



Bats and Birds Present

Preliminary Roost & Nest Assessment



Middleton House,
Yapton Road,
Middleton-on-Sea
PO22 6DU

GR: SU 97450 00522
July 2018



**CONTENTS**

1. Executive Summary of Findings	5
Bats	5
Birds.....	5
2. Survey Objectives.....	6
3. Methods	6
Internal & External Inspection	6
Constraints	6
4. Site Description.....	7
5. Site Habitat & Proposal	8
6. Building / Structure Descriptions	9
7. Site Images	10
8. Results and Assessment.....	10
9. Mitigation.....	12
Bat Mitigation	12
Bird Mitigation.....	12
10. Impact Avoidance During the Construction Phase.....	13
11. Enhancement.....	14
12. Conclusions	15
13. References	16
14. Appendices.....	17
Appendix 1: Legislation Bat and Bird Species	17
Appendix 2: Bat Scoping Triggers.....	19
Appendix 3: Assessing the Potential Value for Buildings.....	21
Appendix 4: BCT Emergence Survey Guideline (Collins, 2016)	22
Appendix 5: Bat Species	23



Contract Details	
Client: -	Steve and Daphne Gore
Architect/Planning Consultant: -	Not Advised
Report ref: -	PRNA_MiddletonHouse_S.&D.Gore_July_2018
Date of Report: -	15/07/2018
Other report ref' if applicable: -	➤ BESR_MiddletonHouse_S.&D.Gore_July_2018 ➤ 'Internal and External Bat Inspection Bat Emergence and Activity Surveys' by the ecology partnership
Surveyor: -	Tom Glover
Additional Surveyors: -	Stefanie Woo
Date of Survey:	25 th June 2018
Author:	T. Glover BSc (Hons), MSc
Verified by:	Sarah Board BSc (Hons) MSc MCIEEM Paul Diamond Cert (Hort) BSc (Hons) MSc Grad CIEEM MArborA Bat Class License Holder 1 and 2
Latest Issue, date:	16/07/2018
Ecological Surveys Ltd:	www.ecological-surveys-ltd.co.uk help@ecological-surveys-ltd.co.uk
Telephone:	(01503) 240846 / 07736 458609
Registered Address:	14, Lower Clicker Road, Menheniot, Liskeard. Cornwall. PL14 3PJ Registered No: 08262462
VAT Registration No: -	224 3182 38



Notice

Ecological Surveys Limited was commissioned to apply for a European Protected Species License (EPSL), which was conditioned by planning (Planning application reference: M/39/17/HH). In order for this to be applied for, an updated internal and external assessment of the site is required, with the findings outlined in this report. This followed a previous 'Preliminary Ecological Appraisal Internal and External Bat Inspection' (PEA) in September 2016 and Bat Emergence Surveys in August 2017 both carried out by 'the ecology partnership'.

With reference to the initial PEA report, the surveyors assessed the main house as having a confirmed bat roost, with 5 serotine bat droppings found in the loft and ingress points being noted along soffits. An outhouse was also identified as having low potential to support roosting bats, with warped weatherboarding on the eastern aspect of the structure. Further Bat Emergence Surveys were therefore recommended. The Bat Emergence Surveys found the main house to be a low value roost for serotine, brown long-eared, and common pipistrelle bats.

Given this result, an EPSL was required, this was included as a planning condition. Other ecology related planning conditions included a badger survey prior to the start of works and a nesting bird check prior to any vegetation removal (Covered in the subsequent Bat Emergence Survey report, ref: BESR_MiddletonHouse_S.&D.Gore_July_2018). However, works were started before any ecological conditions were fulfilled and before applying for an EPSL. Works were stopped part way through by an enforcement officer from the LPA. By this point the outbuilding, garage, ceilings within the main house, and some vegetation had already been removed.

This survey was undertaken with all proper and reasonable skill and care in a professional manner and in accordance with accepted standards, methodologies and guidelines and is based on the evidence recorded at the site at the time of the survey. The information gathered is considered sufficient to provide an assessment of the ecological interest on the site and justify the recommendations provided in this report.

Refer to [Appendix 1: Legislation Bat and Bird Species](#) for details of Bat and Bird Law and Legislation and <http://www.nwcu.police.uk/> regarding avoiding committing wildlife crime.



1. Executive Summary of Findings

Bats

Evidence of Bats in Surveyed Structures	House = Confirmed Bat Roosting. Significant serotine bat roost discovered with hundreds of droppings in cavity wall. This has been disturbed by works already taken place. Outbuildings = No longer exist - Removed by works already taken place
Bat Emergence Surveys	3 Emergence/Re-entry Surveys Required.
Mitigation	Pending Bat Emergence/Re-entry Survey results.
Enhancement	Pending Bat Emergence/Re-entry Survey results.

Birds

Evidence of Birds in Surveyed Structures	House = Confirmed Bird Nesting. Herring Gull nest with fledgling present in nest. Outbuildings = No longer exist - Removed by works already taken place
Bird Surveys	- NOT required.
Mitigation	- REQUIRED. See Bird Mitigation
Enhancement	Pending Bat Emergence/Re-entry Survey results.

Ecological Surveys Ltd



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 Description

Site Habitat	The site surveyed comprises of a house and garden set in a residential area of Middleton-on-Sea. Construction equipment and building materials were also present on site. All outbuildings, garages, etc. and some vegetation listed in the previous PEA survey of the site had been removed prior to 25 th June 2018.
Significance of Surrounding Area	The local area is not of particularly high value for bats or other species. Residential gardens are the dominant local habitat, providing some ecological value, though this is reduced by the considerable fragmentation that exists.

Ecological Surveys Ltd



5. Site Habitat & Proposal

It is understood the client intends to renovate the property, with the construction of an extension around the north and east aspects. This will (and already has) directly impact roosting features. Planning has already been granted for these works.

Locations are approx. and not to scale.	
Structure Remaining	
Structures Removed	
Location of bird nesting	
Location of bat evidence	
Location of bat ingress	





6. Building / Structure Descriptions

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

BUILDING 1 - Main House.



Structure	Roof Covering	Type of Roof	Lining	Insulation
House	Slate	Pitched	Sarking	None
Loft Void	Wall Construction Materials	External Cladding	Roof Fittings/ Additions	
None	Brick	Render	Chimneys present	
Cavity Wall	Cavity Insulation		Other External Features	
Yes	None		Lower extension on the eastern aspect	

Potential Access Points Bats & Birds

Birds: No potential access points large enough for birds to gain access into the house exist.

Bats: A number of gaps exist behind and on soffit boards on the eastern and western aspect of the house

Evidence for Bats & Birds

Bats: Large quantities of droppings were present in the cavity between the lower extension and the main part of the house. These were viewable as all ceilings in the house had been stripped out.

Birds: Herring Gull nest with fledgling was present next to the chimney of the eastern end of the southern pitch of the roof.



7. Site Images

	
Large number of droppings fallen through after removal of ceiling.	Some droppings remained stuck in the cavity wall.
	
Fledgling Herring Gull in nest.	A number of structures from previous PEA and Bat Emergence surveys were no longer present.

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
HOUSE	Yes	Yes	Yes	Yes

Bat Emergence Surveys Required	3 (as per the Good Practice Guidelines in Collins, 2016)
If sufficient data can be collected over two visits, Natural England may consider this adequate to issue EPS licences.	



Assessment: Roosting and Nesting

- i. The presence of a large number of serotine droppings indicate a confirmed significant roost (likely maternity roost), showing that a number of serotine bats use / have previously used this house. Three Bat Emergence/Re-entry Surveys are therefore required to assess whether bats still utilise the house.
- ii. This new evidence contrasts with the previous assessment of the site of being a low value roost. It is not known whether the roost was not occupied at the time of the previous bat emergence surveys or whether the access point was not identified.
- iii. Nonetheless, works already carried out on site has at least caused the inadvertent disturbance of a significant serotine roost. Mitigation will be required to allow to reoccupation of bats into the main house post-construction. This will be outlined in the subsequent Bat Emergence Survey Report (BESR_ MiddletonHouse_S.&D.Gore_July_2018) and further detailed in the EPSL which will need to be applied for.
- iv. It is the client's responsibility to ensure that these Bat Emergence/Re-entry Surveys are commissioned and are undertaken.
- v. Emergence/Re-entry Surveys can only be undertaken between May and August each year. It may be possible for surveys to extend into September too. It is never too soon to arrange emergence/re-entry surveys, even if they cannot be undertaken for several months. This is because the emergence survey season, in particular May and June, are usually exceptionally busy for bat surveyors.
- vi. A Herring Gull nest was 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 birds nest 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.



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. LPA 'Building Control' will ensure that Mitigation / Enhancement measures have been implemented as per recommendations.

Bat Mitigation

Bats	<u>Specific Mitigation</u> can only be determined post Emergence/Re-entry Surveys results and will be provided within the Bat Emergence/Re-entry Survey Report .
Advisory	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.

Bird Mitigation

	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 birds nest 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.
Advisory	It is possible that additional bird nests could also be established in association with this site during the bird nesting season. The bird nesting season generally extends from March to August inclusive. Although nesting can extend outside this period and it is the nesting behaviour that must be observed, not the supposed time frame. 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.



10. 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.
- ✓ 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.



11. 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 networks 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.

Site Enhancement	
Bat, Bird Other	<u>Specific Enhancement</u> for the site overall will be determined post Bat Emergence/Re-entry Survey Results and detailed within the final Bat Emergence/Re-entry Survey Report. Enhancement will therefore be specific and responsive as to whether birds and bats or other require additional support.



12. Conclusions

The structures within the application site have been assessed and the conclusion is that this site supports confirmed bat roosting and bird nesting. Bat and bird habitat will be impacted by the proposed development, with the re-roofing of the main house impacting an active Herring Gull nest, while the creation of extensions to the north and east of the main house will destroy the large serotine roost in the cavity wall. Bat Emergence/Re-entry Surveys are required to ensure the appropriate mitigation is put in place if bats are concluded to still be present. As the Herring Gull nests are in use, any works to the roof are therefore constrained to occur only when the nest is no longer active. Refer to Advisory section [Bird Mitigation](#).

Enhancement for bats and/or birds will be reserved until all further surveys are concluded with results known. The results will determine appropriate enhancements for the site overall and give due regard to both bats and birds or other species.

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 Bat and Bird Species](#), and [Mitigation](#) and [Enhancement](#).



13. 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* (3rd 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 and house holders*. Cornwall Council, Truro. <https://www.cornwall.gov.uk/media/3626630/Accommodating-swallows-swifts-and-house-martins.pdf>
- Countryside and Rights of Way Act 2000. HMSO.
- Mitchell-Jones, A.J. 2004. *Bat Mitigation Guidelines*, English Nature, Peterborough.
- <http://naturalengland.communisis.com/naturalenglandshop/docs/IN13.6.pdf>.
- Mitchell-Jones A.J. & Mcleish A.P. (2004). *The Bat Workers Manual*, 3rd Edition. Joint Nature Conservation Committee, Peterborough. <http://www.jncc.gov.uk/page-2861>.
- Purbeck Technical Design Guidance Bats and Birds, 2014.
- UK Biodiversity Action Plan. www.ukbap.org/uk.
- Waring, S. (2012). *Bats & Breathable Roofing Membranes*. University of Reading. www.batsandbrms.co.uk.
- Wildlife & Countryside Act 1981, as amended. HMSO.



14. 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 listed 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.



Appendix 2: Bat Scoping Triggers.

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 listed 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 present¹

- This may include proposed development affecting any type of buildings, structures, features or location.

Notes:

¹ : 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
Please note: Intermediate categories (e.g. Low – Moderate value) may apply.	
No/Negligible value	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.
Low value	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.
Moderate value	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.
High value	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.
Confirmed roost	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.

**Appendix 4: BCT Emergence Survey Guideline (Collins, 2016)**

The full version of the 2016 BCT guidelines can be obtained via the Bat Conservation Trust <http://www.bats.org.uk/pages/batsurveyguide.html>.

Bat Emergence Survey Requirements

Extracted from - Table 7.3 & 7.1 BCT Recommended Minimum Survey

Low roost suitability	Moderate roost Suitability	High / Confirmed roost suitability
One Survey visit – One dusk or dawn re-entry survey	Two separate survey visits – One dusk and one dawn re-entry survey	Three separate survey visits – at least one must be a dawn re-entry and one a dusk emergence, the other can be either.

Structures that have been categorized as low potential can be problematic and the number of surveys required should be judged on a case by case basis. If there is a possibility that quiet-calling late-emerging species are present, then a dawn survey may be more appropriate, providing weather conditions are suitable. In some cases, more than one survey may be needed, particularly where there are several buildings in this category.

Multiple survey visits should be spread out to sample as much of the recommended survey period as possible, it is recommended that surveys are spaced at least two weeks apart, preferably more. A dawn survey immediately after a dusk one is considered only one visit.

EMERGENCE – RE-ENTRY Survey Dates

May to August (structures) No further survey required (trees)	May to September With at least one between May and August	May to September With at least two, between May and August
--	--	---

September surveys are both weather and location dependent. Conditions may become unsuitable in these months, particularly in more northerly latitudes, which may reduce the length of the survey season. Multiple survey visits should be spread out as much as possible; it is recommended that surveys are spaced at least two weeks apart, preferably more, unless there are specific ecological reasons for the surveys to be closer together (for example a more accurate count of a maternity colony is required but it is likely that the colony will soon disperse) if there is potential for a maternity colony then consideration must be given to detectability. A survey on 31st August followed by a mid-September survey is unlikely to pick up a maternity colony. An ecologist should use their professional judgement to design the most appropriate survey regime.



Appendix 5: 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>

END

Ecological Surveys Ltd.