
Necton Greener Grid Park

on behalf of Statkraft UK

Appendix 3: Preliminary Roost Assessment (PRA)



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FIGURES

Figure 1: Preliminary Bat Roost Assessment

1 INTRODUCTION

1.1 Background

1.1.1 Avian Ecology Ltd. (AEL) was commissioned by Statkraft UK to undertake a Preliminary Bat Roost Assessment (PRA) ahead of proposed tree works associated with the construction of a new access road for construction of a Greener Grid Park (the 'Proposed Development') at land south of Necton Onshore Substation, Necton, Norfolk (the 'Site').

2 LEGISLATION

2.1 Bats

2.1.1 All species of British bat are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are further protected under the Conservation of Habitats Regulation. The Act and Regulations make it an offence to:

- Capture or kill a bat;
- Intentionally injure or take any wild bat;
- Significantly disturb a bat (in any location); intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; and,
- Damage or destroy a breeding site or resting place of any bat.

2.1.2 If bats are present on Site and, as a result of the proposed works there is a likelihood that a roost may be damaged or destroyed, or where there is considered to be a reasonable possibility that bats occupying a roost may be significantly disturbed, or where there would be a requirement to significantly disturb a bat irrespective of its location, the works can only proceed under a European Protected Species Mitigation (EPSM) licence issued by Natural England (NE) and where appropriate mitigation is provided.

3 METHODOLOGY

3.1 Preliminary Bat Roost Assessment

3.1.1 The PRA was undertaken on the 16th March 2023 by Z Hinchcliffe MRes BSc (Hons.), an experienced ecologist.

3.1.2 Bat survey methodologies and subsequent interpretation of result has made reference to the following guidance documents:

- *Bat Conservation Trust (BCT) - Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn.)* (Collins *et al.* 2016); and,
- *Bat Workers Manual. 3rd Edition* (Mitchell-Jones & McLeish, 2004).

3.1.1 A ground-based inspection survey of trees was made to assess their potential to support roosting bats; this incorporated a systematic search around all parts of the tree. Potential roost features (PRFs) can include: woodpecker holes, rot holes, hazard beams, vertical and horizontal cracks and splits, knot holes, partially detached bark and other hollows and cavities. Where a PRF is identified, evidence was

searched for that would indicate or confirm the presence of roosting bats such as bat droppings, urine splashes, fur-oil staining and audible squeaking noises. The search included the ground beneath PRFs.

3.1.2 Following from the site survey, the trees were assigned a category of suitability to support roosting bats, as described within the BCT Guidelines (Collins, *et al.* 2016), there are four categories of roost suitability, these are described below:

- **Negligible** - negligible features likely to be used by roosting bats.
- **Low** - 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 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, not species).
- **High** – a 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.

3.1.3 Where a tree has several PRFs, the tree is categorised according to the highest suitability PRF present.

3.2 Survey Limitations

3.2.1 PRAs can be undertaken throughout the year; however, PRAs of trees are often best undertaken between December and March (after leaves have fallen and before new ones replace them). If undertaken outside this period and leaves are on the tree, it may not be possible to see all PRFs. The survey was undertaken in March and therefore, within the optimum period for undertaking PRAs when all PRFs should be most easily visible.

3.2.2 Evidence indicating bat roost presence may be less obvious or may not remain present outside the main bat activity period which is between May to September (e.g., bat droppings can be removed / washed away by wind and rain).

3.2.3 The above noted limitations are not considered to be a constraint within the scope of this PRA, with the main objective to establish bat roost potential and identify where further surveys may be required to confirm the presence or likely absence of roosting bats.

4 BASELINE

4.1 Preliminary Bat Roost Assessment

4.1.1 All the trees within the area of proposed works as illustrated on **Figure 1** were inspected for PRFs and the roost potential of trees was classified, though many plants within the hedgerow were considered too narrow to have any bat roost features and more likely comprising hedgerow species. Only mature trees of suitably large size are assessed within this report.

4.1.2 One oak *Quercus sp* (T4) located approximately at TF 88216 10539 was found to have low bat roost potential. PRFs are identified in the photographs below. All other assessed mature trees show negligible bat roost potential.

Potnetial Bat Roost Freatures



Photo 1: Ash *Fraxinus excelsior* c8m – T1 – Negligible BRP



Photo 2: Ash 7m – T2 – Negligible BRP.

Potnetial Bat Roost Freatures



Photo 3: Ash 9m – T3 – Negligible BRP



Photo 4: Oak species *Quercus* sp - 12m – T4 – Low BRP

Potnetial Bat Roost Freatures



Photo 5: T4 – Peeled bark and dead branch – Low BRP



Photo 6: Pedunculate oak *Querus robur* 12m – T5 – Negligible BRP

Potnetial Bat Roost Features



Photo 7: Pedunculate oak 11m – T6 – Negligible BRP



Photo 8: Pedunculate oak 12m – T7 – Negligible BRP

Potnetial Bat Roost Freatures



Photo 9: Pedunculate oak 12m – T8 – Negligible BRP



Photo 10: Pedunculate oak 14m – T9 – Negligible BRP

Potnetial Bat Roost Freatures



Photo 11: Pedunculate oak 13m – T10 – Negligible BRP

4.1.3 No evidence to confirm the presence of roosting bats was observed at the time of the PRA survey.

5 DISCUSSION

5.1.1 One tree was assessed as providing low bat roost potential, due to the presence of peeling bark and a dead branch. All other trees were assessed as having negligible or no bat roost potential. No evidence suggestive of bat roost presence was observed during the PRA survey.

5.1.2 The scope of the works is to fell all trees within a 25m line whereby the access track to the Proposed Development cuts through the hedgerow. The proposed works therefore have the potential to disturb roosting bats and / or damage or destroy a roost site, if present.

5.1.3 The BCT '*Bat Surveys, Good Practice Guidelines*' (Collins, 2016) is the standard guidance adopted by local authorities and Statutory Nature Conservation Organisations. Following this guidance, survey effort must vary depending on the likelihood of bat presence and potential for works to affect bats and this guidance provides recommendations on the next steps.

5.1.4 Where bat roost potential (moderate or high suitability) is found during a ground level PRA then further surveys (such as PRF inspection surveys or presence/absence surveys) are required to ascertain presence or likely absence of roosting bats.

5.1.5 If a tree is considered to provide negligible or low bat roost suitability, then further surveys are not necessary. Precautionary measures are typically recommended where felling or pruning activities are scheduled for a tree with low bat roost potential.

- 5.1.6 Tree T4 was the only tree assessed as having any bat roost potential, although this is located c55m from the area identified for removal.
- 5.1.7 Within the section of trees/hedgerow to be removed, no trees were assessed as having any bat roost potential.

Figure 1 – Preliminary Bat Roost Assessment

