David Leach Ecology Ltd.

Ecological Consultants

Land at the Street

West Knoyle

Wiltshire

Ecological Appraisal V1.

Date: November 2022

Report compiled by D. V. Leach. M.C.I.E.E.M

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1.0 Executive summary.

- This survey was commissioned to look for protected species and habitats, or potential for protected species, as part of a planning application to build a dwelling on the site.
- A walkover survey was undertaken in January 2021 and repeated in September 2022.
- There are no sites of statutory conservation designation within 1km of the proposed development site that will be significantly affected by the proposed development.
- The 0.24 acre site comprised an area of species poor semi-improved grassland.
- No rare or uncommon plants were found.
- There are no ponds on site.
- No signs of protected species or habitats were found during the survey.
- **A reptile survey was undertaken which found no reptiles or amphibians on the site.**
- The site will be planted with native or wildlife friendly species of plants and trees.
- Features for bats, birds and insects will be installed on the new dwelling.
- In addition to the enhancement on the site part of a 1.98 acre field on the opposite side of the road will be enhanced by planting an orchard and an area of woodland trees on the land which is also owned by the client.
- **In the unlikely event a protected species is found during the proposed works, work must stop and David Leach or Natural England contacted for advice on how to proceed.**
- **This survey is valid for 12 months and should be updated if conditions on the site change or if protected species or signs of protected species are found on the site in the future.**

2.0 Introduction.

2.1 Background.

Client: Mr. D Marsh

Property Surveyed: Land at the Street
West Knoyle
Wiltshire
BA12 6AE

Grid reference: ST 85326 31875

Date of Survey: 28th September 2022

Lead Surveyor: David Leach BSc. (Hon), CBiol. M.S.B., M.C I.E.E.M.
(Natural England WML CL18 & CL21 registered bat worker).

2.2 Aims of the Survey.

- A Preliminary Ecological Survey was undertaken on 21st January 2021 to accompany a planning application to build a dwelling on the site. Repeat visits were made in September and October 2022
- The survey was commissioned to check for the presence of or the potential for protected species or habitats that would be affected by proposals.

2.3 Site Description.

- The 0.24 acre site comprised of an area of species poor semi-improved grass at the south- west side of West Knoyle, 9km north of Shaftesbury.
- In the wider landscape, there are areas of pasture, woodland and mixed farmland with associated hedgerows.
- There are a few residential and agricultural buildings in the area.
- There are no ponds on site.



Promap V2
LANDMARK INFORMATION
Ordnance Survey © Crown Copyright 2020. All Rights Reserved.

Figure 1. Map of the site location (the 0.24acre plot)

3.0 Methodology

3.1 Desk Study

- A search of the Magic web site was used to obtain details of designated sites in the area that would be affected by the proposed works.

3.2 Site Survey

- This consisted of a walkover survey of the application site and land within 50m of the application site boundaries where possible.
- Any habitats identified as having potentially high botanical value will be subject to further botanical surveys, if deemed necessary. The site was inspected for non-native invasive species such as Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Himalayan Balsam (*Impatiens glandulifera*).
- The survey methodology included an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly.
- Indicative methods for protected species are outlined below following recognized guidelines: Chartered Institute of Ecology and Environmental Management (CIEEM), Amphibian and Reptile Conservation (ARC), Bat Conservation Trust (BCT) and Joint Nature Conservation Committee (JNCC).

Bats.

The external and internal areas of any building or structure on site were inspected following guidelines set out in the BCT Bat Surveys for Professional Ecologists Good Practice Guidelines 3rd edn. Collins. J (2016) and the JNCC Bat Workers' Manual (Mitchell-Jones A. J). The presence of bats or signs of bats and possible entry points into buildings was looked for.

Extant trees were inspected for potential roosting areas that could support bats. Particular attention was paid to the following:

- Mature trees with ivy covering and/or crevices and peeling bark.

Evidence searched for to indicate usage of bats included:

- Droppings
- Urine staining

- Worn entrances or claw marks around potential access points
- Insect feeding remains
- Oil staining left from bat fur
- Live/dead bats
- All accessible areas of any internal space were carefully inspected for bats (live or dead) or signs of bats such as droppings, urine stains, signs of feeding such as moth wings, etc. Cobwebs which indicate no or infrequent use by bats were also looked for. Equipment available included 3.8m telescopic ladder, Leica 8x42 binoculars, digital camera, head torch and Clulite CB2 high powered torches, See snake inspection camera.
- The bat roosting potential of buildings was assessed according to the scale negligible, low, moderate or high:
- *Negligible*: This category describes buildings of a simple structure where all structural features can easily be surveyed with a visual inspection or investigated with an endoscope. For example, a simple wooden garden shed, a corrugated iron barn or precast concrete modular garage may fit this category.
- *Low*: This category is used to describe simple structure buildings that have very few potential bat roosting features but all areas cannot be surveyed visually or investigated with an endoscope.
- *Moderate*: This category is used to describe buildings that have some potential to support roosting bats but is considered to be less than ideal in some way. Some but not all modern industrial and agricultural buildings may fit this category if they are of a simple structure with single layer walls and unlined roof areas.
- *High*: This category is used to describe buildings with multiple internal and external structural features suitable for roosting bats. Most brick built dwelling houses and timber or stone barns will be covered by this category. Features that may be used by bats are e.g. loft spaces and other smaller roof voids, gaps between overlapping clay tiles, gaps in-between the tiles or slates and the roofing felt, cavities under ridge tiles, under soffits fascia and barge boards, by the brickwork of chimney stacks, under lead flashing, inside cavities of flat roofs, under wall hanging tiles, behind wooden cladding or other wooden structures, inside cavity walls or other smaller wall cavities, in gaps and cracks of stone walls and inside wooden beam mortise and tenon joints.

- *Confirmed*: This category is used where evidence of bats such as live or dead bats or bat droppings are present, or where there are records of a bat roost in the building within the last 5 years.

Birds.

Any habitat features, for example, scrub, trees and hedgerows which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Great Crested Newts.

Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts (*Triturus cristatus*) was assessed.

Reptiles.

Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

Badgers.

Any area that could be used for foraging or could potentially contain a Badger sett was surveyed and any signs noted including:

- Evidence of active or disused setts
- Evidence of potential badger diggings
- Latrines / dung pits
- Evidence of badger foraging ('snuffle holes')
- Footprints
- Badger hairs

Otters and Water Voles.

Any riparian habitat present on-site or immediately adjacent to the site was searched for signs of otters (*Lutra lutra*) and water voles (*Arvicola amphibious*). Signs included:

- Otter spraints or sign heaps
- Water vole latrines and feeding stations
- Evidence of potential holts or burrows
- Footprints

Dormice.

The suitability of the habitat was assessed for dormice (*Muscardinus avellanarius*). Any small mammal feeding signs were checked and assessed, including:

- Examination of hazel nuts
- Evidence of nest building

The survey was carried out by David Leach, an experienced ecological surveyor who is a Natural England WML CL18 registered bat worker, a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Biologist.

David Leach is a Registered Consultant under the Bat Mitigation Class Licence – WML-CL21 annexes B, C & D and also holds a Natural Resources Wales bat survey licence.

4.0 Results.

4.1 Desk Study

- The following records were returned from Wiltshire & Swindon Biological Records Centre of notified sites whose boundaries are held by WSBRC and legally protected/UK & Wiltshire priority/notable species.

Table 1. Notified sites within 1km of the site

Site name
Arathoon Wood
Longmead Coppice
Parsons Copse
Common Wood
Little Orchard Cottage Meadows
Godmer Field
Mitchell's Copse
Puckwell Coppice

These are all local wildlife sites. There are none adjacent to the site, the nearest is Puckwell coppice 100m to the south east.

Table 2. Records for the following species were found within 1km of the site.

Triturus cristatus	Great Crested Newt
Milvus milvus	Red Kite
Milvus milvus	Red Kite
Emberiza citrinella	Yellowhammer
Poecile palustris	Marsh Tit
Phylloscopus sibilatrix	Wood Warbler
Turdus viscivorus	Mistle Thrush
Lutra lutra	Eurasian Otter
Meles meles	Eurasian Badger
Chiroptera	Bat
Eptesicus serotinus	Serotine
Pipistrellus	Pipistrelle Bat species
Pipistrellus pipistrellus	Pipistrelle
Plecotus	Long-eared Bat species
Plecotus auritus	Brown Long-eared Bat

There are no records of protected species on or adjacent to the site.

4.2 Site Survey

Weather for recent survey — Dry and clear at 14:00

The external temperature was 18°C.

4.2.1 Habitat

- The 0.24-acre site is an area of species poor semi-improved grass with the perimeters being close board fencing at the north east of the site, wooden post and rail fence with stock proof wire at the north-west and south west and post and rail and gappy, poor quality hedge at the south east. There were two medium sized oak and ash trees at the south east perimeter with the main road.
- On the recent 2022 survey the plot was dominated by common species of grass which has not been managed since before 2020.
- Forbs noted during the surveys in the grass and at the base of the fences were all common species and included celandine, soft rush, dandelion, creeping buttercup, cleavers, stinking iris, cow parsley, broad leaved dock, narrow leaved plantain, rosebay willowherb, ground ivy, meadowsweet and common nettles.
- No rare or uncommon plants or invasive plants were found within or near the site.

4.2.2 Protected fauna.

Bats

- There are no buildings on site.
- The trees around the perimeter of the site lacked potential bat roosting features but could be used by foraging or commuting bats.

Birds

- The hedge at the south east of the site provided limited nesting habitat.

Reptiles

- The habitat on site provided some small areas of suitable reptile habitat at the perimeters.
- Anecdotal evidence from a passer-by indicated that slow worms are present on the site. Due to the limited area of suitable habitat it is thought unlikely there is a large population of reptiles present on site.
- A reptile survey was undertaken to check for reptiles on site.

Reptile presence/absence survey methodology.

- A visit was made on the 29th of September 2022 to deploy artificial reptile refugia to determine the presence or absence of reptiles.
- The recommended density of artificial refugia to be deployed is 10/ha. To increase the likelihood of finding reptiles a higher density of mats was used on the proposed development site and also on a potential receptor site on the other side of the road.
- Twenty five x 50cm squares of bitumen roofing felt and corrugated metal sheeting were placed in suitable reptile habitat around the development site (zone A) and fifteen around the receptor site (zone B). These were left for ten days to bed down.
- Seven visits were made to check for the presence of reptiles in October which is recognised as a suitable month for presence/absence surveys for reptiles in the south of England.
- The checks were carried out under suitable weather conditions: dry, sunny or sunny spells, little or no wind and a range of temperature between 14°C and 18°C. Visits were made a different time of the day ranging between 10:30 and 16:00.
- All checks were undertaken by David Leach or Michelle Haines who are both experienced in reptile surveys.
- The survey followed standard guidelines set out in the Froglife fact sheet 10.

Table 1. Reptile Survey 2021

Date	28 Sept	8 Oct	17 Oct	20 Oct	22 Oct	25 Oct	26 Oct	29 Oct
Time		10:30	14:30	13:30	14:30	13:16	14:00	16:00
Temp ^{0}C		15	18	14	15	16.5	17	16
Reptiles found (Zone A)	25 mats and tins deployed	0	0	0	0	0	0	25 Tins Retrieved
Reptiles found (Zone B)	15 mats and tins deployed	0	0	0	0	0	0	15 Tins Retrieved

Badgers

- No badger setts or signs of badger activity were found on site or nearby.

Dormice

- The site is not linked by hedgerows to any local ancient woodland which may hold populations of dormice.
- There is no suitable habitat for dormice and it is unlikely any will be on site.

Great crested newts (*Triturus cristatus*)

- There are no ponds on site. The nearest are two small ponds 100m – 150m to the north-west and east.
- The ponds are separated from the site closely grazed pasture which would act as a barrier for dispersal onto this site. The farmer who owns the ponds informed D Leach on one of the visits that had had found occasional frogs on his land but never any newts.
- It is unlikely that any great crested newts will be on site and be affected by the proposed works.

Water voles and otters

- There was no suitable habitat on site or nearby.

5.0 Conclusion.

5.1 Assessment.

- There are no designated sites nearby that will be significantly affected by the proposed development.
- No notable habitats of principal importance are present within or adjacent to the application site. The habitats present on site had value at site level only.
- No rare or uncommon plants were found during the survey.
- No signs of or potential for protected species were found on or adjacent to the site.
- The site has been used for hay for many years.
- No large trees or species rich hedges will be affected by the proposals.
- Access to the site will be off the main road via an existing gate and through a section of the post and rail fence.
- Precautionary measures will be taken during construction to protect any wildlife that may encroach onto the site.
- The proposed ecological impact of the development is likely to be minimal.

5.2 Limitations of the survey.

- Many plants have died back and are not apparent at this time of year. Furthermore, for those plants that remain wintergreen some that still persist do not display features necessary for reliable identification, such as inflorescences. September is at the end of the recommended window for reliable botanical identification and plant surveys. However as the site is semi-improved grassland this is not thought to be a major constraint.
- A survey of this type only provides a snapshot of what was found at the time of the survey and it is sometimes necessary to carry out a number of surveys to show the presence or absence of bats or other protected species.
- **In the unlikely event a protected species is found during the proposed works, work must stop and David Leach or Natural England contacted for advice on how to proceed.**
- **This survey is valid for 12 months and should be updated if conditions on the site change or if protected species or signs of protected species are found on the site in the future.**

5.3 Mitigation.

5.3.1 Bats

- Extra care will be taken to ensure that external lights are kept to a minimum and will not illuminate bat access points or flight paths around the buildings with bat features. A suitable lighting scheme and regime in accordance with Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018) must be approved by the Natural Environment Team. This will include:
    - Any lights will be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. A shield or hood will be used to control or restrict the area to be lit and limit “light spillage” on the site.
    - Security lights will be on motion sensors and on for a maximum of 1 minute.
    - Lighting units will be of low intensity - up to 15 watts, and red, amber or warm light with a maximum lighting colour temperature of 2700 K.
    - White, blue and green light sources including metal halide, mercury and CDO / CPO Ceramic Outdoor Lamps bulbs have a significant effect on bats and will not be used.

5.3.2 Reptiles & amphibians.

- It is recommended a phased vegetation removal regime will have to be employed – see below.
- Where the scrub and rough grass along the walls and around the site are to be removed it is recommended to perform works in a staged approach (staged vegetation removal). When removing vegetation, it is important that areas of grassland vegetation to be removed are strimmed in a directional manner toward habitat that is being retained in connection with other nearby habitat; In this case the remaining hedgerow and adjoin plots. This should be performed in a two-stage approach during the active reptile and amphibian season (April – October). This technique will ensure that any rogue transient reptiles have the opportunity to move naturally to nearby habitat and avoid risk of injury. The first stage of vegetation removal is to reduce vegetation to a low sward, not more than 50mm high, and then leave the ground to rest for one week. The area must then be strimmed to ground level and left for a further week before site clearance/construction commences. The ground level vegetation within the construction zone must be maintained below 50mm to render it sub-optimal habitat for reptiles

throughout the duration of works.

- A ‘buffer’ area of a minimum of 1m between boundary hedgerows and scrub and the construction zone must be maintained at all times.
- All construction and building materials must be stored on areas of hard standing or on raised pallets or sealed-based containers at least 5m away from suitable reptile habitat to prevent reptile colonisation during works.

Hedgehogs

- As a precautionary measure the following measures will be carried out.
    - Any scrub and hedges around the site will be checked for hedgehogs by an ecologist immediately prior to, and during the clearance of the ruderals and scrub which must be done using hand tools, not machinery such as a motorized flail or Allen scythe.
    - The hedge and scrub must be cleared between April and October to avoid disturbing hibernating hedgehogs.

General precautions

- Any deep holes or footings must be back-filled overnight or if this is not possible then earth ramps (less than 45 degrees) must be left in the trench to allow badgers and other wildlife to easily climb out.
- Back filling holes and trenches after checking for newts as soon as possible and avoiding creating temporary waterbodies which may be attractive to newts. Alternatively any foundation excavations left open at the end of a day will be covered over with plywood and the edges sealed with sand or soil.

5.4 Enhancements.

In accordance with local policies, Section 40 of the Natural Environment and Rural Communities Act 2006 and paragraphs 8, 170 and 175 of the National Planning Policy Framework (2019), measures will be implemented to enhance the biodiversity on site and ensure that there is a net biodiversity gain and no net biodiversity loss in the long term as per Government planning policy.

These will include but not be limited to:

5.4.1 Bats

- An integrated bat box/tube (see appendix D & E) will be incorporated into the new building as high as possible but at least 4m above ground level on the south-west elevation.
- Extra care will be taken to ensure that external lights are kept to a minimum and will not illuminate bat access points or flight paths around the building with bat features. A suitable lighting scheme and regime in accordance with Guidance Note 08/18 Bats and Artificial Lighting in the UK. Bats and the built environment series, Bat Conservation Trust (London) & Institution of Lighting Professionals (Rugby) (2018) must be approved by the Natural Environment Team. This will include:
    - Any lights will be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. A shield or hood will be used to control or restrict the area to be lit and limit “light spillage” on the site.
    - Security lights will be on motion sensors and on for a maximum of 1 minute.
    - Lighting units will be of low intensity - up to 15 watts, and red, amber or warm light with a maximum lighting colour temperature of 2700 K.
    - White, blue and green light sources including metal halide, mercury and CDO / CPO Ceramic Outdoor Lamps bulbs have a significant effect on bats and will not be used.

5.4.2 Birds.

- Swift Nest Boxes (at least two) will be installed as high as possible to the apex of the north-east gable (see appendix D & E).
- A pair of house martin nest cups will be installed under the eaves on the north-east elevation (see appendix D & E).

5.4.3 Insects.

- Two bee bricks will be built into a sunny but sheltered wall of the new house at least 1.5m above the ground and in an area that will not be obscured by plants (see appendix D & E).

5.4.4 Trees, shrubs and flowering plants.

- Native or wildlife friendly trees and plants will be use around the site.

- **Conifers, rhododendrons and Portuguese or cherry laurel are not suitable**.
- A mix of native trees – e.g. Native Woodland Pack from Perrie Hale Nursery in Devon- from oak, beech, cherry, silver birch, hornbeam, rowan, hazel, aspen, alder, field maple, could be planted around the site.
- Approximately 75m of a suitable mix of hedging plants such as Conservation Native Hedge Mix or Garden Hedge mix – no thorns from Perrie Hale Nursery in Devon- will be planted around the house site perimeter.
- Approximately 70m of a suitable mix of hedging plants such as Conservation Native Hedge Mix from Perrie Hale Nursery in Devon- will be planted along the south west perimeter of the field side opposite the new house.
- It is recommended that a mix of fruit trees, apple, pear, cherry, plum, damson etc. is planted at the north-west section of the field and a mix of native tree species is planted at the south-east section of the field.
- The area under the hedges and trees will be sown with a suitable wildflower mix such as:
    - EH1 – Hedgerow Mixture from Emorsgate seeds.
    - Hedgerow and Shade Wildflower Seeds LW7P mix from Landlife Wildflowers.
- The remaining area in the paddock will be some with a wildflower mix. The mix must include mixed grass species as these are an important food plant from many butterflies and moths. Suitable mixes are:
    - Heritage Seed of Osmington in Dorset supply the following suitable mixes
        - HS2 wildflower mix for heavy soils.
        - White Vine Farm mix (for Neutral Grassland from an organically managed SSSI).
    - Emorsgate Seeds
        - EM4 mix for clay soils.

6.0 Appendices

A. Legislation (a brief summary only. Please refer to full text of legislation or policy for full details).

Bats

Under section 9 of the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way (CroW) Act 2000, all bats have legal protection. In addition any structure which shows signs of use by bats either currently or in the past, for shelter or protection, is classed as a bat roost and both the roost and any bats using it are protected by law which makes it an offence to:

- Intentionally or recklessly kill or injure or take any bat.
- Intentionally or recklessly damage or destroy any bat roost and to obstruct access to that roost.
- Intentionally or recklessly to disturb any bat using a structure as a roost.

All native bat species are also defined as European Protected Species (EPS) through inclusion in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended); the UK implementation of the EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. Addition IV lists all bats.

Regulation 39 makes it an offence to:

- Deliberately kill or capture a bat.
- Deliberately disturb a bat.
- Damage or destroy a resting place or breeding site of any bat.

In addition, the following native bats are identified as Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities Act 2006:

- Barbastelle bat - *Barbastella barbastellus*
- Bechstein's bat - *Myotis bechsteinii*
- Noctule - *Nyctalus noctula*
- Soprano pipistrelle - *Pipistrellus pygmaeus*
- Brown long-eared bat - *Plecotus auritus*
- Greater horseshoe bat - *Rhinolophus ferrumequinum*
- Lesser horseshoe bat - *Rhinolophus hipposideros*

If any proposed development would result in the otherwise illegal acts above, a licence must be obtained from Natural England prior to any work being carried out. A licence will only be granted if there is no satisfactory alternative and the authorised action will not be detrimental to the maintenance of the population of the species concerned.

Reptiles

The Wildlife and Countryside Act 1981 (as amended) also protects all reptiles from killing, injury and sale.

Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to damage or destroy the nests of birds of breeding birds (with the exception of certain pest species). The bird nesting season is generally defined as being between mid-February and August inclusive although nesting outside of the period is not unusual if conditions are favorable.

B. References

- **Collins, J. (Ed.) 2016. Bat Surveys for Professional Ecologists - Good Practice Guidelines: 3rd** *edition.* Bat Conservation Trust, London, United Kingdom.

- **English Nature 2004.** *Bat Mitigation Guidelines.*

- **IEEM 2006**. Guidelines for Ecological Impact Assessment in the United Kingdom (version 7 July 2006), Institute of Ecology and Environmental Management [online]. Available: http://www.ieem.org.uk/ecia/index.html [accessed February 2011]

- **JNCC 2004**. *Common Standards Monitoring Guidance for Mammals*. Joint Nature Conservation Committee, Peterborough.

- **Mitchell-Jones A. J. & McLeish, 2004**. *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

- **Natural England and Countryside Council for Wales, 2007***. Disturbance and protected species: understanding and applying the law in England and Wales. – A view from Natural England and the Countryside Council for Wales.* United Kingdom

- **Stebbings R.E., 1986**. *Which bat is it?* The Mammal Society and the Vincent Wildlife Trust, London.

Appendix C. Photographs (taken September 2022 unless otherwise stated).



Plate 1. View of the south-east perimeter of the site 2020.



Plate 2. View across the perimeter of the plot from the south-west corner looking north-west.



Plate 3. View across the east end of the site from the south west corner looking north.



Plate 4. View across the site from the west perimeter looking north east.



Plate 5. View across to the south east corner of the site from the west of the plot.



Plate 6. The west perimeter of the plot 2020.

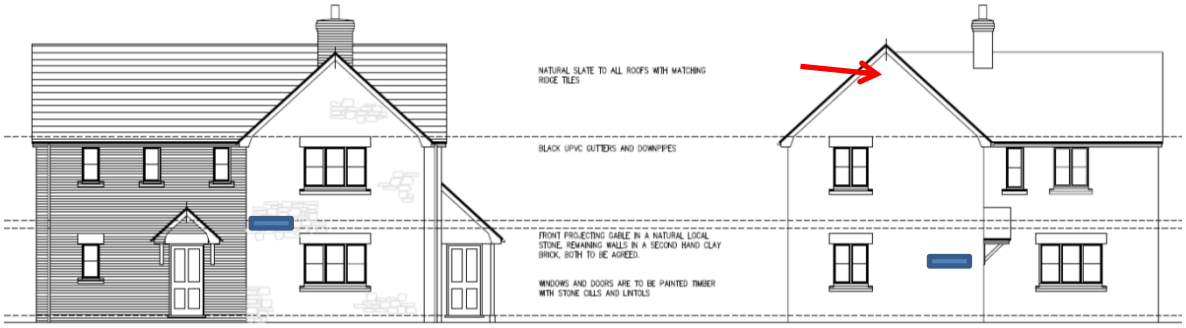


Plate 7. Looking south-west across the field opposite the plot that will be enhanced as part of the development.

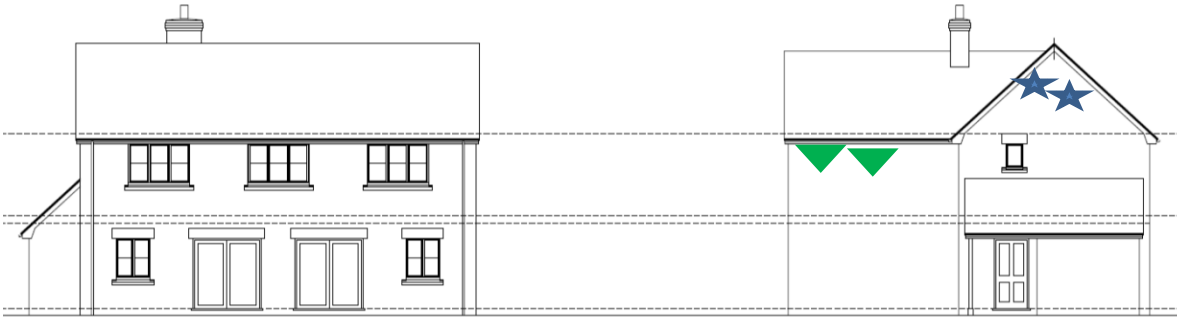


Plate 8. Looking north-west from the south-east corner of the field to be enhanced.

Appendix D. Location of enhancement features.



SOUTH EAST ELEVATION 1:100 SOUTH WEST



NORTH WEST NORTH EAST

Integrated bat tube

Swift Bricks (minimum of two) House martin cups (minimum of two)

Bee bricks

Appendix E. Suitable enhancement features.

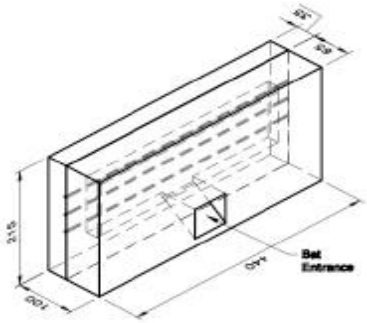
Bat boxes to install into / on to buildings & built structures

Forticrete

Product Information – **Bat Box**



- The Forticrete Bat Box has been developed to be used in new build construction or renovation work where there is a requirement to provide a habitat for Pipistrelle bats.
- The box is made of a conventional cast stone front face but is backed with high grade plywood which is sawn and roughened internally to provide a haven for bats.
- The Bat Box is maintenance free due to the bottom entrance.
- The Bat Box illustrated is available from Forticrete's 'Stone in Stock' range although bespoke boxes can be designed and made for any application.



For more information please contact Forticrete at:
caststone@forticrete.com

Telephone: **01909 775000**
Fax: **01909 773549**

You can also visit our website at
www.forticrete.com

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Habibat Bat Box

With the increase in development of new building sites and redevelopment of older buildings, especially in rural areas, availability of roost sites for bat species is becoming more limited. However, bats can be encouraged to remain at old sites or colonise new sites by incorporating artificial roost spaces into the building during the build or renovation process.

The Habibat Bat Box is a large, solid box made of insulating concrete with an internal roost space, which can be incorporated into the fabric of a building as it is built or renovated. A variety of facings can be fitted to suit any existing brick, wood, stonework or rendered finish, rendering the box unobtrusive and aesthetically pleasing. The Habibat box is suitable for species which are most commonly found roosting in buildings in the UK, such as Pipistrelle, Natterer's, Whiskered, and Brandt's bats.

This box is made to order with a plain face suitable for rendering over to match the rest of the building, leaving just a small entrance hole exposed. It is available with a choice of three plinth finishes: smooth blue, smooth red, or buff.

Ibstock - Enclosed Bat Box B
Designed specifically for the pipistrelle bat
Available in all brick types
Discrete home for bats
Various sizes
Several roosting zones are created inside the box
Bats are contained within the bat box itself
Maintenance free with entrance at the base
Ideal for new build & conservation work

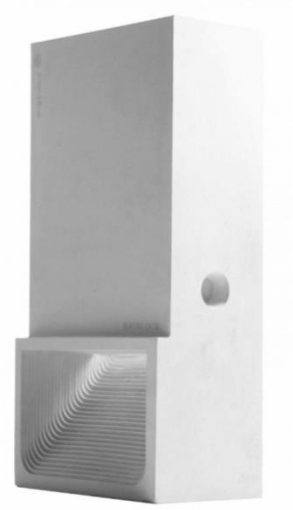
215mm x 215mm or 215mm x 290mm
F2 S2 Fully frost resistant



Ibstock - Bat Box with Engraved Motif C
Attractive motive
Available in all brick types
Discrete home for bats
Various sizes
Several roosting zones are created inside the box
Bats are contained within the bat box itself
Maintenance free with entrance at the base
Ideal for new build & conservation work

215mm x 215mm or 215mm x 290mm





The Green & Blue Bat Block is designed to create roosting space for bats within the framework of new builds, or to be retrofitted within existing properties. Once installed, the front of the Bat Block is designed to sit flush with the outside bricks of a build, with the entrance slightly protruding. Depending on the position installed, the Bat Block can become either a summer maternity roost (South or West facing) or a winter hibernation roost (North facing).

The Bat Block features an internal FSC certified wooden panel, a small entrance space to deter larger birds and predators and a "Bat Ladder" at the base of the box to facilitate bats landing and climbing. The Bat Block can be turned into a colony by knocking out the section on the side and installing Bat Blocks next to each other.

Made from cast concrete using up to 75% waste materials from the Cornish China Clay industry and is standard UK block size.

The Bat Block should be positioned at least 4m from ground level, away from artificial light sources and in proximity to vegetation and linear features like hedgerow which bats rely on for navigation and food. If it is on an existing feeding or flight route you are more likely to get occupation. The Bat Block does not require maintenance as the design allows droppings to fall from the entrance.

Specification
Dimensions: 215mm x 440mm x 160mm
Weight: Approx.15 kg
Materials: Cast Concrete and FSC Certified Wood

Vivara Pro Build-in Woodstone Bat Tube



Designed to be built in to the masonry of external walls or beneath a rendered surface, the Vivara Pro Woodstone Bat Tube provides an unintrusive, tailored habitat for a variety of bat species. It is designed to provide the maximum internal space across two cavities, allowing space for larger groups. The cavities can be reached via the crawl-in entry slot in the front facing. It is manufactured from hard-wearing WoodStone and plywood with removable side panels so that several boxes can be placed side by side. Position the box at least 2m above ground level away from artificial light sources. WoodStone is a mixture of sawdust from FSC wood sources and concrete, and it is designed to last for years. It is breathable so there will be no problems with condensation and Woodstone maintains a consistent temperature inside, providing excellent insulation for roosting bats.

This tube requires no maintenance as droppings fall out of the entrance ramp.

Specification
* External dimensions: 21cm (W) x 50cm (H) x 7.7cm (D)
* Internal dimensions: 16cm (W) x 40cm (H) x 2.2cm (D) (x2 cavities)
* Weight: 6kg
* Material: WoodStone



9A Schwegler House Martin Nest

It is increasingly difficult for Swallows and House Martins to find suitable nest-building and mud they do find, if any, is often poor quality. In addition, the walls of buildings are nowadays often very smooth, so as a result, nests tend to fall down, sometimes with the nestlings inside. In many places, the vibration caused by heavy vehicles shakes the nests loose.

Easily fixed under the eaves on the outside walls of buildings, these nest boxes are perfect for house martins to return to year after year. The bowl-shaped nest is made of air-permeable wood-concrete and a backing board made of exterior grade, formaldehyde-free chipboard to prevent warping.

Double nest: House martins are very sociable and will more readily use nests that are arranged in pairs. They can also be installed in groups to form large colonies. The backing board may be painted to match the building.

Siting: Under eaves on the externals walls of buildings. Install on the sheltered side of the building at a minimum height of 2m above the ground.

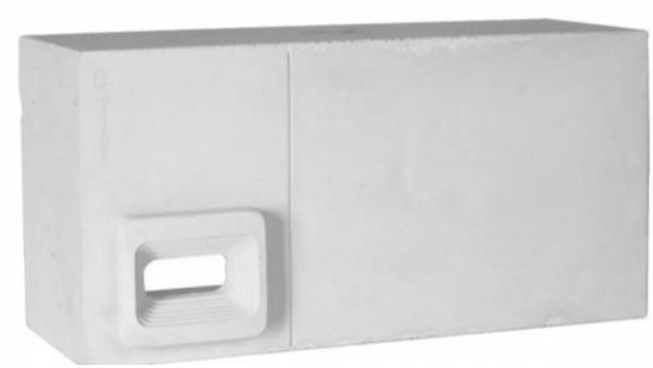
These nests can be used for years without cleaning. However, if possible it is recommended to inspect them frequently and to clean them when necessary.



No. 11 Schwegler House Martin Terrace

This **House Martin Terrace** means you can now provide house martin nesting sites on any external wall regardless of whether it has eaves or not. Made using Schwegler's patented wood-concrete (an exceedingly durable, rot-proof and breathable natural material designed to mimic the properties of natural nest sites and last up to 25 years), this contemporary design is an attractive addition to urban areas.

Ensure the nest is located at least 2 m above the ground. The nest can be installed on any unobstructed facade without an overhanging roof, or alternatively directly under overhanging eaves. Ensure the nest is on the outside of the building (rather than inside the roof) on the sheltered side. Each individual nest can be removed separately for cleaning and inspection.



Swift Block
Green & Blue

The Swift Block is designed to create nesting space for swifts that can be easily integrated into new builds or wall mounted on existing properties. If integrated, the front of the Swift Block is designed to sit flush with the outside bricks of a build, with the entrance slightly protruding.

The Swift Block features an internal nesting bowl, a small entrance hole to deter larger birds and predators, full instructions cast into the surface for easy fitting, a stylish entrance feature.

Made from cast concrete, meaning that it is long lasting and will not rot or deteriorate like a traditional wooden nest box. The cast concrete is made using up to 75% waste materials from the Cornish China Clay industry and is standard UK block size.

The Swift Block should be positioned at least 5m from ground level avoiding south facing walls, on the side of a building that gets shade during the day, or under an overhang or eaves. It should be mounted away from windows and vents and predator access. Swift Blocks should also be placed in a spot with clear adjacent access, allowing high speed, direct flight entry.

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WoodStone Build-in Swift Nest Box B
CJ Wildlife

The WoodStone Build-in Swift Nest Box B is ideal for building into or mounting on a wall. It is constructed from FSC certified WoodStone meaning that it is long lasting and will not rot or deteriorate like a traditional wooden nest box. The front of the nest box is removable for cleaning or inspection.



WoodStone Build-in Swift Nest Box Deep

A lack of suitable nesting sites is thought to be one of the main reasons behind the decline in our swift populations and by installing nest boxes such as this one it will greatly help to support their numbers. This build-in nest box is designed to be integrated into the cavity of a building. It is constructed from long lasting FSC certified WoodStone with a plywood backing. This nest box should be sited at least five metres high, with a clear flight path and avoid south facing sites.

Ecosurv





The Ecosurv Swift brick can be customised to match any brickwork. The materials include slate.

URL: http://www.ecosurv.co.uk/product/bird-box-range

Ibstock





An attractive brick, designed to encroach minimally on the cavity. It is thus one of the narrowest boxes on the market. The materials are frost resistant.

URL: http://www.ibstock.com/literature/eco-products/

CJ Wildlife Woodstone



Built-in Visible Swift box
Number 90068



Built-in Visible Swift box
Number 90059



Built-in hidden Swift box
Number 90060

These nest boxes are made of WoodStone®, a robust, durable mix of cement and wood fibres which offers protection from predators and a more consistent internal temperature.

URL: http://www.vivarapro.com/brochure/#p=23 or http://www.vivarapro.co.uk/Swallows-and-Swifts

Bee Brick



The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

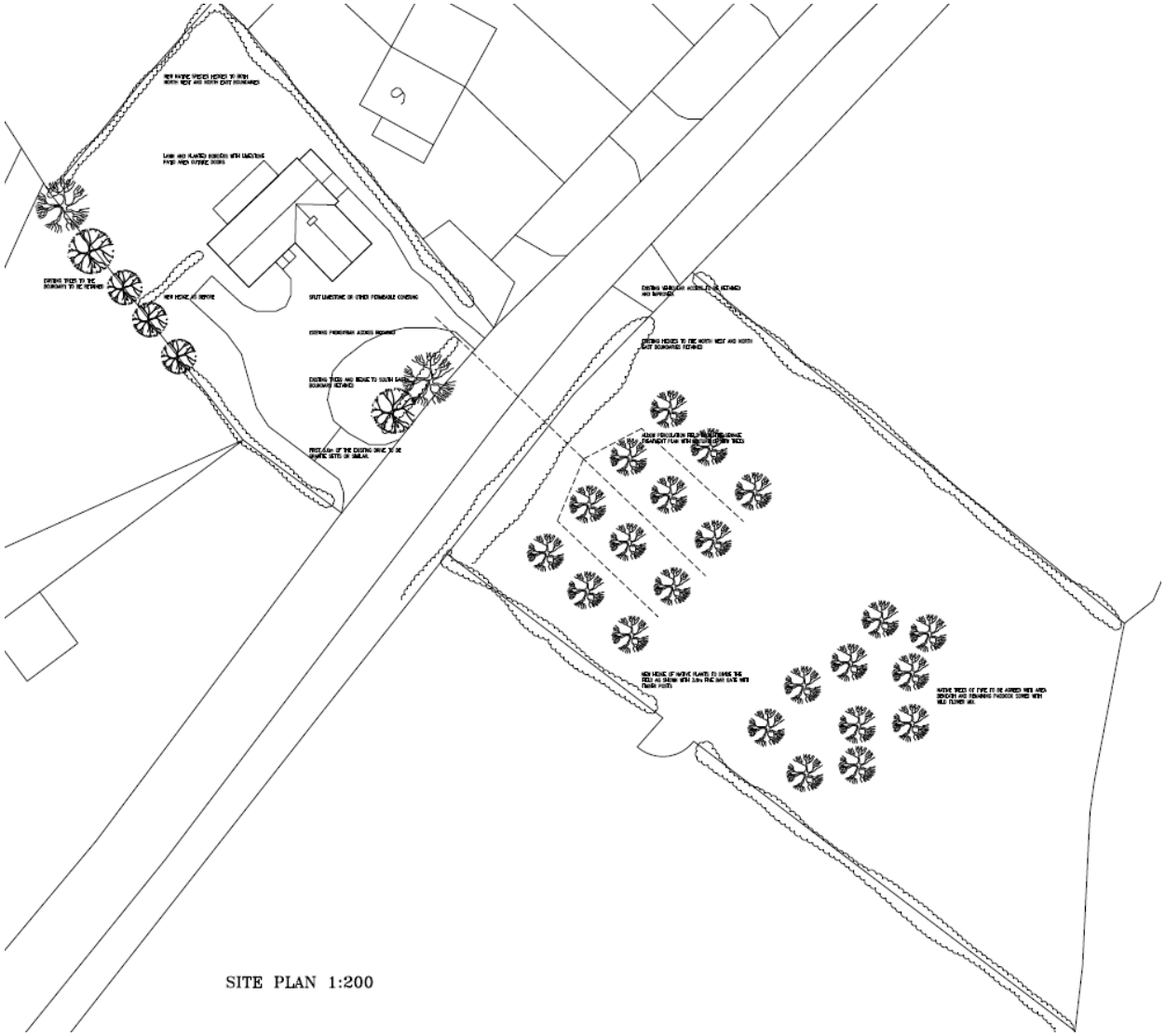
Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back.

Bee Bricks are made in Cornwall in England using the waste material from the Cornish China clay industry. 75% of the brick is made from recycled materials and concrete, making it both strong and environmentally friendly.

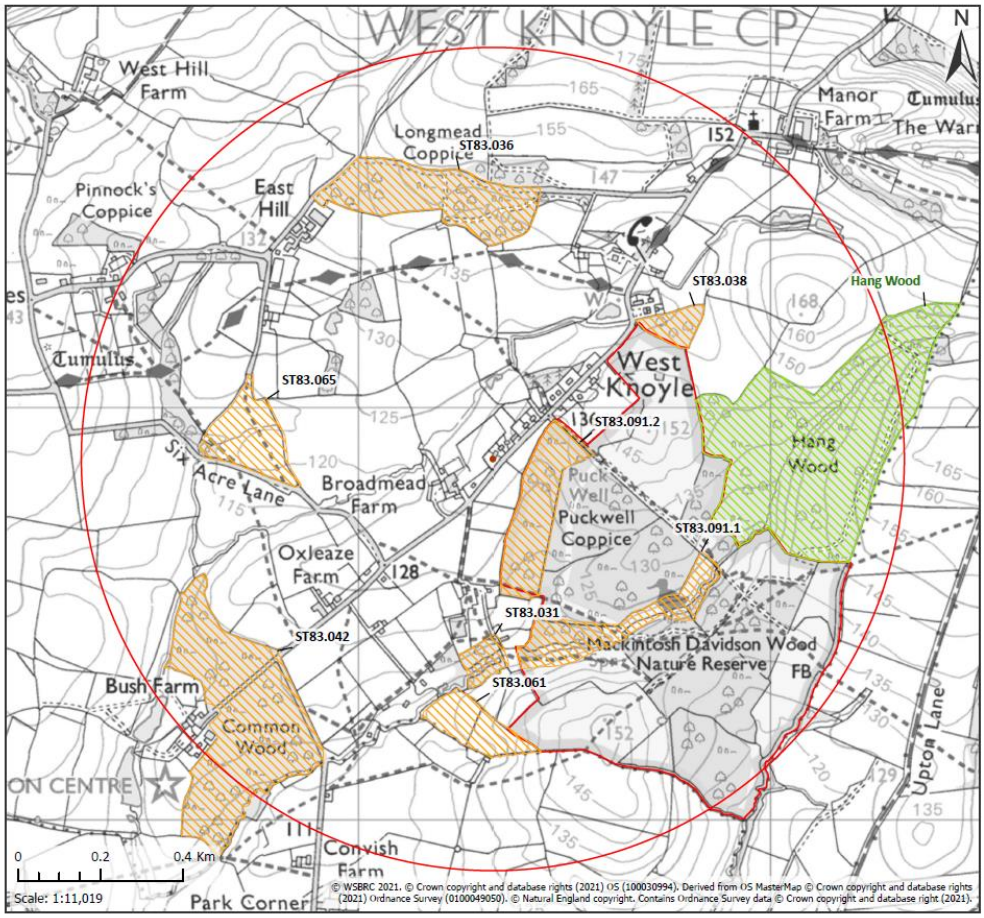
Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used. Lavender, honeysuckle and buddleia are all pollinator-friendly plants.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Appendix F. Proposed site plan.



Appendix G. Local Wildlife sites.



WSBRC Wiltshire & Swindon Biological Records Centre

Wildlife Sites Within 1 km of Land at the Street: ST8532631875

14/10/2022

- Wiltshire Wildlife Trust Reserve
- Site of Special Scientific Interest
- National Nature Reserve
- Special Area of Conservation
- Special Protection Area
- Local Nature Reserve
- Local Wildlife Sites
- Local Geological Site
- Protected Road Verge
- Woodland Trust Reserve (boundary information only)
- Bat Consultation Zone

David Leach BSc (Hons) CBiol. MSB MCIEEM. David is a professional ecologist with over forty years' research and fieldwork experience in many aspects of ecology and for the past twelve years in environmental consultancy work.

David is an experienced bat surveyor with competency in activity surveys, bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required.

David also has experience in surveying for birds, reptiles, amphibians, Barn Owls and Badgers and also carries out extended Phase 1 habitat surveys, BREEAM and Code for Sustainable Homes assessments.

David holds Natural England and Natural Resources Wales licenses to disturb bats for the purposes of science and education or conservation and is a **Registered Consultant for the Bat Low Impact Class Licence**. David and has been involved in over 145 Protected Species Licenses to permit development works affecting bats and also closing down badger setts.



David Leach BSc. (Hons), C.Biol., M.S.B., M.C.I.E.E.M.

Disclaimer.
All reasonable effort has been made to provide accurate information at the time of the survey. However weather conditions and the timing of surveys can affect the results. Some species or signs of that species will only be visible at certain times of the year e.g. the nesting season for birds is usually between March and September. The absence of certain species or signs of use at the time of a survey does not mean that they are not present at other times of the year and does not imply that a species might not use the site at some time in the future.

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