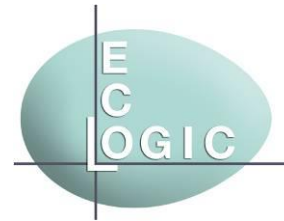


Bat and Protected Species Survey,  
Bat Emergence Survey &  
Remote Monitoring



Barn C  
Greendale Farm  
Clyst St Mary  
Devon  
EX5 1AW

<b>Planning Reference:</b>		<b>Report Reference:</b>	190610 C rev00E
<b>Client:</b>	Mr. Terry Adams		
<b>Architect/Agent</b>			
<b>Survey Date/s:</b>	2020: 7 <sup>th</sup> September 2022: 19 <sup>th</sup> October & 6 <sup>th</sup> December 2023: 9 <sup>th</sup> May, 1 <sup>st</sup> June & 12 <sup>th</sup> July		
<b>Report Date:</b>	October 2023	<b>OS Grid Ref:</b>	SY 00083 89971
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<b>Surveyors &amp; License N°:</b>	James Baker	<b>Bats:</b> 2015-12067-CLS-CLS (WML-A34 – Level 2)	
<b>Additional Surveyors:</b>	Laurent Duverge, Lyn Jenkins, Ruth Cooper, Charlotte Gill, Andy Hobbs & Alfie Mussell		

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### DISCLAIMER

It should be noted that this report is context-specific. If any changes are made to the brief and/or the development proposal Ecologic Consultant Ecologists LLP must be informed, as amendments may be required. The information provided in this report must be reviewed and updated in the time following twelve months from the date of survey. This report (including any enclosures and attachments) has been prepared for the exclusive use and benefit of the addressee(s) and solely for the purpose for which it is provided. Unless we provide express prior written consent, no part of this report should be reproduced, distributed or communicated to any third party. Ecologic Consultant Ecologists LLP do not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report.

## 1.1 Introduction

It is understood that it is proposed to convert the central section and northern ground floor room of Barn C into a studio workshop at; Greendale Farm, Clyst St Mary, Exeter, Devon, EX5 1AW.

## 1.2 Bats

### 1.2.1 Roost Characterisation

The combined survey results confirm the use of the building by roosting bats consisting of the following:

- Lesser horseshoe (*Rhinolophus hipposideros*); summer day roosting, utilised by low numbers (peak count 2);
- Greater horseshoe (*Rhinolophus ferrumequinum*); summer day roosting, utilised by low numbers (peak count 5);
- Brown long-eared bat (*Plecotus auritus*); summer day roosting and winter hibernation, utilised by low numbers (peak count 2);
- Common pipistrelle (*Pipistrellus pipistrellus*); summer day roosting, utilised by low numbers (peak count 1);
- Soprano pipistrelle (*Pipistrellus pygmaeus*) – summer night roosting, utilised by low numbers; and,
- Natterer's bat (*Myotis nattereri*) – summer night roosting, utilised by low numbers.

### 1.2.3 Implications of the Proposal for Bats

The proposed conversion works to the barn will modify/destroy the identified bat roosts/access points/flight routes and potentially cause disturbance and/or injury to any roosting bats present at the time of the proposed works.

It will therefore be necessary to apply and obtain a European Protected Species (EPS) Licence from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

In order to apply for the licence, it will be required to incorporate mitigation, compensation and enhancement measures for bats into the proposal (see Section

6.1.3) and successfully obtain full planning permission from the Local Planning Authority (LPA).

### **1.3 Nesting Birds**

Former nesting sites for swallow (*Hirundo rustica*) and robin (*Erithacus rubecula*) were discovered within the barn. Mitigation and compensation measures have been detailed within Sections 6.2 & 6.3.

### **1.4 Ecological Enhancements**

Provisions for birds and invertebrates, detailed within Section 6.3, should be incorporated into the proposal to increase opportunities for wildlife on site.

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## SECTION 2

## SURVEY OBJECTIVES

It is understood that it is proposed to convert the central section and northern ground floor room of Barn C into a studio workshop at; Greendale Farm, Clyst St Mary, Exeter, Devon, EX5 1AW.

The survey specifically aimed to identify the following:

- The presence of, or past use of the site by, any species of bat;
- The presence of, or past use of the site by, barn owl, or other nesting birds;
- The sites potential for use by any of above; and,
- Any other ecological issues relating to the proposal.

## SECTION 3

## SURVEY SITE DESCRIPTION

Greendale Farm is located in a rural setting, approximately 5 km to the east of Exeter and less than 1 km to the south of the A3052 Sidmouth Road. It is surrounded by land in agricultural production. A brook and woodland belt lie less than 100 m to the north and an extensive network of hedges surround the buildings/farmstead linking to the wider landscape with good foraging and dispersal opportunities for bats.

Greendale Farm comprises of a series of brick and modern agricultural barns including Barn C (see Figure 1).

Barn C was a two-storey brick barn with unlined slate roof. It was divided into two enclosed wood stores at the north and south ends with a large central storage section (see Figures 3 & 4).

The north section included a ground floor door to the west elevation with louvered opening above, and a first-floor hayloft with a ladder opening from the ground floor. The first floor included a shuttered access door within the north gable (see Figures 4 & 5).

The south section included a large mezzanine floor with a double-door entrance to the east elevation and windows including a louvered access (see Figures 2, 6 & 7).

The large central section included double door access to both the east and west elevations and a mezzanine floor within the northern section (see Figures 8 & 9).



Figure 1. Site layout at Greendale Farm



Figure 2. The south and east elevations of Barn C



Figure 3. The north and west elevations of Barn C



Figure 4. The north section ground floor



Figure 5. The north section first floor





Figure 6. The south section ground floor



Figure 7. The south section mezzanine floor



Figure 8. The central section viewed from the mezzanine floor



Figure 9. The central section mezzanine floor

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#### 4.1 The Bat & Protected Species Survey

The survey comprised of an initial internal and external inspection of the building undertaken on the 19<sup>th</sup> October 2022, followed by a full inspection on 6<sup>th</sup> December 2022 by James Baker. The surveys were conducted with the aid of head and hand-held torches, an endoscope, close-range binoculars, an extendable ladder and a digital camera.

The aim of the survey was to assess levels of use by bats through the presence of actual animals or their field signs, such as droppings, insect prey remains and/or urine staining, and the potential suitability of the buildings for roosting.

The presence of other protected species, notably nesting birds and barn owl/s, was also investigated, including the presence and behaviour of any actual animals or their field signs, such as whitewash, pellets and or nest debris.

#### 4.2 The Bat Emergence Survey

The bat emergence surveys consisted of evening survey visits undertaken of the buildings on site, including Barn C on 7<sup>th</sup> September 2020 and 9<sup>th</sup> May, 1<sup>st</sup> June & 12<sup>th</sup> July 2023. The surveys of Barn C were conducted by Laurent Duverge, Lyn Jenkins, Ruth Cooper, Charlotte Gill, Andy Hobbs and Alfie Mussell. The survey visits were undertaken from 15 minutes prior to sunset until 1½ hours after sunset.

The surveyors were positioned to cover all aspects of the buildings, with particular emphasis placed on the areas which had potential to be utilised by emerging bats. When a bat was detected, it was identified with its position and activity noted on a field base plan. The time and position of each bat was recorded, along with its direction of flight (light permitting) and whether the bat was emerging, foraging or commuting. Cloud cover, wind strength, precipitation, humidity and temperature were all recorded at the start and on completion of the survey.

The surveyors were each equipped with a bat detector and recording device, comprising of either a Peersonic RPA3 Echo Meter Touch Pro or Elekon Batlogger. To aid species identification, all recordings were analysed using Kaleidoscope Viewer (ver4.5.5) or BatSound (ver4.03) computer software.

### **4.3 Remote Monitoring Survey**

An automated bat detector was positioned upon the mezzanine floor within the central section of Barn C for a period of five nights from the 12<sup>th</sup> July to 16<sup>th</sup> July 2023.

The automated bat detector consisted of a Song Meter MINI bat zero crossing frequency division detector, programmed to commence recording 30 minutes prior to sunset until 30 minutes after sunrise.

All subsequent ultrasound recordings were analysed using Kaleidoscope Viewer (version 4.5.5), Analoow (version 4.1) and BatSound (version 3.3) computer software.

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## 5.1 The Bat & Protected Species Survey

### 5.1.1 Bats

Two lesser horseshoe bats were observed roosting at the roof apex within the central section of the barn during the initial scoping survey undertaken on 19<sup>th</sup> October 2022.

Two brown long-eared bats were discovered in a state of torpor during the survey undertaken on 6<sup>th</sup> December 2022. One was observed roosting at the roof apex within the southern section (see Figure 10). One was discovered roosting within a narrow gap between the eastern wall and the mezzanine floor (see Figure 11).

Droppings from lesser horseshoe and brown long-eared bats were discovered throughout all sections of the barn with concentrations below the ridgeline and accumulations upon and beneath the mezzanine floors (see Figures 12 & 13).

Free-flight access was noted throughout the barn sections as well as the dedicated access openings above the western door and the southern window (see Figures 14 & 15).

### 5.1.2 Nesting Birds

Two former nesting sites for small passerines, likely robin, were discovered within the southern section of the barn, below the mezzanine floor. A former swallow nesting site was discovered within the central section roof structure.



Figure 10. Brown long-eared bat roosting within south section



Figure 11. Brown long-eared bat roosting behind mezzanine floor in central section



Figure 12. Mixed droppings and urine staining on stored items within the barn



Figure 13. Mixed droppings upon the mezzanine floor within the central section of the barn



Figure 14. Free-flight access above west elevation door of north section



Figure 15. Free-flight access via louvered opening in south gable ground floor window

## 5.2 The Bat Emergence Survey

The bat emergence survey was undertaken on the evenings of 7<sup>th</sup> September 2020 and 9<sup>th</sup> May, 1<sup>st</sup> June & 12<sup>th</sup> July 2023. Weather conditions recorded at the start and end of the survey visits are presented in Table 1.

**Table 1. Timings and environmental conditions relating to the bat emergence survey**

Date & Times	Start/End	Temp (°C)	Wind Speed (Beaufort Scale)	Cloud Cover %	Precipitation	Humidity %
7 <sup>th</sup> Sept 2020	Start of	18	1	50	None	75
Sunset: 19:47	Survey					
Start Time: 19:30	End of	14	1	40	None	95
End Time: 21:20	Survey					
9 <sup>th</sup> May 2023	Start of	14	2	60	None	75
Sunset: 20:47	Survey					
Start Time: 20:30	End of	12	1	40	None	80
End Time: 22:00	Survey					
1 <sup>st</sup> June 2023	Start of	16	1	5	None	67
Sunset: 21:17	Survey					
Start Time: 21:00	End of	12	2	0	None	73
End Time: 21:00	Survey					
12 <sup>th</sup> July 2023	Start of	17	1	30	None	66
Sunset: 21:24	Survey					
Start Time: 20:10	End of	16	0	90	None	72
End Time: 22:00	Survey					

### 5.2.1 The Bat Emergence Survey Visit – 7<sup>th</sup> September 2020

Greater horseshoe bat activity was recorded inside the barn from the northwest door opening between 19:54 and 20:01. Five greater horseshoe bats exited the barn door on the northwest corner between 20:05 and 20:12 and entered Barn A, located to the north.

A long-eared bat emerged from the gable wall-top at 20:18 and entered the first floor of Barn A to the north (see Figure 16).

### 5.2.2 The Bat Emergence Survey Visit – 9<sup>th</sup> May 2023

One lesser horseshoe bat emerged from the opening above the door on the western elevation at 21:10 and entered Barn A (see Figure 16).

### 5.2.3 The Bat Emergence Survey Visit – 1<sup>st</sup> June 2023

A lesser horseshoe bat was detected within the ground floor of the northern section of the barn at 21:39 but not observed emerging during the survey (see Figure 16).

### 5.2.4 The Bat Emergence Survey Visit – 12<sup>th</sup> July 2023

A common pipistrelle bat emerged from the eaves of the barn on the east elevation at 21:43 (see Figure 17).

A lesser horseshoe bat was observed light sampling from the opening above the door on the western elevation at 21:42, before emerging at 21:46 and heading west across the yard area (see Figure 16).



Figure 16. Lesser & greater horseshoe bats observed emerging from doorway (highlighted in red and yellow) and individual long-eared emerging from wall-top (green)



Figure 17. Location of emerging common pipistrelle on 12<sup>th</sup> July 2023



### **5.3 Remote Monitoring Survey: 12<sup>th</sup> – 16<sup>th</sup> July 2023**

During the survey period, 1545 bat files were recorded with activity recorded on all nights.

The survey confirmed night and day roosting within the barn for common pipistrelle, brown long-eared and lesser horseshoe bats throughout the survey period.

Night roosting was also recorded for soprano pipistrelle and Natterer's bats on all nights.

Two recordings for Barbastelle were made, indicating prospecting behaviour by an individual bat.

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## 6.1 Bats

### 6.1.1 Barn C Roost Characterisation

The combined survey results indicate that Barn C supports;

- Lesser horseshoe: summer day roosting, utilised by low numbers (peak count 2);
- Greater horseshoe: summer day roosting by low numbers (peak count 5);
- Brown long-eared bat: summer day roosting and winter hibernation, utilised by low numbers (peak count 2);
- Common pipistrelle: summer day roosting, utilised by low numbers (peak count 1);
- Soprano pipistrelle – summer night roosting, utilised by low numbers; and,
- Natterer's bat – summer night roosting, utilised by low numbers.

### 6.1.2 Legislation

Bats are protected under several articles of UK and European legislation, notably the Wildlife & Countryside Act 1981, the CroW Act 2000, and the Conservation (Natural Habitats, &c) (Amendments) 2019 Regulations [referred to as HR]. Under this legislation, it is illegal to:

- Intentionally or deliberately kill or injure bats;
- Deliberately disturb bats; and,
- Recklessly disturb roosting bats or obstruct access to their roosts; and,
- Damage or destroy bat roosts.

Where works are proposed that would result in offences being committed, a European Protected Species (EPS) Licence is required under the Habitats Regulations (2019). An EPS Licence or must be applied for from Natural England, permitting activities that would otherwise be deemed illegal.

### 6.1.3 Impact of the Proposed Development

The proposed conversion works to the barn will modify/destroy the identified bat roosts/access points/flight routes and potentially cause disturbance and/or injury to any roosting bats present at the time of the proposed works.



Therefore, subject to receiving planning approval, it will be necessary to apply and obtain an EPS Licence from Natural England under the conservation (Natural Habitats, &c) (Amendments) 2017 Regulations, to legally allow the proposed works to take place.

In order to apply for the licence, it will be required to successfully obtain full planning and building regulation permissions (if required) from the respective authority.

In order to obtain an EPS Licence, the following three regulations must be satisfied:

- 1) The proposed works or development may be 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.*” [R.44(2) (e)];
- 2) “*There is no satisfactory alternative*” [R.44(3)(a)]; and,
- 3) “*The action will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.*” [R.44(3)(b)].

It is noted that previous mitigation for bats has been implemented at the site within an alternative barn: Barn A, under two EPS Licences granted by Natural England.

Updated mitigation and compensatory measures will need to be detailed within the EPS Licence application for the conversion of Barn C, taking the whole site into consideration including the existing mitigation features.

Appropriate/sensitive timing of the commencement of works, with initial ecological exclusion and supervision of works to the barn and roof structure will be required.

Incorporation of suitable roosting provisions within the retained sections of Barn C and other on-site structures will be required to maintain continual ecological function by horseshoe bats and other bat species at the site.

Providing that measures are implemented; the proposed works will not necessarily have a detrimental population effect.

Mitigation and compensatory measures will need to be detailed within the EPS

Licence application, including:

- Creation of a bat roosting void of suitable dimensions for horseshoe bats within an alternative building onsite, consisting of:
  - A building with attic style void with a minimum of 16 m<sup>3</sup> volume;
  - The bat roosting void to include free flight bat entrance point/s at least 400 mm wide by 300 mm high;
  - Use of suitable building materials in association with the bat roosting void/provision/s, including no breathable roofing membrane and approved timber treatment products only;
  - Incorporation of four inbuilt and internally mounted bat roosting provisions for crevice roosting species;
  - External lighting must not illuminate the bat roosting provisions, their entrances or flight lines connecting to the surrounding buildings and wider environment.
- Exclusion of horseshoe bats from the proposed working areas by an ecologist;
- Retention of the whole southern section and northern section first floor of Barn C for roosting bats;
- Ecological supervision of the initial stages of the development works for removal of any uncovered or discovered non-horseshoe bats; and,
- Any bats discovered/uncovered, would be removed and moved to safety by the supervising ecologist.

#### **6.1.4 Lighting**

Any new lighting associated with the development must not illuminate:

- The created bat roost/s and corresponding flight lines linking the roosts to the adjacent barns or surrounding environment;
- The boundary vegetation; or,
- Any areas beyond the site.

External lighting should be avoided. However, if lighting is required, it should be installed adjacent to access, doorways, steps etc. only, below 1 m in height and directed below a 70-degree plane.

Any external lighting associated with the development will be adapted to be based on a Passive Infrared Sensor (PIR) system (being motion-sensitive only to large objects) and on a short timer (no longer than 1 minute). Such lighting will specifically not be

positioned where it could illuminate surrounding vegetation (woodland, trees, hedgerows, hedgebanks etc.) or any areas beyond the development area.

Lighting must be kept at the minimum height permissible. LED luminaires which lack UV elements with glass glazing should be used instead of mercury or metal halide lamps. This type of lighting can be used more directionally and will reduce the range of light wavelengths emitted thus significantly reducing the levels of light which may attract increased levels of invertebrate bat prey items. Such light should be positioned to only illuminate the required areas, limiting light spill, both horizontally and vertically beyond the site.

A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce the blue light component. Luminaires should feature peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats (Institution of Lighting Professionals & the Bat Conservation Trust 2018). Additionally, hoods, cowls, louvers and/or shields should be used to further direct any lighting.

#### Internal Lighting

Internal lighting should be recessed where installed in proximity to windows and blinds should be fitted to reduce glare and light spill (Institution of Lighting Professionals & the Bat Conservation Trust 2018).

## **6.2 Birds**

Two former nesting sites for small passerines, likely robin, were discovered within the southern section of the barn, below the mezzanine floor. A former swallow nesting site was discovered within the central section roof structure.

It is likely that these nesting sites will be re-established and new nest site/s could be established within or upon the building during any future bird nesting season/s.

Whilst active, bird nest sites are legally protected from damage or disturbance (see Appendix 1).

The proposed conversion works of the barn should be scheduled to commence outside of the bird nesting season, removing any potential for undue delays caused by nesting birds. The bird nesting season is considered to extend from March to August inclusive, although, depending upon the species, geographical area and the weather conditions, nesting can extend outside this period.

Alternatively, if any conversion works are to be commenced during the bird nesting season, a nesting bird check would be required to confirm the presence or absence of active bird nests, with any active nests protected accordingly.

### **6.3 Ecological Mitigation, Compensation & Enhancements**

In order for the development to result in an increase in biodiversity the following should be included;

- One inbuilt sparrow nesting terrace – positioned upon/within external wall(s) of the converted barn (see Appendix 4);
- Three swallow nesting cups mounted within the roof structure of the adjacent Barn A (see Appendix 4); and,
- One invertebrate provision – installed at a minimum height of 1 m in a sunny location (Appendix 5).

The required provisions are to be incorporated into the proposed plans and elevations for the barn conversion and/or conditioned prior to commencement if approval is granted for the barn conversion.

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## APPENDICES

- Appendix 1: Legislation
- Appendix 2: Examples of Horseshoe Bat Roosting Provisions
- Appendix 3: Examples of Inbuilt Bat Roosting Provisions
- Appendix 4: Examples of Bird Nesting Provisions
- Appendix 5: Bee Brick

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### Bat Species

All bat species and their roosts are legally protected in the UK. All bats are listed as European protected species of animals in the European Union's Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the Habitats Directive. This Directive is implemented in the UK by The Conservation of Habitats and Species Regulations 2017 (better known as the Habitats Regulations).

There is also some protection for bats and roosts in England and Wales under the Wildlife & Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000). For practical purposes, the protection of bats and their roosts now falls mostly under the Habitats Regulations

In summary, it is an offence to

- deliberately, capture, injure or kill a bat
- deliberately, disturb in a way that would significantly affect their local distribution or abundance, or affect their ability to survive, breed or rear young
- damage or destroy a roost (this is an 'absolute' offence)
- possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

('Deliberately' may be interpreted as someone who, although not intending to injure, kill, etc, performed the relevant action, being sufficiently informed and aware of the consequences their action will probably have.)

A person who needs to carry out actions that would result in an offence being committed should apply for a derogation licence from Natural England. They have powers to grant Habitats Regulations derogation licences in certain circumstances, for certain reasons and with certain terms attached, so that the licence holder remains within the law. Application for a derogation licence should be made in plenty of time, and the services of a bat expert utilised in making the application. It is an offence to make a false statement to obtain such a licence.

This information is not provided as legal advice and before making decisions relating to the law a qualified legal representative should be consulted.

### Barn Owl

All birds, their nests and eggs are protected by law under Part 1 of the Wildlife and Countryside Act 1981 (as amended). Barn Owls are listed on Schedule 1 which provides them with special protection.

It is an offence to:

- Intentionally kill, injure, or take (handle) any wild barn owl.
- Intentionally take, damage, or destroy any wild barn owl nest whilst in use or being 'built'.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing eggs or young.
- Intentionally or recklessly disturb any dependent young of wild barn owls.

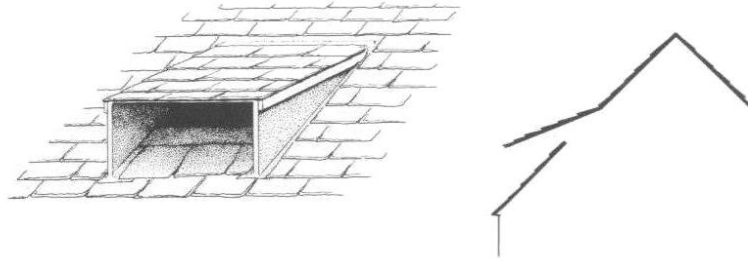
### Nesting and Nest Building Birds

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). Nesting is determined as being from when birds first initiate nest building up until the point when fledglings stop returning to the nest.

**Horseshoe Bat Roosting Void Provision**

Horseshoe bats require an internal flight and roosting area at least 16m<sup>3</sup> (typically consisting of an apex height of 2m with a base of 4m by 4m).

Lesser horseshoe bats: access point of at least 300mm wide by 150mm high; &  
Greater horseshoe bats: access point of at least 400mm wide by 300mm high.



Dormer type entrance suitable for horseshoe bats



Letter box type entrance suitable for horseshoe bats

### Schwegler 1FE Bat Access Panel with Optional Back Panel

Material: Woodcrete (75% wood sawdust, concrete and clay mixture)  
 Width: 300mm  
 Height: 300mm  
 Depth: 80mm  
 Weight: 7.8kg  
 Entrance: 20mm slit

Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.

Additional Information: Installation of access panel alone would allow bats to access into a building, potentially into a cavity wall spaces or loft spaces.

By fitting the optional back panel the Schwegler 1FE becomes a self-contained bat roosting unit at the dimensions shown above.



### Schwegler 1FR Bat Tube

Material: Woodcrete (75% wood sawdust, concrete and clay mixture)  
 Width: 200mm  
 Height: 475mm  
 Depth: 125mm  
 Entrance Width: 150mm  
 Entrance Depth: 20mm  
 Weight: 9.5kg

Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.



### Segovia Build-In Woodstone Bat Box

Designed to be built into a wall with the entrance face at the front, remaining exposed and visible. The boxes have removable sides so that an extension box can be placed next to this box, to create a larger roosting space.

Dimensions: 21 x 17 x 50 cm.



### Ibstock Enclosed Bat Box 'B'

Available in red, buff and blue brick finish, and two sizes:

	Small	Large
Height:	215mm	290mm
Width:	215mm	215mm
Depth:	105mm	105mm
Weight:	5.8kg	8kg

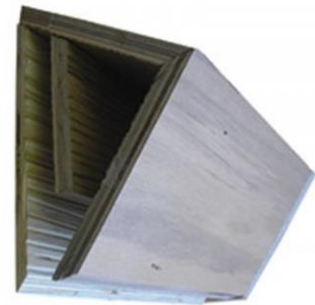


Position: Within external walls with a southerly aspect, beneath eaves or approximately 3m or higher from ground level.

### Soffit Bat Box

Dimensions: 30 cm long with a 2 cm entrance slot.

Entrance slot is 20 mm  
Length of the roost 330 mm  
Manufactured from 12-18 mm FSC hardwood



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### WoodStone Build in Open Nest Box

Suitable for: robins, wrens and blackbirds.

Material: Woodstone

Height: 180 mm

Width: 220 mm

Depth: 180 mm

Weight: 4.2 Kg

Position: Within external walls, at a height of 2m or above.



### Schwegler Sparrow Terrace

Suitable for: House sparrows and individual blue & great tits

Material: Woodcrete

Height: 245mm

Width: 430mm

Depth: 300mm

Weight: 7kg

Position: At a height of at least 2m upon external wall



### Schwegler No 10 Swallow Nest

Suitable for: Common swallow

Material: Woodcrete with water resistant glued chipboard mounting panel which can be painted

Height: 110mm

Width: 250mm

Depth: 140mm

Weight: 0.9Kg

Positioning: Inside of buildings or larger covered areas ensuring clear flight path in and out of the structure

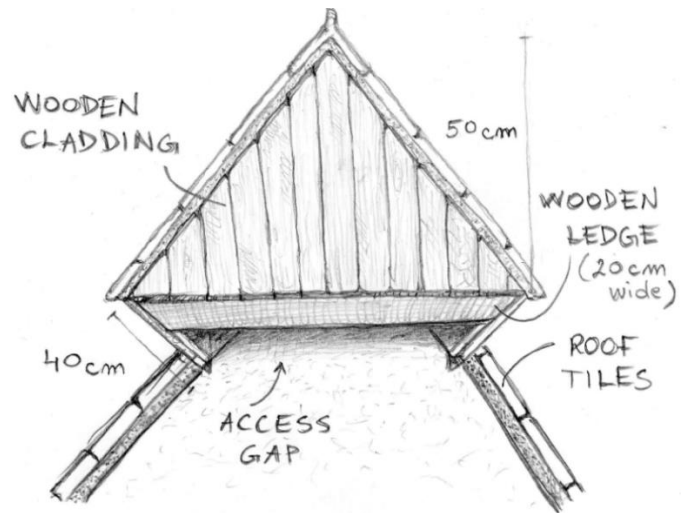




## Swallow Eaves Overhang Nesting Box

Suitable for: Common swallow  
Material: Timber cladding with tile roof to match building  
Height: 500mm  
Width: to match pitch of roof  
Depth: 400mm

Positioning: on gable of existing building.  
Supplemented by three Schwegler No 10 Swallow nesting cups installed within the box against the gable wall.



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**Bee Brick**

Each bee brick includes nesting compartments for solitary nesting bees, including for egg laying and hibernation.

Bee bricks to be positioned within southerly elevations, which includes part or full sun, between 1m to 2m above ground level, and ideally facing garden or boundary habitats.



Bee Brick - case in concrete: 215mm x 105mm x 65mm  
<http://greenandbluebuild.co.uk/product/bee-brick/>



Bee brick & bee block incorporated into an external brick wall