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Sunte House, Birchen Lane, Haywards Heath, West Sussex

**Great Crested Newt eDNA Survey &
Bat Survey for Building Group 1**

November 2024

Sunte House, Birchen Lane, Haywards Heath, West Sussex

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Abbreviations

BCT	Bat Conservation Trust
BMCL	Bat Mitigation Class Licence
CHS	Conservation of Habitats and Species Regulations 2017 (as amended)
ECow	Ecological Clerk of Works
EPSE	European Protected Species
EPSML	European Protected Species Mitigation Licences
GCN	Great Crested Newt
NERC	Natural Environment and Rural Communities Act 2006
NPPF	National Planning Policy Framework
PCR	Polymerase Chain Reaction
PEA	Preliminary Ecological Appraisal
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
SAC	Special Area for Conservation
SSSI	Site of Special Scientific Interest
SxBRC	Sussex Biological Records Centre
WCA	Wildlife and Countryside Act 1981 (as amended)

0 Executive Summary

0.1 Introduction

0.1.1 Surveys for great crested newt and bats were carried out for the site of a proposed renovation project at Sunte House, Birchen Lane, Haywards Heath, West Sussex. The surveys were undertaken to establish the presence or likely absence of great crested newts and roosting bats within the survey area, to identify and evaluate potential impacts of the development, and make recommendations accordingly.

0.2 Results

0.2.1 Two ponds (P1 and P2) identified within 250m of the survey area boundary were subject to eDNA sampling for great crested newts. Both P1 and P2 tested negative for great crested newt.

0.2.2 An internal and external building inspection was initially carried out as part of a Preliminary Ecological Appraisal of the site in April 2024. The Preliminary Roost Assessment concluded that the Main House (B1) had high suitability for roosting bats and the Dairy (B2) and Log Shed (B3) had moderate suitability. Dusk emergence surveys were undertaken between June and September 2024 by a seven-person team. One bat roost for common pipistrelle was recorded within building B1 during the surveys, together with a roost for an unconfirmed species of bat which was not echolocating.

0.2.3 Across the three surveys, generally moderate to high levels of foraging and commuting activity were recorded in the grounds around the building. The species assemblage included serotine, *Myotis spp*, noctule, Leisler's, common pipistrelle, soprano pipistrelle, and brown long-eared bats.

0.2.4 A summary of roosting bats recorded on site is presented in Table 0.1.

Table 0.1: Summary of roosting bats

Roost	Aspect	Species	Indiv.*	Freq.**	Max.***	Status
1	B1 – western elevation (eaves)	Unconfirmed species	1	1	1	Day roost, occasional
2	B1 – western elevation (ridge)	Common pipistrelle	1	1	1	Day roost, occasional

* Individuals: Number of bats recorded using the roost over three surveys

** Frequency: Number of surveys during which use of the roost was recorded

*** Max.: Maximum count per survey

0.3 Evaluation

- 0.3.1 It is considered likely that great crested newt are absent from the survey area. This is due to the negative result for great crested newt eDNA in ponds located within 250m of the survey area, and the distance and isolation of the survey area from ponds located more than 250m away. The survey area is considered to be of Negligible Importance for great crested newt.
- 0.3.2 Both roosts in the Main House (B1) are considered to be of Site Importance for roosting bats. Proposed renovations of the Main House will include renovations to the top floor (roof level) that will divide its current open plan layout into separate bedrooms. The plans include the installation of 3no. new skylights that will improve light and ventilation. In the absence of mitigation, the Proposed Development may result in destruction of a bat roost and present a risk of killing, injury or disturbance for individual bats if present during the works, which would constitute an offence under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017 (as amended).
- 0.3.3 The survey results provide a good level of confidence that roosting bats were absent from the Dairy (B2) or Log Shed (B3) during the 2024 breeding season, and these buildings are considered to be of Negligible Importance for roosting bats.

0.4 Recommendations

- 0.4.1 To protect common amphibians, any work to P1 or P2, including draining, removing, filling and / reprofiling will be carried out under the supervision of a suitably qualified ecologist, and outside of the amphibian breeding season (broadly March to July).
- 0.4.2 A low impact Bat Mitigation Class Licence will need to be obtained from Natural England prior to commencing the works, and once planning permission is granted. A mitigation Method Statement will form part of the licence application and will specify precautionary working methods, mitigation and compensation of lost habitats, based on the recommendations outlined in Section 5 of this report. A named Ecological Clerk of Works will be appointed to oversee operations which will take place between April and October.
- 0.4.3 Alternatively, a Non-licenced Method Statement may be adequate if the roosts can be fully retained and the works can be scheduled to take place during March/April or September/October

0.5 Conclusion

- 0.5.1 The Proposed Development is unlikely to result in negative impacts to great crested newt. In the absence of mitigation, the Proposed Development will result in negative impacts to roosting bats. However, mitigation measures are recommended to prevent an offence under the relevant legislation from occurring, and to avoid / reduce the risk of development proposals resulting in significant effects on the populations of species recorded.

1 Introduction

1.1 Background

- 1.1.1 A Preliminary Ecological Appraisal (PEA) including a Preliminary Roost Assessment (PRA) was carried out on 9 April 2024 for the site of a proposed renovation project at Sunte House, Birchen Lane, Haywards Heath, West Sussex (Grid Reference: TQ 33387 25562). The PRA concluded that the Main House (B1) had high suitability for roosting bats, and that the Dairy (B2) and Log Shed (B3) had moderate suitability. As such it was recommended that further bat surveys should be carried out. The additional buildings within the survey area (B4-B9) were surveyed as part of a separate application.
- 1.1.2 The PEA also recommended that environmental DNA (eDNA) surveys for great crested newt (GCN) should be carried out, based on the presence of two ponds (P1 and P2) within the survey area, as well as suitable terrestrial habitat.

1.2 Objectives and Approach of the Study

- 1.2.1 The study was commissioned to fulfil the following objectives:
- ▶ To determine the presence or likely absence of bats using potential roosts and GCN within nearby ponds which may be affected by works on the survey area;
 - ▶ To establish the baseline assemblage and relative abundance of bat species using the survey area;
 - ▶ To identify and evaluate the types of roost present and assess the potential impacts of the Proposed Development on bats and GCN;
 - ▶ To provide sufficient data to inform a mitigation licence application for bats and great crested newt, if required; and
 - ▶ To outline the measures required for avoiding and mitigating negative impacts, including compensation of habitat losses if necessary, and make recommendations for ecological enhancement.
- 1.2.2 To meet these objectives the survey approach involved:
- ▶ A desk study involving a review of bat records from the local area (2km radius from the centre of the Proposed Development site) and designated site citations;
 - ▶ Dusk emergence surveys of potential bat roost features likely to be affected by the Proposed Development, based on current industry guidelines (Collins (ed.), 2023), and
 - ▶ Collection of water samples for eDNA analysis for GCN, based on current industry guidelines (Biggs *et al.*, 2014).

1.3 Survey Area

- 1.3.1 The Application Site boundary is smaller than survey area boundary defined in the PEA and comprises the Main House (B1), Dairy (B2) and Log Shed (B3) along with the surrounding habitats. The survey area boundary and impacted buildings are defined at Figure 1.1
- 1.3.2 The survey area lies to the north of the town of Hayward Heath in the Mid Sussex District of West Sussex. The survey area comprises c.2.96ha of previously developed land, currently dominated by a large Grade II listed property with numerous outbuildings and substantial grounds that include a grassland field, lawns, woodland, hedgerows and ornamental planting. The survey area is bound to the north and east by residential properties, to the south by grassland fields and to the west by a strip of mature woodland.
- 1.3.3 The wider landscape is characterised by extensive urban development to the east south and west with open countryside and large woodland blocks to the north. Four ponds lie within 500m of the survey area, which includes two within the survey area.

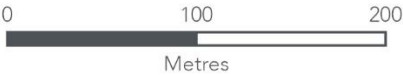
1.4 Proposed Construction Activities

- 1.4.1 The scope of proposed works is still being developed but is expected to include an extension to the Main House (B1) that would join to The Dairy (B2) and Log Shed (B3) along with renovation of the top floor (roof level) to create individual bedrooms and install additional skylights. Additional works within the survey area include the construction of a new pool house, works to the pond and some relandscaping of the grounds. A drawing of the proposed works is provided at Figure 1.2

Sunte House, Haywards Heath, West Sussex

-  Survey area
-  Surveyed buildings

Figure 1.1: Survey area



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Ordnance Survey 0100031673

Scale (at A4): 1:4,000 Created by: MT
Date: Oct 2024 Reviewed by: NP
Drawing number:
UE0664ECOARB-SunteHouse:Site location





Figure 1.2: Proposed works concept (B1, B2 and B3) eastern elevation

2 Survey Methodology

2.1 Great Crested Newt

eDNA survey

- 2.1.1 The objective of the survey was to establish the presence or likely absence of GCN from potentially suitable breeding ponds. The PEA (UEEC, 2024) recommended that ponds P1 and P2 within the survey area boundary were surveyed. Ponds outside of the ownership boundary were not considered necessary to survey, as they were all in excess of 250m from the survey area boundary. See Appendix I for pond locations.
- 2.1.2 The eDNA water sampling followed the methodology set out in Natural England's '*Technical advice note for field and laboratory sampling of GCN environmental DNA*' (Biggs et al., 2014), which is provided as an appendix of the research report published by Defra into environmental DNA testing for GCN. This is the only methodology currently accepted by Natural England for this technique.
- 2.1.3 A single visit to each pond was made on 13 May 2024. At the time of the survey, the following information was collected for the pond:
- ▶ Site name;
 - ▶ Nearest settlement;
 - ▶ County;
 - ▶ Time between receipt of sampling kit and date of sampling;
 - ▶ Date of sampling;
 - ▶ Personnel collecting sample;
 - ▶ Ordnance Survey grid reference (12 figures);
 - ▶ Percentage of pond perimeter that is accessible for survey;
 - ▶ Data on inflows, and whether these were wet or dry at the time of survey;
 - ▶ Data on presence and number of GCNs recorded during the survey (if any); and
 - ▶ Information on any difficulties experienced during sample collection.
- 2.1.4 The following methodology for the sampling procedure for eDNA analysis was applied in the field in accordance with the survey protocol (Biggs et al., 2014):
- ▶ During the survey, 20 samples of 30ml each were taken from around the perimeter of the pond, as equally spaced as possible. The locations of the samples were chosen to sample the entire margin with specific effort made to target areas where there may be newt egg laying and / or displaying activities.

- ▶ The sample ladle was stirred gently in the pond before the sample was retrieved in order to mix the water column, with care being taken not to stir up the sediment.
- ▶ All 20 samples were emptied as they were collected into a Whirl-Pack bag, which was then sealed and shaken for 10 seconds to mix the samples.
- ▶ Upon mixing, and using a sterile pipette, exactly 15ml of the sample was transferred from the Whirl-Pack bag into each of the six sterile tubes, which contained 35ml of ethanol. The sample was stirred between filling each tube to homogenize the water.
- ▶ Once filled to 50ml, each tube was mixed for 10 seconds to mix the sample and preservative. Date of sampling.
- ▶ Samples were returned to the office and either dispatched at ambient temperature immediately for analysis or stored at 2-4°C in a refrigerator dedicated for this purpose.

2.1.5 The following precautions were adhered to, which ensured that no cross-contamination of samples occurred:

- ▶ Sterile gloves were worn by all surveyors at all times during the sampling process; and
- ▶ Samples were collected without the surveyor entering the water (i.e. the surveyors stood on the pond bank or edge).

2.1.6 The laboratory used for analysis of the samples was NatureMetrics, 1 Occam Court, Surrey Research Park, Guildford, GU2 7HJ, United Kingdom, which is participating in Natural England's proficiency testing scheme. Water samples were stored in refrigerated conditions and returned to the laboratory on 15 May 2024 via a 24hr courier service.

Evaluation criteria

2.1.7 A positive result means that GCNs are present in the water or have been present in the water in the recent past (eDNA degrades over around 7-21 days).

2.1.8 A negative result means that GCN DNA was not detected and GCN are likely to be absent from the waterbody.

2.1.9 On rare occasions an inconclusive result is issued. This occurs where GCN DNA has not been detected but the controls have indicated that the sample has been degraded or the polymerase chain reaction (PCR) inhibited in some way. This may be due to undefined components in the water chemistry or may be due to the presence of high levels of sediment or algae in the sample. A re-test could be performed but a fresh sample would need to be obtained, and if water chemistry was the cause of the indeterminate then a re-test would most likely also return an inconclusive result.

2.1.10 Sediment content of each sample is visually recorded in the lab and reported on the results document. Inhibition and degradation results are also noted. If the result is recorded as evidence of decay (meaning that the degradation control was outside of accepted limits) or evidence of residual inhibition (meaning that the PCR reaction was inhibited) any negative result is recorded as indeterminate.

- 2.1.11 GCN populations were evaluated to the extent possible under the survey methods used, and in relation to a geographical frame of reference, i.e. international/European value being most important, then national, regional, metropolitan/county/district/borough, and lastly local (based on CIEEM, 2018).
- 2.1.12 Evaluation of the potential impacts on GCN was undertaken with reference to Chapter 6 of English Nature (2001) and Natural England Standing Advice¹, with predicted impacts to each feature noted as of Low, Medium or High significance.

Limitations

- 2.1.13 There were no difficulties access the survey area of the perimeters of ponds P1 and P2 to collect water samples.

2.2 Roosting Bats

Desk Study

- 2.2.1 Sussex Biodiversity Records Centre (SxBRC) were consulted for records of bat species within a 2km search radius. The desk-study data search was carried out in preparation for the corresponding bat survey. Additionally, the Multi-Agency Geographic Information for the Countryside (MAGIC) website was consulted for granted European Protected Species Mitigation Licences (EPSML) for bats within a 2km radius, and for citations of Sites of Special Scientific Interest (SSSI) or Special Areas of Conservation (SAC) which are notified for important populations of bats within 10km of the survey area.

Bat Presence / Absence Survey

- 2.2.2 Where a structure is found to contain evidence of roosting bats, or judged to be potentially suitable as a roost, then further surveys are required prior to undertaking works in order to confirm whether bats are currently present or are likely to be absent. These surveys typically take the form of emergence surveys (undertaken as the bats leave the roost at dusk) and can be carried out between May and September (May to August being the optimal period).
- 2.2.3 Guidelines (Collins (ed.), 2023) recommend the minimum levels of presence / absence survey effort for structures, based on their overall suitability for roosting bats; see Table 2.1. The PRA concluded that the Main House (B1) had high suitability for roosting bats, and therefore three presence / absence surveys were undertaken. The Dairy (B2) and Log Shed (B3) were both classified as moderate suitability and therefore two presence / absence surveys were undertaken for these buildings.

¹ Natural England (2015): *Great crested newts: surveys and mitigation for development projects*. Accessed online at: <https://www.gov.uk/guidance/great-crested-newts-surveys-and-mitigation-for-development-projects>

Table 2.1: Recommended minimum survey effort for presence/absence surveys

Low roost suitability	Moderate roost suitability	High roost suitability
One dusk emergence survey.	Two dusk emergence surveys.	Three dusk emergence surveys.

- 2.2.4 The emergence surveys commenced at least 15 minutes before dusk and continued for up to 2 hours after sunset. The objective was to establish the presence or likely absence of bats within each feature, determine the assemblage and relative abundance of bat species using the features, and identify the type(s) of roost (e.g. day roost or maternity roost). Surveyor positions are shown at Appendix III.
- 2.2.5 Detection equipment included Wildlife Acoustics Echo Meter Touch 2 Pro full spectrum detectors and Canon XA11 and XA60 infrared cameras, illuminated by infrared flood and spot lighting. The approach to survey was hybrid i.e. surveys were undertaken by eye until light levels became untenable and then switched to live review of the camera footage using Lilliput 4K external camera monitors. A screen shot from the camera at the darkest point of the final survey of each building is provided at Appendix IV to demonstrate the field of view and level of illumination.
- 2.2.6 Recordings of bat calls were analysed using Kaleidoscope Pro (v5.6.8) software. The number of bats leaving / entering the building were noted, together with observations regarding point of emergence / re-entry, type of behaviour and areas of particularly high activity. Survey covariates were also noted (minimum / maximum air temperatures, wind speed / direction, precipitation and cloud cover). Table 2.2 shows the dates and weather conditions for each survey visit.

Table 2.2: Roosting bats survey dates and weather conditions

Date (2024)	Sunset time	Start and stop time	Weather conditions
24 June	21:19	21:04 – 22:49	16-15°C, 10% cloud cover, light air (Beaufort 1), no precipitation
29 July	20:50	20:35 – 22:20	21-18°C, 40-0% cloud cover, light breeze (Beaufort 2), no precipitation
2 September	19:42	19:27 – 21:12	18-17°C, 100% cloud cover, light air (Beaufort 1), no precipitation

Evaluation

- 2.2.7 The importance of bat roosts is classified as Site, Local, District, County or Regional with reference to Table 3.2 in the *Bat Mitigation Guidelines* (Reason, P.F. and Wray, S. (2023). However, these are relative terms which require an interpretation of the rarity of different species and regional variations therein. The terms are hence applicable within the survey area only and are intended to indicate which features of the survey area may be of importance to the conservation status of local bat populations. Evaluation of the potential impacts on bats was undertaken with reference to Reason, P.F. and Wray, S. (2023) and Natural England Standing Advice, with predicted impacts to each Important Ecological Feature noted as of Site, Local, District, County or Regional significance.

Limitations

- 2.2.8 The surveys were completed with the assistance of bat detectors. All survey techniques are subject to bias, and bat detector surveys may under-record species with weak echolocation calls, such as long-eared bats *Plecotus* spp. However, these biases were considered when interpreting the results.
- 2.2.9 Any bats recorded were identified to species (where possible) and recorded on a field map. Many of the calls were heard without being seen due to the position of the bat and the lack of light. Some bat calls are variable and extremely similar between species. Where identification to species level was not possible (for example in the *Myotis* bat group), bats were identified to family level (e.g., *Myotis* spp.).
- 2.2.10 Part of the western aspect of the Main House (B1) was obscured by vegetation which limited the field of view. However, it is likely that any emerging bats would still be picked up if they were to appear from behind the vegetated areas.
- 2.2.11 Light, persistent rain occurred during the first hour of the third presence / absence survey in September. Temperature and wind conditions were within acceptable ranges and bat activity was recorded whilst it was raining. However, the level of bat activity was significantly lower than survey 1 and survey 2 and therefore may have been impacted by the rain. Because survey 1 and 2 were carried out during optimal conditions, the reduced bat activity during survey 3 is not considered to have had a significant impact on the overall results.

2.3 General Limitations

- 2.3.1 See Appendix VII for general Legal and Technical Limitations which apply to this document.
- 2.3.2 The details of this report are valid until the dates shown in Table 2.3. Beyond these periods, if works have not yet been undertaken, the development proposals change or red line boundary changes, it is recommended that a review of the ecological conditions is undertaken.

Table 2.3: Validity of assessment

Survey Type	Validity period (CIEEM, 2019)	Date of final survey	Expiry date
GCN	18 months	13/05/2024	13/11/2025
Roosting bats	12 months	02/09/2024	02/09/2025

2.4 Personnel

- 2.4.1 The personnel deployed on the surveys are listed in Table 2.4.

Table 2.4: Survey personnel and qualifications

Feature / Task	Personnel
GCN Survey	Rich Emerson, Christina Pullan
Bat presence / absence	Nick Pincombe, Dan Maude, Christina Pullan, Zoe Benefer, Rich Emerson, Ed Peters, Joe Dale, Emma Mitchell
Personnel	Qualifications
Nick Pincombe BA(Hons) MSc CEnv MIEMA MCIEEM	Managing Director with nineteen years' experience leading survey and impact assessment teams for a wide range of ecology and environmental planning projects. Natural England Class Licences to survey for bats (WML-CL18) and GCN (WML-CL08).
Dan Maude BSc (Hons) MRes	Senior Ecologist with four years' experience in professional consultancy.
Christina Pullan BSc (Hons) MSc	Consultant Ecologist with seven years' survey experience.
Rich Emerson BSc	Assistant with three seasons' survey experience.
Joe Dale BSc MSc	Assistant with two seasons' survey experience.
Zoe Benefer BSc (Hons) MSc	Assistant with two seasons' survey experience.
Ed Peters BSc (Hons) MSc	Assistant with two seasons' survey experience.
Emma Mitchell BSc MSc	Graduate GIS Consultant with one season's experience assisting with bat surveys

3 Results

3.1 Great Crested Newt

eDNA survey

3.1.1 The GCN eDNA analysis results are presented at Appendix II and summarised in Table 3.1.

Table 3.1: Summary of eDNA analysis results

Pond	Result
P1	<u>Negative</u> for GCN DNA
P2	<u>Negative</u> for GCN DNA

3.2 Roosting Bats

Desk Study

3.2.1 SxBRC returned 182 records of at least nine species of bat from within 2km of the survey area, as summarised in Table 3.2. Most of these records were of bats in flight but included 60 roost sites, the closest recent record to the survey area being an unspecified common pipistrelle *Pipistrellus pipistrellus* roost located c.650m south-east in 2023.

Table 3.2: Summary of bat records data within 2km of the site

Species	Protection
Serotine <i>Eptesicus serotinus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Brandt's bat <i>Myotis brandtii</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Whiskered <i>Myotis mystacinus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Daubenton's bat <i>Myotis daubentonii</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Noctule <i>Nyctalus noctula</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full, NERC s41
Nathusius' pipistrelle <i>Pipistrellus nathusii</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Common pipistrelle	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full, NERC s41
Brown long-eared <i>Plecotus auritus</i>	Habs.Dir.Ax.4, CHS Sch.2, WCA Sch.5 full, NERC s41

Habs.Dir.Ax.4	Habitats Directive 92/43/EEC Annex 4
CHS Sch.2	Conservation of Habitats & Species Regulations 2010 Schedule 2 (EPS animals)
WCA Sch.5 full	Wildlife and Countryside Act (1981), Schedule 5 (fully protected)
NERC s41	Natural Environment and Rural Communities (Act 2006) Section 41

- 3.2.2 A search of the MAGIC database for granted EPS mitigation licenses for bats within a 2km radius found five licenced sites (associated with two location). There are 12 SSSI and one SAC within 10km of the survey area. Bat populations do not feature among the notified features of any of these sites.

Table 3.3: Summary of granted EPS mitigation licences within 2km of the site

Case ref.	Location	Species affected & licensed actions	Start date	End date
EPSM2012-4991	c.950m south-west	Brown long-eared Destruction of a resting place	31/10/2012	01/11/2014
2014-1916-EPS-MIT	c.950m south-west	Brown long-eared Damage of a resting place	10/07/2014	01/10/2015
EPSM2009-455	c.1km south-west	Brown long-eared Destruction of a breeding site and resting place	04/03/2010	01/02/2012
2020-44421-EPS-MIT	c.1km south-west	Brown long-eared and common pipistrelle Destruction of a resting place	10/02/2020	30/04/2030
2020-44421-EPS-MIT-1	c.1km south-west	Brown long-eared and common pipistrelle Destruction of a breeding site and resting place	10/02/2020	30/04/2030

Bat Presence / Absence Survey

Survey 1: 24 June 2024 (Survey start: 21:04, Sunset: 21:19, Survey end: 22:49)

- 3.2.3 A single unconfirmed species of bat was recorded emerging from under the eaves on the western aspect of B1 (Main House) at 22:17 (58 minutes after sunset) by the surveyor at Position 2. The location of the emergence was slightly north of the large chimney at the southern end of the western roof, and from the lower roof section, close to where the roof sections joined. The bat did not echolocate upon emergence and therefore it has not been possible to confidently confirm the species. Repeated calls from common pipistrelle were recorded before and after the emergence, but these may have come from other foraging and commuting bats within the survey area. No other emerging bats were recorded from B1, B2 or B3 during the survey.
- 3.2.4 The earliest bat activity recorded was a common pipistrelle at 21:30 (11 minutes after sunset) that was commuting through the survey area. There were relatively high levels of foraging and commuting bat activity across the survey area, mostly from common pipistrelles, which at times were near constant. The highest levels of common pipistrelle activity were between 21:50 and 22:05. Other species of bat recorded within the survey area included soprano pipistrelle, which were recorded intermittently, and serotine which was recorded between 22:00 and 22:03 commuting through the survey area.

Survey 2: 29 July 2024 (Survey start: 20:35, Sunset: 20:50, Survey end: 22:20)

- 3.2.5 One common pipistrelle was recorded emerging from under the ridge tiles on the western aspect of B1 (Main House) close to the position of the emergence recorded during survey 1. The bat emerged at 21:17 (27 minutes after sunset) and was recorded by the surveyor at Position 2 - an image of the emerging bat is provided at Figure 3.1. No other bats were recorded emerging from any of the other buildings during the survey.
- 3.2.6 Similar to survey 1, there were high levels of foraging and commuting bat activity through and around the survey area. The first bat activity recorded was a common pipistrelle at 20:44 (6 minutes before sunset). Regular activity from common pipistrelle was recorded from all surveyors with occasional passes from soprano pipistrelle. A serotine was recorded at 21:23, 22:03 and 22:18 at various positions across the survey area. Also recorded were noctule at 21:25 and Leisler's bat *Nyctalus leisleri* at 21:55.
- 3.2.7 As no roosting bats were recorded from B2 (Dairy) and B3 (Log Shed) no further surveys were required beyond survey 2, as these buildings were classified as moderate suitability.

Survey 3: 2 September 2024 (Survey start: 19:27, Sunset: 19:42, Survey end: 21:12)

- 3.2.8 No bats were recorded emerging from the B1 (Main House).
- 3.2.9 Very low levels of bat activity were recorded throughout the survey. Temperature and wind levels were within the optimal range for bats but light rain for the first hour of surveying may have reduced activity. The first bat activity recorded was a commuting common pipistrelle at 19:55 (8 minutes after sunset). Common pipistrelle activity was sporadic through the rest of the survey, but bats were recorded on occasion throughout. Other species recorded included soprano pipistrelle, serotine at 20:05, unidentified *Myotis* spp. at 20:38 to 20:40 and a brown long-eared bat at 20:45. Each of these species made only one or two passes through the survey area.



Figure 3.1: Roost 1 (yellow): Emerging bat seen from survey position 2 at 22:17 on 24 June 2024. Roost 2 (red): Emerging bat seen from survey position 2 at 21:17 on 29 July 2024

4 Evaluation

4.1 Introduction

- 4.1.1 This section evaluates the survey area in terms of the protected species present or potentially present on site or its immediate vicinity, in the context of relevant legislation and planning policy. See Appendix VI for a review of the legislation and planning context.

4.2 Great Crested Newt

Presence or absence of GCN

- 4.2.1 All ponds within 250m of the survey area boundary that were potentially suitable for GCN, were subject to eDNA testing. Ponds P1 and P2 returned a negative result for GCN DNA. The surveys were carried out during the peak sampling season and are considered to provide a good level of confidence in the presence or likely absence of GCN within surveyed ponds.
- 4.2.2 Smooth newts *Lissotriton vulgaris* were observed in pond P2 during the water sample collection, and it is likely they are also present within P1 given its close proximity.

Site evaluation

- 4.2.3 Overall, the survey area contains good quality terrestrial habitats for GCN, including the horse paddock to the north-west that had a tussocky grassland structure, which is suitable for foraging. The other less managed sections of modified grassland were also suitable for foraging. The woodlands, introduced shrub and hedgerow provide shelter, dispersal habitat and hibernation potential. The shortly mown lawns were sub-optimal for GCN, but if left unmanaged could increase in suitability.
- 4.2.4 There were an additional two ponds (P3 and P4) located between 250m and 500 from the survey area. The majority of GCN will remain within a core area of up to c.50–250m from the breeding pond (250m being the estimated maximum routine migratory range; Cresswell & Whitworth, 2004) if that area can fulfil their lifecycle requirements although, as with all amphibians, small numbers of individuals (often juveniles) will disperse as colonisers to distances of 1km or more (Langton et al., 2001). Research on the efficiency of GCN capture techniques within a range of habitats at various distances from a breeding pond concluded that (Cresswell & Whitworth, 2004):

“The most comprehensive mitigation, in relation to avoiding disturbance, killing or injury is appropriate within approximately 50m of a breeding pond. It will also almost always be necessary actively to capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality... At distances greater than 200-250m, capture operations with hardly ever be appropriate.”

- 4.2.5 For this reason, ponds located greater 250m from the survey area were not subject to an eDNA survey because if any GCN were present within these ponds they were unlikely to disperse the distance required to reach the survey area. This likelihood is reduced further where significant barrier to dispersal is present, such as the large housing developments which leave both P3 and P4 relatively isolated from the survey area. Therefore, it is unlikely that GCN, if present within P3 and P4, would attempt a significant dispersal distance to reach the survey area.
- 4.2.6 It is considered likely that GCN is absent from the survey area. This is due to the negative result for GCN eDNA in ponds located within 250m of the survey area, and the distance or isolation from the survey area of ponds located more than 250m away. The survey area is considered to be of Negligible Importance for GCN.

4.3 Roosting Bats

Presence or absence of roosting bats

- 4.3.1 The survey results provide a good level of confidence that one roost for unconfirmed species and one common pipistrelle roost were present in building B1 during the 2024 breeding season, as summarised in Table 4.1. No roosts were recorded in B2 (Dairy) or B3 (Log Shed). The recorded roosts were considered to be day roosts in occasional use by individual bats (i.e. only observed to be used once each out of three emergence surveys). See Figure 4.1 for roost locations.

Table 4.1: Summary of roosting bats

Roost	Aspect	Species	Indiv.*	Freq.**	Max.***	Status
1	B1 – western elevation (eaves)	Unconfirmed species	1	1	1	Day roost, occasional
2	B1 – western elevation (ridge)	Common pipistrelle	1	1	1	Day roost, occasional

* Individuals: Number of bats recorded using the roost over three surveys

*** Max.: Maximum count per survey

** Frequency: Number of surveys during which use of the roost was recorded

- 4.3.2 Surveys were carried out at an appropriate time of year and within acceptable wind, temperature and precipitation parameters. The results are therefore considered to provide an accurate account of the bat roost status of the buildings.

Species assemblage

- 4.3.3 Species diversity recorded during the presence / absence surveys included at least seven species of bat. Their national conservation status is listed in Table 4.2 (BCT, 2010; Mathews *et al.*, 2018; Russ, 2021). All have previously been recorded within 2km of the site, excluding Leisler's bat, as confirmed during the desk study stage.
- 4.3.4 *Plecotus* spp. call parameters overlap significantly within genus, and it is not normally possible to conclusively identify them to species level unless they are in the hand. Brown long-eared bats are widespread and relatively abundant both in Surrey and nationally. Grey long-eared bats are rare, and their restricted national distribution is focused on southern coastal areas. As such, the calls

have been attributed to brown long-eared due to the inland location and absence of historical records identified during the desk study.

- 4.3.5 The *Myotis* spp. calls recorded within the survey area were most closely matched to the call parameters of Brandt's bat, whiskered and Daubenton's bat. The survey area falls broadly within the known distribution of these species and all three have previously been recorded within 2km. However, as *Myotis* were not identified to species level they have been excluded from the table below.

Table 4.2: Conservation status of recorded bat species (abundance and distribution)

Species	UK abundance/distribution	UK status	Sussex status
Serotine	Uncommon, widespread, southern England	Vulnerable	Uncommon, widespread
Noctule	Uncommon, widespread, absent in Scotland	Least concern	Uncommon, widespread
Leisler's bat	Scarce but widespread to southern Scotland	Near threatened	Rarely recorded
Common pipistrelle	Widespread, abundant	Least concern	Abundant, widespread
Soprano pipistrelle	Fairly common, widespread	Least concern	Fairly common, widespread
Brown long-eared	Widespread, relatively abundant	Least concern	Relatively abundant, widespread

Site evaluation

- 4.3.6 As common pipistrelle bats are widespread and abundant across all geographies, and both roosts were of low significance (occasional day roosts for individuals), building B1 is considered to be of Site Importance.
- 4.3.7 No roosting bats were recording in B2 or B3 across the presence / absence surveys, and these buildings are considered to be of Negligible Importance.

Impact Assessment

Designated sites

- 4.3.8 No designated sites notified for their bat populations will be affected by the proposals for the site.

Roosting bats

- 4.3.9 Proposed redevelopment of the Main House (B1) will include renovations to the top floor (roof level) that will divide its current open plan layout into separate bedrooms. The plans include the installation of 3no. new skylights that will improve light and ventilation.

- 4.3.10 The new skylights will be installed on the northern and western aspects of the roof as shown circled in red on Figure 4.1. The proposed location of the south-western skylight is in close proximity to the recorded common pipistrelle roost (shown as a red cross on Figure 4.1). The works to install the new skylights may cause a significant impact to roosting bats. In addition, renovation works within the loft space in the vicinity of the common pipistrelle roost have the potential to cause significant disturbance to roosting bats.

Short-term impacts

- 4.3.11 Redevelopment of B1 is likely to result in the following short-term impact unless mitigated, which would constitute an offence under the CHS and WCA.
- ▶ Risk of killing, injury or disturbance to low numbers of at least one common bat species (common pipistrelle) if present during the works.

Long-term impacts

- 4.3.12 There are unlikely to be any long-term impacts to the recorded common pipistrelle roost as it is anticipated the proposed redevelopment of the roof can occur without destruction of the bat roost.
- 4.3.13 If works are required in the location of the roost, such as replacement of tiles or flashing, it may result in the following long-term impacts, which would constitute an offence under the CHS and WCA. The significance of roost loss impacts is predicted with reference to Reason & Wray (2023) taking into account their recorded abundance and frequency within the application site, and rarity in a local context.
- ▶ Site significant impact from the destruction of up to two occasional summer day roosts (Roosts 1&2) used by individual common pipistrelle bat and unconfirmed species.

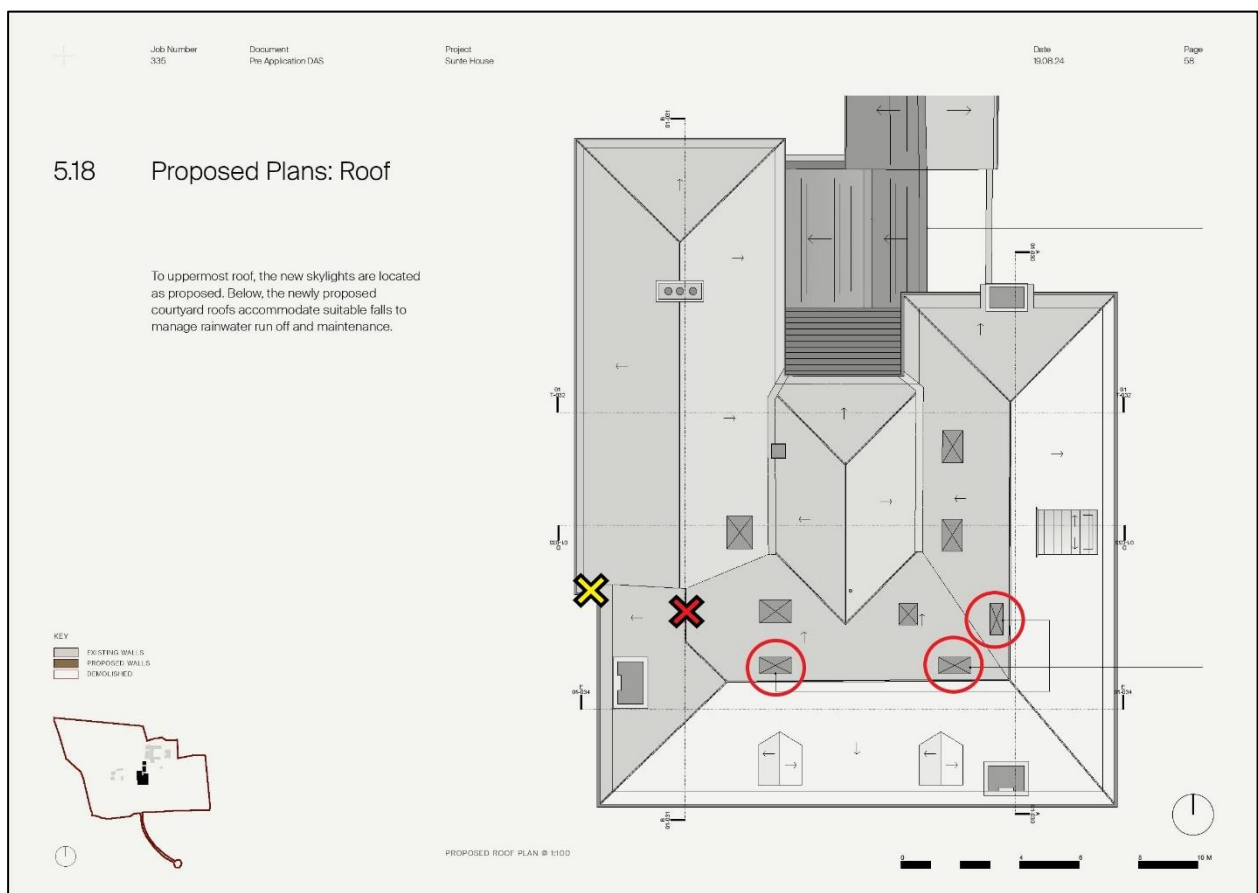


Figure 4.1: Proposed roof layout with the recorded roost locations shown with yellow and red crosses and new skylights circled in red

Foraging and commuting habitats

- 4.3.14 It is currently understood that the redevelopment proposals do not include any works that would directly (e.g. through habitat loss) or indirectly (e.g. through artificial lighting) affect foraging and commuting habitats. Foraging and commuting bats were not considered to present a constraint to development proposals and bat activity surveys were not required.

5 Recommendations and Conclusion

5.1 Introduction

- 5.1.1 Recommendations are made below for avoidance and mitigation of impacts to protected species, to prevent an offence under the relevant legislation from occurring, and to reduce the risk of development proposals resulting in significant effects on the population and distribution of species recorded during the surveys. The recommendations should be read alongside those contained in the PEA (UEEC, 2024) which continue to apply, including those for ecological enhancement.

5.2 Recommendations for Avoidance, Mitigation and Compensation of Impacts

Amphibians

- 5.2.1 Both ponds (P1 and P2) recorded an absence of GCN during the 2024 breeding season and no further recommendation are required for this species. However, P1 and P2 provided good quality aquatic habitat for a range of common amphibians. A population of smooth newt was recorded within P2 during the eDNA surveys, and the species are likely also present within P1 given its close proximity.
- 5.2.2 Any work to P1 or P2, including draining, removing, filling and / reprofiling will be carried out under the supervision of a suitably qualified ecologist, and outside of the amphibian breeding season (broadly March to July).

Bats

- 5.2.3 A mitigation strategy is required to (a) remove or reduce the likelihood of damage to bats or their habitats, and (b) offset the damage caused by development through compensation. The aim is to achieve both the avoidance of harm to individual bats and compensation for loss of suitable habitat, thereby ensuring the local conservation status of the species is maintained.

Bat Mitigation Class Licence / Non-licenced Method Statement

- 5.2.4 A low impact Bat Mitigation Class Licence (BMCL) will need to be obtained from Natural England prior to commencing the works, and once planning permission is granted. A mitigation Method Statement will form part of the licence application and will specify precautionary working methods, mitigation and compensation of lost habitats, based on the recommendations outlined below. Alternatively, a Non-licenced Method Statement may be adequate if the roosts can be fully retained and the works can be scheduled to take place during March/April or September/October.

Avoidance and Mitigation

- 5.2.5 Other than the roof voids no significant voids or cavities (e.g. cellars) suitable for hibernation were noted within the buildings. The possibility nonetheless exists that bats could be present in small numbers during the winter months as common pipistrelle and brown long-eared bats are known to use buildings for hibernation (Collins (ed.), 2023; English Nature, 2004; Dietz and Kiefer, 2016).
- 5.2.6 An outline of the precautionary working methods to be followed under the BMCL is given below:
- ▶ **Appointment of Ecological Clerk of Works:** A named ECoW who is licenced by Natural England will be appointed to oversee operations which could negatively affect bats and other ecological features of value.
 - ▶ **Timing of the works:** Works to the internal or external roof structure of building B1 will be carried out between April and October, i.e. during the period in which hibernating bats are least likely to be present.
 - ▶ **Creation of temporary replacement habitat:** Prior to any works to B1, two bat boxes will be installed on nearby mature trees which are to be retained. These will provide a safe refuge for any bats which are found and moved during the works; 1no. Schwegler 2F DFP and 1no. Schwegler 1FF bat boxes (or another manufacturer's equivalent) will be suitable.
 - ▶ **Toolbox talks:** All site operatives will receive a briefing from the ECoW to explain the legal protection for bats, the precautionary methods to be followed, tips on identifying bats, and the procedure to be followed should a bat be found at any stage during the works.
 - ▶ **Supervised roof strip:** If redevelopment works are required in the immediate vicinity of the roosts they will be preceded by a 'soft-strip' of the tiles and any other features suitable for bats that are due to be removed, using hand tools only, under the supervision of an ecologist licenced to handle bats. Particular attention will be paid to the roost locations listed in Table 4.1 and Figure 4.1. If any bats are found during the roof strip, they will be captured and safely relocated into the pre-installed bat boxes by the supervising ecologist.
 - ▶ **Procedure if bats are encountered:** If bats are found within the construction zone during subsequent works, site operatives will be advised to cease activity in its vicinity while advice from the ECoW is sought. The ECoW will then assess the most appropriate course of action which may include removing the individual(s) from the site and moving it to a pre-installed bat box or nearby area of suitable habitat outside of the construction zone.
 - ▶ **Nesting birds:** A survey for active bird nests will be carried out by the ECoW immediately prior to the renovation works. If an active nest is found, the nest must be cordoned off and works adjacent to this nest must be delayed until such time that the chicks have fledged.
 - ▶ **Commencement of construction works:** Once the supervised soft strip is complete, it is likely that no bats will be present within the areas to be affected and redevelopment works can commence.
- 5.2.7 It should be noted that the above bullets are indicative and that the mitigation strategy will be finalised following consultation with Natural England prior to a BMCL being issued. The current report is based on three emergence surveys. If a licence is not obtained within 12 months of the

date of these surveys (i.e. by September 2025), updated active season surveys may be required to confirm the status of the roost and identify any changes which may have occurred in the interim.

Compensation

- 5.2.8 The disturbance of two summer day roosts used by individual common pipistrelle bats and unconfirmed species is unavoidable if the scheme is to proceed as planned. Compensatory measures are required to ensure there is no net loss of roosting habitats and to enable the recorded bat population to persist in the long-term.
- 5.2.9 It is recommended that replacement roosting habitat features are installed prior to works commencing and fixed in similar positions and aspects on the nearby retained features. The precise number, type and location of features to be installed will be agreed as part of the BMCL, however it is currently recommended that two bat tiles, similar to the features that may be lost, are installed:
- ▶ 2no. Habibat Bat Access Tile installed in a similar location to the existing roosts if the roosts are lost as part of the redevelopment.
- 5.2.10 Bat box specifications are outlined in Appendix V.

Monitoring

- 5.2.11 Any requirement to monitor the success of mitigation and compensatory habitats will be established by the BMCL licence.

Enhancements

- 5.2.12 The measures recommended in section 5.5 of the PEA (UEEC, 2024) should be implemented to deliver ecological enhancements for a range of wildlife following construction.

5.3 Conclusions

- 5.3.1 The Proposed Development is unlikely to result in negative impacts to great crested newt. In the absence of mitigation, the Proposed Development will result in negative impacts to roosting bats. However, mitigation measures are recommended to prevent an offence under the relevant legislation from occurring, and to avoid / reduce the risk of development proposals resulting in significant effects on the populations of species recorded.

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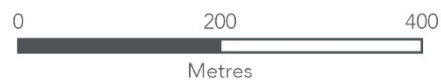
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UEEC (2024): *Sunte House, Birchen Lane, Haywards Heath, West Sussex: Preliminary Ecological Appraisal Report*

Appendix I: GCN Survey Plan

Sunte House, Haywards Heath, West Sussex

-  Survey area
-  250m buffer
-  500m buffer
-  Pond: Negative for GCN eDNA
-  Pond: Scoped out



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Ordnance Survey 0100031673

Scale (at A4): 1:7,500 Created by: MT

Date: Oct 2024 Reviewed by: NP

Drawing number:

UE0664ECOARB-SunteHouse:GCN



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Web: www.ueec.co.uk



Appendix II: eDNA Results for Ponds



Thank you for choosing NatureMetrics

Welcome to your report. We are the leading provider of powerful, scalable biodiversity data delivered using environmental DNA.

Your sample(s) have been processed in accordance with the protocol set out in Appendix 5 of Biggs et al. (2014). Results are based on the samples as supplied by the client to the laboratory. Incorrect sampling methodology may affect the results. Note that a negative result does not preclude the presence of GCN at a level below the [limits of detection](#).

A results interpretation guide and a glossary of terms highlighted throughout this report can be found at the end of the report.

GCN Detection Results

Pond ID	Inhibition	Degradation	GCN Score	Result
664-2	No	No	0	Negative
664 P1	No	No	0	Negative

Sample Information

Pond ID	Kit ID	Sampling Date	Received Date
664-2	GCN-24-01701	2024/05/13	2024/05/15
664 P1	GCN-24-01711	2024/05/13	2024/05/15

Methods

eDNA was precipitated via centrifugation at 14,000 x g and then extracted using Qiagen DNeasy Blood and Tissue extraction kits. **qPCR** amplification was carried out in 12 replicates per sample, using GCN specific **primers** and **probe** (developed by Thomsen et al. (2012) and adopted by Biggs et al. (2014)), in the presence of **extraction negative controls**, **qPCR positive controls**, and **qPCR negative controls**. A score is given for the number of positive replicates out of 12.

The **qPCR** method follows the recommendations set out by NatureMetrics for Natural England in the qPCR validation project and helps improve the reliability of the interpretation of the data.

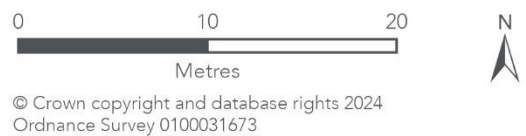
Results from the GCN assay are considered to have a **high** confidence rating according to our **Validation Scale** (Harper et al. 2021).

The quality control methods exceed the requirements outlined in Appendix 5 of Biggs et al. (2014). These consist of the use of **kit blanks**, additional **extraction negative controls**, **qPCR negative controls**,

Appendix III: Surveyor Positions

Sunte House, Haywards Heath, West Sussex

-  Survey area
-  Building with high suitability for roosting bats
-  Building with moderate suitability for roosting bats
-  Surveyor
-  Line of vision



Scale (at A4): 1:400 Created by: MT
Date: Oct 2024 Reviewed by: NP
Drawing number:
UE0664ECOARB-SunteHouse:Bats



Appendix IV: Infrared Camera Field of View



View from Canon XA11 infrared camera on 2 September 2024, illuminated by infrared flood lighting, at surveyor position 1.



View from Canon XA11 infrared camera on 2 September 2024, illuminated by infrared flood lighting, at surveyor position 2 and roost location.



View from Canon XA11 infrared camera on 2 September 2024, illuminated by infrared flood lighting, at surveyor position 3.



View from Canon XA11 infrared camera on 2 September 2024, illuminated by infrared flood lighting, at surveyor position 4.



View from Canon XA11 infrared camera on 2 September 2024, illuminated by infrared flood lighting, at surveyor position 5.



View from Canon XA11 infrared camera on 29 July 2024, illuminated by infrared flood lighting, at surveyor position 6.



View from Canon XA11 infrared camera on 29 July 2024, illuminated by infrared flood lighting, at surveyor position 7.

Appendix V: Bat Box Specifications



Schwegler 2F DFP General Purpose Bat Box:

Apex roof to mimic tree cavity, suitable for noctule, brown long-eared, Bechstein's and Daubenton's. Internal double front panel creates a crevice suitable for pipistrelles

Siting and Positioning:

On a tree-trunk or on buildings

Cleaning and Inspection:

Easy cleaning and inspection due to removable front panel. If occupied by bats, inspection and cleaning must be carried out by a licensed professional

Entrance hole:

Slotted hole

Occupants:

Bats

Material:

Air-permeable and long lasting SCHWEGLER wood-concrete



Schwegler 1FF Flat Bat Box:

Open at bottom so cleaning not required. Varied internal roost surfaces. Suitable for crevice roosters such as pipistrelles, and large enough for use as maternity roost

Siting & positioning:

On the tree-trunk or on buildings

Cleaning and inspection:

Open at bottom, cleaning not required. Easy to inspect due to removable front panel. If occupied by bats, inspection and cleaning must be carried out by a licensed professional

Entrance hole:

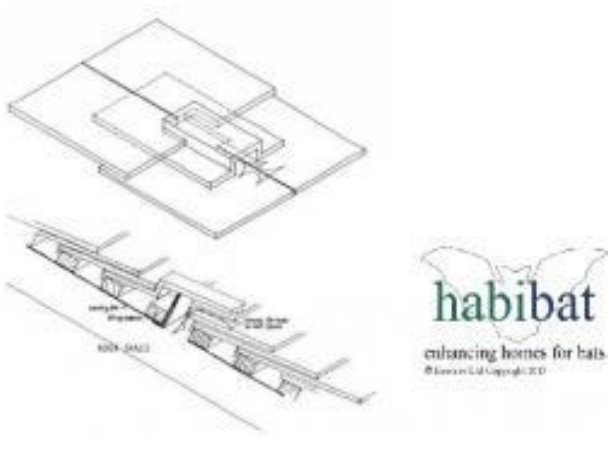
Width 12-24 mm x Length 21cm

Occupants:

Bats

Material:

Air-permeable and long lasting SCHWEGLER wood-concrete

Kit includes: Roost box with removable front panel Galvanized steel hanger - forestry approved Aluminium Nail - forestry approved Colour: Black Dimensions: Height: 350mm Dia.: 165mm Weight: 4kg approx.	Kit includes: Roost box with swing-away front panel Galvanized steel hanger - forestry approved Aluminium Nail - forestry approved Colour: Black Dimensions: Depth: 140mm Width: 270mm Height: 430mm Weight: 10kg approx.
	
Habibat Bat Access Tile (available in clay, slate or lead): The Habibat Access Tile is a roof tile which has been modified to allow bats either into the batten space (between tiles and liner for pipistrelles) or into the roof void (for brown long-eared bats). The Habibat Access Tile consists of a vacuum-moulded plastic cowl embedded into the tile. The access cowl is designed to prevent rainwater ingress to the roof but is of correct size and roughened to be suitable for bats. The 5-piece clay tile set fits on any roof with plain clay tiles to provide access for bats either behind the tiles or into the roof space. The slate tile consists of a standard sized slate, with a capped vent which allows access into the batten space (between tiles and liner for pipistrelles) or into the roof void (for brown long-eared bats). Dimensions: (H) 418 x (W) 375 x (D) 80mm Entrance hole dimensions: (H) 20 x (W) 100mm Weight: 1.3kg	

Appendix VI: Legislation and Planning Context

Legislation

General

The main legislative instruments for ecological protection in England and Wales are: the Wildlife and Countryside Act 1981 (WCA; as amended); Countryside and Rights of Way Act 2000 (CRoW; as amended); Natural Environment and Rural Communities Act 2006 (NERC; as amended); the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations; as amended); and the Environment Act 2021.

WCA 1981 consolidated and amended pre-existing national wildlife legislation in order to implement the Bern Convention and the European Union Wild Birds Directive (Council Directive 2009/147/EC). It complements the Habitats Regulations, offering protection to a wider range of species than the latter. The Act also provided for the designation and protection of nationally important conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSI). Schedules of the act list protected species of flora and fauna, as well as invasive species, and detail the possible offences that apply to these species.

The CROW Act 2000 amended and strengthened existing wildlife legislation detailed in the WCA. It placed a duty on government departments & the National Assembly for Wales to have regard for biodiversity, provided increased powers for the protection and maintenance of SSSI, and created a right of access to parts of the countryside. The Act contained lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The NERC Act 2006 consolidated and replaced aspects of earlier legislation. Section 40 of the Act places a duty upon all local authorities and public bodies in England and Wales to have regard to the purpose of conserving biodiversity in exercising all of their functions, including by restoring or enhancing habitats and species populations. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity (otherwise known as priority habitats/species as listed in the now superseded UK Biodiversity Action Plan). These lists supersede Section 74 of the CRoW Act 2000. These species and habitats are a material consideration in the planning process.

The Habitats Regulations 2017 are the principal means by the European Union Habitats Directive (Council Directive 92/43/EEC) was transposed into English and Welsh law, and place a duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria in Europe are designated as Sites of Community Importance by the European Commission, and subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. Since the UK's departure from the European Union the European Commission no longer has a role in designating SACs in the UK. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 establish a single stage designation process, where the appropriate authority is the decision maker. The selection and designation of SACs is based on the criteria set out in Annex III of the Habitats Directive insofar as it applies to the UK, and having regard to the advice of the appropriate nature conservation body.

The 2019 Amendment Regulations have created a new national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes existing SACs, existing Special

Protection Areas (SPA) originally designated as a result of Council Directive 2009/147/EC on the Conservation of Wild Birds, and any new SACs and SPAs designated under the 2019 Regulations. SACs and SPAs in the UK therefore no longer form part of the EU's Natura 2000 ecological network.

The Habitats Regulations also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively (European Protected Species (EPS)). Schedule 2 includes species such as otter and GCN for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade in these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations. Under the Habitats Regulations disturbance includes any activity which is likely to: impair the ability of a EPS to survive, breed, reproduce, or rear/nurture its young; impair the ability of a EPS to migrate or hibernate; or significantly affect the local distribution or abundance of the species.

The Environment Act 2021, among other things: established an Office for Environmental Protection; introduced a mandatory requirement for all new development requiring planning permission to achieve a net gain for biodiversity of at least 10% (although implementation of this is transitional); amended the NERC Act duty to conserve biodiversity by explicitly adding a duty to enhance; and requires local authorities to produce local nature recovery strategies.

Great crested newt (*Triturus cristatus*; GCN) (and natterjack toad *Bufo calamita*)

GCN is fully protected by the WCA and the Habitats Regulations. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a GCN (including its eggs).
- ▶ Possess or control a live or dead GCN, any part of, or anything derived from a GCN.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a GCN uses for shelter or protection.
- ▶ Intentionally or recklessly disturb a GCN while it is occupying a structure or place that it uses for shelter or protection.

Wild birds

Birds are protected by the Wildlife and Countryside Act, 1981 (as amended). This legislation makes it an offence to intentionally kill, injure or take away any wild bird. It is also an offence to take, damage or destroy the nest of any wild bird while it is in use or being built or to take or destroy the egg of any wild bird. In addition, certain species are listed on Schedule 1 of the WCA (such as kingfisher *Alcedo atthis*). This makes it an additional offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young. Such species are considered to be in greater need of legal protection or of high nature conservation priority.

Birds of Conservation Concern ("BoCC5) are included on Red and Amber lists (Stanbury *et al.*, 2021). Birds on the Red list are those of highest conservation priority due significant and sustained population decreases and/or range contractions (e.g. house sparrow *Passer domesticus* and starling *Sturnus vulgaris*). Birds on the Amber list are the next most critical group and include species whose population/range have shown moderate declines, or which have recovered to some extent from historical decline, such as dunnoek *Prunella modularis*.

Bats (Chiroptera)

Bats and their roosts are fully protected by protected by the WCA and the Habitats Regulations, and seven species of bats are species of principal importance. The legislation makes it an offence, *inter alia*, to:

- ▶ Intentionally kill, injure or take a bat.
- ▶ Possess or control a live or dead bat, any part of a bat, or anything derived from a bat.
- ▶ Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.
- ▶ Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.
- ▶ Make a false statement in order to obtain a licence for bat work.

Under the Habitats Regulations disturbance includes any activity which is likely to:

- ▶ Impair the ability of a bat to survive, breed, reproduce, or rear/nurture its young.
- ▶ Impair the ability of a bat to migrate or hibernate.
- ▶ Significantly affect the local distribution or abundance of the species.

Planning context

National Planning Policy Framework (Section 15: Conserving and enhancing the natural environment)

The National Planning Policy Framework (NPPF), published in December 2023, outlines the Government's commitment to the conservation of wildlife and natural features. It is concerned with:

- ▶ Protecting and enhancing valued landscapes, sites of biodiversity or geological conservation value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- ▶ Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- ▶ Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- ▶ Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current & future pressures;
- ▶ Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- ▶ Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The NPPF requires that local plans should “distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value...; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

To protect and enhance biodiversity and geodiversity, the NPPF states that planning policies should:

- ▶ Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife

corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and

- ▶ 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.

When determining planning applications, local planning authorities should aim to protect and enhance biodiversity by applying the following principles:

- ▶ if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- ▶ development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- ▶ development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- ▶ development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The following wildlife sites should be given the same protection as habitats sites:

- ▶ potential Special Protection Areas and possible Special Areas of Conservation;
- ▶ listed or proposed Ramsar sites; and
- ▶ sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects) unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site. The policies within the NPPF (and additional guidance contained within Circular 06/2005) are a material planning consideration.

UK/Local Biodiversity Action Plan Designations and Birds of Conservation Concern and Red Data Book Listings

Note that BAP designations and status as RSPB Birds of Conservation Concern or Red Data Book species does not offer any further legal protection, but planning authorities are required to prevent these species from being adversely affected by development in accordance with National Planning Policy and the CROW and NERC Acts. The United Kingdom Biodiversity Action Plan (UKBAP), first published in 1994 and updated in 2007, was a government initiative designed to implement the requirements of the Convention of Biological Diversity to conserve and enhance species and habitats. The UKBAP contained a list of priority habitats and species of conservation concern in the UK, and outlined biodiversity initiatives designed to enhance their conservation status.

However, as a result of devolution, and new country-level and international drivers and requirements, much of the work previously carried out by the UK BAP is now focussed at a country-level rather than a UK-level, and the UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK lists of priority habitats and species nonetheless remain an important reference source and were used to draw up statutory lists of priority habitats and species in England, Northern Ireland, Scotland and Wales. The priority habitats and species correlate with those listed on Section 41 and 42 of the NERC Act.

The UKBAP required that conservation of biodiversity be addressed at a County level through the production of Local BAPs. These are targeted towards species of conservation concern characteristic of each area. In addition, a number of local authorities and large organisations have produced their own BAPs. Where they exist, Local BAP targets with regard to species and habitats are a material consideration in the planning process.

Local Planning Policy

The Mid Sussex District Plan 2014-2031 (Mid Sussex District Council, March 2018) contains the following policy relating to wildlife and biodiversity:

DP38 – Biodiversity

"Biodiversity will be protected and enhanced by ensuring development:

- Contributes and takes opportunities to improve, enhance, manage and restore biodiversity and green infrastructure, so that there is a net gain in biodiversity, including through creating new designated sites and locally relevant habitats, and incorporating biodiversity features within developments; and*
- Protects existing biodiversity, so that there is no net loss of biodiversity. Appropriate measures should be taken to avoid and reduce disturbance to sensitive habitats and species. Unavoidable damage to biodiversity must be offset through ecological enhancements and mitigation measures (or compensation measures in exceptional circumstances); and*
- Minimises habitat and species fragmentation and maximises opportunities to enhance and restore ecological corridors to connect natural habitats and increase coherence and resilience; and*
- Promotes the restoration, management and expansion of priority habitats in the District; and*
- Avoids damage to, protects and enhances the special characteristics of internationally designated Special Protection Areas, Special Areas of Conservation; nationally designated Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty; and locally designated Sites of Nature Conservation Importance, Local Nature Reserves and Ancient Woodland or to other areas identified as being of nature conservation or geological interest, including wildlife corridors, aged or veteran trees, Biodiversity Opportunity Areas, and Nature Improvement Areas"*

Appendix VII: Legal and Technical Limitations

- This report has been prepared by Urban Edge Environmental Consulting Ltd (UEEC Ltd) with all reasonable skill, care and diligence within the terms of the contract made with the Client to undertake this work, and taking into account the information made available by the Client. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us.
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- Unless otherwise stated in this report, the assessments made assume that the sites and facilities that have been considered in this report will continue to be used for their current planned purpose without significant change.
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- Where this report presents or relies upon the findings of ecological field surveys (including habitat, botanical or protected/notable species surveys), its conclusions should not be relied upon for longer than a maximum period of two years from the date of the original field surveys. Ecological change (e.g. colonisation of a site by a protected species) can occur rapidly and this limitation is not intended to imply that a likely absence of, for instance, a protected species will persist for any period of time;
- This report has been prepared using factual information contained in maps and documents prepared by others. No responsibility can be accepted by UEEC Ltd for the accuracy of such information;
- Every effort has been made to accurately represent the location of mapped features, however, the precise locations of features should not be relied upon;
- Populations of animals and plants are often transient in nature and a single survey visit can only provide a general indication of species present on site. Time of year when the survey was carried out, weather conditions and other variables will influence the results of an ecological survey (e.g. it is possible that some flowering plant species which flower at other times of the year were not observed). Every effort has been made to accurately note indicators of presence of protected, rare and notable species within and adjacent to the site but the possibility nonetheless exists for other species to be present which were not recorded or otherwise indicated by the survey;
- Any works undertaken as a consequence of the recommendations provided within this report should be subjected to the necessary health & safety checks and full risk assessments.

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