



Frolic Farm, nr Lode

Preliminary Bat Roost Assessment

Produced for Mr Edward Wright

By Applied Ecology Ltd

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1 Introduction

Background

- 1.1 In April 2021, Applied Ecology Ltd (AEL) was commissioned by Twenty Nine Architecture & Planning to complete a preliminary bat roost assessment of two agricultural buildings at Frolic Farm, Lug Fen Drove, nr Lode, Cambridgeshire, CB25 9HF ("the Site"). The location of the Site, which has a grid reference of TL 51805 65413, is shown in **Figure 1.1**.
- 1.2 The PBRA was required to determine the likely ecological constraints associated with a proposal for the change of use of the two buildings to residential (hereafter referred to as "the Development") – details of the development proposal are unknown.
- 1.3 Where possible, the report discusses, at a high level, the likely impacts of the development on ecology and is based only on a broad understanding of the intended development. However, it does not provide, and nor is it intended to provide, a detailed or comprehensive assessment of development impacts in the form of an Ecological Impact Assessment (EclA), and such an assessment cannot be considered until full details of the development are known.

Legislation and Planning Policy

Legislation

- 1.4 The Wildlife and Countryside Act 1981 (as amended) provides the main legal framework for nature conservation and species protection in the UK. The Site of Special Scientific Interest (SSSI) is the main statutory nature conservation designation for sites in the UK. Such sites are notable for their plants, animals, or habitats, their geology or landforms, or a combination of any of these features. Natural England is the key statutory agency in England for advising Government, and for acting as the Government's agent in the delivery of statutory nature conservation designations.
- 1.5 Designation of a SSSI is a legal process, by which sites are notified under the Wildlife and Countryside Act 1981. The 1981 Act makes provision for the protection of sites from the effects of changes in land management, and owners and occupiers receive formal notification specifying why the land is of special scientific interest, and listing any operations likely to damage the special interest.
- 1.6 Species protection in the UK is provided by the Wildlife and Countryside Act 1981 (as amended), with some species receiving additional European-wide protection from the Conservation of Habitats and Species Regulations 2017 (commonly referred to as 'European Protected Species'). Some examples, but not an exhaustive list, of the species and form of protection offered by these legislations follow below.
- 1.7 A wide variety of species such as: reptiles, birds, bats, hazel dormice *Muscardinus avellanarius* and great crested newts *Triturus cristatus* (GCN) are protected from killing, injuring and capture. The nests of birds are additionally protected from damage and



destruction and, for those listed on schedule 1 of the Wildlife and Countryside Act 1981, from deliberate or reckless disturbance.

- 1.8 The habitats of European protected species are additionally protected. For example, bat roosting sites are protected from either deliberate or reckless damage, destruction or obstruction (even if a bat is not present) and places used for shelter and protection by GCN are similarly protected from destruction, damage or obstruction.
- 1.9 Specific protection for badgers *Meles meles* is provided by the Protection of Badgers Act 1992. This Act protects badgers from being taken, injured or killed. Furthermore, badger setts are protected from interference, making it an offence to damage, destruct or obstruct access to a sett as well as to disturb a badger whilst it occupies a sett.
- 1.10 The Countryside and Rights of Way Act 2000, and The Natural Environment and Rural Communities (NERC) Act 2006, provide supplementary protected species legislation.

Bat Legislation

Wildlife & Countryside Act

- 1.11 The Wildlife and Countryside Act 1981 (as amended) provides the main legal framework for nature conservation and species protection in the UK. All UK native species of bat are listed in Schedule 5 of the WCA. The legislation protects bats and their roosts under Section 9 of the Act, such that it is an offence to:
- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection;
 - Intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection;
 - Sell or advertise for sale any live or dead bat or any part of, or anything derived from a bat.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

- 1.12 The Regulations provide legal protection for European Protected Species (those listed under Annex IV of the EU Habitats Directive (Council Directive 92/43/EEC)). With regards to all British bats, this makes it an offence to:
- Deliberately (or recklessly in Scotland) capture, injure or kill a bat;
 - Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
 - Damage or destroy a roost [this is an 'absolute' offence and need not be deliberate or intentional].
 - Possess, control, transport, sell, exchange or offer for sale/exchange and live or dead bat or any part of a bat.
- 1.13 Licences to permit illegal activities relating to bats and their roost sites can be issued for specific purposes and by specific licensing authorities in each EU country under the auspices of the of Conservation of Habitats and Species Regulations. These are sometimes



called 'derogation licences' or 'European Protected Species Mitigation' (EPSM) licences, and in England, are issued by Natural England.

Habitats and Species of Principal Importance in England

- 1.14 The Natural Environment and Rural Communities (NERC) Act came into force on 1 October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act.
- 1.15 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 Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

Habitats of Principal Importance

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

Species of Principal Importance

- 1.17 There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework. In addition, the hen harrier *Circus cyaneus* has also been included on the list because without continued conservation action it is unlikely that the hen harrier population will increase from its current very low levels in England.
- 1.18 In accordance with Section 41(4) the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

National Planning Policy Framework

- 1.19 The National Planning Policy Framework (NPPF) was published in March 2012 and replaced previous planning policy guidance (PPS 9) on biodiversity. The NPPF was updated in July 2018 and again in February 2019 and states the following in relation to biodiversity and planning:

“When determining planning applications, local planning authorities should apply the following principles:

- *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*



- *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

The following should be given the same protection as habitats sites:

- *potential Special Protection Areas and possible Special Areas of Conservation;*
- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.*

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”



2 Methodology

Preliminary Bat Roost Assessment

- 2.1 A preliminary bat roost assessment of the two farm buildings was completed on 18 April 2021, by AEL ecologist Dr Duncan Painter CEnv MCIEEM (DP)¹ in line with Collins 2016² to assess their use or potential for use by roosting bats. DP is a professional ecologist and bat surveyor with extensive bat field survey and mitigation planning experience in relation to bats and development across the UK.
- 2.1 Evidence of bats searched for included live bats, bat droppings on walls and other exposed surfaces, staining (caused by bat fur oils and/or urine spots) and the characteristic odour of accumulated bat droppings in confined (typically poorly ventilated) spaces. A systematic internal and external inspection assisted as necessary by the use of binoculars and a high powered cree torch was completed.
- 2.2 The inspection of buildings to assess their roosting use/suitability for bats can be conducted at any time of year, according to the best practice survey guidance (Collins, 2016). However, finding evidence of bats (e.g. their droppings) on external surfaces that are unprotected from rainfall may be restricted if undertaken outside the main bat active season (May to September) and/or after periods of wet weather. Bat droppings inside buildings may also quickly disintegrate in damp conditions.
- 2.3 The survey was completed in the spring outside of the main bat active period, and evidence of bats (droppings) left over from the previous 2020 bat active season would not have been expected to be visible on unsheltered external surfaces.
- 2.4 The suitability of buildings for roosting bats was classified according to the categories and descriptions defined by Collins 2016 for roosting habitats, as summarised in **Table 2.1**.

Table 2.1: Guidelines for assessing the potential suitability of roosting habitats such as buildings and trees for bats (taken from Collins, 2016).

Suitability	Description of roosting habitat
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 individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger number of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (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 habitat but unlikely to support a roost of high

¹ Holds three separate licences pertaining to bat survey: WML-CL18; WML-CL21; and WML-CL32 and has been a registered bat roost volunteer visitor for Natural England (WML-CL15). Holds a class licences in relation to badger (WML-CL35) and great crested newt (WML-CL09 & WML-CL33), hazel dormouse (WML-CL10A), and native crayfish (WML-CL11).

² Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.



	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 suitable for use by larger 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.



3 Results

Preliminary Bat Roost Assessment

Barn 1

- 3.1 Barn 1 was a large steel portal framed agricultural building open on two sides and in use as a vehicle and material shelter. It had a shallow unlined pitched roof covered in corrugated cement sheets and unlined galvanised metal sheet walls. A blockwork lean-to with a mono-pitch cement sheet roof covering and galvanised metal sheet walls was present on the north-west corner of the barn with an open west facing front and direct opening into the main barn.
- 3.2 There was no evidence of bats inside or outside of the building, and it was devoid of any obvious bat roost features.
- 3.3 Two old collard dove or woodpigeon nests were present on steel roof beams in the main barn, but no evidence of nesting barn swallow or roosting/nesting barn owl was present.
- 3.4 In overall terms, the barn was considered to have **negligible bat roost suitability** as set out previously in **Table 2.1**.

Barn 2

- 3.5 Barn 2 was a concrete and steel portal framed building with a shallow pitched unlined roof covered in corrugated tin sheets. The external walls were clad in timber weatherboards that were well fitted and lacked any obvious bat roost features. There was no evidence of bats externally or internally.
- 3.6 There was no evidence of swallow or barn owl in the building.
- 3.7 The barn was considered to have **negligible bat roost suitability**.





Photo 1 - Barn 1



Photo 2 - Barn 1



Photo 3 - Barn 1



Photo 4 - Barn 2



Photo 5 - Barn 2



Photo 6 - Barn 2

4 Conclusions and Recommendations

Conclusions

- 4.1 The two barns lacked evidence of bats and were considered to offer negligible bat roost suitability.
- 4.2 The buildings also lacked evidence of nesting/roosting barn swallow and barn owl.

Recommendations

- 4.3 While it can be recommended that the buildings can be removed without restriction in relation to bats, it is recommended that the buildings are removed outside of the bird nesting period in the months of September to February or following a check to confirm nesting bird absence, as both house sparrow and barn swallow were present on Site during the survey, and both species have the potential to nest in the two buildings in the future.

Ecological enhancements

- 4.4 Given the presence of house sparrow on Site, it is recommended that nest box provision for this species is provided within the development or wider site – with the erection of two colonial nest boxes for the species.



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