



Baseline Bat Activity Assessment

Seacourt Tennis Club, Victoria Avenue, Hayling Island, PO11 9AJ

On behalf of Nick Atkins

July 2024

Quality Assurance

The methods and recommendations in this report are based on the following:

- Chartered Institute of Ecology and Environmental Management (CIEEM) (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2.
- CIEEM (2021) Good Practice Guidance for Habitats and Species.
- CIEEM (2017) Guidelines on Ecological Report Writing.
- CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition
- Bat Conservation Trust (BCT) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition

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1. Executive Summary

Site Details
- Seacourt Tennis Club, Victoria Avenue, Hayling Island, PO11 9AJ - Central grid reference: SZ 71728 98949
Scope of Works
Imprint Ecology was commissioned to undertake a Baseline Bat Activity Survey at a site which is required to inform a planning proposal for the installation of fencing and lights to form two padel tennis courts.
Key Ecological Constraints
Legal protection is afforded to particular habitats, species and designated sites. The legislation, and the habitats and species listed, vary between the different jurisdictions.
Results
- A data search revealed that there have been records of at least 10 bat species with a 4km by 4km square radius of the site in the last ten years. - Transect survey – 2 common pipistrelle passes recorded at survey position B. Very low bat activity recorded. No bats detected at position A. - Static survey - over 16 nights, static detector recorded: 20 common pipistrelle passes and 5 soprano pipistrelle passes. Activity assessed as very low, and bats not recorded every night.
Mitigation Measures
- Use of Maha Plus 1K2 Visor to reduce light spillage onto boundary vegetation. - Luminaires with 0° tilt, mounted at a maximum height of 6m, with no ultraviolet components or high blue spectral content. - Luminaire output will be dimmed to reduce the core padel court lighting from 300 lux to 200 lux between April – October. Floodlights switch off time of 21:00 between May – August. - Lighting for padel courts to enable individual court lighting. - Addition of natural screening with native UK trees and shrubs (hazel, hawthorn, holly, yew, hornbeam, crab apple, dog rose, field maple). New vegetation will take time to contribute to light attenuation.
Enhancement Recommendations
Enhancements for nesting birds on site, in line with local and national planning policies.

2. Introduction

2.1 Background and Proposed Development

Imprint Ecology Limited was commissioned to undertake baseline bat activity surveys at Seacourt Tennis Club, Victoria Avenue, Hayling Island, PO11 9AJ, Central grid reference: SZ 71728 98949, hereafter referred to as ‘the site’. The report has been requested to accompany a planning application for the installation of fencing and lights to form two padel tennis courts.

2.2 Experience of Ecologists

Report written by Emily Sabin, BSc (Hons), ACIEEM, MRSB, Natural England Level 2 Class Survey Licence holder for Bats (2024-12034). Emily is a committee member of Sussex Bat Group and a bat rescuer, and has five years’ experience as an ecological consultant. She is pending approval for her recent “Full” membership application to CIEEM. Emily is also the Water Vole Officer at the People’s Trust for Endangered Species and coordinates the National Water Vole Monitoring Programme.

2.3 Purpose of this Report

A daytime walkover assessment of the site was undertaken in August 2023 which identified that the proposed development has the potential to affect suitable foraging and commuting habitat for bats within the site. This report details the findings of the bat habitat surveys carried out to inform an assessment of the importance of habitats within the site for foraging and commuting bats. These surveys aim to observe:

- The assemblages of bat species using the site
- The relative frequency with which the site and wider survey area is used by different species
- The locations and distribution of activity for different species within the site and wider survey area
- The nature of activity for different bat species, i.e. foraging, commuting etc
- The results from the activity surveys detailed in this report will be used to inform any mitigation and or compensation requirements with regard to the proposed development works affecting habitats within the site

2.4 Site Description

The site is located in South Hayling. The impact zone proposed with new lighting, fencing and two padel tennis courts is located in the western zone of Seacourt Tennis Club. Habitats on site comprise modified grassland, sealed and unsealed surfaces, scattered small trees and ornamental shrubs. The surrounding suburban environ is typified by semi-rural residential houses and gardens, coastal habitats, lines of trees and sealed surfaces.

3. Planning Policy and Relevant Legislation

3.1 National Planning Policy

The National Planning Policy Framework (2021) outlines the government's responsibility to minimise adverse impacts on biodiversity and bestow biodiversity net gains where possible. Paragraph 179 of the NPPF states that “*To protect and enhance biodiversity and geodiversity, plans should:/... promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*”

The NPPF is also complemented by the Circular 06/2005: Biodiversity and Geographical Conservation – Statutory Obligations and Their Impacts Within The Planning System (Office of the Deputy Prime Minister, 2005). Paragraph 99 states that “*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.*”

3.2 Local Planning Policy

The site is within the Havant District. The relevant policies are the Core Strategy (2011) and Allocations Plan (2014), in particular: Policy CS11 Protecting and Enhancing the Special Environment and Heritage of Havant Borough; DM8 Conservation, Protection and Enhancement of Existing Natural Features; and DM10 Pollution (which includes light pollution).

3.3 Bats

British bats are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Additionally, all bat species are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 which defines European Protected Species (EPS). Bats and their habitats receive additional protection via the Countryside and Rights of Way (CROW) Act, 2000, under the Bonn Convention (Agreement of Bats in Europe), and in Appendix II and III of the Bern Convention. Seven British bat species are listed under Section 41 of the NERC Act 2006.

This combined legislation means that it is a criminal offence to:

- Deliberately kill, injure or capture a bat
- Deliberately disturb bats, including in particular any disturbance which is likely to impair their ability to survive, to reproduce or to rear or nurture their young, or their ability to

hibernate or migrate, or which is likely to affect significantly their local distribution or abundance

- Damage or destroy a breeding site or resting place of a bat
- Damage or destroy, or obstruct access to, any structure or place which any bat uses for shelter or protection
- Disturb bats while occupying a structure or place used for that purpose

A bat roost is a place or structure which a bat uses for shelter or protection. Bats are loyal to roosts, returning annually to the same place. Therefore, the legislation protects bat roosts regardless of whether or not bats are present at the time of survey or construction work.

If proposed development work is likely to destroy or disturb bats or a bat roost, Natural England would be consulted to obtain a European Protected Species Licence (EPSL). which would be subject to appropriate measures to safeguard bats. With suitable approved mitigation, exemptions can be granted from the protection afforded to bats under Regulation 39 by means of a EPSL.

The Natural Environment and Rural Communities Act (NERC Act) 2006, requires due consideration be given to biodiversity and its potential enhancement when considering proposed developments. The NERC Act defines a number of bat species as species of principal importance for consideration during planning.

4. Methods

4.1 Desk Study

A data search was requested from Hampshire County Council/Hampshire Bat Group for local bat records within a 4km by 4km square radius centred on the site. The data was interpreted to include records from within the last ten years.

4.2 Bat Activity Survey - Transect

The site was assessed as having low suitability for foraging and commuting bats by Imprint Ecology in 2023. A bat transect survey was undertaken following best practice guidance. This was undertaken by Emily Sabin, a Natural England Level 2 Class Licenced bat surveyor. Bats were identified using an Echometer Touch 2 Pro full spectrum recording bat detector. The entire site proposed with padel courts was surveyed, with static recording points of c.5 minutes during which all bat species and activity were recorded. Due to the small size of the site, only two transect positions were selected, called survey position A and B (see Appendix 1). Weather conditions were optimal, as follows in Table 1:

Table 1 – Transect survey weather conditions

Date	Sunset	Start	End	Start – Weather Conditions	End – Weather Conditions
24 th May 2024	20:59	20:29	22:59	15.2°C, BF.2, Okt.1	14.1°C, BF.1, Okt.1

4.3 Bat Activity Survey – Static

A Wildlife Acoustics Song Meter Mini Bat static detector with 128GB SanDisk memory card was deployed on 25th May 2024 until 8th June 2024. This static detector was positioned on a tree on the far western boundary of Seacourt Tennis Club. The detector was set to record all sounds above 16kHz from 30 minutes before sunset until 30 minutes after sunrise. Call analysis was undertaken using Kaleidoscope Pro. The number of passes (defined as at least one clearly defined call, within each 10 second recording) was counted and an average number of passes per hour calculated.

To ensure that bat activity and species were not missed and to allow for three nights of sub-optimal weather including rainfall during the static detector deployment period, a longer static survey was undertaken, differentiating from the standard guidance of five consecutive nights. This is line with best practice guidance to ensure that any rare or quiet bats could be more easily detected during the time frame in which the static detector was deployed.

4.4 Limitations and Constraints

Traditionally a full suite of bat activity surveys spans the entire bat active season April – October. However, proportionality has been applied in this case, and professional judgement has been applied based on the evidence gathered using the data collected from May-June 2024. Reducing the length of the survey period to establish an understanding of how bats use this site is not considered to pose a significant constraint to the assessment. The survey scope was designed in line with best practice guidance on activity surveys in low suitability habitats, as follows:

BCT 2023, Table 8.3, a) *“If the habitat has been classified as having low suitability for bats, particularly on small sites with relatively few features, an ecologist should make a professional judgement on how to proceed based on all of the evidence available. It may or may not be appropriate for bat activity surveys to be carried out in low suitability habitats.”*

5. Results

5.1 Desktop Study – Local Bat Survey Records

The Hampshire Bat Group data search returned records of at least ten bat species recorded within a 4km by 4km square radius centred on the site within the last ten years. Species recorded comprise:

- Brown long-eared (7 records)
- Common pipistrelle (148 records)
- Daubenton's (1 record)
- Leisler's noctule (1 record)
- Nathusius' pipistrelle (4 records)
- Natterer's (2 records)
- Noctule (4 records)
- Serotine (25 records)
- Soprano pipistrelle (101 records)
- Whiskered (1 record)
- Unspecified bat (2 records)
- Unspecified pipistrelle spp. (4 records)
- Unspecified long-eared spp. (3 records)
- Unspecified Myotis spp. (21 records)

5.2 Transect Survey

24th May 2024:

The bat activity transect survey recorded a total of 2no. common pipistrelle passes from survey position B (Appendix 1). This was considered to be a very low level of bat activity. One call was faint and the bat was not seen during the survey. One bat was seen was flying from the northern boundary towards gardens to the south. No bats were detected at position A.

5.3 Static Survey

The static bat detector recorded a total of 20no. common pipistrelle passes and 5no. soprano pipistrelle passes over the 16 nights that the static detector was deployed. The level of activity detected is assessed as being very low, and bats were not recorded on all nights. See Table 2 below. The static detector survey suggests that the site and surrounding habitats are used infrequently by individual passing bats travelling to and from their roosts. Only common pipistrelle and soprano

pipistrelle bats were detected during the static survey. These are considered not to be light-averse bat species, although will avoid brightly-lit areas (James D. Hale et al. 2015).

Table 2: Static Bat Detector Results

Date	Species	Total passes	Average passes per hour
25-May-24	Common pipistrelle	3	0.43
26-May-24			0.00
27-May-24	Common pipistrelle	1	0.14
	Soprano pipistrelle	2	0.43
28-May-24	Common pipistrelle	2	0.71
29-May-24			0.00
30-May-24			0.00
31-May-24	Common pipistrelle	5	0.71
01-Jun-24	Common pipistrelle	1	0.57
02-Jun-24			0.00
03-Jun-24	Common pipistrelle	3	0.86
04-Jun-24	Common pipistrelle	1	0.14
	Soprano pipistrelle	3	0.57
05-Jun-24			0.00
06-Jun-24			0.00
07-Jun-24	Common pipistrelle	3	0.43
08-Jun-24	Common pipistrelle	1	0.14
	Total	27	0.21

6. Mitigation

This section seeks to present all potential impacts of the proposed development on each relevant feature identified in the Results (section 5). This includes impacts associated with all phases of the proposed development including, but not limited to, construction, operation, restoration, de-commissioning, etc. Impacts are clearly set out and justified and mitigation measures that can be secured to avoid significant impacts are clearly stated.

6.1 Foraging and Commuting Bats

Potential impacts

There are no lux level thresholds available for individual species to negate the need for site specific advice. While not representative of the whole bat season, the bat activity surveys in May-June 2024 show that, in the absence of mitigation, the proposed floodlights could impact a very low number of common pipistrelle and soprano pipistrelle bats.

Common pipistrelles and soprano pipistrelles have been shown to opportunistically forage in well-lit urban areas, although high light levels will create a barrier to them (James D. Hale et al. 2015), so it is important that avoidance measures are put in place and light spillage is reduced to a minimum around the proposed padel courts.

During November to March the new floodlighting is expected to have a negligible impact on bats during their inactive/hibernation period.

Mitigation measures

- The addition of a visor on each floodlight will cut the impact of light spillage onto the boundary vegetation considerably. Specifically, the Maha Plus 1K2 Visor has been selected for this site based on its ability to reduce horizontal light spill and to direct the floodlights downwards (Figure 6.1).

Figure 6.1 – Maha Plus 1K2 Visor



- There will be a 0° tilt on the luminaires, which will be mounted on a column at a maximum height of 6m. The luminaires will not emit ultraviolet components or have a high blue spectral content.
- Between April – October, the luminaire output will be dimmed to reduce the core padel court lighting from 300 lux to 200 lux.
- A switch off time of 21:00 between May – September inclusive allows for a full night of darkness to continue until dawn during the summer months. There will be no overnight illumination of the floodlights.
- As recommended in the Lighting Technical Report (DFL, August 2023) the lighting for each individual padel court should enable users to light single courts as opposed to both courts at the same time if only one court is in use.
- Natural screening around the site will be added in the form of native UK trees and shrubs, such as: hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium*, English yew *Taxus baccata*, hornbeam *Carpinus betulus* crab apple *Malus sylvestris*, dog rose *Rosa canina*, field maple *Acer campestre*. It should be noted that newly planted vegetation is unlikely to adequately contribute to light attenuation for a number of years, until it is well established, and therefore will not be relied upon solely for light spill mitigation.

Significance of residual effects

The site is used infrequently by very low numbers of commuting common pipistrelle and soprano pipistrelle bats. Provided the mitigation measures are followed, the proposals are expected to have a minimal impact on bats.

7. Enhancements

In addition to mitigation, development proposals are expected to demonstrate an overall positive impact on the natural environment as set out in local and national planning policies.

The following ecological enhancements have been recommended to be included in this project's designs.

- During the static survey, a high number of garden birds including blue tit, house sparrow, blackbird, robin and wren were detected each day, therefore, enhancements for nesting birds have been provided.

Two bird boxes* will be installed on a tree or fence on site within the boundary vegetation around the proposed padel courts. These will face between northwest and northeast. See Figures 7.1 to 7.2 for suitable examples of bird nesting opportunities.

Figure 7.1 – [Vivara Pro External Bird Box](#)



Figure 7.2 – Open-fronted bird box suitable for wrens/robins can be installed within a hedge behind foliage



**WoodStone/Woodcrete boxes are recommended for external habitat/nesting boxes, rather than timber boxes. They safeguard against attacks from predators and the durable material insulates the box which creates a more consistent internal temperature.*

8. References

Bat Conservation Trust and Institute of Lighting Professionals (2018). Guidance Note 08/23 - *Bats and artificial lighting in the UK*. Available at <https://www.bats.org.uk/>

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Appendix 1: Bat Survey Results Plan

Seacourt Tennis Club: Bat Activity Survey Plan

