

Angmering Pavilion  
Angmering Sports Hub  
Decoy Drive  
Angmering  
Litthehampton  
BN16 4DN  
West Sussex

**Interim Bat Survey**  
**Preliminary Roost Assessment & Emergence Survey**  
Report ref.: R2769\_BS\_a

Report Quality Control Information	
Author	Jake Morgan (Qualifying member of CIEEM)
Reviewer	John Wenman MCIEEM

**November 2024**

 **JOHN WENMAN**  
ecological consultancy

1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL

John Wenman Ecological Consultancy LLP is a limited liability partnership registered in England and Wales with registered number OC399067.  
Registered office: 100 New Wokingham Road, Crowthorne, Berkshire RG45 6JP where you may look at a list of members' names.

## CONTENTS PAGE

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>2</b>	<b>INTRODUCTION .....</b>	<b>4</b>
2.1	Project Background.....	4
2.2	Site Location and Context.....	4
2.3	Report Objectives .....	4
<b>3</b>	<b>LEGISLATIVE AND POLICY BACKGROUND .....</b>	<b>5</b>
3.1	Relevant Legislation.....	5
3.2	Planning Policy .....	5
3.3	Mitigation Licensing .....	6
<b>4</b>	<b>SURVEY METHODOLOGY .....</b>	<b>7</b>
4.1	Desk Study .....	7
4.2	Building Inspection.....	7
4.3	Emergence Surveys.....	9
<b>5</b>	<b>SURVEY RESULTS .....</b>	<b>11</b>
5.1	Desk Study .....	11
5.2	Building Inspection.....	11
5.3	Emergence Survey .....	16
<b>6</b>	<b>DISCUSSION .....</b>	<b>19</b>
6.1	Assessment of Potential Roost Suitability.....	19
6.2	Assessment of Roost Potential/Status .....	20
<b>7</b>	<b>REFERENCES .....</b>	<b>21</b>
	<b>APPENDIX 1 – DARKEST POINT OF SURVEY FOR NIGHT VISION AIDS .....</b>	<b>22</b>
	<b>APPENDIX 2 – BAT EMERGENCE SURVEY RAW DATA TABLES .....</b>	<b>23</b>

## 1 EXECUTIVE SUMMARY

- 1.1.1 John Wenman Ecological Consultancy LLP was instructed by Mace to undertake a Bat Survey of the pavilion building at Palmer Road Recreation Ground in Angmering, West Sussex. The survey was commissioned to support an application for the creation of a Sports Hub on site, which will require the removal of the pavilion.
- 1.1.2 The Bat Survey comprised a Preliminary Roost Assessment (PRA) followed by a Bat Emergence Survey (BES). Both surveys were conducted on 17<sup>th</sup> September 2024 by John Wenman (registered under Natural England Class Licence CL182016-23859-CLS-CLS) and assistant ecologists: Jake Morgan (a qualifying member of CIEEM) and Sam Wenman. The survey found no evidence of roosting bats but identified potential external roosting features associated with the corrugated metal sheet roofing, ridge, end caps and gables clad with timber panels. The pavilion was assigned moderate potential suitability for bats.
- 1.1.3 In line with good practice guidance, two dusk emergence surveys have been recommended with the first carried out on the 17<sup>th</sup> September 2024. No bats were seen emerging from the building but common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) were recorded within their typical emergence period indicating that these species are likely roosting within the nearby area. This interim evidence indicates that it is unlikely that the pavilion supported roosting bats at the time of the survey or supports a roost of high conservation importance such as a maternity roost, but a second emergence survey completed between May and August 2025 is scheduled and in accordance with good practice guidelines (Collins 2023) is required to determine the absence of roosting bats.

## **2 INTRODUCTION**

### **2.1 Project Background**

**2.1.1** John Wenman Ecological Consultancy LLP was instructed by Mace to undertake a Bat Survey of the pavilion at the Palmer Road Recreation Ground in Angmering, West Sussex.

**2.1.2** The survey was commissioned to support an application for the creation of a Sports Hub replacing the existing recreation ground and pavilion building.

**2.1.3** The Bat Survey comprised a Preliminary Roost Assessment (PRA) and Bat Emergence Survey completed on the 17<sup>th</sup> July 2024. In line with good practice guidance (Collins 2023), two dusk emergence surveys have been recommended with the first carried out. The findings for the PRA and first emergence survey are detailed within this report.

### **2.2 Site Location and Context**

**2.2.1** The pavilion is located on Palmer Road Recreational Ground in Angmering, Littlehampton, West Sussex (OS grid ref.: TQ 06597 05097.)

**2.2.2** The pavilion is situated on a sports ground within a suburban area with houses and their gardens along Decoy Drive. Agricultural land is situated along the western boundary of the sports ground with parcels of mixed priority woodland defined under Section 41 of the NERC Act 2006 approximately 270 metres northeast and 370 metres north of the pavilion.

### **2.3 Report Objectives**

**2.3.1** The aim of the PRA is to ascertain if there is evidence of the presence of bats and/or potential for roosting bats to be present, and therefore whether further survey and/or mitigation would be required for the proposed maintenance and repair works.

**2.3.2** The aim of the BES is to determine the presence or likely absence of roosting bats and to characterise the bat roost(s) in cases where presence is confirmed. The BES findings inform an impact assessment and mitigation strategy for the proposed works and ascertain whether a European Protected Species (EPS) mitigation licence would be required to allow the works to proceed.

### **3 LEGISLATIVE AND POLICY BACKGROUND**

#### **3.1 Relevant Legislation**

**3.1.1** In England and Wales, all bat species found in the wild are fully protected under the Wildlife & Countryside Act 1981 (as amended) (WCA) and Conservation of Habitats and Species Regulations 2017 (as amended); the regulations are commonly referred to as the Habitat Regulations and hereafter referred to as such. The Habitat Regulations refer to European Protected Species (EPS) and all species of bats in the United Kingdom (UK) are EPS. Although the UK left the European Union on the 31<sup>st</sup> January 2020 and is therefore no longer tied to European legislation, the Habitat Regulations have been retained in their current format.

**3.1.2** The legal framework underpinned by the WCA and Habitat Regulations makes these specific actions an offence as follows:

- Deliberately kill, injure, capture or take a wild bat;
- Deliberately, intentionally or recklessly disturb bats; in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or to significantly affect local distribution or abundance;
- Damage or destroy a place used by a bat for breeding or resting; and
- Intentionally or recklessly obstruct access to any place used by a bat for shelter or protection.

#### **3.2 Planning Policy**

**3.2.1** The biodiversity duty imposed through the Environment Act 2021 states that Local Planning Authorities (LPAs) must consider what action they can take to conserve and enhance biodiversity in England. Government planning policy, such as the ODPM Circular 06/2005, requires LPAs to account for the conservation of protected species when considering and determining planning applications.

**3.2.2** The ODPM Circular 06/2005 states that ‘the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.’ This policy means that in instances where there is a reasonable likelihood of bats being present and affected by a development, surveys must be undertaken to inform a mitigation strategy to be agreed prior to granting planning permission.

### 3.3 Mitigation Licensing

**3.3.1** The government's statutory nature conservation body, Natural England, is responsible for issuing European Protected Species (EPS) mitigation licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. An EPS mitigation licence can be issued if the following three tests derived from Regulation 55 have been satisfied:

- (2)(e) – the derogation is for the purposes of *'preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.'*
- (9)(a) – there is *'no satisfactory alternative'* to the derogation; and
- (9)(b) – *'the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.'*

**3.3.2** LPAs have a statutory duty under Regulation 7(3)(e) of the Habitat Regulations to consider and determine whether these three tests are likely to be satisfied by planning proposals affecting EPS before granting planning permission. If an EPS mitigation licence is necessary, a licence can be sought once all the necessary planning consents have been granted. Natural England aims to issue a decision on licence applications within 30 working days of submission.

**3.3.3** The Bat Mitigation Class Licence (BMCL) scheme allows ecologists to apply to become Registered Consultants to use this licence for low conservation status roosts, i.e. roosts comprising small numbers of seven commonly occurring species. A site registration form must be completed as a condition of the licence and submitted to Natural England at least three weeks before the licensable activities are due to start; Natural England aims to register sites within two weeks of submission.

**3.3.4** Baseline survey information supporting EPS mitigation licence applications or BMCL site registrations must be up-to-date and have been completed within the current or most recent optimal season. A suitably experienced ecologist will be required to undertake a site walkover/check within three months prior to application/registration submission to confirm that conditions have not changed since the most recent survey.

## 4 SURVEY METHODOLOGY

### 4.1 Desk Study

4.1.1 A desk-based study for bats was undertaken to collate and review existing information about the site and the surrounding land. The study utilised the following open access resources:

- Google Earth – satellite imagery was used to identify potential flight paths and foraging habitats for bats;
- MAGIC – examined to locate granted European Protected Species licences; and
- Pre-existing bat survey reports – any available reports were obtained from the client or relevant planning portal to provide background information for the site.

### 4.2 Building Inspection

#### *Survey Details*

4.2.1 A daylight inspection of the pavilion was undertaken on the 17<sup>th</sup> September 2024 by John Wenman MCIEEM (registered under Natural England Class Licence CL18: 2016-23859-CLS-CLS) and assistant ecologists: Jake Morgan (a qualifying member of CIEEM) and Sam Wenman. The inspection was completed in accordance with good practice guidance (Collins 2023). The equipment used during the inspection comprised binoculars, a high-power (1 million candlepower) LED torch, a headtorch, ladder and PPE (facemask, gloves etc.). The inspection involved a systematic search of the exterior and interior of the building during daylight hours to compile information on potential and actual bat access points; potential and actual bat roost sites; and any evidence of bat presence.

#### *External Survey*

4.2.2 Frequently used bat access points and/or roost sites include (but are not limited to) spaces:

- behind hanging tiles, weatherboarding, soffit boxes and barge boards;
- under lead flashing (particularly around chimneys) and roof tiles/slates; and
- in existing bat boxes.

4.2.3 It is important to note that the two most abundant and widespread bat species, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*),

typically only require gaps measuring 15mm by 20mm to gain access to a roost inside a building.

**4.2.4** The external survey involved a systematic search for evidence of bats including:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining; and
- squeaking noises.

**4.2.5** It should be noted that bats can be present in a building while leaving no visible signs externally and wet weather has the potential to wash any evidence away. The search for evidence was focused on (but was not limited to) the ground, windowsills, windowpanes and walls (including cladding and hanging tiles); particularly in places near to potential bat access points and/or roost sites.

#### *Internal Survey*

**4.2.6** The internal survey comprised a systematic search for evidence of bats inside the roof spaces. Evidence of bats found during an internal inspection can include:

- live or dead specimens;
- droppings;
- urine marks;
- fur-oil staining;
- feeding remains (i.e. moth wings);
- squeaking noises;
- bat-fly (*Nycteribiid*) pupal cases; and
- odour.

**4.2.7** It should be noted that only specimens or droppings can be relied upon in isolation to confirm the presence of a bat roost.

**4.2.8** Frequently used roosting locations within the roof include (but are not limited to):

- the apex of the gable end or dividing walls;



- the top of chimney breasts;
- ridge and hip beams;
- mortise and tenon joints;
- behind purlins; and
- between tiles and roof lining.

#### *Survey Limitations and Validity*

**4.2.9** There were no significant survey limitations because PRAs can be carried out at any time of year under any weather conditions and the building was fully accessible.

**4.2.10** It should be noted that it is not always possible to inspect all potential roost sites during a survey, particularly for bat species, which typically roost in hidden crevices. Therefore, an absence of bat evidence found during a survey does not necessarily equate to evidence of bat absence in a building.

### **4.3 Emergence Surveys**

#### *Survey Details*

**4.3.1** In accordance with good practice guidance (Collins 2023), two dusk emergence surveys have been recommended for the pavilion – assessed as being of moderate condition during the PRA - with the first (**please note a second emergence survey is scheduled for May – August 2025**) carried out on the 17<sup>th</sup> September 2024 by three experienced bat surveyors (each with at least three seasons of bat emergence survey experience): John Wenman BSc (Hons), MSc, MCIEEM (registered under CL18: 2016-23859-CLS-CLS); Jake Morgan BSc (Hons) – a qualifying member of CIEEM; and Sam Wenman BSc (Hons) – an assistant ecologist– refer to the Survey Locations on the emergence survey plan in **Section 5.3**.

**4.3.2** The equipment used during the survey included full-spectrum sampling bat detectors (Elekon Batlogger M/M2) and infrared night vision aids i.e. Nightfox Whisker binoculars and Sionyx Aurora Cameras with Sionyx infrared torches. A still shot of the darkest point of the survey has been included for all night vision aids in **Appendix 1**.

**4.3.3** The emergence survey started 15 minutes before sunset and continued for 1 hour and 30 minutes after sunset. The bat call recordings were processed and analysed using the BatExplorer computer software package, and the night vision video footage was

reviewed in VLC media player.

*Survey Limitations and Validity*

- 4.3.4** There were no significant constraints to the Bat Emergence survey, which was undertaken in conditions suitable for bat activity i.e. dry and calm with air temperatures 10°C or above at sunset during the survey season i.e. May to September, (Collins 2023). **It should be noted that this survey presents interim survey findings only; a second emergence survey completed between May and August 2025 is scheduled to provide a complete assessment of the presence or likely absence of roosting bats in accordance with good practice survey guidelines (Collins 2023).**
- 4.3.5** This report contains information regarding a mobile species so it will likely be valid for 12 months only (CIEEM 2019).

## 5 SURVEY RESULTS

### 5.1 Desk Study

5.1.1 The linked private gardens with mature scattered trees and hedgerows in the suburban area to the south as well as the hedgerows and treelines that surrounded the recreational ground could be used as flight paths connecting to high-quality foraging habitats such as the mixed priority woodland to the northeast and north.

5.1.2 Bat mitigation licences that have been granted inside a 2-kilometre radius of the property are detailed in **Table 1** below.

*Table 1. Bat mitigation licences granted within a 2km radius of the property (Source: MAGIC).*

Case Reference of Granted Licence	Species on the Licence	Licensable Period	Licensable Works	Distance (m)
2019-43864-EPS-MIT-2	Common pipistrelle	21/04/2020 – 31/08/2025	Destruction of a breeding site	1510 SE

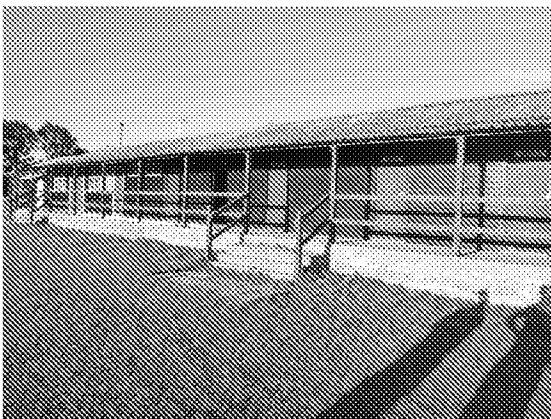
### 5.2 Building Inspection

#### *Overview*

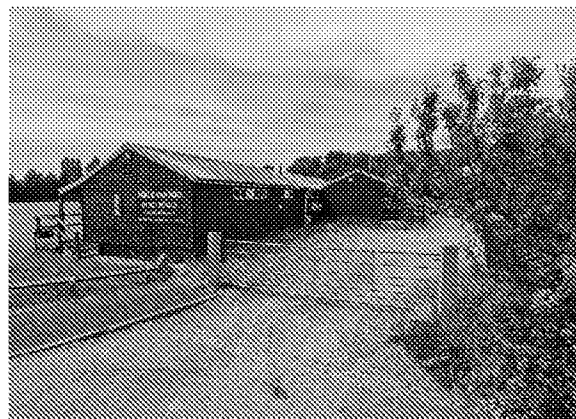
5.2.1 The survey findings from the external and internal inspections carried out for the building are described with photographs and are annotated in a plan, as follows:

#### *External Survey*

5.2.2 The pavilion is a simple, detached, single-storey building with a pitched roof (**Photographs 1 & 2**).



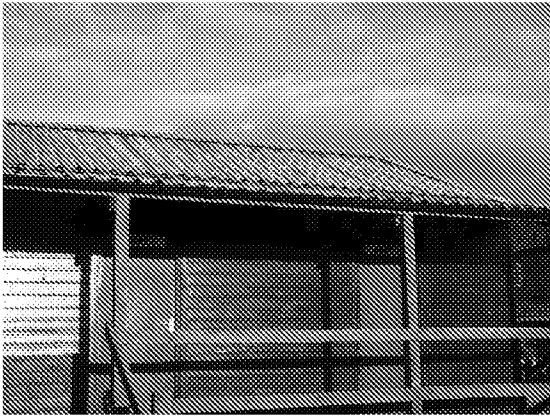
*Photograph 1. Front elevation viewed from the southwest.*



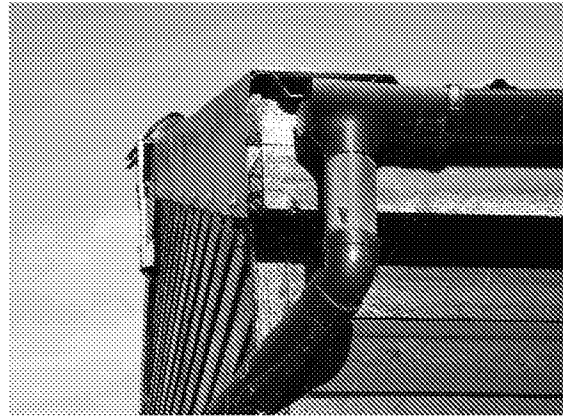
*Photograph 2. Rear elevation viewed from the southeast.*

5.2.3 The roof was formed of corrugated metal sheets that had frequent gaps beneath the metal ridge cap, leading directly within the voids of the building (**Photograph 3; Target note 1**). In addition, slight gaps were situated behind the end cap along the

northwestern timber gable (**Photograph 4; Target note 2**).

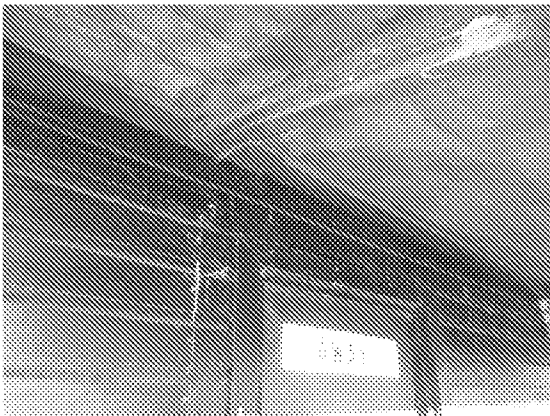


*Photograph 3. Gaps between corrugated sheets and ridge (front elevation).*

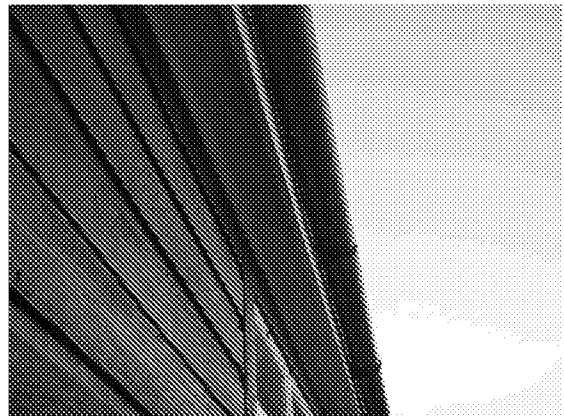


*Photograph 4. Gaps behind the metallic end caps (north elevation).*

**5.2.4** The timber soffit along the front elevation, in addition to the painted timber soffit along the rear, was sealed to the walls of the pavilion (**Photographs 5 & 6**). Whilst the timber bargeboard under the metal cap was sealed to the eastern timber clad gable, slight gaps were situated between the grooves of the timber cladding and bargeboard on the northeastern gable, however, the gaps were heavily cobwebbed with no signs of recent use by bats (**Photographs 7 & 8; Target note 3**).



*Photograph 5. Timber soffit sealed to wall (front elevation).*



*Photograph 6. Painted timber soffit sealed to wall (rear elevation).*



*Photograph 7. Timber bargeboard under metal cap sealed to the gable (south elevation).*



*Photograph 8. Cobwebbed gaps between grooves of timber cladding and bargeboard (north elevation).*

- 5.2.5** The timber clad walls were sealed on all elevations of the pavilion and a large vent with directly internal access to the void was situated on the southern gable (**Photographs 9 & 10; Target note 4**).



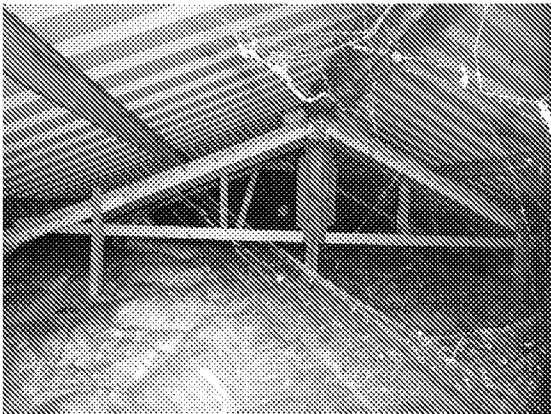
*Photograph 9. Timber cladding walls fully sealed (rear elevation).*



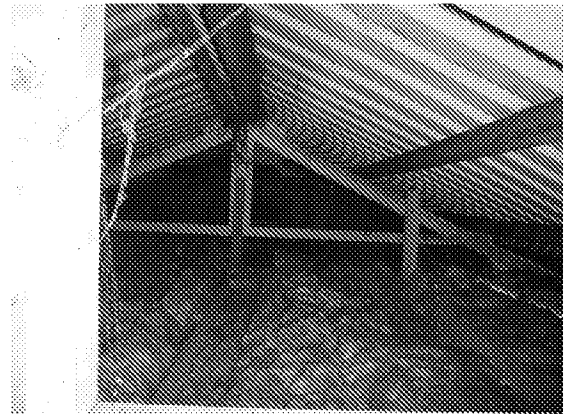
*Photograph 10. Large vent within southern gable (south elevation).*

#### *Internal Survey*

- 5.2.6** The pavilion had two roof voids that covered its footprint. Both voids were of simple construction, accessible via loft hatches, had approximate floor-to-ridge heights of 0.5 metres and were heavily cobwebbed throughout (**Photographs 11 & 12**).



*Photograph 11. Roof void 1 heavily cobwebbed throughout.*

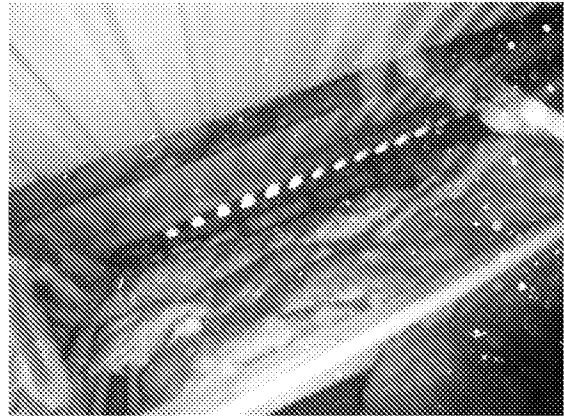


*Photograph 12. Roof Void 2 heavily cobwebbed throughout.*

- 5.2.7** The voids were both unlined with exposed ridges and the corrugated metal sheeting accessible (**Photograph 13; Target note 5**). The floors were covered by fibreglass insulation that did not fill the eaves, allowing access to gaps situated within the grooves of the corrugated roof where daylight was visible (**Photograph 14; Target note 6**).

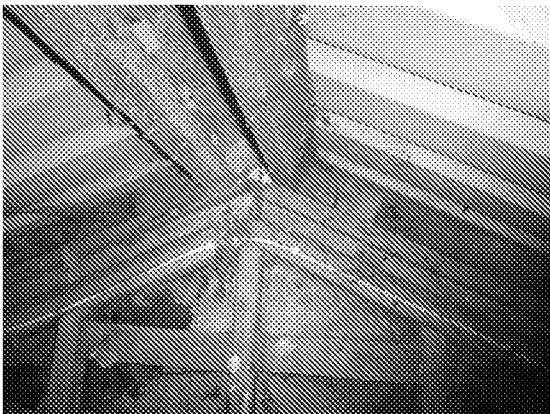


*Photograph 13. Unlined roof with exposed ridge (Roof Void 1).*



*Photograph 14. Daylight visible within grooves of corrugated metal roof (Roof void 2).*

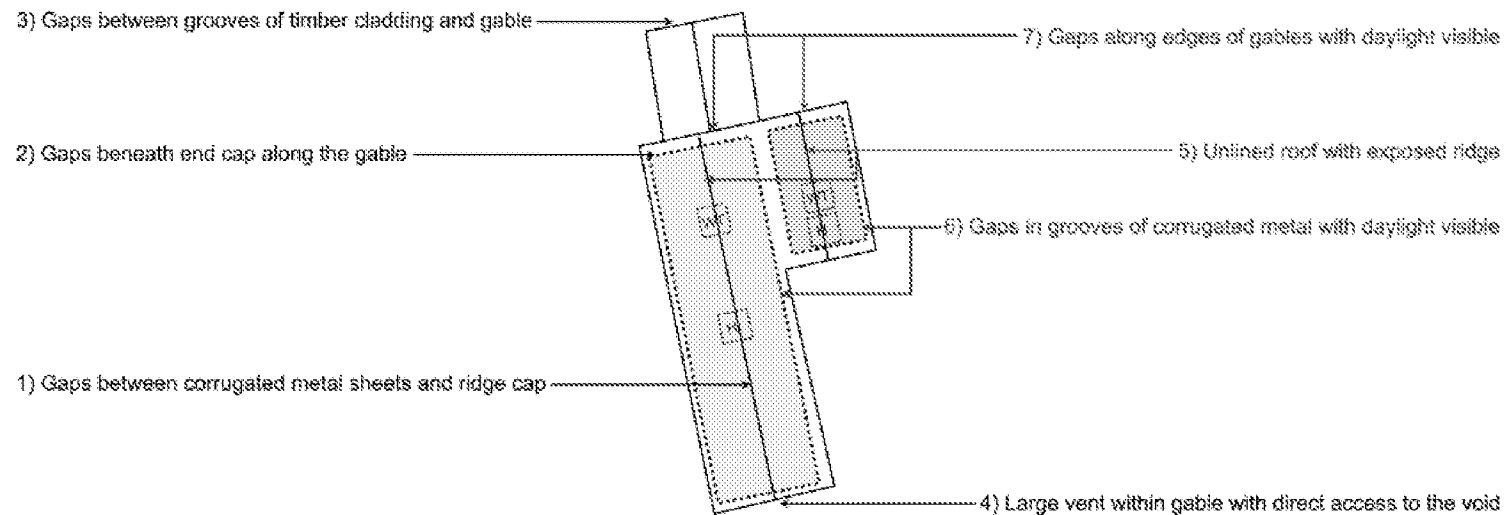
**5.2.8** All gables were lined by timber sarking boards which had slight gaps along their edges where daylight was visible (**Photograph 15; Target note 7**). Mouse droppings were scattered throughout both voids (**Photograph 16**).



*Photograph 15. Gaps along edges of timber sarking gables (Roof void 2).*



*Photograph 16. Mouse droppings scattered throughout the voids (Roof Void 2).*



Drawn by:	Date:	Scale:	Angmering Pavilion, Angmering	
JW / JM	November 2024	Not to scale	Preliminary Roost Assessment Plan	

Figure 1. Preliminary Roost Assessment findings plan.

### 5.3 Emergence Survey

- 5.3.1 The bat emergence survey findings are described, summarised in **Tables 2-3** and illustrated in **Figure 2** below; the raw detector data is supplied in **Appendix 2**.

17<sup>th</sup> September 2024

- 5.3.2 No bats were seen or recorded emerging from the property throughout the survey.

Table 2. Weather conditions and survey timings

Weather	Wind (BF0-12)	Cloud cover (oktas)	Rain	Temperature (°C)	
	1 - 2	1	Dry	Start	Finish
Start	18:56	Sunset	19:11	Finish	20:41

Table 3a. Surveyor recordings at location 1(JW)

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
<i>Pipistrellus pipistrellus</i>	8	0	19:44 (33 mins)
<i>Pipistrellus pygmaeus</i>	1	0	19:44 (33 mins)
<i>Nyctalus noctula</i>	2	0	19:22 (11 mins)

Table 3b. Surveyor recordings at location 2 (JM)

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
<i>Pipistrellus pipistrellus</i>	7	0	19:43 (32 mins)
<i>Nyctalus noctula</i>	3	0	19:26 (15 mins)

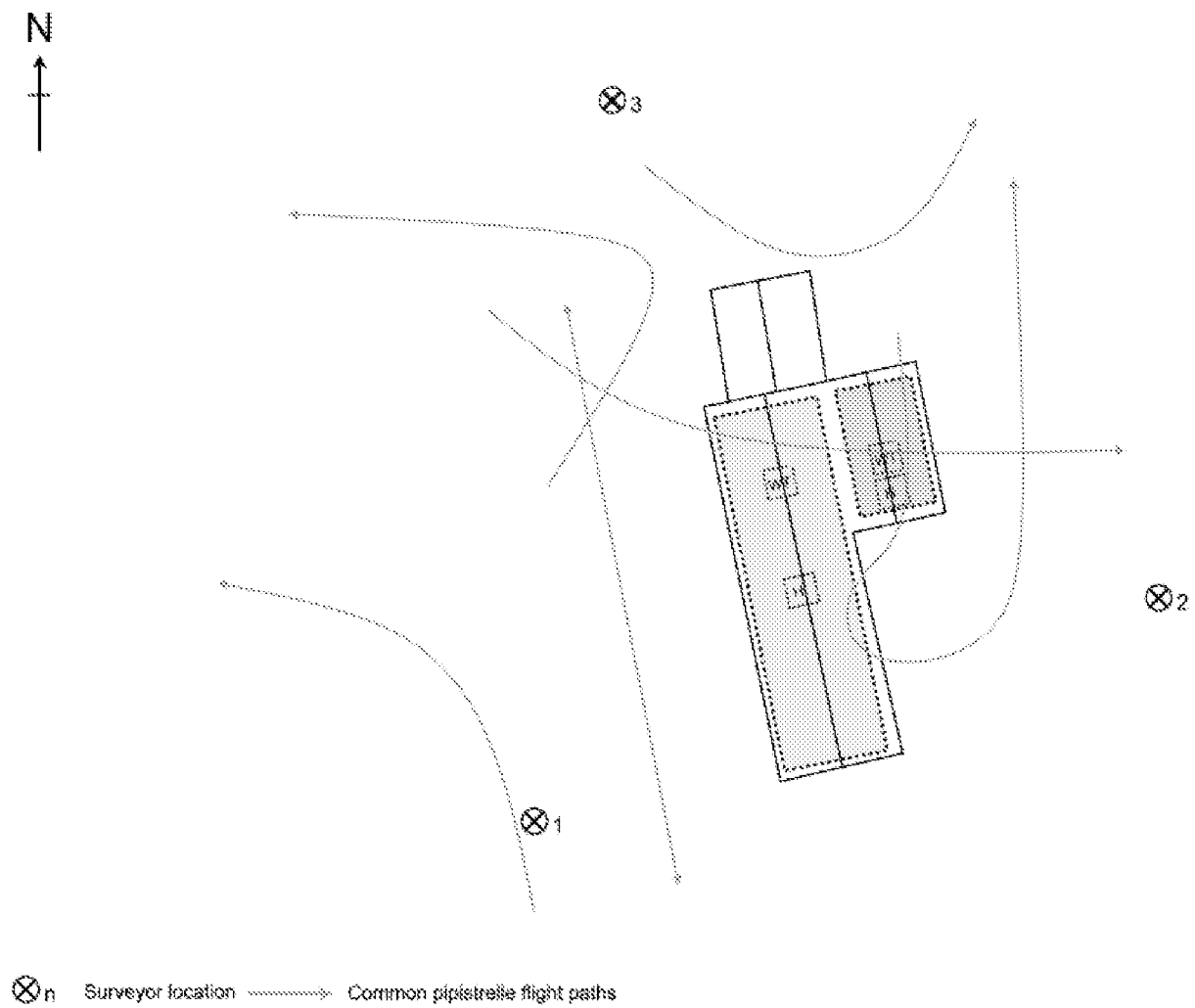
Table 3c. Surveyor recordings at location 3 (SW)

Species	Recordings*	Emergences†	Time of first call (minutes after sunset)
<i>Pipistrellus pipistrellus</i>	7	0	19:43 (32 mins)
<i>Nyctalus noctula</i>	1	0	20:12 (61 mins)

- 5.3.3 The first bat recorded during the survey was a noctule (*Nyctalus noctula*) that was heard by the surveyor at Survey Location 1 at 19:26 (15 minutes after sunset). This falls within the typical emergence period for this species indicating that it is likely roosting within the local area. In addition, common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*) were recorded at 19:43 (32 minutes after sunset) and 19:44 (33 minutes after sunset) respectively with the *P. pipistrellus* seen by all surveyors passing along the western elevation of the pavilion and then over its roof from west to east. These recordings fall within the upper quartile of the typical emergence period for these species, indicating they are also likely roosting within the local area.
- 5.3.4 Activity was low throughout the survey period and primarily comprised *P. pipistrellus* foraging passes over the pavilion, along its northern, western and eastern elevations



and over the nearby sports ground. Artificial lighting illuminated all elevations of the pavilion.



Drawn by:	Date:	Scale:	Angmering Pavilion, Angmering	JOHN WENMAN ecological consultancy
JW / JM	November 2024	Not to scale	Preliminary Roost Assessment Plan	

Figure 2. Emergence Survey Findings.

## 6 DISCUSSION

### 6.1 Assessment of Potential Roost Suitability

6.1.1 The suburban and agricultural areas surrounding the pavilion and sports ground contain hedgerows, scattered trees and tree lines that provide continuous habitat able to be used as a flight-path connecting to high-quality foraging habitats for any bat(s) roosting in the property such as the nearby parcels of mixed priority woodland to the northeast and north. Furthermore, the search of granted bat mitigation licences identified a common pipistrelle (*Pipistrellus pipistrellus*) breeding roost at a residential site approximately 1510 metres to the southeast.

6.1.1 The pavilion had the following suitable/potential bat access points and roost features:

- Gaps between the corrugated metal sheets and metal ridge (**Photograph 3; Target note 1**);
- Gaps behind the end cap along the northwest timber gable (**Photograph 4; Target note 2**);
- Gaps between the grooves of the timber cladding and bargeboard on the northeast gable (**Photograph 8; Target note 3**);
- A large vent within the south gable (**Photograph 10; Target note 4**);
- Gaps at the ends of the corrugated metal sheet roof (**Photograph 14; Target note 6**); and
- Gaps along the edges of the timber sarking gables (**Photograph 15; Target note 7**).

6.1.2 Whilst the features associated with the corrugated metal roof, ridge and timber gables directly lead inside the roof void, which had sufficient space for internal flight and suitable conditions for supporting void-dwelling bats such as the locally recorded brown long-eared bat (*Plecotus auritus*), no bat droppings were observed and so the presence of void-dwelling bats is considered unlikely.

6.1.3 With that said, the features associated with the gable and end caps offer potential crevice roost sites for small numbers of crevice-dwelling bats such as the locally recorded common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle (*Pipistrellus pygmaeus*). Evidence of crevice roosting species is typically hidden from view in areas such as gaps between tiles and internal linings/insulation.

- 6.1.4** Considering the nature of the potential roost features i.e. suitable for individual or small numbers of bats and unlikely to support roosts of high conservation importance e.g. a maternity roost, and the building's setting with nearby tree lines and woodland, the building is considered to be of moderate potential suitability for bats (see **Appendix 1** for potential suitability categories).

## **6.2 Assessment of Roost Potential/Status**

- 6.2.1** During the emergence surveys, whilst common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and noctule (*Nyctalus noctula*) bats were recorded within their typical emergence period and likely to be roosting nearby, no bats were observed emerging from the pavilion. The interim emergence survey findings, combined with the Preliminary Roost Assessment, demonstrates that it unlikely that the pavilion supported roosting bats at the time of the survey.
- 6.2.2** With *P. pipistrellus* and *P. pygmaeus* recorded during their typical emergence period, and the presence of a *P. pipistrellus* maternity roost at a residential site approximately 1510 metres southeast, it is likely that these species are roosting within the nearby area surrounding the sports ground and may utilise roosting features within the pavilion at other times of year. In accordance with good practice guidance (Collins 2023), a second emergence survey completed between May and August is required to determine if roosting bats are likely to be present or absent (**please note a survey is scheduled for 2025**).
- 6.2.3** Common pipistrelle (*P. pygmaeus pipistrellus*) and Soprano pipistrelle (*P. pygmaeus*) are two of the most abundant and widespread bat species in Great Britain. These species occurs in almost any habitat type and is well adapted to the built environments; they are one of the species most regularly reported roosting in houses and churches (Mathews et al. 2018).

## 7 REFERENCES

CIEEM (2019). *Advice Note on the Lifespan of Ecological Reports and Surveys*. CIEEM, Winchester.

Collins, J (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4<sup>th</sup> edition)*. The Bat Conservation Trust, London.

Mathews F., Kubasiewicz L.M., Gurnell J., Harrower C.A., McDonald R.A., Shore R.F. (2018). *A Review of the Population and Conservation Status of British Mammals*. A report by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough.

Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3<sup>rd</sup> edition)*. JNCC, Peterborough.

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. CIEEM, Ampfield.

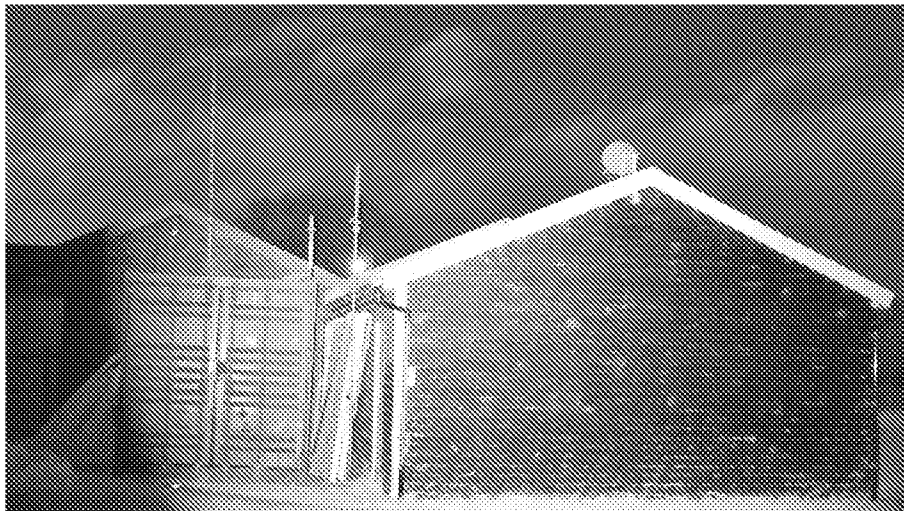
## APPENDIX 1 – DARKEST POINT OF SURVEY FOR NIGHT VISION AIDS



*Nightfox Whisker – Survey Location 1 (17/09/24)*



*Sionyx Aurora Pro – Survey Location 2 (17/09/24)*



*Sionyx Aurora Pro – Survey Location 3 (17/09/24)*

Pavilion at Angmering Sports Hub - Interim Bat Survey (R2769\_BS\_a)

## APPENDIX 2 – BAT EMERGENCE SURVEY RAW DATA TABLES

### 17<sup>th</sup> September 2024 – JW at Location 1 (Batlogger M2)

Time	Species	Number of Calls [#]
19:22	<i>Nyctalus noctula</i>	3
19:44	<i>Pipistrellus pipistrellus</i>	14
19:44	<i>Pipistrellus pygmaeus</i>	12
19:49	<i>Pipistrellus pipistrellus</i>	12
19:49	<i>Pipistrellus pipistrellus</i>	17
19:49	<i>Pipistrellus pipistrellus</i>	9
19:49	<i>Pipistrellus pipistrellus</i>	6
19:52	<i>Pipistrellus pipistrellus</i>	17
19:52	<i>Pipistrellus pipistrellus</i>	11
19:52	<i>Pipistrellus pipistrellus</i>	3
20:04	<i>Nyctalus noctula</i>	2

### 17<sup>th</sup> September 2024 – JM at Location 2 (Batlogger M)

Time	Species	Number of Calls [#]
19:26	<i>Nyctalus noctula</i>	5
19:26	<i>Nyctalus noctula</i>	2
19:43	<i>Pipistrellus pipistrellus</i>	7
19:43	<i>Pipistrellus pipistrellus</i>	6
19:43	<i>Pipistrellus pipistrellus</i>	8
19:43	<i>Pipistrellus pipistrellus</i>	19
19:43	<i>Pipistrellus pipistrellus</i>	3
19:43	<i>Pipistrellus pipistrellus</i>	22
19:49	<i>Pipistrellus pipistrellus</i>	3
20:04	<i>Nyctalus noctula</i>	2

### 17<sup>th</sup> September 2024 – SW at Location 3 (Batlogger M)

Time	Species	Number of Calls[#]
19:43	<i>Pipistrellus pipistrellus</i>	1
19:43	<i>Pipistrellus pipistrellus</i>	29
19:44	<i>Pipistrellus pipistrellus</i>	14
19:44	<i>Pipistrellus pipistrellus</i>	12
19:48	<i>Pipistrellus pipistrellus</i>	3
19:48	<i>Pipistrellus pipistrellus</i>	23
19:52	<i>Pipistrellus pipistrellus</i>	3
20:12	<i>Nyctalus noctula</i>	1