

ecological support,
management and solutions



**Osier Dell
Manor Farm
Hayling Island
Phase I Survey**

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1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Andrea Walter to conduct a Phase I Survey of the stable block associated with Osier Dell, Manor Farm. This survey was required to identify any ecological impacts that may arise from its conversion into residential accommodation. This document has been prepared in order to ensure the proposed development fully complies with nature conservation legislation and policy where applicable.

This survey takes no account of seasonal variation and fluctuations in the presence of any species noted that might take up residence following this report. Lack of signs of a particular species does not confirm its absence, merely that there was no indication of its presence during the time of survey.

Data contained within this report will be valid for 24 months, after which the advice of a Suitably Qualified Ecologist must be sought as surveys may require updating if the proposed works have not been undertaken.

1.2 Aim

A Phase I Habitat Survey is the first step in assessing the potential ecological effects (or lack of) of a proposed development, and determines whether or not (and which) Phase II Protected Species Surveys are required. The objectives of this survey were as follows:

- Identify current land use and distribution of broad habitat types including plant communities of ecological importance,
- Identify and classify any priority habitats,
- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Identify all relevant legislation and policy
- Make recommendations for further survey work as appropriate
- Make recommendations for appropriate enhancements

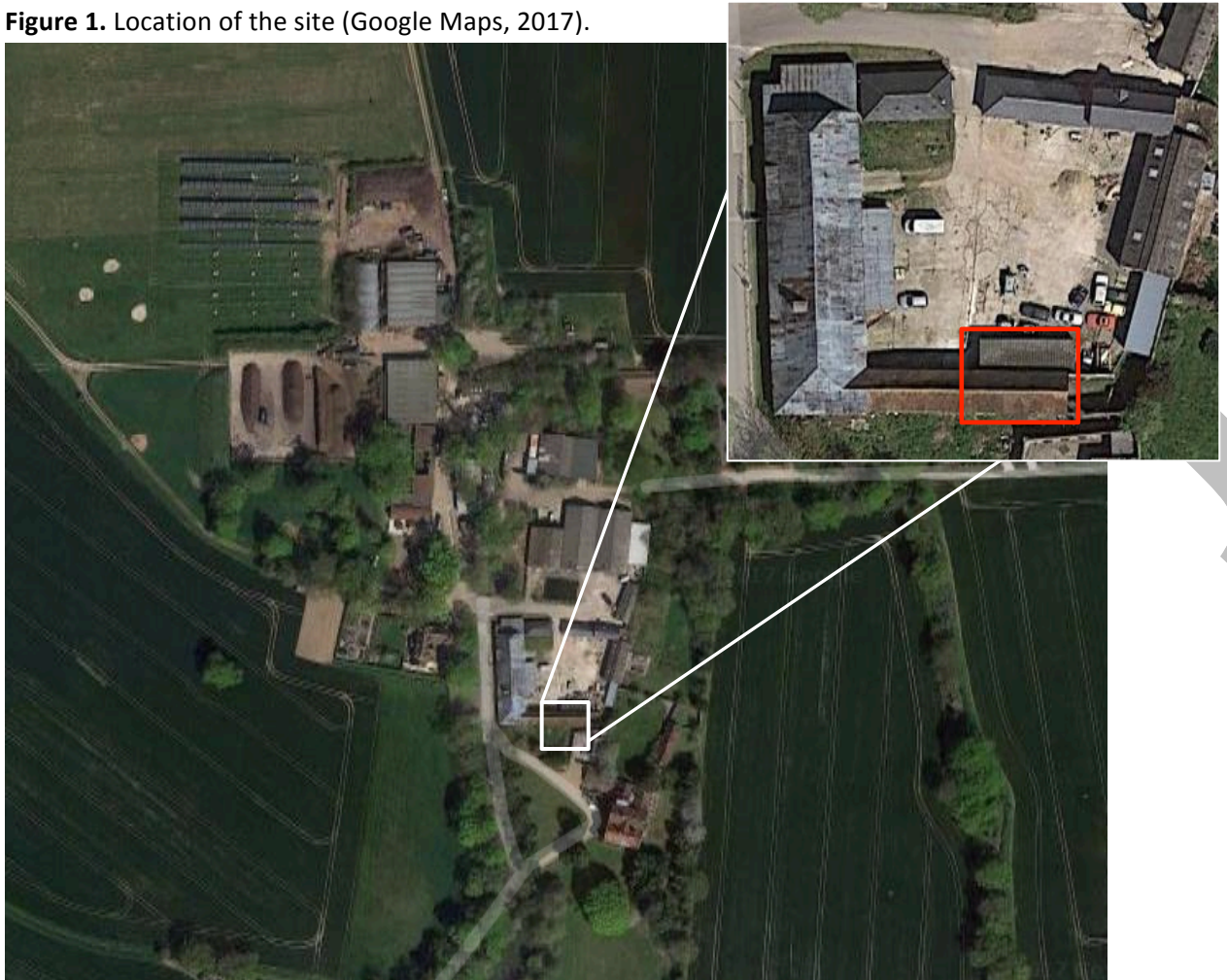
The survey paid particular attention for the potential for roosting bats. The objectives of this aspect of the Phase I Survey were as follows:

- Inspect the property internally and externally for evidence of bats or bats themselves
- Identify any external features that may be utilised by bats
- Classify the building's roost potential

1.3 Site Location

The site is located at Osier Dell, Manor Farm, Manor Road, Hayling Island, Hants, PO11 0QW (**Figure 1**) (Grid Reference SU 72135 00811). The site is surrounded by agricultural land with housing south of the A3023. The surrounding landscape is highly rural, dominated by agricultural land and infrastructure and patches of woodland.

Figure 1. Location of the site (Google Maps, 2017).



2.0 LEGISLATION & POLICY

One of the aims of this report is to demonstrate that the proposed development complies with relevant Planning Policy and nature conservation legislation. This section details the policy and legislation with which the development would need to comply.

2.1 Legislation

2.1.1 The Conservation of Habitats and Species Regulations (2010)

The Conservation of Habitats and Species Regulations (2010) transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

2.1.2 The Wildlife and Countryside Act (1981) (as amended)

The Wildlife and Countryside Act (1991) (as amended) is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost to intentionally or recklessly obstruct access to a bat roost. Barn Owls are also protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to kill, injure or take a wild barn owl and take or destroy their eggs. It is also illegal to disturb or check a nest site during the breeding months of April to October.

2.2 Policy

The development would seek to comply with relevant Planning Policy at a local, regional and national level.

2.2.1 National Planning Policy and Framework (2012)

This sets out the Government's vision for biodiversity in England. It states that the planning system should maintain, enhance, restore or add to biodiversity and geological conservation interests. Key principles of the framework include the creation, protection, enhancement and management of networks of biodiversity, the preservation, restoration and recreation of priority habitats and ecological networks and the recovery of priority species populations, including sections on legally protected species.

2.2.2 Havant Borough Core Strategy (2011)

Part of the 'Vision for Havant Borough in 2026' is to protect and enhance biodiversity. Similarly policy 'CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough' states that planning permission will only be granted when development protects habitats and features of biological interest and prevents the fragmentation of existing habitats.

3.0 METHODOLOGY

3.1 Phase I Habitat Survey

The initial walk over survey was carried out by Tristanna Cornwell BSc (Hons) (Natural England Class Level 2 Bat and Class Level 1 Great Crested Newt License Holder) of ecosupport Ltd on the 16th January 2017. This incorporated a visual assessment of the site and the surrounding landscape, loosely following the methodology outlined within the Joint Nature Conservation Committees (JNCC) *Phase I habitat survey handbook* (2003). The habitats present were described, paying particular attention to their potential to support protected species.

3.2 Assessment of Building to Support Roosting Bats

An assessment of the stable block on site was made to determine the likelihood of supporting roosting bats. The externals were examined, using 8 x 42 Avian Trekker binoculars and a high-powered torch, for any suitable features which bats may use to enter the internals or an external roost and also to search for signs of (i.e. droppings, feeding remains) and/or bats themselves. The internals was assessed by gaining access into the stable block itself and conducting a thorough search for evidence of bats and so assess its suitability to support roosting bats. The survey was carried out in accordance with *Bat Surveys for Professional Ecologists; Good Practice Guidelines* 3rd edition published by the Bat Conservation Trust (Collins, 2016).

4.0 RESULTS

4.1 Phase I Habitat Survey

The following habitat types and dominant species were identified on site:

Building: The timber framed stable block is of redbrick construction with machine cut clay tiles (Figure 2). The eastern gable end is covered in a single skin sheet of corrugated metal. There is also a single storey stretch of stables on the northern elevation of the stable block (present at the forefront of Figure 2). These are also of redbrick construction with a single skin corrugated roof and wooden cladding.

Figure 2. The stable block proposed for conversion.



Within the second storey of the main block and at the eastern gable end, a Barn Owl (*Tyto alba*) perch was identified. In addition, a number of bird's nests were identified within the stables including a Swallow (*Hirundo rustica*) nest.

Unmanaged grassland: To the rear of the stable block a small patch of grass, containing a number of saplings, was recorded (Figure 3). Species noted included common grass species Dock (*Rumex Sp.*), Creeping Buttercup (*Ranunculus repens*), Ribwort and Greater Plantain (*Plantago lanceolata* and *major*), Common Nettle (*Urtica dioica*), Cat's ear (*Hypochaeris radicata*), Clover (*Trifolium Sp.*), Scarlett Pimpernel (*Anagallis arvensis*), Willowherb (*Epilobium Sp.*), Yarrow (*Achillea millefolium*), Ground Ivy (*Glechoma hederacea*) and Herb Robert (*Geranium robertianum*).

Figure 3. The area of unmanaged grass to the rear of the stable block.



4.2 Assessment of Building to Support Roosting Bats

Externally a number of lifted tiles were noted on the main roof. As the tiles were underlined with bitumen roofing felt, they provide potential access into the gap between the tiles and felt for crevice dwelling bat species. In addition broken windows and open doorways provided unhindered flight paths into the internals of the building. Similarly the use of the single sheet of corrugated metal on the gable end allowed potential access at a number of locations. On the stables, the use of corrugated roofing material also provided a number of opportunities for bats to gain access.

The internal assessment of the ground level of the stable block did not identify any evidence of bats (**Figure 3**). Although there were relatively high light levels inside due the presence of the timber beam structure, providing a number of dark crevice opportunities, it is considered that the internals offer high quality roosting conditions.

Figure 3. Internal ground level.



The surveyor was able to visually assess the upper storey of the stable block from the loft hatch (**Figure 4**) however it was not safe to enter and conduct a full assessment and search for evidence of bats. Daylight was seen entering however, as previously stated, this was not considered likely to reduce the likelihood of bats roosting due to high quality features being present. Finally, the felt underlining was found to be in good condition.

Figure 4. The second storey of the stable block.



5.0 EVALUATION

5.1 Phase I Survey

Unmanaged Grassland: As reptiles require diverse vegetation structure where scrub and grass tussocks are present (Edgar et al., 2010) it is considered that the surrounding grassland area has potential to support reptiles. Although the saplings lack the maturity to support features capable of supporting roosting bats, they may provide habitat for nesting birds.

Buildings: A number of features were identified which were considered to hold the potential to support roosting bats. As such further Phase II survey effort has been recommended (see **Table 1**). It is considered likely roosting bats will be present given the level of activity previously recorded on site during Phase II surveys conducted on the neighbouring barn.

Table 1. Recommended minimum number of survey visits (from Table 7.3 (BCT, 2016).

Low Roost Suitability	Moderate Roost Suitability	High Roost Suitability / Confirmed roost
One survey visit. One dusk emergence or dawn re-entry survey.	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey*.	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third could be either dusk or dawn*.

*It is recommended that surveys are spaced at least two weeks apart, preferably more.

No Barn Owl nest was identified within the Barn along with the pellets. Therefore this is considered likely to be an example of a Barn Owl roost site. A Barn Owl home range in summer has a 1km radius (around 350ha) around the nest. Within this home range the Barn Owl recorded on site will have preferable hunting places and clear flight paths and other roost sites (1 – 3).

There is also potential for further nesting birds within the main block itself as well as the stables having confirmed activity of past nesting bird activity.

6.0 FURTHER RECOMMENDATIONS

6.1 Further Phase II Bat Surveys

The stable block is considered to hold high potential to support roosting bats. As a result three Phase II surveys will be carried out within the active bat season (mid-May to September). Given the likelihood of roosting bats being present, provision to incorporate mitigating features, has already been taken into consideration. This specification will be confirmed once Phase II surveys have been completed (i.e. species specific mitigation will be established).

If bats are recorded roosting on site a full Mitigation Strategy will be produced. This will detail associated methodologies and working practices which will then support the planning application. In order for works to legally take place a European Protected Species license application will need to be submitted to Natural England. This will be informed by the Mitigation Strategy.

6.2 Nesting Birds

6.2.1 Barn Owls

The stable block will need to undergo significant work to repair the exterior in order to prevent water entering into the internals. This will also prevent birds gaining access. Therefore the Barn Owl roost site will no longer be accessible.

In order to maintain the Barn Owl's presence on site, it is recommended that at least three months (preferably more) prior to works commencing an artificial Barn Owl box will be erected within one of the nearby trees to provide an alternative roosting site. An ideal tree is defined as the following (The Barn Owl Trust, 2016):

- Mature with a thick trunk;
- Isolated, in a hedgerow or on the woodland edge;
- With a high canopy with few or no low branches;
- Where a box can be placed at least 3 metres above ground level;
- Where the box access hole would be visible from a distance to a passing owl, even when the tree is in full leaf;
- Close to the hunting area (in this case the habitat surrounding the stable block).

The direction the box faces is not particularly important but avoiding the prevailing weather is preferable, although facing the access hole toward open ground is of principle importance.

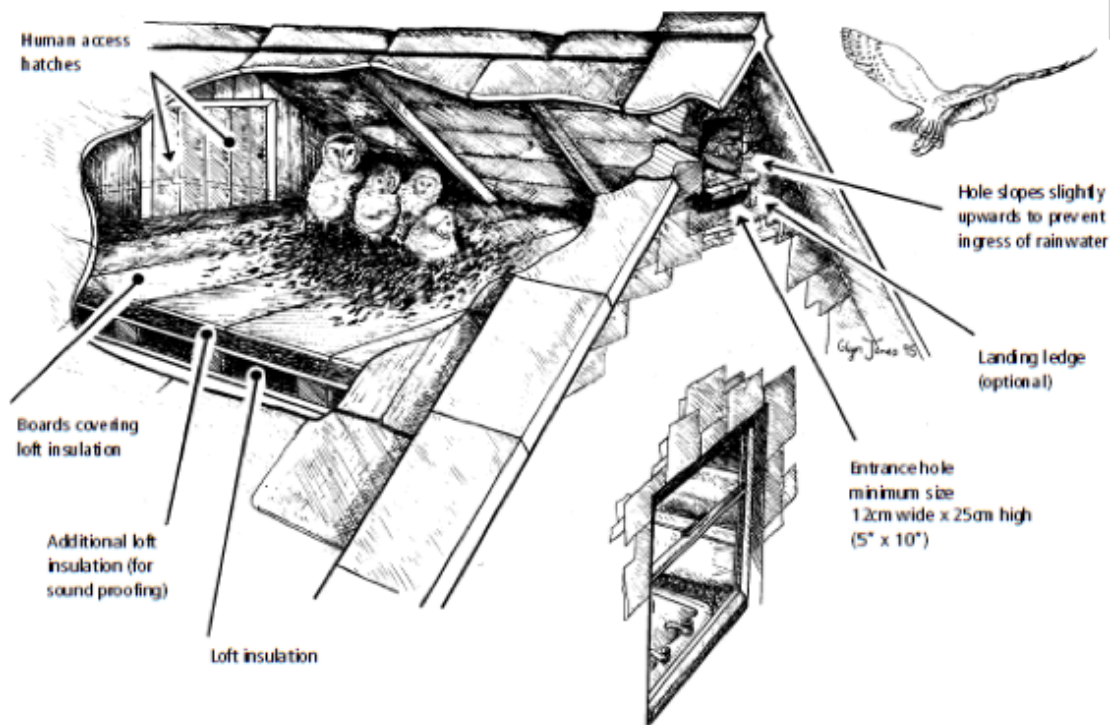
Permanent provision for Barn Owls will be introduced within the retained section of the barn (an example of which is given in **Figure 5** below). This gives immediate access for Barn Owls out into the adjoining fields, where they can hunt for food. This nesting space will include;

- a) An entrance hole into the building (130mm wide by 250mm high) at a height more than 3m, positioned to avoid obstructions.
- b) An external landing platform,

- c) A floor area of at least 1m^2 .

The depth from bottom of entrance hole to floor of nesting area must be less than 460mm. The roost will be boarded out and it will be insulated against condensation and noise. Finally human access for clearing out (once every four years) will be essential.

Figure 5. Example of provision for barn owls in a converted barn (Barn Owl Trust, 2012).



6.2.2 Other Species

All nesting birds are protected under the Wildlife & Countryside Act 1981 (as amended). Therefore no work can be undertaken during bird nesting season (March – August inclusive).

Mitigation will include two Schwegler 1B bird boxes to be erected within trees on site. Enhancement will include the provision of two Swallow cups under the eaves of on the stable block.

6.3 Reptiles

As the area of suitable habitat will not be lost it is considered proportionate that this be managed sensitively as to ensure reptiles are not negatively impacted by proposals. This will involve gradually reducing the sward height of the grassland. This will encourage any reptiles to move passively into the surrounding area out of harms way.

7.0 CONCLUSION

The Barn is considered to hold high potential to support roosting bats. As a result further Phase II Survey effort has been recommended. The results of these surveys will inform any further mitigation and compensation if required. It is considered that as long as the appropriate level of mitigation and compensation are employed this development will not have a residual impact upon the local bat population. Similarly set timeframes have been

detailed inline with the presence of nesting birds. This combined with adequate enhancements will ensure that nesting birds are protected and that their opportunities on site are enhanced. Finally, as a Barn Owl utilises the site, recommendations have been made to maintain their presence.

8.0 REFERENCES

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