

Preliminary Bat Roost Assessment

Horiba MIRA, Watling Street, Nuneaton

A Report To: Horiba Mira Ltd
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Quality Assurance

Date	Version	Author	Checked and Approved by
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Declaration of Compliance

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of Practice for Planning and Development”. The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Disclaimer

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client’s brief, no site investigation can ensure complete assessment or prediction of the natural environment. Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

Validity of Data

The findings of this study are valid for a period of 12 months from the date of survey. If works have not commenced by this date, it may be necessary to undertake an updated survey to allow any changes in the status of bats on site to be assessed, and to inform a review of the conclusions and recommendations made.

Non-Technical Summary

Project Background

In February 2023, Horiba Mira Ltd commissioned Middlemarch to undertake a Preliminary Bat Roost Assessment of a building at Horiba MIRA, Watling Street, Nuneaton in Warwickshire. This assessment is required to inform a planning application associated with a proposed building extension.

Scope of Survey

To assess the potential for the existing building on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 15th March 2023. The assessment was carried out in line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004) and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016).

Summary of Key Bat Features

No potential roosting features were identified within the building. The building was considered to possess negligible bat roosting potential.

Potential Impacts on Bats

No impacts on roosting bats are anticipated due to the lack of potential roosting features observed within the building on site.

Potential impacts on foraging and commuting bats have been discussed within the Preliminary Ground Level Bat Roost Assessment of Trees, Report RT-MME-159786-02. This report should be referred to for further details.

Recommendations

- **Building B1:** The building on site was fully inspected and no bat roost was identified. This building had no potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If development works to the surveyed building have not commenced within this timeframe it will be essential to update the survey effort to establish if suitable features have developed and if bats have colonised the building in the interim. In the unlikely event that a bat is found during demolition works all works must immediately cease and a suitably qualified ecologist should be contacted.

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1. Introduction

1.1 Project Background

In February 2023, Horiba Mira Ltd commissioned Middlemarch to undertake a Preliminary Bat Roost Assessment at Horiba MIRA, Watling Street, Nuneaton in Warwickshire. This assessment is required to inform a planning application associated with a proposed building extension.

Middlemarch has also been commissioned to undertake an Ecological Walkover and a Preliminary Ground Level Assessment of Trees at this site. The findings of these surveys are detailed in Reports RT-MME-159786-01 and RT-MME-159786-02, respectively.

To fulfil the above brief to assess the potential for the existing building on site to support roosting bats, a Preliminary Bat Roost Assessment was undertaken on 15th March 2023.

All UK bat species are legally protected species, and they are capable of being material considerations in the planning process. A summary of the legislation protecting bats is included within Appendix 1.

1.2 Site Description and Context

Table 1.1 provides a brief summary of the site and its surroundings.

Attribute	Description
Site Location	Horiba MIRA, Watling Street, Nuneaton
National Grid Reference	SP 3620 9537
Site Area (ha)	0.2
Topography	Predominantly flat
Land Cover (on site)	The site was dominated by rough neutral grassland. The western extent of the survey area comprised arable farmland and an intact hedgerow formed the boundary between the arable and neutral grassland fields. The east of the survey area was dominated by a large building, which forms the subject of this assessment.
Land Cover (site surrounds)	The wider landscape is dominated by farmland with pockets of woodland and scattered waterbodies. The Horiba MIRA site extends to the west and north-west. The A5 runs to the south.

Table 1.1: Summary of Site and Surroundings

1.3 Previous Bat Surveys

Middlemarch have carried out ecological surveys at Horiba MIRA in association with a range of different projects previously undertaken on site. These surveys have included bat surveys, most recently carried out at land located to the north during 2021 and 2022. During these surveys, commuting and foraging behaviour by five species of bats was recorded comprising the following species: noctule *Nyctalus noctula*, Leisler's bat *Nyctalus leisleri*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, and brown long-eared bat *Plecotus auritus*. Day roosts of common pipistrelle, soprano pipistrelle and brown long-eared are also known to be present within the surrounding area.

2. Methods

2.1 Field Survey

A Preliminary Bat Roost Assessment of the building was carried out on site in line with the specifications detailed in Bat Mitigation Guidelines (English Nature, 2004)¹ and Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)². The assessment was conducted on 15th March 2023 by Marie Steggall (Principal Ecological Consultant and licensed bat worker under Classes 19 and 20). Weather conditions were recorded and are presented in Table 2.1.

Parameter	Condition
Temperature (°C)	8
Cloud (%)	60
Wind (Beaufort)	F1
Precipitation	Nil

Table 2.1: Weather Conditions During Field Survey

A visual assessment was conducted during daylight hours of the building to determine the presence of any Potential Roost Features (PRFs), together with a general appraisal of the suitability of the site for foraging and commuting bats. Please refer to Appendix 2 for a list of example PRFs. Any accessible PRFs were inspected using binoculars, a torch and endoscope for evidence of possible bat presence. The building was surveyed externally and internally.

For reasons of health and safety, the survey was only undertaken in areas accessible from 3.5 m ladders.

Based on the PRF's present, the survey area was assessed using the suitability classes detailed within Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2016)², as detailed in Table 2.2.

Suitability	Description
High	A structure 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.
Moderate	A structure 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 – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).

Table 2.2: Classification of Structures with Bat Potential (Adapted from Collins, 2016)² (continues)

¹ English Nature (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

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

Suitability	Description
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 numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Table 2.2 (cont.): Classification of Structures with Bat Potential (Adapted from Collins, 2016)²

2.2 Constraints

No significant constraints were encountered during the survey.

3. Survey Results

3.1 Building

Building B1

External Assessment

Building B1 comprised a large, steel-framed building, approximately 9 m tall and constructed from sheet metal with a plastic spray coating (Plate 3.1). The walls were double panelled with two skins of metal, and insulation material between the two. Due to the corrugated nature of the metal sheeting small gaps were present in some locations, however, these were blocked by foam inserts and did not lead into any suitable crevices or cavities. The roof was gabled with a low gradient and comprised metal panels all of which appeared tightly sealed. To the rear was a single-storey blockwork extension, the walls and roof of which also appeared tightly sealed with no suitable bat roosting features or ingress points.



Plate 3.1: External view - western elevation

Internal Assessment

Internally the building was open to the roof and no lofts or voids were present. The internal room is in frequent use and brightly illuminated. No suitable roosting features were present.



Plate 3.2: Internal space

Roosting Potential

Following assessment, the building was considered to possess negligible bat roosting potential.

3.2 Site and Surrounding Habitats

The habitats on site, namely the trees, ditch and scrub provide some, albeit rather limited, foraging habitat for bats due to the potential for artificial illumination spilling onto these features from the existing site boundary. However, the site is set more widely within farmland with scattered woodland, grassland, ponds and hedgerows which provide suitable opportunities for foraging and commuting in the wider landscape.

Habitats within 1 km of the site suitable for roosting, commuting and foraging include:

- Residential houses and associated gardens;
- Farmhouses and associated agricultural buildings;
- Standing waterbodies;
- Pockets of woodland;
- Agricultural fields with tree and hedge lined boundaries; and,
- Disused railway line with associated vegetated corridor.

4. Impact Assessment

4.1 Summary of Proposals

This survey was required ahead of a proposed building extension which will extend from the western elevation and northern corner of this structure.

4.2 Summary of Key Bat Features

No potential roosting features were identified within the building. No evidence of bats was observed on site during the assessment.

4.3 Potential Impacts on Bats

No impacts on roosting bats are anticipated due to the lack of potential roosting features observed within the building on site.

Potential impacts on foraging and commuting bats have been discussed within the Preliminary Ground Level Bat Roost Assessment of Trees, Report RT-MME-159786-02. This report should be referred to for further details.

5. Recommendations

All recommendations provided in this section are based on Middlemarch's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

- R1 Building B1:** The building on site was fully inspected and no bat roost was identified. This building had no potential for roosting bats. The survey data obtained for the site is valid for 12 months from the survey date. If development works to the surveyed building have not commenced within this timeframe it will be essential to update the survey effort to establish if suitable features have developed and if bats have colonised the building in the interim. In the unlikely event that a bat is found during demolition works all works must immediately cease and a suitably qualified ecologist should be contacted.

Appendix 1

Relevant Legislation

Bats and the places they use for shelter or protection (i.e. roosts) receive legal protection under the Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017) and the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations 2019 (Habitats Regulations 2019). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Changes have been made to parts of the Habitats Regulations 2017 so that they operate effectively from 1st January 2021. The changes are made by the Habitats Regulations 2019, which transfer functions from the European Commission to the appropriate authorities in England and Wales.

All other processes or terms in the 2017 Regulations remain unchanged and existing guidance is still relevant.

The obligations of a competent authority in the 2017 Regulations for the protection of species do not change. A competent authority is a public body, statutory undertaker, minister or department of government, or anyone holding public office.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, or *obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CROW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The reader should refer to the original legislation for the definitive interpretation.

The following bat species are Species of Principal Importance for Nature Conservation in England: barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule *Nyctalus noctula*, soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared bat *Plecotus auritus*, greater horseshoe bat *Rhinolophus ferrumequinum* and lesser horseshoe bat *Rhinolophus hipposideros*. Species of Principal Importance for Nature Conservation in England are material considerations in the planning process. The list of species is derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006.

Appendix 2

Examples of Potential Roost Features

External Features

- access through window panes, doors and walls;
- behind peeling paintwork or lifted rendering;
- behind hanging tiles;
- weatherboarding;
- eaves;
- soffit boxes;
- fascias;
- lead flashing;
- gaps under felt (even including those of flat roofs);
- under tiles/slates;
- existing bat and bird boxes; and
- any gaps in brickwork or stonework permitting access into access to cavity- or rubble-filled walls.

Internal Features

- behind wooden panelling;
- in lintels above doors and windows;
- behind window shutters and curtains;
- behind pictures, posters, furniture, peeling paintwork;
- peeling wallpaper, lifted plaster and boarded-up windows;
- inside cupboards and in chimneys accessible from fireplaces.
- within attic voids:
- the top of gable end or dividing walls;
- the top of chimney breasts;
- ridge and hip beams and other roof beams;
- mortise and tenon joints;
- all beams (free-hanging bats);
- the junction of roof timbers, especially where ridge and hip beams meet;
- behind purlins;
- between tiles and the roof lining; and
- under flat felt roofs.

Potential Roost Features (Adapted from Collins, 2016²)