastelle	<i>Barbastella barbastellus</i>
3	Bechstein's bat	<i>Myotis bechsteinii</i>
4	Brandt's bat	<i>Myotis brandtii</i>
5	Brown long-eared bat	<i>Plecotus auritus</i>
6	Common pipistrelle	<i>Pipistrellus pipistrellus</i>
7	Daubenton's bat	<i>Myotis daubentonii</i>
8	Greater horseshoe bat	<i>Rhinolophus ferrumequinum</i>
9	Greater mouse-eared bat	<i>Myotis myotis</i>
10	Grey long-eared bat	<i>Plecotus austriacus</i>
11	Leisler's bat	<i>Nyctalus leisleri</i>
12	Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>
13	Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>
14	Natterer's bat	<i>Myotis nattereri</i>
15	Noctule	<i>Nyctalus noctula</i>
16	Serotine	<i>Eptesicus serotinus</i>
17	Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
18	Whiskered bat	<i>Myotis mystacinus</i>

Ecological Surveys Ltd.