Preliminary Roost Assessment

36 Main Street
Distington
Cumbria
Michael Graham

FE-070-001-400-R-01-V1

July 2020

FALCO Ecology
ecological consultancy

FALCO Ecology Ltd is a registered company (England & Wales): 10885438 M: 07928040460 E: adrian@falcoecology.co.uk
18 Moorside, Great Lime Road, West Moor, Newcastle upon Tyne, NE12 7NL

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1 Introduction

1.1 Background

1.1.1 FALCO Ecology Ltd. was commissioned by Michael Graham (hereon referred to as the "Client") to undertake a Preliminary Roost Assessment (hereon referred to as "the survey") on 36 Main Street, Distington (hereon referred to as the "surveyed building") on the 8th July 2020.

1.1.2 The purpose of this report is to provide a pre-development record of the suitability of the surveyed building to support roosting bats and any evidence of bat roosts. The suitability of the surrounding habitats to support foraging bats is included within this report, along with recommended roost surveys, if required. Evidence of breeding birds within/on the surveyed building is also included within this report.

1.2 Surveyed Building Location

1.2.1 The address of the surveyed building was 36 Main Street, Distington, Workington, Cumbria, CA14 5TH. The central Ordnance Survey grid reference for the surveyed building was NY 00636 23526 and was ~65 m above sea level. The location of the surveyed building is shown in Figure 1.

1.2.2 The surveyed building was located within a small village which is surrounded by farmland. Streams, woodland and woodland corridors are present throughout the surrounding area. The wider surrounding area and habitats are shown in Figure 2.

1.3 Development Proposals

1.3.1 It was proposed to add an extension to the front elevation which will have a pitched roof and will be at the same level as the current roof. An extension on the rear elevation will have a flat roof at approximately the height of the current exterior wall top. The surveyed building will be converted from a garage/storage room into a residential bungalow. The architectural drawings of the proposed development are shown in Appendix 1.

1.3.2 The proposed roof works have the potential to impact roosting bats, if present within the surveyed building.

1.4 Preliminary Roost Assessment and Reporting Objectives

1.4.1 The Preliminary Roost Assessment, undertaken by FALCO Ecology, included the following objectives:

- Establish if the surveyed building has the potential to be used by roosting bats;
- Record evidence of use by bats;
- Record locations of Potential Access Points ('PAPs');
- Record locations of Potential Roost Features ('PRFs');
- Provide recommendations for further bat surveys where required;
- Obligations for the Client to consider if confirmed bat roost(s) are located; and
- Observations of old or active bird nests within/on the surveyed building where recorded.

Figure 1: Surveyed building.

© Google Earth 2020. Imagery Date: 30/06/2018.

Figure 2: Surrounding habitats & 2km buffer.

© Google Earth 2020. Imagery Date: 30/06/2018.

1.5 Legislation

1.5.1 UK Legislation (specifically related to England) relating to bats are fully documented in Appendix 3; however, in summary all bats and their roosts are protected under UK legislation. This legislation makes it an offense to deliberately disturb, damage or destroy a bat roost.

1.5.2 Active bird nests (nests under construction, nest with eggs or young) are fully protected from deliberate and reckless destruction under the Wildlife & Countryside Act 1981 (as amended). Furthermore, Schedule 1 species, such as barn owl (*Tyto alba*), are protected from deliberate or reckless disturbance at the nest site or of dependant young.

1.5.3 Convictions under the WCA 1981 (as amended) may result in an unlimited fine and/or up to 6 months imprisonment.

2 Methodology

2.1 Desktop Study

Data Search

2.1.1 A data search from following web recourses was used:

- The Government's Multi-Agency Geographic Information for the Countryside or 'MAGIC' website, which provides details of statutory sites designated for their ecological interest and for local European Protected Species Mitigation (EPSM) Licenses that had been granted;
- Google Earth Pro was utilised to assess the habitats surrounding the surveyed building for their suitability to support foraging, commuting and roosting bats;
- Joint Nature Conservation Committee for UK Biodiversity Action Plan (BAP) Priority Species (JNCC 2007);
- Cumbria Wildlife Trust website for Local BAP Priority Species (CWT 2009); and
- Cumberland Bat Group website (Cumberland Bat Group 2020).

Consultation Data

2.1.2 Consultation data is not included as part of this report. Given the local habitats it is considered that a limited range of species listed in paragraph 3.1.3 were present in the local area, during the time of the survey. These species included common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*).

2.2 Preliminary Roost Assessment

2.2.1 The exterior of the surveyed building was surveyed from ground level using high powered binoculars (Swarovski EL 10x42) to locate any PAPs. The interior inspection of the surveyed building was undertaken at ground level and the interior of the roof was visible from ground level.

2.2.2 A Ledlenser MT-6 torch was used to inspect accessible crevices that were deemed as potentially PAPs or PRFs. Photos taken during the survey of the surveyed building are shown in Appendix 2.

2.2.3 The survey followed the guidance for assessing buildings as set out within the Bat Conservation Trust Guidelines (Collins 2016) and shown in Table 1. The survey was undertaken by Adrian George on the 8th July 2020 in suitable weather conditions.

Table 1: Guidelines for assessing potential roost features.

Suitability	Description
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individuals bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitats to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding

Suitability	Description
	habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously used by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed	A bat or bats observed within the building/tree.

2.2.4 All UK bats have been found to be roosting in buildings; however, some bats prefer buildings more than others. Furthermore, many species prefer unique aspects of a roost feature within a building. Bats that utilise buildings for roosting can be separated into four categories and are described in Table 2 (BCT 2015).

Table 2: Roost features in buildings that various bats prefer.

Roost Type	Species
Crevice dwelling bats (These are often hidden from view)	Common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle (*Pipistrellus nathusii*), Brandt's bat (*Myotis brandtii*) and whiskered bat (*Myotis mystacinus*)
Roof-void dwelling bats (maybe seen on roof timbers)	Serotine (*Eptesicus serotinus*), Leisler's bat (*Nyctalus leisleri*), Daubenton's bat (*Myotis Daubentonii*)
Bats that need flight space in certain types of roost	Natterer's bat (*Myotis nattereri*) and brown long-eared bat (*Plecotus auritus*)
Bats that need flight space and flying access into the roost	Greater Horseshoe (*Rhinolophus ferrumequinum*) and Lesser Horseshoe (*Rhinolophus hipposideros*)

2.3 Breeding Birds

2.3.1 An inspection of the surveyed building to identify any nest material from former bird nests or locations of active nests was undertaken during the survey. Nest material varies depending upon individual species, for example a house sparrow (*Passer domesticus*) may use small twigs, grasses and leaves; however, a house martin (*Delichon urbicum*) construct a nest using mud. Furthermore, some species are crevice nesters (house sparrow) whilst other are open nesting on external walls (house martin).

2.4 Surveyor's Experience

Adrian George

2.4.1 Adrian is an experienced ecologist who has undertaken bat surveys on a range of developments including residential properties, small to large scale wind farms, solar farms, power lines and water pipelines. Bat surveys have been undertaken throughout England, Wales and Scotland. Adrian holds a Class 2 Natural England (CL18 2017-32910-CLS-CLS) and a Scottish Natural Heritage bat licence. Adrian is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM) and a member of the Northumberland Bat Group.

2.5 Limitations

2.5.1 There was no access to the rear of the surveyed building and therefore the rear elevation was viewed from a distance ~20m, from a disused car park. Binoculars were used to locate any potential holes/gaps in the roof. Given the height of the wall tops (~2.5m) of the surveyed building, if a PAP was present between the facia board and the external wall, it is very unlikely that a bat would utilise the PRF due to the high chance of predation from cats.

3 Results

3.1 Desktop Study

Data Search

Statutory Designated Sites

3.1.1 The surveyed building did not lie within a statutory designated site. Furthermore, no statutory designated sites were recorded within 2km of the surveyed building. The Solway Firth Special Protected Area was present ~2.3km west of the surveyed building; however, it is designated for birds.

EPSM Licenses

3.1.2 No granted EPSM License for bats were returned within 2km of the surveyed building (MAGIC 2020).

Local & Regional Status of Species

3.1.3 There were 17 bat species recorded in the UK, of which nine (possibly more) had been recorded in and breeding in the Cumberland Bat Group recording area. Recorded species included: Brandt's bat, Whiskered bat, Natterer's bat, Daubenton's bat, Noctule bat, Brown Long-eared bat, Common Pipistrelle, Soprano Pipistrelle and Nathusius' Pipistrelle.

3.1.4 All the above species are listed as a Cumbria Biodiversity Action Plan Priority Species. Noctule, Brown Long-eared bat and Soprano Pipistrelle are also UK Biodiversity Action Plan Priority Species.

Surrounding Habitats

3.1.5 The surveyed building was situated within a small village near the west coast of Cumbria. The surrounding residential buildings appeared to have PAPs located within the roofs. Further afield the village was surrounded by predominantly pasture farmland with streams, woodland and woodland corridors. The habitats within the surrounding area were optimal for roosting and foraging bats.

3.2 Preliminary Roost Assessment

3.2.1 The surveyed building was a single storey garage/storage building with a pitched roof and was attached to the adjoining properties on both sides.

Key findings:

- *No evidence of roosting bats were recorded during the survey;*
- *The surveyed building had **Negligible** suitability to support roosting bats.*

External Inspection

3.2.2 The surveyed building was a brick construction with a cavity wall and was rendered on the exterior walls.

3.2.3 The roof had concrete roof tiles and concrete ridge tiles. No gaps were observed between the roof tiles, between the ridge tiles or between the ridge tiles and the roof tiles. Lead soakers were present on both ends of the surveyed building roof where it attached to the adjoining properties. Plastic roofing end caps were present elsewhere on the sides of the roof.

3.2.4 A metal roller door with a metal frame was present on the front elevation and is extremely unlikely to support roosting bats. A single window was situated on the front

elevation which had a wooden frame with single glazed re-enforced glass. No gaps were recorded around the window frame during the survey.

3.2.5 A wooden facia board was present on the front and rear elevation which supported unplastized polyvinyl chloride (uPVC) guttering. A gap between the front elevation facia board and the exterior wall was recorded during the survey and was considered as a PAP. The gap between facia board and exterior wall varied between ~5mm-20mm and was ~2.5m above ground level.

Internal Inspection

3.2.6 The surveyed building was separated into two sections - north and south, by a breeze block wall with a rolled steel joist (RSJ) forming a large opening.

3.2.7 The surveyed building had a roof structure with wooden purlins, rafters and a single ridge beam on the south section. Two RSJs were used as roof supports on the northern section of the surveyed building. Bitumen roofing underlay was used in the south section and a membrane type underlay on the north section. No external light was visible around the interior roof.

3.2.8 The surveyed building was used a storage unit for a variety of items. An inspection of the worktops and stored items that were visible at ground level was completed to look for evidence of roosting bat, such as droppings. No droppings were recorded.

3.2.9 A toilet facility and room constructed with chipboard was also present within the surveyed building.

3.3 Breeding Birds

3.3.1 No breeding birds were recorded on or within the surveyed building. A house sparrow was recorded nesting in the rear elevation roof of the northern adjoining property during the survey.

4 Evaluation

4.1 Roosting Bats

4.1.1 The surveyed building appeared to be in good condition with very few gaps present where bats could potential access a PRF. A gap between the facia board and the exterior wall on the front elevation was recorded; however, this PAP was considered unsuitable for roosting bats due to the close proximity of a streetlight producing artificial light pollution and illuminating the PAP. It is considered very unlikely that roosting bats would utilise the gap between the wooden facia board and the exterior wall. Furthermore, there were numerous PAPs in the roofs of nearby residential properties that were more likely to be used by roosting bats.

4.1.2 The suitability rating of the surveyed building to support roost bats was **Negligible** (Collins 2016).

4.2 Breeding Birds

4.2.1 The surveyed building was confirmed to not support breeding birds during the survey. Furthermore, no evidence of historical nests were located during the survey.

5 Impact

5.1 Roosting Bats

5.1.1 The proposed development is highly unlikely to disturb roosting bats if present during the construction works or destroy a roost location. Whist PAPs were recorded on the front elevation, artificial lighting significantly reduces the chances of roosting bats using this feature. Mitigation measures described in Section 6 will ensure the safety of any potential roosting bat during the construction phase.

5.1.2 The impact of the proposed development on European Protected Species, i.e. roosting bats is predicted to be **Negligible**.

5.2 Breeding Birds

5.2.1 No breeding birds were recorded on or within the surveyed building.

5.2.2 The impact of the proposed development on breeding birds is considered to be **Negligible**.

7 Required Actions

7.1 Mitigation Measures

Roosting Bats

7.1.1 It is advised that all facia boards are removed slowly and with care. The rear of the facia boards and the wall tops, particularly within the cavity wall will be checked for any potential roosting bat or bats. If a bat or evidence of bats are located, then works should cease and professional advice sort from either The Bat Conservation Trust or an ecological consultant (FALCO Ecology). It is a criminal offense to deliberately or recklessly destroy a bat roost or disturb a roosting bat under the Wildlife & Countryside Act 1981 (as amended).

Bats and their Roost Locations

7.1.2 UK bats are relatively small, and the body of the common pipistrelle is only the size of a human thumb. Figure 3 shows the size of a closely related Nathusius pipistrelle (*Pipistrellus nathusii*) in the hand during a monitoring program under licence from Natural England.

Figure 3: Nathusius pipistrelle in the hand.

7.1.3 Figure 4 and Figure 5 (page 12) show piles of bat droppings which indicates the presence of a bat roost location. Bat droppings, which will crumble to dust when rubbed between fingers, can be easily identified from mouse droppings, which are hard and generally do not crumble easily.

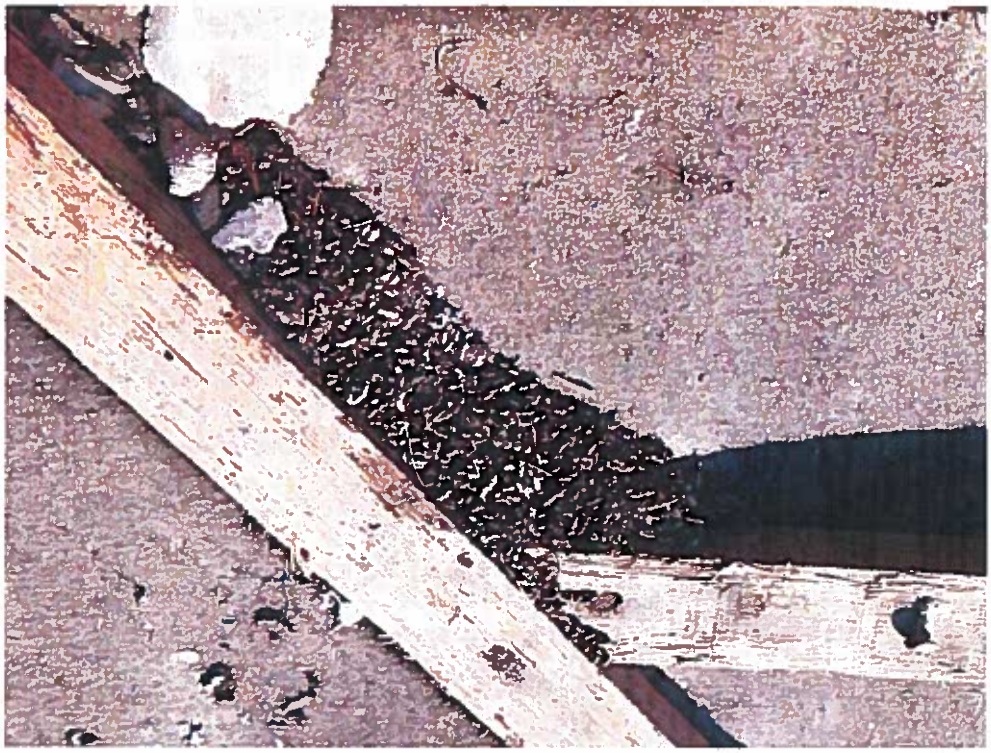


Figure 4: Bat Droppings between slates (removed) and roofing underlay next to a roof valley.

Figure 5: Bat droppings in eaves.

7.2 Breeding Birds

7.2.1 Breeding birds were not recorded using the surveyed building during the survey. A house sparrow was recorded within the roof of the adjoining property; however, the

proposed works will not impact the nest location. It is considered that breeding birds are not a constraint to the proposed development. However, if an active nest is located within the surveyed building then professional advice will be gained from an appropriate qualified and experienced Ecologist, such as at FALCO Ecology. All wild bird nests are protected under the Wildlife & Countryside Act 1981 (as amended) and it is an offence to recklessly or deliberately destroy a nest whilst being built or a nest which contains eggs or young.

8 Recommendations

8.1 Ecological Net Gain Recommendations

8.1.1 In order to fulfil the latest National Planning Policy Framework which includes Biodiversity Net Gain into proposed developments, it is recommended that integrated/in-built swift boxes are incorporated into the proposed building design, such as the examples shown in Figure 6, but not exclusively this design. This style of box is also used by house sparrow which is also on the UK Red List and a UK BAP priority species.Figure 1

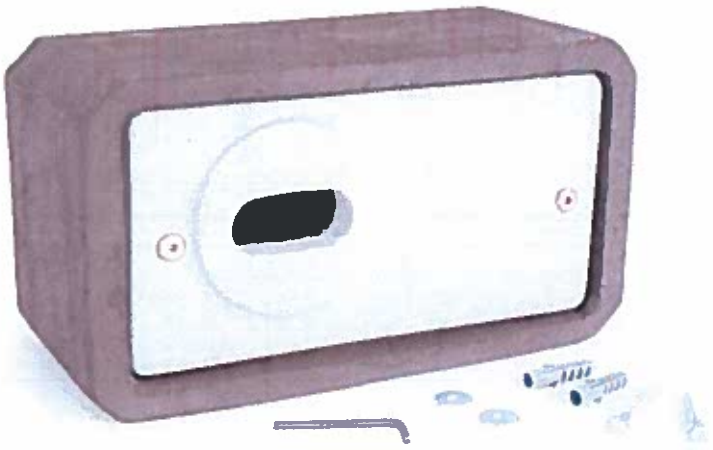


Figure 6. Integrated swift nest box[1]

[1] Picture sourced from https://www.birdfood.co.uk

9 References

BCT (2015). Bats in Buildings. The Bat Conservation Trust. Available online from https://cdn.bats.org.uk/pdf/Bats_and_Buildings.pdf?mtime=20181101151310 (accessed on 9th July 2020).

BCT (2018). Guidance Note 08/18. Bats and artificial lighting in the UK. Bats and the Built Environment series. The Bat Conservation Trust. Available online from https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229 (accessed on 9th July 2020).

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

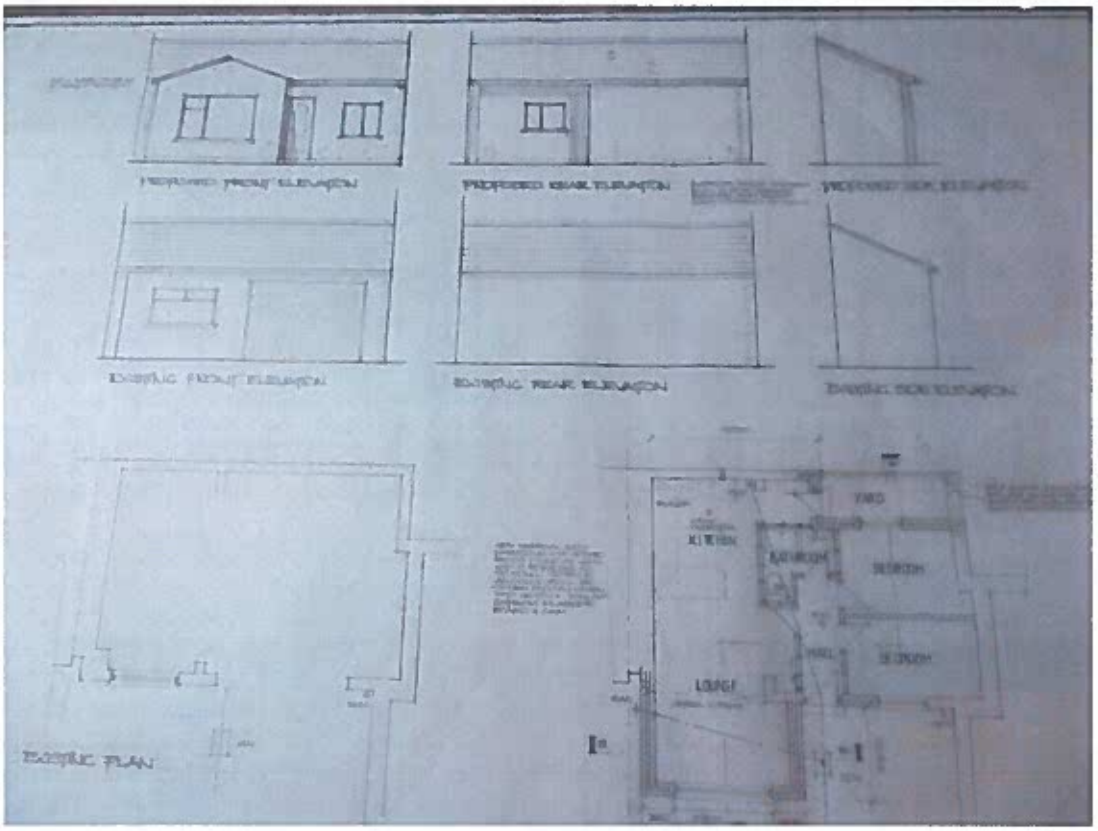
Cumberland Bat Group (2020). Bats in Cumbria. Available online from https://www.cumberlandbatgroup.org.uk/bats-in-cumbria/which-bat-is-it/ (accessed on 9th July 2020).

CWT (2009). Cumbria BAP Species List Updated 2009. Cumbria Wildlife Trust. Available from https://www.cumbriawildlifetrust.org.uk/sites/default/files/2018-05/cumbria-biodiversity-action-plan-species-updated-list-2009.pdf (accessed on 10th July 2020).

JNCC (2007). UK Biodiversity Action Plan – List of UK BAP Priority Terrestrial Mammal Species. Available online from http://data.jncc.gov.uk/data/98fb6dab-13ae-470d-884b-7816afce42d4/UKBAP-priority-terrestrial-mammals.pdf (accessed on 10th July 2020).

Magic Maps (2019). Magic Maps. Available online from https://magic.defra.gov.uk/MagicMap.aspx (accessed on 9th July 2020).

Appendix 1 – Architectural Drawings


LOUNGE

Appendix 2 – Surveyed Building Photos

Ref.	Description	Photo
1	Front elevation – east aspect	
2	Rear elevation – west aspect	
3	Plastic end caps of the roof where not adjoined to the adjacent properties.	

Ref.	Description	Photo
4	Wooden single glazed window on front elevation	
5	Wooden facia board on front elevation. PAP – 5mm-20mm gap between facia board and exterior wall. Feature at ~2.5m above ground level. Lit by adjacent streetlight. Suitability rating - **Negligible**	
6a	Internal area of surveyed building showing bitumen roofing underlay.	

Ref.	Description	Photo
6b	Internal area of surveyed building showing bitumen roofing underlay.	
8a	Breeze block internal wall with metal I beam.	
8b	Internal area of surveyed building showing membrane roofing underlay.	
9	Surrounding habitat (disused car park) to the rear of the surveyed building.	

Appendix 3 – Environmental Legislation & Convention Relating to Bats

Introduction

The UK has ratified a number of Conventions and implemented legislation pertaining to the protection of bats, either independently or as member state of the European Union. These are defined and summarised below.

Lists of threatened, endangered and extinct species are also provided, together with a summary explanation of each.

Bern Convention (1982)

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the EC Birds Directive (1979) and the EC Habitats Directive (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

The UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework was published in July 2012 and supersedes the Biodiversity Action Plan which lists and prioritises habitats and species and sets national targets to be achieved. The UK Post-2010 Biodiversity Framework includes all the species formally listed under the old UKBAP. The Environmental Departments of all four governments in the UK work together through the Four Countries Biodiversity Group.

The former UKBAP identified 391 'Priority' Species Action Plans (SAPs) and 162 Local Biodiversity Action Plans. Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities.

UKBAP Bat priority species include Barbastrelle Bat, Bechstein's Bat, Soprano Pipistrelle, Noctule, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985, Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW)

The UK has currently ratified four legally binding Agreements under the Convention, one of which is the Agreement on the Conservation of Populations of European Bats (EUROBATS).

National Planning Policy Framework (2018)

Following the publication of the first revision of the National Planning Policy Framework (NPPF) in March 2012, Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005) has been withdrawn. However, ODPM 06/2005: Biodiversity and Geological

Conservation – Statutory Obligations and their impact within the Planning System (the guidance document that accompanied PPS9) has not been withdrawn and, where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005. The NPPF has been revised and was published in July 2018 and an update with clarifications was released in February 2019

The purpose of the NPPF is to contribute to the achievement of sustainable development which includes an environmental objectives - *an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*

This guidance requires local planning authorities (planning policies and planning decisions) to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Furthermore, the NPPF 2018 includes the requirement for developments to *improve biodiversity* including ecological *net gain*. In the case of European Protected Species such as bats, planning policy emphasises that strict statutory provisions apply (including the Conservation of Habitats and Species (Amendment) Regulations 2012), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

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

Species of Principal Importance in England

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. 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 the Natural Environment and rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions.

The S41 list includes Barbastrelle Bat, Bechstein's Bat, Soprano Pipistrelle, Noctule, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat.

The Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 came into force on 30th November 2017. The Conservation of Habitats and Species Regulations 2017 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales.

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then

designated as Special Protection Areas (SPAs) within six years. The 2012 amendments include that public bodies help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, which include all horseshoe bats *Rhinolophidae sp.* and all common bats *Vespertilionidae sp.*

Wildlife and Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The WCA makes it an offence to:

- deliberately capture, injure or kill a bat;
- intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- intentionally or recklessly obstruct access to a bat roost; and
- possess or advertise/exchange/sell a bat (alive or dead) or any part of a bat.