Arboriculture | Ecology | Landscape

DAVID ARCHER ASSOCIATES

Preliminary Roost Assessment

Bats

Bridleway ER252

Capel-le-Ferne

Kent

Date: March 2019

1 Summary

Site:	ER252 Bridleway, Capel-le-Ferne, Kent
Central OS Grid Reference:	Point A: TR 25329 38681 Point H: TR24925 39031
Report Commissioned by:	Dover District Council
Date of Roost Assessment:	18 th March 2019

Bat Survey Results	Preliminary Roost Assessment	No evidence of roosting bats was recorded, although two trees, which may be impacted by the works, are of moderate suitability to support roosting bats. A small group of trees were densely clad in ivy, which may be obscuring potential roost features and are thus of low suitability to support roosting bats. All other trees to be impacted are of negligible suitability for roosting bats. The trees along the bridleway are of moderate suitability to support foraging and commuting bats.
Further Surveys	Roosting bats	If impacts to the two trees of moderate potential to support roosting bats can not be avoided, two nocturnal emergence / re-entry surveys of each tree will be required to establish if roosting bats are present. To comply with current guidelines, these surveys will need to take place between May and August and be spaced at least two weeks apart.
	Roosting bats	If impacts to the dense ivy clad trees between points B and C (Appendix 2) can not be avoided, precautionary measures by means of sectional felling are required.
Avoidance and Mitigation	Foraging and commuting bats	Maintain a continuous tree line along the bridleway, in order to retain suitable bat foraging and commuting habitat. If this is unavoidable over small sections (<5m in length), where trees need to be removed on health and safety grounds, incorporate replacement planting to infill any gaps created.

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2 Introduction

2.1 Background

David Archer Associates was commissioned by Dover District Council to undertake a Preliminary Roost Assessment (PRA) for bats in relation to trees between points A and H of the ER252 Bridleway, Capelle-Ferne, Kent, hereinafter referred to as the 'site' (see **Appendix 2** for plan of bridleway and locations of Points A and H).

Recommendations for further surveys, avoidance and mitigation measures for bats are included in this report where applicable.

2.2 Site Location and Description

Bridleway ER252 runs in a south-east to north-west direction along the eastern edge of the main housing area in Capel-le-Ferne, adjacent to arable fields. It is currently a heavily used public right of way, and is bounded by trees and shrubs along most of its length. The 550m section surveyed, stretches from Ordnance Survey Grid Reference TR2532938681 in the south-east to TR2492539031 in the north-west. A primary school backs on to the north-western end of the route and a recreation ground lies south of the centre of the bridleway section being surveyed. The wider area comprises mostly arable fields with the south-Kent coast c. 1km to the south.

2.3 Proposed Works

Dover District Council propose to carry out improvements to approximately 550m of bridleway ER252 at Capel-le-Ferne. The aim is to create a 3m wide path with 0.5m border on each side. This requires cutting back vegetation and shrubs and removal of some trees (with diameter at breast height <25cm) either side of the path, and pruning of overhanging branches to ensure a 4m high clearance above the path. All arisings will be removed and disposed of at an off-site facility.

An ecological assessment of the potential impacts arising from the bridleway improvements was made by the White Cliffs Countryside Partnership (March 2019). This concluded that a suitably licensed bat ecologist should carry out an assessment of the potential for the trees to support roosting bats.

2.4 Legislation and Policy

All UK species of bats and their roosts are strictly protected under European and UK legislation (*Conservation of Habitats and Species (Amendment) Regulations 2017* (CHSR), and the *Wildlife and Countryside Act, (1981)* (WCA). Four UK bat species are also listed under Annex II of the Habitats Directive. Bat foraging / commuting habitat is not legally protected, although it is a material consideration within the planning process under the *National Planning Policy Framework*. Refer to **Appendix 1** for further information about the legislation and planning policies that protect bats.

2.5 Objectives

The objectives of the survey and this assessment are to:

- Assess potential presence / likely absence of roosting bats within the trees to be impacted;
- Assess the potential for usage of the bridleway by foraging and commuting bats;
- Assess any impacts that the proposals may have on any roosting and foraging / commuting bats;

- Determine the need for a Natural England European Protected Species Mitigation (EPSM) licence; and
- Inform any avoidance and mitigation measures, if required.

3 Methodology

3.1 Surveyor Information

The bat roost assessment was undertaken by the following suitably experienced and licensed staff:

 Claire Munn BSc (Hons) MSc MCIEEM (WML-CL18- Level 2 bat licence number: 2015-12515-CLS-CLS);

3.2 Preliminary Roost Assessment

A daytime roost assessment of all trees between Points A and H of the bridleway (see **Appendix 2**) was undertaken on the 18th March 2019. The weather conditions during the survey were noted to be 9°C with a gentle breeze (Beaufort scale 3), no rain and 20% cloud cover.

Trees that may be suitable to hold potential to support bats were described, mapped and surveyed for direct evidence of bats and for Potential Roost Features (PRFs). The types of feature which are known to have potential to be used by roosting bats include woodpecker holes, rot holes, hazard beams, cracks and splits, knot holes, cavities, loose bark and partially detached ivy (Andrews, 2013). The trees were inspected for the presence of these features, with such features further inspected with an endoscope where accessible from the ground, and then assigned a level of suitability for roosting bats as outlined in **Table 3.1** below.

High roosting suitability	A tree with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate roosting suitability	A 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 conservation status (with respect to roost type only).
Low roosting suitability	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.
Negligible roosting suitability	A tree with few, if any features suitable for roosting.

 Table 3.1: Classifying the bat roosting suitability of buildings and trees (Collins, 2016).

3.3 Limitations and Assumptions

The survey was carried out at an optimal time of year to assess trees for bat roost features as heavy leaf cover was not yet present. However, dense ivy on some trees may have obscured some potential roost features. Where this is the case, this has been factored into the recommendations for avoidance and mitigation, and does therefore not pose a significant limitation.

On the assumption that site conditions and habitats stay unchanged, this assessment will remain valid for 1 year, and should be updated if works have not yet commenced within this timeframe.

4 Results and Evaluation

4.1 Preliminary Roost Assessment

All of the trees along the edge of the bridleway were assessed for their suitability to support roosting bats. Following the ground inspection and endoscope inspection of reachable features, the large majority of these tree were assessed as being of negligible suitability for roosting bats.

A small group of trees between Points B and C (**Photo 4.1**; **Appendix 2**), were densely clad in ivy; whilst it is unlikely that bats would roost in the ivy itself, the ivy may be obscuring potential roost features for bats. As such, these ivy-clad trees (from the blackthorn *Prunus spinosa* at Point B to the ash *Fraxinus excelsior* at Point C) are assessed as being of **low** suitability for roosting bats. If impacts to these trees cannot be avoided, precautionary measures outlined in **Section 5** should be adhered to in order to further reduce the risks to roosting bats.



Photo 4.1: Group of trees with dense ivy, between Points B and C (Appendix 2)

Two trees were assessed as being of **moderate** suitability for roosting bats (numbers correlate to those indicated on the plan in **Appendix 2**):

- Tree 1: Blackthorn, *Prunus spinosa* (**Photo 4.2**). Several cracks in the bark are present on the north-east and south-west sides of a bowed branch on the northern side of the path, at the junction with path ER241. These features may offer suitable roosting opportunities for a small number of bats.
- Tree 2: Blackthorn, *Prunus spinosa* (**Photo 4.3**). This tree is on the south side of the path, adjacent to the recreation ground. Crevices and fissures are present, some of which were not possible to inspect with the endoscope from ground level. These features may offer suitable roosting opportunities for a small number of bats.

Trees 1 and 2 were marked with red and white hazard tape to make them easily identifiable in the field, although it should be noted that public access may result in tampering or removal of the tape.

If not possible to avoid impacts to Trees 1 and 2, further surveys will be required to determine if they are of importance to roosting bats, as outlined in **Section 5**. These surveys and any resulting mitigation should be carried out prior to any works impacting Trees 1 and 2 and any trees and vegetation within 5m of them.



Photo 4.2: Tree 1, leaning north-east towards field, marked with hazard tape

Photo 4.3: Tree 2, on edge of recreation ground, marked with hazard tape



4.2 Foraging and Commuting Bats

The trees bounding the bridleway form a vegetated buffer between housing and a recreational ground to the south-west and open fields to the north-east. The trees also form a near-continuous line of suitable foraging and commuting habitat for bats, with connections to other suitable habitat such as field-boundary hedgerows.

Assuming that foraging and commuting bats are using this habitat, the proposed works have potential to impact negatively on them if gaps are created in this continuous habitat corridor, and if mature trees supporting dense foliage cover and diverse invertebrate fauna are removed.

There are no plans to install lighting along the bridleway, and as such, no direct impacts from lighting are expected. If mature trees were to be removed and / or gaps created in the tree line, there may be potential indirect impacts on foraging and commuting bats if increased light spill from properties and the recreational ground to the south-west of the path then reached the field margin to the north-east.

Avoidance measures are therefore outlined in **Section 5** in order to ensure the continued suitability of the habitats along the bridleway to support foraging and commuting bats.

5 Recommendations for Further Surveys, Avoidance and Mitigation

5.1 Further Surveys – Roosting Bats

Trees 1 and 2 (Moderate Roost Potential)

If possible, avoid impacts to Trees 1 and 2, identified in **Section 4.1** as being of moderate suitability for roosting bats.

Where impacts to Trees 1 and / or 2 are unavoidable, further surveys will be required prior to works starting to these trees and all vegetation within 5m of them as follows:

• Two bat emergence / re-entry surveys that are spaced at least two weeks apart between May and August are recommended in line with current guidance (Collins, 2016).

If roosting bats are identified using the tree/s and impacts are considered likely to cause a legal offence, one further bat emergence / re-entry survey between May – September and a European Protected Species Mitigation (EPSM) licence from Natural England would be required prior to works affecting a roost.

Ivy-clad Trees (Low Roost Potential)

Where impacts to the group of trees between Points B and C (**Appendix 2**) identified as having low potential for roosting bats cannot be avoided, apply the following precautionary measures during tree works:

- Sectionally fell the ivy-clad trees, carefully lowering each section to the ground.
- Once lowered, check each section for cracks or crevices behind the ivy. If any are present, leave that section on the ground next to the location of the tree overnight, with the features exposed, so that any bats present can move away overnight.
- If any roosting bats are encountered during the above process, stop works immediately and contact an ecologist for advice. Further surveys, mitigation and a derogation licence from Natural England may be required before works can recommence.

5.2 Avoidance and Mitigation – Foraging and Commuting Bats

When removing vegetation and trees, ensure that no gaps are created in terms of continuous, linear, arboreal connectivity and avoid removal of mature trees wherever possible. If this is unavoidable over small sections (<5m in length), where trees need to be removed on health and safety grounds, incorporate replacement planting to infill any gaps created.

Any replacement planting should be of native, local provenance and be of suitable size and shape to prevent any new light spill reaching the field margins to the north-east of the path. If this is not possible, and immature planting is used, additional measures may be required to prevent light spill, for example, installation of fencing.

6 Conclusion

It is highly likely that avoidance measures can be easily incorporated to avoid impacts to any trees with bat roost potential and to ensure the continued suitability of the habitats for foraging and commuting bats. Should this not be feasible for any reason, further surveys and / or mitigation measures have been recommended to ensure that the proposed works will have a minimal impact on bats.

7 References

Andrews, H., (2013). Bat Tree Habitat Key. Bridgewater: Andrews Ecology.

Collins, J. (2016). *Bat Surveys for Professional Ecologists: Best Practice Guidelines* (3rd edition). The Bat Conservation Trust, London.

HMSO (2017). The Conservation of Habitats and Species (Amendment) Regulations 2017. HMSO, London.

HMSO (1981). Wildlife and Countryside Act 1981. HMSO, London.

White Cliffs Countryside Partnership (2019). Ecological report for proposed works along Bridleway ER252, Capel-le-Ferne.

Appendix 1 Legislation and Policy

All 18 British bat species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species (Amendment) Regulations 2017* as European Protected Species. Furthermore, the *Countryside and Rights of Way Act 2000* (Schedule 12, Paragraph 5) has amended Section 9 of the 1981 Act. Bats are therefore, fully protected under Section 9 of the 1981 Act and under Regulation 41 of the *Conservation of Habitats and Species (Amendment) Regulations 2012*, which transposes the Habitats Directive into UK law.

All European bat species are listed as protected under Annex IV of Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, commonly referred to as the EC or EU Habitats Directive. In addition, four UK bat species are listed in Annex II of the EC Directive; the conservation of which requires the designation of Special Areas of Conservation under certain criteria. These four species are the greater horseshoe bat *Rhinolophus ferrumequinum*, the lesser horseshoe bat *Rhinolophus hipposideros*, Bechstein's bat *Myotis bechsteinii* and the barbastelle *Barbastella barbastellus*.

In England (and Wales) the EC Habitats Directive is transposed into national law by means of the *Conservation of Habitats and Species (Amendment) Regulations 2012*. The commonly used collective term for this above legislation is the 'Habitats Regulations' and all bats are European Protected Species (EPS).

All British bat species are also listed as protected under national laws via Schedule 5 of the *Wildlife* and *Countryside Act (WCA) 1981* (as amended). Furthermore, the *Countryside and Rights of Way (CRoW) Act 2000* (Schedule 12, Section 5a) has amended Section 9 (subsection 4) of the WCA Act, 1981 thereby strengthening the level of protection further to include 'reckless' offences as well as 'intentional'.

Ultimately, the above EU and UK legislation makes it an offence to, or to attempt to do, any of the following:

- Deliberately capture, injure or kill a bat;
- Deliberately disturb a bat, including in particular any disturbance which is likely to impair a bats ability to survive; breed or reproduce; or rear or nurture their young;
- In the case of hibernating or migratory species, to impair their ability to hibernate or migrate;
- Affect significantly the local distribution or abundance of the species to which they belong;
- Damage, destroy or obstruct a breeding site or resting place of a bat whether intentionally or recklessly; and / or,
- Possess, control, transport, exchange or sell a bat or parts of a bat, alive or dead.

Furthermore, where development will result in damage to, or obstruct access to, any bat roost (whether occupied or not) or risks harming or significantly disturbing bats an EPS licence is required from Natural England, the regulatory body responsible for protected species in England, to allow the development to proceed.

The legal interpretation of "development" in the context of EPS is not restricted to works requiring planning permission from LPAs but includes permitted development and can encompass works that do not require any formal permission.

Bats are also afforded more general protection in England (and Wales) within the *Natural Environment and Rural Communities Act, 2006*. This imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, "to have due regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity" [Section 40 (1)]. It notes that "conserving biodiversity includes restoring or enhancing a population or habitat" [Section 40 (3)]. Consequently, attention should be given to dealing with the modification or development of an area if aspects of it are deemed important to bats, such as roosts, flight corridors and foraging areas.

Species of Principal Importance in England (SPIE) – formerly UK Biodiversity Action Plan Priority (BAP) include the barbastelle, brown long-eared bat *Plecotus auritus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctula*, greater horseshoe, lesser horseshoe and Bechstein's bat.

Appendix 2 Survey Area & Trees with Bat Roost Potential

