stark ecology ltd

PRELIMINARY ECOLOGICAL APPRAISAL REPORT

THE STABLES, HINDON ROAD, DINTON, WILTSHIRE

BY

stark ecology ltd

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INTRODUCTION

Stark Ecology Ltd was asked by Rock Architectural Services, on behalf of Les Dunn, to carry out a Preliminary Ecological Appraisal and building inspection for bats survey of The Stables, Hindon Road, Dinton. The property is proposed for extension and renovation.

The site is located at OS Grid Reference SU025313 and is in a rural location surrounded by mixed farmland which supports excellent hedgerow networks and woodland connectivity.



Fig 1: The site is surrounded by mixed farmland with excellent hedgerow and woodland connectivity.

The Preliminary Ecological Appraisal and building inspection survey was carried out by Georgie Starkie BSc (Hons) MSc MRSB (Natural England Class 2 Bat Licence Number 2015-13123-CLS-CLS) on 5th January 2023 when the weather overcast with light rain showers and a light wind. The temperature was approximately 10°C.

METHODOLOGY

Data Search

The MAGIC website was used to search for any protected or designated sites and any European Protected Species licences which have been granted by Natural England for work within 2km.

Preliminary Ecological Appraisal and Building Inspection for Bats

The house and stables were surveyed internally and externally in accordance with the Bat Survey Guidelines, published by the Bat Conservation Trust (BCT). Externally they were examined for cracks, crevices or other features that could be used by bats for shelter or as access points to voids within the building. Internally they were surveyed for signs of use by bats such as droppings, rub marks or bats themselves.

Evidence of any other species (eg. nesting birds) was sought both inside the buildings and in the habitat immediately surrounding them.

Limitations

This survey provides a brief snapshot of the site at the time the work was carried out and while every step was taken to ensure that the results of the survey are accurate, features of ecological value can change and therefore this report is only valid for 12 months.

RESULTS

Desk Study

The Stables lies within the 6000m buffer for barbastelle *Barbastella barbastellus* bats associated with the Chilmark Quarries Bat Special Area of Conservation (SAC) but is outside the 4000m buffer for greater horseshoe *Rhinolophus ferrumequinum* bats.

Approximately 150m to the south of The Stables the River Nadder forms part of the River Avon SAC and Site of Special Scientific Interest (SSSI) which is of national and international importance for the wildlife communities it supports. The river is richer and more varied than most chalk streams, with over 180 species of aquatic plant recorded, one of the most diverse fish faunas in Britain and a wide range of aquatic invertebrates. Five species are a primary reason for the SAC designation:

- Desmoulins whorl snail *Vertigo moulinsiana*
- Sea lamprey *Petromyzon marinus*
- Brook lamprey *Lampetra planeri*
- Atlantic salmon *Salmo salar*
- Bullhead *Cottus gobio*.

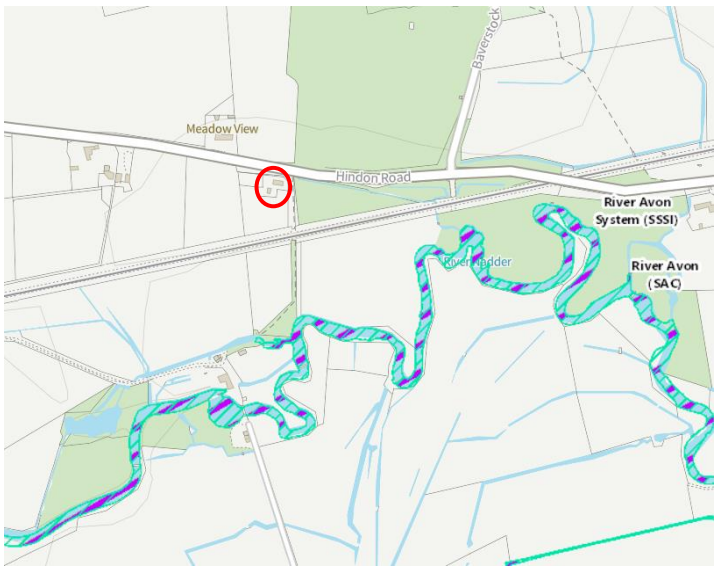

Fig 2: The Stables (circled in red) is c.150m from an SAC and SSSI.

Given the limited extent of the proposals for The Stables (a small extension and renovation of existing buildings) no impacts on the SAC or SSSI could reasonably be anticipated and so they are considered no further in this report.

There are several Priority Habitats in close proximity to the property, although none of these habitats occur within the site itself. The habitat immediately to the east is

Deciduous Woodland and to the south are Lowland Meadow (c.75m to the south, beyond an active railway line) and Coastal and Floodplain Grazing Marsh (c.180m to the southeast and also beyond an active railway line). No impacts on these Priority Habitats would be anticipated due to the limited extent of the proposals and the intervening barriers (in particular the active railway line).

Natural England has granted one licence for work affecting European Protected Species at locations within 2km of The Stables. In 2015 a licence was granted for work which would result in damage to a non-breeding roost used by brown long-eared *Plecotus auritus*, lesser horseshoe *R. hipposideros* and greater horseshoe bats at a location c.1.2km to the west.

Building Inspection – External

House

The house was built in 2009 and the walls are constructed from 4-inch thermalite blocks which are covered with a smooth building paper over which batten and timber cladding have been added.



Fig 3: The Stables.

This photo taken from the north on 5h January 2023.

Approximately half the building is a single storey with a flat roof and the other half has two storeys with a pitched roof. The flat roof is covered with bitumen roofing felt and the pitched roof is covered with a corrugated rubber material.



Fig 4: Half the building is a single storey with a flat roof and the other half has a pitched roof.

This photo taken 5th January 2023.



Fig 5: The flat roof is covered with bitumen roofing felt and the pitched roof is covered with a corrugated rubber material.

This photo taken on 5th January 2023.

Stables

This building has a block base with unlined timber above. The flat roof is timber board which has been covered in roofing felt but the roof is no longer weatherproof in all areas.

The building is set out and used as horse stalls and for storage with some stable doors left open.



Fig 6: The stable building.

This photo taken facing north on 5th January 2023.

Habitat

The habitat surrounding the house and stable building is predominantly bare ground which is used for parking, storage and as a terrace. There are also small areas of amenity grassland present. The habitats within the red line site boundary are shown in the habitat map at Appendix 1.



Fig 7: The habitat surrounding the house and stables is predominantly bare ground with small areas of amenity grassland.

This photo taken on 5th January 2023.

Building Inspection - Internal

House

There are no loft spaces or other voids in any area of the building, which is converted to the roof.

Stables

The stables are open throughout and support no voids or other enclosed areas.



Fig 8: The stables are open throughout with no separate voids in any area.

This photo taken 5th January 2023.

The roof of the stables is no longer weatherproof in some areas and water has caused damage to the roof.



Fig 9: The roof is no longer weatherproof, allowing water ingress.

This photo taken 5th January 2023.

Bats

House

Internally there are no voids in which bats could roost. All areas of the building are fully converted to habitable accommodation.

Externally the property was assessed to determine whether crevices in the walls and roof could be suitable for use by roosting bats.

Walls

The walls are clad in timber and so all aspects of the building were assessed to determine whether any of the crevices or gaps behind or around the timber cladding could provide shelter for roosting bats. In most places the timbers were tight fitting but in a few places the timber cladding was lifted and could be suitable for bats to use when seeking shelter. However, a full inspection of those areas found that they were unsuitable for use by roosting bats for the following reasons:

- None of the crevices behind lifted timber were found to be deep enough to provide shelter for bats. None were more than around 1 inch deep.
- The timber cladding is lined with smooth building paper which bats could not cling to when roosting.
- No rub marks, droppings or other evidence to suggest that bats had roosted behind the timber cladding were found.

Roof

The flat roof section of the building is totally sealed and supports no opportunities in which bats could seek shelter.

The pitched roof has a corrugated rubber covering which is well sealed and does not provide any opportunities for bats to access areas below. Where potential gaps were visible close to the ridge these were inspected using a high powered torch and were found to be too shallow to provide shelter for roosting bats.

Stables

The stables have a flat roof and no separate loft void and the walls are unlined timber which support no crevices in which bats could seek shelter. The internal structure of the building includes no complex timber joints or other features in which crevice dwelling species could roost.

As the stable doors are kept open there is the possibility that the stable could be used as a night roost or feeding perch by bats, including horseshoe species. However, the poor state of the roof, which is deteriorating as a result of water damage, means the building is too disturbed to be used for this purpose.

Nesting Birds

No evidence of birds nesting in or on the house or stables was found but as this survey was carried out over the winter months, outside the nesting period, it is possible that evidence of nesting was not apparent.

The house does not support features in which birds could build nests and there were no signs of nests being built on the walls of the building (by house martin *Delichon urbicum* for example).

No swallow *Hirundo rustica* nests were found in the stables but species such as robin *Erithacus rubecula* or wren *Troglodytes troglodytes* could build nests in sheltered areas of this building.

Other Species

The habitat surrounding the buildings could be used by badger *Meles meles* and hedgehog *Erinaceous europaeus* as they commute through the surroundings. Brown hare *Lepus europaeus* could also move through the site on occasion.

Given the proximity of The Stables to the River Nadder, it is also possible that otter *Lutra lutra* could use the site when commuting on occasion.

LEGISLATION

Nesting Birds

The Wildlife & Countryside Act 1981 protects bird species in the UK and makes it an offence to:

- Intentionally kill, injure or take a wild bird;
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; and
- Intentionally take or destroy the egg of any wild bird.

Other offences under this legislation relate to taking and possessing specimens or the eggs of wild birds.

DISCUSSION AND CONCLUSIONS

Bats

Roosting

A full inspection survey of the house and stables found no evidence of use by roosting bats and both buildings are considered to have Negligible potential to support a roost, for the following reasons:

- Neither building supports a separate, sheltered void space in which bats could roost.
- External crevice features in the walls and roof of the house were all able to be fully inspected and all were found to be too shallow to provide shelter for roosting bats.
- The timber cladding on the walls of the house is lined with smooth buiding paper which bats cannot cling to.
- The stable building supports no internal or external crevices in which bats could seek shelter. The walls are unlined timber and there are no complex joints in the timber frame.
- Although there is fly-in access to the building the roof is in a poor state of repair due to the ingress of water, making it unsuitable for use as a night roost or feeding perch.

No further surveys for bats are recommended and the proposals for the house and stables will not result in impacts on bats and their roosts.

Commuting and Foraging

The Stables is well connected to habitat which is of value to bats when commuting and foraging and is connected to other areas of suitable habitat for this purpose in the wider landscape. The proposals for the site are limited to the on-site buildings only, with no removal of the habitat surrounding the property proposed. There will therefore be no overall loss of commuting and foraging habitat as a result of the proposed works.

Where external lighting is required for the purposes of security, this will comply with ILP Guidance Note 8 and no lighting will be allowed to spill onto nearby woodland.

No impacts on the Chilmark Quarries Bat SAC would be anticipated as a result of the very limited extent of the proposals for this site.

Badgers, Brown Hare and Hedgehog

No badger setts have been identified at the site and no latrines or snuffle holes were found. However, the site is surrounded by suitable habitat for this species and badgers may commute through on occasion so the following steps should be taken to avoid accidental harm to them and other wildlife (including brown hare, hedgehog and otter) moving across the site during development works:

- Any trenches or excavations that have to be left open overnight must be adapted so that any animal that falls into it is able to escape, either by leaving a gradient at one end, or placing a structure (such as a plank of wood) in the trench to allow animals to climb out;
- Anything that may present a fire or other hazard (eg. stored chemicals) should be kept securely locked and made inaccessible to wild animals moving around the site at night.

Nesting Birds

It is likely that the stable building is used by nesting birds during the period March – August (inclusive). Given the protection afforded to all breeding birds, their nests, eggs and young, it is strongly recommended that initial work to this building should be undertaken between October and February, inclusive, outside of the main bird breeding season.

Should this seasonal constraint prove not to be practicable, then suitable surveys for active nests should be undertaken before works commence during the nesting bird season (March to August, inclusive). These surveys should be undertaken by a suitably qualified ecologist immediately prior to the start of any works. If any active nest or nest under construction is found, then a buffer zone of at least 5m (with distance dependent upon species and location) should be created around the nest and maintained until all chicks have fledged. Once the fledglings are no longer dependent upon the nest, works can then re-commence.

It should be noted that significant delays can result to works being undertaken during the breeding bird season and, as such, it is strongly recommended that works to the stables, where possible, commence and are completed during the winter months.

REFERENCES

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Bat Special Areas of Conservation (SAC). Planning Guidance for Wiltshire. September 2015.

Collins, J. (ed.). (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition.). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1.

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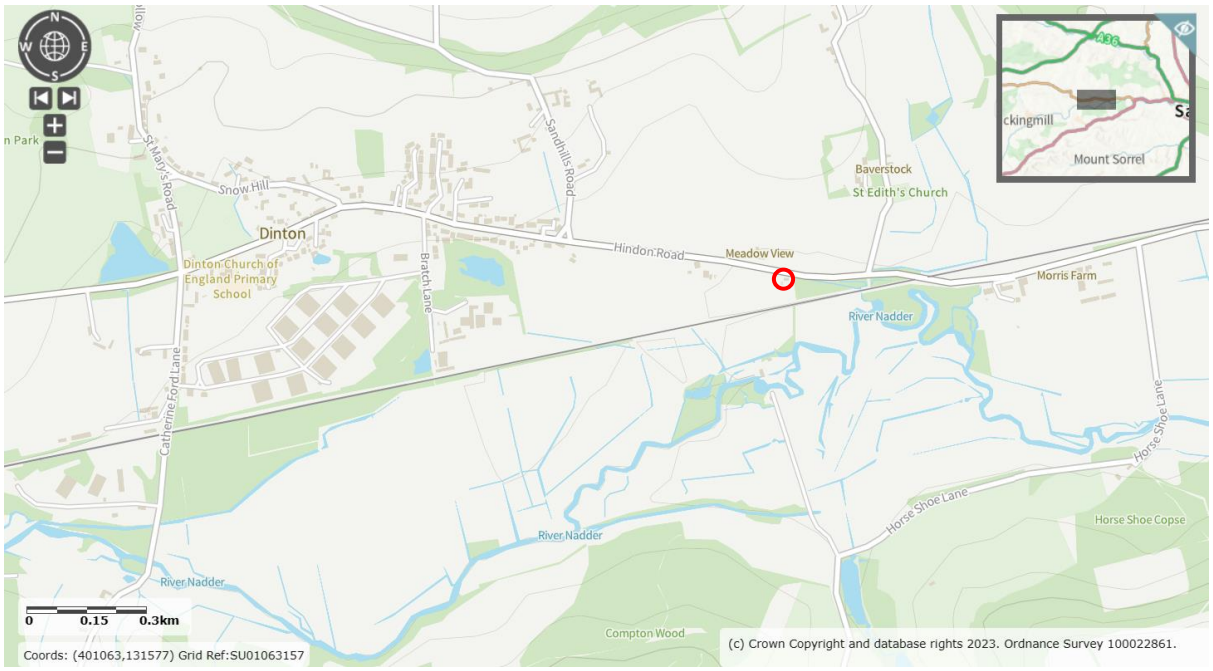
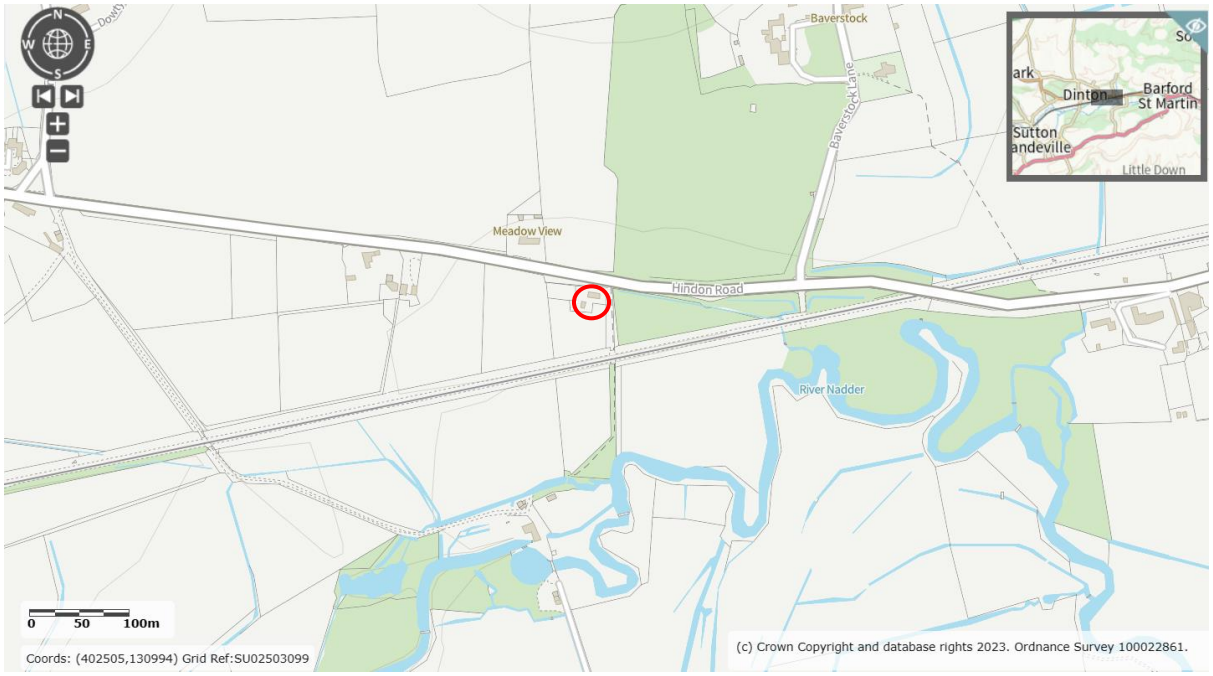
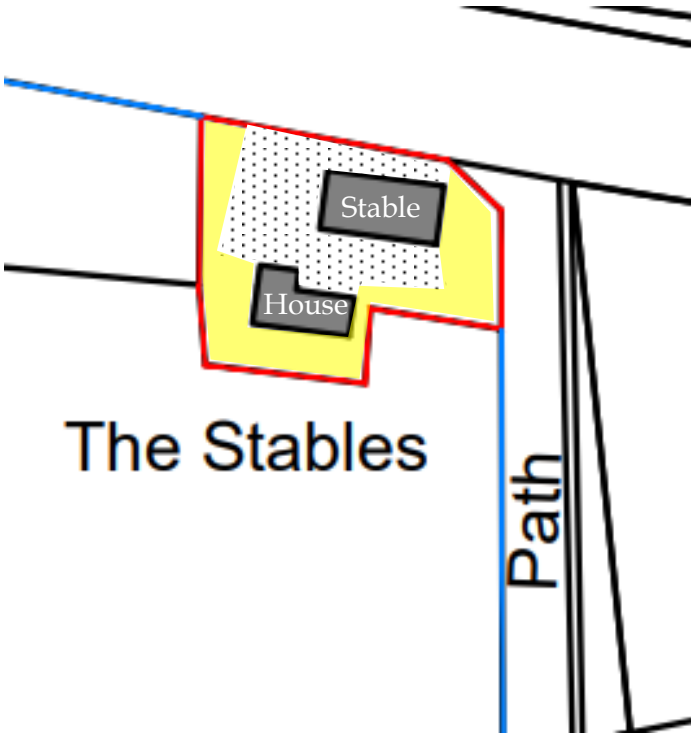
APPENDIX 1: SITE MAP





Habitat Map



Key

- Site boundary
- Buildings
- Bare ground/hard standing
- Amenity grass