AEWC Ltd

Animal Ecology & Wildlife Consultants

Bat Ground Level Tree Assessment Report

Land East of Tilletts Lane

Warnham
Horsham
West Sussex

Natalie Arscott

23-246
November 2025

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Contents

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Report and version number	23-246-GLTA-v1
Survey Date	28/10/2025

Summary

- AEWC Ltd were commissioned by Batcheller Monkhouse to undertake a Ground Level Tree Assessment (GLTA) at Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex at central grid reference TQ 15533 34010 to help inform the proposed removal of trees required as part of development proposals.
- This report details the results of the survey, which was carried out on the 28th of October 2025 by Natalie Arscott, a Natural England licensed bat ecologist, and accompanied by qualified ecologist Lexie Hobbs.
- A total of four trees and sections of three groups of trees are proposed for removal. These were assessed from the ground.
- Tree T65 and all the tree groups surveyed were considered to have negligible potential to support roosting bats and, as such, there are no known constraints regarding these species and the proposed removal of these trees.
- Tree T47 was assessed to have PRF-I roost suitability due to an upward-facing knot hole. Trees T63 and T64 should precautionarily be treated as having PRF-I suitability due to being large and ivy-smothered, although no potential roosting features were identified. These trees are considered highly unlikely to support a maternity roost. No bats or evidence of use by bats was found in any of the trees.
- **No further surveys are required. However, a lack of any mitigation could result in a negative impact on bats if present, through potential death, disturbance or loss of roost space, a mitigation plan is therefore required for works to proceed for trees T47, T63, and T64, as detailed within Section 6 of this report**.
- **In addition, appropriate compensation must be created in advance of impacts**. **This should be delivered through the installation of at least three bat boxes on retained trees at the field boundaries.**

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the Professional Guidance and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1 Introduction

1.1 AEWC Ltd were commissioned by Batcheller Monkhouse to undertake a Ground Level Tree Assessment (GLTA) at Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex to help inform the proposed removal of trees required as part of development proposals.

1.2 The bat survey and report writing were carried out in accordance with Bat Surveys: Good Practice Guidelines (Bat Conservation Trust, 2023).

1.3 A Preliminary Ecological Appraisal was carried out at the site in April 2024. The on-site trees were not individually assessed as part of this survey as at the time it was unknown which, if any, would be removed.

1.4 GLTA was therefore required to ascertain whether the trees proposed for removal hold potential for roosting bats and represent a constraint to the proposed felling.

1.5 This report details the results of the GLTA and outlines recommendations in relation to bats and the proposed development of the site.

Aims and Objectives

1.6 The objectives of the survey were to:

- Identify the potential of the trees proposed for removal on the site to support roosting bats;
- Estimate the size and status of any existing bat roost within the trees;
- Determine the potential impacts on any bat roost from the proposed works; and
- Provide information for use in the design and development of ecological mitigation and enhancement measures where appropriate.

Site Location

1.7 The site is located at Land to the east of Tilletts Lane, Warnham, Horsham, West Sussex at central grid reference TQ 15533 34010. The site is located in the village of Warnham, northwest of Horsham and west of the A24. The surrounding landscape includes a diverse mix of habitats, such as ancient and semi-natural woodlands, traditional meadows, grasslands, native hedgerows, and arable and pastoral agricultural lands. To the south is residential development. See Figure 1.

1.8 The site covers approximately 4.37 hectares and predominantly comprises two fields, the western of which is arable with the eastern field being grassland, and pedestrian access routes to these from Caryll Place and Knob Hill. There are several hedgerows and trees across the site. A total of four trees and sections of three groups of trees are proposed for removal to facilitate the development. These trees are T47, T63, T64 and T65, and sections of tree groups G4, G6 and G7 as per the Arboricultural survey by MDJ Arboricultural Consultancy Limited. See Figures 2 and 3.

FIGURE 1: SHOWING THE LOCATION OF THE SITE

FIGURE 2: SHOWING THE TREES SUBJECT TO SURVEY IN THE EAST OF THE SITE

FIGURE 3: SHOWING THE TREES SUBJECT TO SURVEY IN THE WEST OF THE SITE

Legislation

1.9 All species of bats are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981 (as amended)* which affords them protection under *Section 9*, as amended. They are also protected under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. In combination, this makes it an offence to:

- intentionally kill, injure or take (capture etc.);
- possess;
- intentionally or recklessly damage, destroy, obstruct access to any structure or place used by a scheduled animal for shelter or protection, or disturb any animal occupying such a structure or place; and
- sell, offer for sale, possess or transport for the purpose of sale (live or dead animal, part or derivative) or advertise for buying or selling such things.

1.10 A roost is defined as 'any structure or place which a bat uses for shelter or protection'. As bats tend to reuse the same roosts, legal opinion is that a roost is protected whether or not bats are present.

1.11 Any disturbance of a bat occupying a roost can lead to prosecution. Disturbance can be caused by noise, vibration and artificial lighting. Penalties for breaking the law can include fines of £5,000 per bat, imprisonment and the seizure of equipment.

1.12 Furthermore, seven bat species (barbastelle, Bechstein's, noctule, soprano pipistrelle, brown long-eared, lesser horseshoe and greater horseshoe) are also Species of Principal Importance in England under *Section 41* of the *Natural Environment and Rural Communities Act 2006*.

Proposals

1.13 The development proposal is for the construction of 59 dwellings, with associated public greenspace, parking, access roads, and footpaths. The required tree removals will be to facilitate access routes.

2 Methods

Daytime Assessment

2.1 A detailed bat ground level tree assessment was undertaken on the 28th October 2025 by Natalie Arscott, a Natural England licensed bat ecologist, and assisted by qualified ecologist Lexie Hobbs.

2.2 The survey comprised an external inspection of the trees proposed for removal to look for the presence of Potential Roosting Features (PRF) including woodpecker and rot holes, horizontal cracks and splits in stems and branches, partially detached platey bark, cankers, hollows and cavities, double-leaders forming compression forks with included cavities, gaps between overlapping branches, partially detached ivy with stem diameter exceeding 50mm and bat, bird or dormouse boxes.

2.3 Where features were identified that could be accessed using a ladder, these were closely inspected using a torch, to inspect for bats or signs of use by bats and determine the quality of the feature.

2.4 Taking account of these habitat features and signs of presence, the trees were then assigned a level of roost suitability based the criteria given in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (Collins, 2023) and professional judgement. The primary objective of this exercise was to identify the need for further detailed bat survey later in the year, or alternatively to obtain sufficient information that would dismiss the need for further assessment.

2.5 Potential roost features are classified as PRF-I or PRF-M. PRF-I are only considered to be suitable for individual or low numbers of bats, either due to size or low quality. PRF-M are suitable for multiple bats and may therefore be used by a maternity colony.

3 Constraints/Limitations

3.1 Bats are difficult to locate in trees, particularly large trees, with only around 75% of potential roosting areas visible from ground level. It should be noted that it is not always possible to identify bat presence by examining features internally as droppings and other evidence can deteriorate rapidly within tree cavities and poor weather conditions may have washed away droppings which were deposited on exposed surfaces.

3.2 Bats can have seasonal use of trees and being so mobile may arrive and start using a site after it has been surveyed, or roost somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected, particularly during daytime assessment.

4 Results

Daytime Assessment

4.1 Tree T47 was assessed to have PRF-I roost suitability. This was due to the tree having an upwards facing rot hole. The rot hole appeared very damp and was shrouded by surrounding hedgerow vegetation which limits fly-in access. As such, it was considered to be of very low suitability for roosting and is of not of sufficient quality to be used by a maternity colony. No other potential roosting features were identified and the tree is fairly small and slender.

4.2 Trees T63 and T64 both had moderate amount of climbing ivy and are fairly large trees. No potential roosting features were identified, but cannot be fully ruled out due to the trees' large size and presence of ivy limiting visibility. As such these trees should be treated as having possible PRF-I suitability.

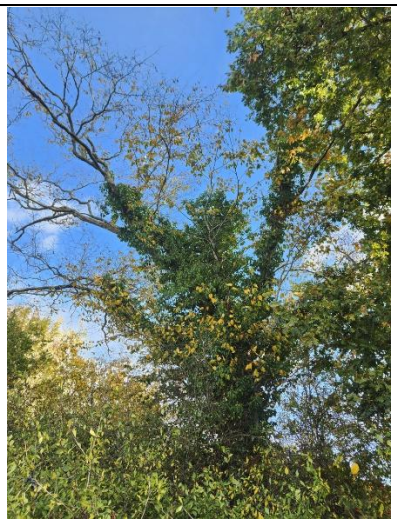
4.3 Tree T65 and the sections of G4, G6 and G7 proposed for removal were assessed to have negligible roost suitability due to a complete absence of potential roosting features or features that could create roosting opportunities in the near future.

4.4 Full results of the assessment are detailed in Table 1 and photographs are provided below.

Table 1: Ground level tree assessment findings

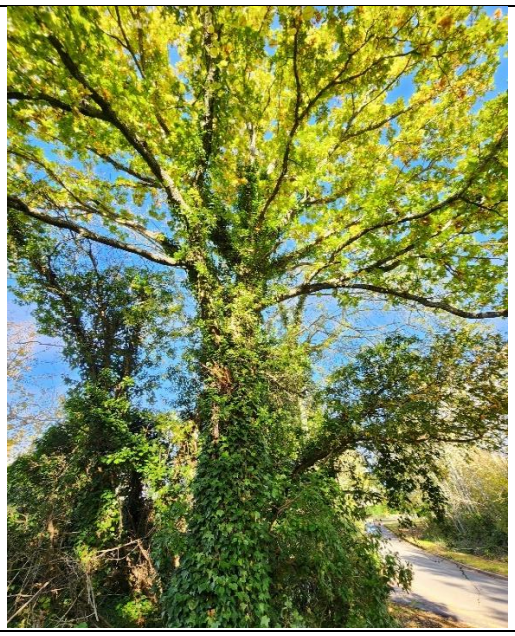
Tree/ Group Number	Species & Life Stage	Trunk Diameter	Roost Suitability	Assessment
T47	Hornbeam, early-mature	400mm	PRF-I	Fairly small tree with some deadwood and ivy covering. There is an upwards facing knot hole on the east-facing aspect at 4m high. This appeared very damp and is shrouded by hedgerow limiting fly in access. Is highly unlikely to have more than PRF-I suitability. No other features identified.
T63	Common ash, early-mature	525mm	No PRFs seen but potential for PRF-I	Fairly large tree with ivy present, particularly around lower half, but not dense enough to be considered a feature in itself. No features identified but due to the size and presence of ivy, there is a possibility for minor concealed features to be present.
T64	English oak, early mature	540mm	No PRFs seen but potential for PRF-I	Large tree with ivy present over whole tree but not dense enough to be considered a feature in itself. No features identified but due to the size and presence of ivy, there is a possibility for minor concealed features to be present.
T65	Blackthorn, semi-mature	130mm	Negligible	Very small and slender tree, no potential roosting features present.
G4 (partial)	Various hedgerow trees, young	75 – 125mm	Negligible	All trees too small and slender to hold any PRFs.
G6 (partial)	Various hedgerow trees, young	75 – 100mm	Negligible	All trees too small and slender to hold any PRFs and no fly-in access through hedgerow.
G7 (partial)	Various hedgerow trees, young	75 – 300mm	Negligible	All trees too small to hold any PRF.

Photograph 1: Tree T47 only potential upwards facing feature covered by light foliage.

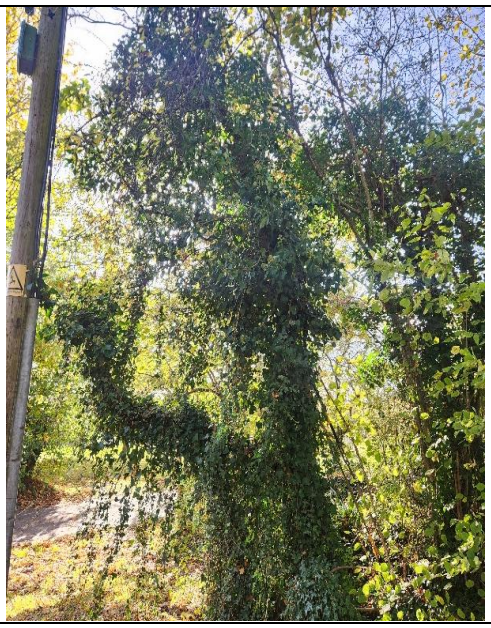


Photograph 2: Tree T47 with ivy.

Photograph 3: Tree T63 with ivy.



Photograph 4: Tree T64 with ivy.



Photograph 5: Small tree T65 with no features.

Photograph 6: Tree group G4 with no trees of suitable size.

Photograph 7: Tree group G6 with no trees of suitable size or fly-in access.

Photograph 8: Tree group G7 with no trees of appropriate size to hold PRF.

5 Evaluation, Conclusions & Recommendations

5.1 Tree T47 proposed for removal was considered to have PRF-I roost suitability, however the feature was considered to be sub-optimal due to it facing upwards, having evidence of water ingress and limited fly-in access. For trees T63 and T64, no features potentially suitable for roosting were identified, however the trees were large and ivy-smothered, and therefore it cannot be completely ruled out that minor, concealed features could be present.

5.2 **No further surveys are required. However, a lack of any mitigation could result in a negative impact on bats if present, through potential death, disturbance or loss of roost space, a mitigation plan is therefore required for works to proceed for trees T47, T63, and T64, as detailed within Section 6 of this report**.

5.3 **In addition, appropriate compensation must be created in advance of impacts**. **This should be delivered through the installation of at least three bat boxes on retained trees at the field boundaries.**

5.4 T65 and all the sections of tree groups surveyed were considered to have negligible potential to support roosting bats and, as such, there are no known constraints regarding these species and the proposed removal of these trees.

5.5 Lighting can have notable negative impacts on commuting bats, that are known to be present locally. There is potential for lighting during and post-development to cause indirect disturbance in these areas. Direct lighting of trees must be avoided or kept to the minimum necessary, indirect lighting should be fitted with motion detection to reduce lighting time.

5.6 Additional work lighting which may be required must be positioned to ensure that it shines onto the area of works with minimal spread into the wider area.

5.7 Tree removal must be undertaken outside the breeding bird period from March to August. Should any vegetation clearance be scheduled to take place between the beginning of March and the end of August, this must be immediately preceded by a survey to check for nesting birds. No trees can be cleared whilst a nest is occupied, regardless of species.

6 Mitigation

Stage 1

6.1 Prior to works commencing, trees T47, T63, and T64 must be fully inspected by a licensed bat ecologist to check for roosting features, signs of use and/or the presence of bats.

Stage 2

6.2 When works commence, a licensed bat worker will provide a toolbox talk for all workers on site, detailing the mitigation to be followed during this stage of the works and the procedure to follow in the unlikely event a bat is found during works (detailed below).

6.3 If in the unlikely event a bat is found present works must stop and be assessed by a licence natural England bat worker and a Natural England licence may be required for works to continue.

6.4 All areas with potential for bats will be soft-felled under direct supervision of the licensed ecologist, able to handle and check any bats found and move them to a safe place.

6.5 Felling must only be conducted when the air temperature is sufficiently high (at least 8°C) and in the absence of strong wind and rain, so as to not risk harming bats which may be found.

6.6 Once all areas with suitability for bats have been soft-felled, the remaining works can be undertaken without an ecologist present.

6.7 New roost features will be created on site through the installation of bat boxes onto retained trees on site, to provide compensation or additional sites for bats to roost. At least three bat boxes should be installed, and this must be done prior to the removal of existing trees.

7 Procedure to follow in the event a bat is found on site at unsupervised times.

7.1 Bats are present within the vicinity of the site and may be found at any location. Bats are protected species, and these procedures must be followed to avoid committing an offence.

7.2 If a bat is found at any location around the site DO NOT TOUCH unless necessary for the safety of the bat.

7.3 If the bat was uncovered in a roosting location carefully replace covering ensuring the bat is not crushed or harmed. If this is not possible cover the animal with a loose covering.

7.4 Stop all work at that area and the immediate vicinity. Work may continue at other areas around the site.

7.5 Call the AEWC Ltd bat licensed ecologists Brigitte De Coriolis 07545130203 or Daniel Whitby 07764813002 or call the office on 08452 505585.

8 References

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