

Author(s):

Client:

Report	Preliminary Ecological Appraisal	
Site Name	Janes Cottage (Barn Conversion), Dogmersfield	
Author(s)	Adam Jessop BSc (Hons) MSc ACIEEM	
Client	t Mr Jeremy Cocks	
Date of Issue	24/11/2022	
Status	Revised for barn conversion application (22/02423/FUL)	

www.ecosupport.co.uk

Tel:01329 832 841

info@ecosupport.co.uk

Table of Contents

EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	5
1.1 Brief	
1.2 Site Description & Location	-
1.3 PROPOSED DEVELOPMENT	
	-
2.0 RELEVANT LEGISLATION AND POLICY	
2.1 LEGISLATION	
2.1.3 The Wildlife and Countryside Act (1981) (as amended)	
2.1.4 The Countryside and Rights of Way Act (2000)	
2.1.5 NERC Act	
2.1.6 Protection of Badgers Act	
2.2 POLICY	
2.2.1 National	9
3.0 METHODOLOGY	10
3.1 DESK STUDY	10
3.1.1 Data Request	10
3.1.2 Waterbodies	10
3.2 FIELD SURVEY	10
3.2.1 Habitats	10
3.2.2 Badger	10
3.2.3 Bats	10
3.2.4 Great Crested Newts	11
3.3 Assessment Methodology	11
3.3.1 Introduction	11
3.3.2 Valuation	11
3.4 LIMITATIONS	11
4.0 ECOLOGICAL BASELINE	12
4.1 Designated Sites	
4.1.1 Statutory	
4.1.2 Non-Statutory	
4.2 Vegetation Survey Results	
4.2.1 Modified Grassland (g4, 75)	16
4.2.2 Other Rivers & Streams (r2b) / Hedgerow (priority habitat (h2a)	
4.2.3 Standing Open Water & Canals (r1)	
4.2.4 Line of Trees (w1g6)	
4.2.5 Buildings (u2b)	
4.3 BAT SURVEY RESULTS	
4.3.1 Pre-existing Data	18
4.3.2 Preliminary Roost Assessment (buildings)	
4.3.3 Foraging and Commuting Habitat	
4.4 BADGERS	
4.4.1 Pre-existing Information	23

4.4.2 Site Survey	23
4.5 REPTILES	23
4.5.1 Pre-existing Information	23
4.5.2 On Site Suitability	23
4.6 GREAT CRESTED NEWTS	23
4.6.1 Pre-existing Records	23
4.6.2 Waterbodies Within 500m	23
4.6.3 Habitat Suitability Index	23
4.7 HAZEL DORMOUSE	24
4.8 Nesting and Breeding Birds	24
5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION	25
5.1 INTRODUCTION	25
5.2 SITE PREPARATION AND CONSTRUCTION	25
5.2.1 Impacts to Habitats	25
5.2.3 Impacts to Wildlife	25
5.3 SITE OPERATION	25
5.3.1 Impacts to Wildlife	25
6.0 RECOMMENDATIONS TO MITIGATE & ENHANCE	26
6.1 INTRODUCTION	26
6.2 BATS	26
6.2.1 Sensitive Lighting	26
6.2.2 Bat Boxes	26
7.0 REFERENCES	27

Executive Summary

Ecosupport Ltd was instructed by Mr Jeremy Cocks to undertake an updated Preliminary Ecological Appraisal (PEA) of a parcel of land and a recently constructed storage barn associated with Janes Cottage, Dogmersfield. This was required to identify any potentially important ecological features that may be affected by the conversion of the barn into two holiday lets. As part of this assessment, the following surveys were undertaken:

- Desktop survey submitted to the Hampshire Biodiversity Information Centre (HBIC) Jan 2021)
- UK Habs assessment (November, 2022)
- Preliminary roost assessment of new barn (November, 2022)
- Habitat Suitability Index of pond (November, 2022)

The following important ecological features were identified on site following the conclusion of the above survey work and may be subject to adverse impacts in the absence of suitable mitigation / compensation:

- Pond of 'average' suitability for GCN
- Suitable habitat for breeding and nesting birds within new barn
- Site near to SINC

In the absence of any mitigation measures, the proposed development is anticipated to result in *minor adverse impacts* although suitable mitigation and enhancement measures are provided within this document comprising;

- Sensitive external lighting
- Provision of bat boxes

1.0 INTRODUCTION

1.1 Brief

Ecosupport Ltd was commissioned by Mr Jeremy Cocks conduct an updated Preliminary Ecological Appraisal (PEA) of a parcel of land and a recently constructed barn (built under 21/00524/FUL) associated with Janes Cottage, Dogmersfield. This was required to identify any potentially important ecological features that may be affected by the conversion of the barn into two holiday lets. The objectives of the survey were as follows:

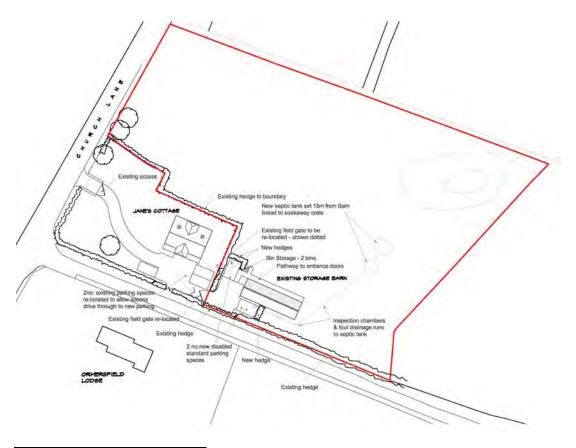
- Assess the ecological value of the site
- Identify any signs of protected species and potential features that may support them
- Make recommendations for further survey work as appropriate.

NB If the development does not take place within 18 months¹ of this report then the findings of this survey will no longer be considered valid and may require updating.

1.2 Site Description & Location

The site comprises a parcel of land and a recently constructed storage barn associated with Janes Cottage located off Church Lane, Dogmersfield, Hook, RG27 8TA (centred on OS grid reference SU779 523) (**Fig 1**). The south of the site is marked by an unnamed road, the north and east by what appears to be a rush pasture field and the west by Church Lane. The immediate surrounding environ is largely rural dominated by arable / pasture fields and woodland.

Figure 1. Redline location plan of the site / proposals.



¹ <u>https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf</u>

1.3 Proposed Development

The proposals entail the conversion of the recently constructed barn (built under 21/00524/FUL) into two holiday lets with access via the driveway of the adjacent Jane's Cottage.

2.0 RELEVANT LEGISLATION AND POLICY

2.1 Legislation

2.1.1 The Environment Act (2021)

The Environment Act 2021 is the UK's new legislation for environmental protection in the UK, which includes protection of water quality, clean air, and biodiversity among other key protections. This Act provides the government power to set targets to reach long-term aims relating to the environment, which will be periodically reviewed and updated. This legislation also establishes a new environmental watchdog organisation, the Office for Environmental Protection (OEP), which will hold the government accountable on environmental issues.

Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain to be a condition of planning permission in England and a requirement for nationally significant infrastructure projects. Biodiversity net gain will require maintenance for a period of at least 30 years after the completion of enhancement works to be achieved.

The legislation also includes updates to existing environmental legislation, such as the NERC Act 2006, to strengthen biodiversity enhancement rather than just conservation and includes a requirement for local, or relevant, authorities to publish biodiversity reports. Further, The Environment Act places a requirement on responsible authorities to prepare local nature recovery strategies, which will outline nature conservation sites and priorities and opportunities for recovering or enhancing biodiversity within the local area. Within England, the legislation also provides Natural England with the power to publish 'species conservation strategies' and 'protected site strategies' to identify activities that may affect a species or site's status and outline their opinions on measures that would be appropriate to avoid, mitigate or compensate any adverse impacts.

2.1.2 The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 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.

The Conservation of Habitats and Species Regulations 2019 (EU Exit) makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument

also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

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

This is the primary piece of legislation by which biodiversity if 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 or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

2.1.4 The Countryside and Rights of Way Act (2000)

This Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.5 NERC Act

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the UK Post – 2010 Biodiversity Framework.

2.1.6 Protection of Badgers Act

The Protection of Badgers Act (1992) relates to the welfare of Badgers (*Meles meles*) as opposed to nature conservation considerations. The Act prevents:

- The wilful killing, injury, ill treatment or taking of Badgers and / or
- Interference with a Badger sett
- Damaging or destroying all or part of a sett
- Causing a dog to enter a set and
- Disturbing a Badger while it is occupying a sett

Provisions are included within the Act to allow for the lawful licensing of certain activities that would otherwise constitute an offence under the Act.

2.2 Policy

2.2.1 National

Section 15 of the National Planning Policy Framework (NPPF, 2021) 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural environment. They should do this by protecting and enhancing sites of biodiversity and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks.

The plan states to protect and enhance biodiversity plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks. This includes the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them. Plans should identify the protection and recovery of priority species and opportunities for securing measurable net gains for biodiversity.

When determining planning applications, local planning authorities should apply the following principles:

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

3.0 METHODOLOGY

3.1 Desk Study

3.1.1 Data Request

A data request was submitted to the Hampshire Biodiversity Information Centre (HBIC) in order to ascertain any records held of nature conservation designations and protected species within 1 km of the boundary of the site.

The data search covered:

- Statutory designated sites
- Non-statutory designations such as SINCs
- Records of protected and notable species.

3.1.2 Waterbodies

Any ponds located within 250 m of the proposed development were searched for using Ordnance Survey maps and available aerial images.

3.2 Field Survey

3.2.1 Habitats

The updated field survey work which forms the basis of the findings of this report was carried out by Adam Jessop MSc ACIEEM, (8 years post MSc graduation experience) on the 24th November, 2022. The weather was good with sunny spells, light winds and a temperature of 10°C.

Habitats on site pre-development were identified in accordance with the categories specified for a UK Habitats survey, using Habitat Definitions Version 1.1 (UKHab Ltd., 2020). This was chosen as an appropriate habitat categorisation system as it fits within the Biodiversity Metric 3.1 calculation. Where appropriate primary habitat codes were sued although for some habitat types, the use of secondary habitat codes was necessary as well.

3.2.2 Badger

The site was thoroughly searched for evidence of use by Badgers (*Meles meles*), with the specific aim of identifying the presence and location of any setts. In accordance with the *Badgers and Development: A Guide to Best Practice and Licensing* (Natural England, 2011) guidance, the survey accounted for a 30m from the site's boundary (observed where possible i.e. does not conflict with private dwellings). Evidence of Badgers could include latrines, dung pits, feeding remains and foraging evidence, trails and setts.

3.2.3 Bats

An assessment was made of the suitability the barn to support roosting bats based on the presence of any Potential Roost Features (PRFs). This involved the use of 8 x 42 close focus binoculars and a high-powered torch (where required) for a more detailed inspection of any features along with an internal inspection of the accessible loft space. The survey conformed to current best practice guidance as described *Bat Surveys for Professional*

Ecologists: Good Practice Guidelines (Collins, 2016) and was also undertaken by Adam Jessop (class level 2 bat licence number 2015-13366-CLS-CLS).

3.2.4 Great Crested Newts

A pond located within the site (seen in **Fig 1**) was subject to an updated Habitat Suitability Assessment (as per ARG 2010) in order to ascertain any suitability for GCN (*Triturus cristatus*). This survey was undertaken at the same time as the initial walkover and was completed by Adam Jessop (GCN survey licence number 2016-21153-CLS-CLS).

3.3 Assessment Methodology

3.3.1 Introduction

The methodology for the assessment of the likely ecological effects of the proposed development is based on IEEM's *Guidelines for Ecological Assessment in the UK* (CIEEM 2018). Although this assessment does not constitute a formal Ecological/ Environmental Impact Assessment, the IEEM guidelines provide a useful framework for assessing ecological impacts at any level.

3.3.2 Valuation

Features of ecological interest are valued on a geographic scale. Value is assigned on the basis of legal protection, national and local biodiversity policy and cultural and/or social significance.

3.4 Limitations

The walkover survey was undertaken during November which is outside of the time period when vascular plants are flowering. Notwithstanding this, given the mild weather and the nature of the grassland (g4 modified grassland), it was not considered this would have posed any constraints on assigning a habitat type. The new barn was all open and freely accessible and there were not considered to be any constraints on this aspect of the survey.

4.0 ECOLOGICAL BASELINE

4.1 Designated Sites

4.1.1 Statutory

The HBIC data request has identified the following statutory designated site located within 1 km of the site (shown in **Fig 2**):

• Basingstoke Canal SSSI

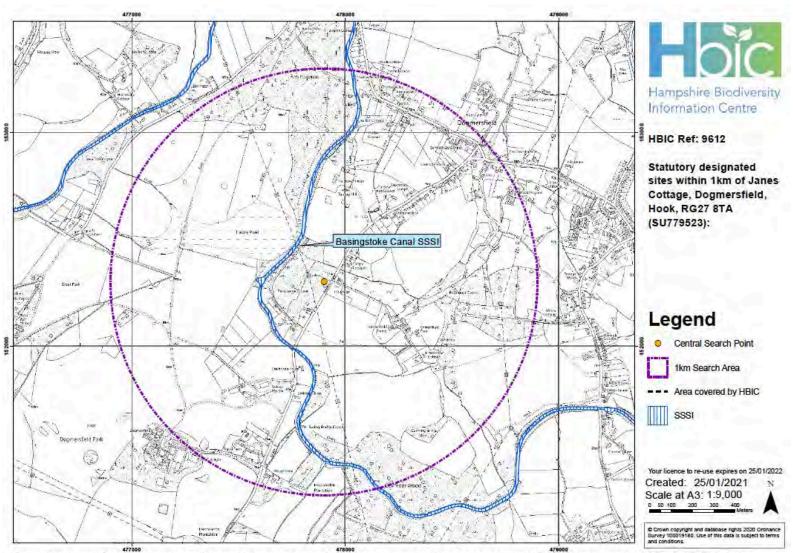


Figure 2. Map provided by HBIC which indicates the proximity of the site to the nearby statutory designations.

Please note: The boundaries for statutory sites have been provided as digital data from Natural England (NE); this digital data is indicative not definitive. Paper maps produced by NE at the time the sites were designated show the official site boundaries.

4.1.2 Non-Statutory

A number of SINCs were identified as falling within 1 km of the site (**Fig 3**) although only one was considered to fall within the potential Zone of Influence (ZoI) (with further details outlined below):

 Parsonage Copse SINC – Located within 10m of redline boundary of the site across Church Lane (although area where barn will be replaced is approximately 50m form SINC). Designated under criteria 1A which relates to ancient semi natural woodlands.

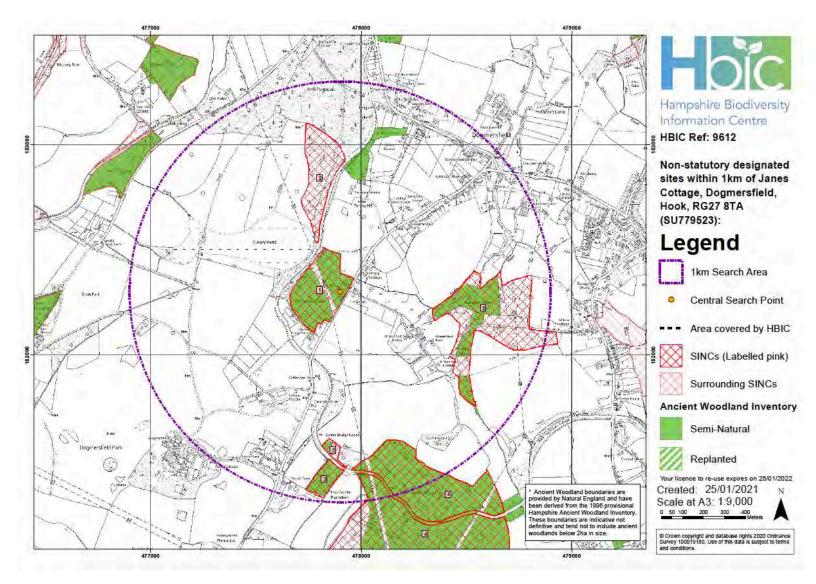


Figure 3. Map of SINCs within 1 km of the site as provided by HBIC with one located within 10m of the site across Church Lane.

PEA

4.2 Vegetation Survey Results

The vegetation within the site has been described below using the UK Habs Habitat Definitions Version 1.1 (UKHab Ltd., 2020). The below species noted should not be considered an exhaustive list and instead refer to dominant, characteristic and other noteworthy species associated with each community within the survey area (*NB the below lists of habitats covers the whole redline although the area that will be impacted upon is confined to the existing barn footprint and area immediately around it*).

- Modified grassland (g4) (secondary code 75, active management)
- Other rivers and streams (r2b) / hedgerow (priority habitat) (h2a)
- Standing open water and canals (r1)
- Line of trees (w1g6)
- Building (u2b)

4.2.1 Modified Grassland (g4, 75)

The dominant habitat type on site around the barn is modified grassland (g4) which (from discussions with the owner) managed fairly regularly. The sward was dominated by grasses such as Perennial Rye Grass (*Lolium perenne*), *Poa* spp, Cocks Foot (*Dactylis glomerata*) and *Agrotis* spp with *Crisium* spp, Curled Dock (*Rumex crispus*), Ribwort Plantain (*Plantago lanceolata*), Greater Plantain (*Plantago major*), Yarrow (*Achillea millefolium*) and Self-Heal (*Prunella vulgaris*) also noted (**Fig 4**).

Figure 4. View of the barn with g4 modified grassland present around it (taken Nov, 22).



4.2.2 Other Rivers & Streams (r2b) / Hedgerow (priority habitat (h2a)

The southern boundary of the site was marked by a small drainage ditch (which had been cleared in 2021) with a native species poor hedgerow along its banks (**Fig 5**). The hedgerow feature was dominated by Hazel (*Corylus avellana*) and Holly (*illex aquifoilum*) with vegetation on the ditch banks largely limited to Ivy (from what could be seen).

Figure 5. Small drainage ditch and hedgerow located along the southern boundary of the site (and immediately adjacent to the barn) (taken Jan 2021).



4.2.3 Standing Open Water & Canals (r1)

A pond is present in the north eastern corner of the site that was dug out in winter 2019 / 2020. This did support some reeds (Bulrush, *Scirpoides holoschoenus*) that had developed more from the previous surveyed in 2021 with some native marginal aquatic vegetation developing too (**Fig 6**).



Figure 6. The pond located in the NE corner of the site (seen in Fig 1) (taken Nov, 22).

4.2.4 Line of Trees (w1g6)

Mature *Quercus* spp trees are present on-site with these mainly located along the eastern boundary (and adjacent to the pond as seen in **Fig 6**).

4.2.5 Buildings (u2b)

The final habitat type is the recently constructed barn and this has been described in greater detail in section 4.3.2 below as part of the preliminary roost assessment.

4.3 Bat Survey Results

4.3.1 Pre-existing Data

HBIC have returned the following records from within 1 km of the site (Table 1).

Table 1. Bat records using a 1 km search radius as provided by HBIC.

Taxon Name	Common Name	No of Records	Max Count	Notes
Myotis	Myotis bat	1	Present	
Myotis daubentonii	Daubenton's Bat	3	Present	Records from near to Tundry pond, 0.4 km to west of site

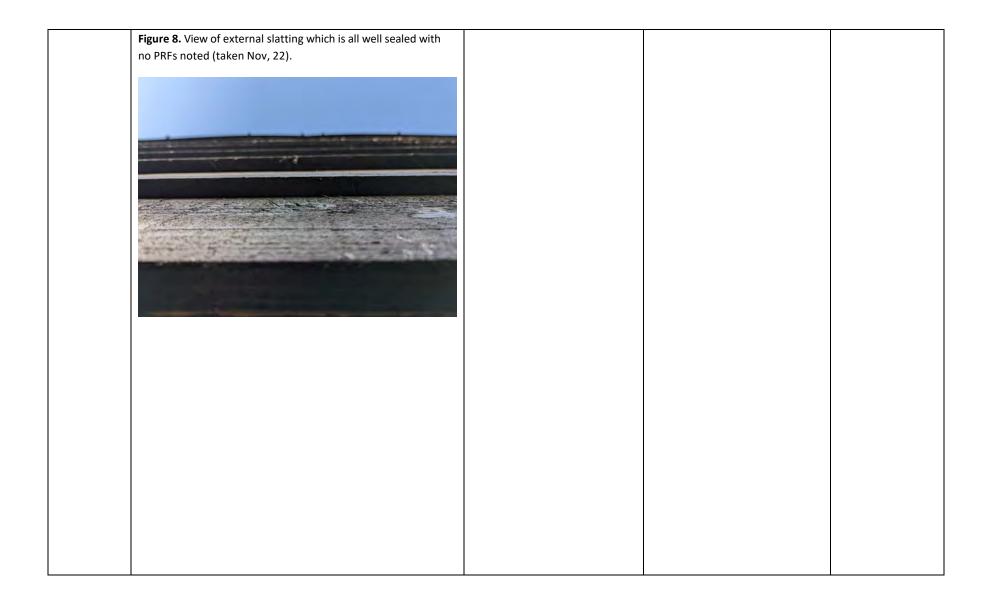
Nyctalus leisleri	Lesser Noctule	3	Present	
Nyctalus noctula	Noctule Bat	4	Present	
Pipistrellus	Pipstrelle spp	3	124	1 record of maternity roost (although from 1993)
Pipistrellus pipistrellus	Common Pipistrelle	8	4	
Pipistrellus pygmaeus	Soprano Pipstrelle (55 kHz)	3	Present	
Plecotus	Long-eared sp.	5	1	
Plecotus auritus	Brown Long- eared Bat	7	Present	

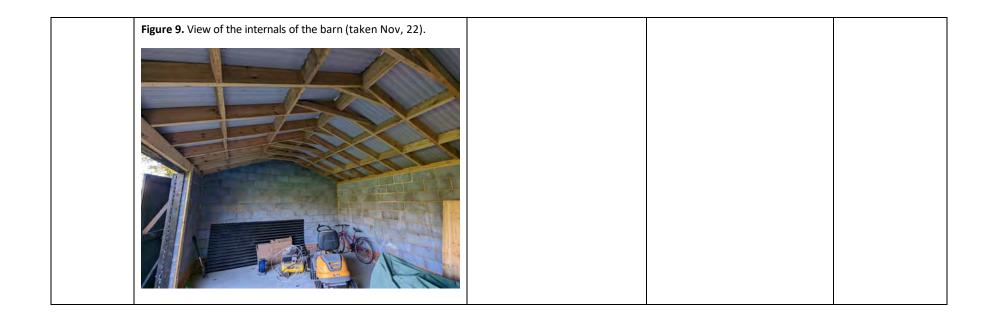
4.3.2 Preliminary Roost Assessment (buildings)

The results of the preliminary roost assessment undertaken of the barn on site is provided within **Table 2** below

Table 2. Findings of the preliminary roost assessment of the barn

Building	Figure(s)	Description of Construction	PRFs / Evidence of Occupation	Assessed Roost Potential
Storage Barn	Figure 7. View of the northern elevation of the storage barn (taken Nov 22)	Storage barn built 6 – 9 months ago with a concrete base and wooden slatting on the exterior. The barn is internally split into two with bi-folding external doors present and a corrugated metal roof with timber supporting frame (Fig 7).	Due to the nature of the building there were limited areas within which bats could access and the wooden slatting used on the externals was also all well sealed (as seen in Fig 8). No evidence of any bat occupation was noted within the internals of the barn although the exposed rafters would present a potentially suitable feeding perch (Fig 9).	Negligible roost potential although could be used as a feeding perch





4.3.3 Foraging and Commuting Habitat

The site supports a mosaic of habitats including grassland, scattered mature trees, hedgerows and a pond as well as being located adjacent to an extensive area of ancient woodland (designated as a SINC). These habitats can all be considered of value to foraging and commuting bats and as such, (taking this into account, along with the high number and diversity of records provided by HBIC), the site is considered to be of *Moderate potential* for foraging and commuting bats.

4.4 Badgers

4.4.1 Pre-existing Information

No records of Badger were provided by HBIC from within the 1 km search radius.

4.4.2 Site Survey

No evidence of resident Badger was noted whilst undertaking the walkover survey on site although the grassland can be considered to provide a potentially suitable foraging resource.

4.5 Reptiles

4.5.1 Pre-existing Information

HBIC returned a single record for Grass Snake (*Natrix natrix*) associated with Tundry Pond dated from 2008. No other records for reptiles were provided.

4.5.2 On Site Suitability

The grassland areas on site are regularly managed with a short sward height and were therefore not considered to provide the structure and the 'ecotones' favoured by common reptile species (Edgar et al., 2010). Although a local record of Grass Snake presence was provided by HBIC form within 0.5 km of the site, given the pond (the most suitable habitat for this species) is located well away from the barn, it is not considered its proposed conversion would impact upon reptiles.

4.6 Great Crested Newts

4.6.1 Pre-existing Records

HBIC did not return any records of GCN presence from within the 1 km search radius.

4.6.2 Waterbodies Within 500m

Only a single pond was shown on available OS maps within a 250m radius from the site with this the one located on the site itself (as seen in **Fig 5**).

4.6.3 Habitat Suitability Index

The results of the HSI undertaken of the pond on site are provided below (**Table 3**) which identified the pond as being of 'Average' suitability for GCN as per ARG (2010) (although with the pond only being less than 2 years old, it is considered unlikely GCN would be present on-site accounting or the absence of local records and other ponds within 250m of the site).

Suitability Indices Criteria Selected		Score Awarded	Notes	
Location	Zone A	1		
Pond area	250m ²	0.5	Estimated	
Pond drying	Never	0.9		
Water quality	Moderate	0.67		
Shade	0 - 60%	1		
Fowl	Minor	0.67	Based on information from land owner	
Fish	Absent	1		
Ponds within 1 km	> 12	1		
Terrestrial habitat suitability	Poor	0.33	Dominated by managed improved grassland	
Macrophytes	1 – 5%	0.43		
HSI Score 0.68 ' Average'				

Table 3. Results of the HSI assessment undertaken on the pond located on the site (as per ARG 2010).

4.7 Hazel Dormouse

HBIC did not return any records of Dormouse (*Muscardinus avellanarius*) presence from within the 1 km search radius (although using freely available online resources, there is a record approx. 1.5 km to the south of the site). The habitats on site can be considered of suitable to support Dormice with Hazel dominant in the hedgerow (one of the most important woody species for Dormice as per Bright et al., 2006) with this also contiguous with a large area of woodland to the east of the site. Notwithstanding this, given the proposals will not require the removal of any woody vegetation and the footprint and location of the barn will not change, it is not considered the works would impact upon Dormice.

4.8 Nesting and Breeding Birds

HBIC have returned records for a variety of different bird species including a number of NERC S41 listed species and Birds of Conservation Concern (BoCC). The habitats on site can also be considered suitable for a variety of these species with mature hedgerows, scrub and tree lines. As such, the site is considered to be of *High* potential for breeding and nesting birds (although all of the suitable habitat will be retained).

No evidence of nesting birds or Barn Owls (*Tyto alba*) was noted within the barn as well.

5.0 LIKELY ECOLOGICAL IMPACTS IN ABSENCE OF MITIGATION

5.1 Introduction

The CIEEM guidelines (CIEEM 2018) require that the potential impacts of the proposals should be considered in absence of mitigation. In order for a significant adverse effect to occur, the feature being affected must be at least of local value. However, in some cases, features of less than local value may be protected by legislation and/or policy and these are also considered within the assessment. Although significant effects may be identified at this stage of the assessment, it is often possible to provide appropriate mitigation.

5.2 Site Preparation and Construction

5.2.1 Impacts to Habitats

The development will result in the loss of small areas of improved grassland and the modification of the existing building with this habitat considered to be of value at the *Site* level of significance. Works will be taking place adjacent to mature hedgerows and a drainage ditch which could be affected through dust deposition and root zone compaction (with these features considered to be of *Local* value) but these could be protected by temporary fencing during the construction phase, to minimise dust deposition and root zone compaction. Therefore, a *potential minor adverse impact* upon habitats of value at the local level is possible.

5.2.3 Impacts to Wildlife

Based on the information obtained from the desktop study and field survey, it is considered unlikely the construction works would impact upon any protected and or notable species.

5.3 Site Operation

5.3.1 Impacts to Wildlife

The development is taking place in an area within which night time lighting is minimal and therefore any additional lighting associated with the development could result in disturbance to bats along with any other nocturnal wildlife present). Therefore, any further *adverse impact is likely* on any bats present in the vicinity due to lighting.

6.0 RECOMMENDATIONS TO MITIGATE & ENHANCE

6.1 Introduction

The below sections outline a number of recommendations for further survey work required to fully assess the potential ecological impacts of the development and ensure and proposed mitigation and compensation appropriate and proportionate. In addition to this, measures are outlined to protect the existing features of value.

6.2 Bats

6.2.1 Sensitive External Lighting

Based on discussion with the client, it is understood there will not be any external lighting used on the barn after the conversion to holiday lets.

6.2.2 Bat Boxes

In line with national and local planning policy to deliver biodiversity enhancements, 2 bat boxes will be erected within the trees located within the improved grassland field. These will be placed at least 3 m off of ground level orientated to achieve some level of sun exposure with the following models recommended (may need to change subject to availability):

- 1 No Miramere bat box²
- 1 No Vivara pro woodstone bat box³

² <u>https://www.wildcare.co.uk/miramare-woodstone-bat-box-11268.html</u>

³ <u>https://www.nhbs.com/vivara-pro-woodstone-bat-box</u>

7.0 REFERENCES

ARG (2010) ARK UK Advice Note 5, Great Crested Newt Habitat Suitability Index, May 2010

Bright, P., Morris, P., & Mitchell-Jones, T., (2006) The Dormouse Conservation Handbook, 2nd Edition

Collins (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd Edition

Cook, K., 2006. The Natural Environment and Rural Communities Act 2006. Environmental Law Review, 8(4), pp.292-298.

Hart District Council (2020) Hart Local Plan (strategy and sites) 2032

HMSO (2017) The Conservation of Habitats and Species Regulations. Statutory Instrument 2010 No. 490. HMSO, London.

HMSO (2000). The Countryside and Rights of Way Act 2000. HMSO, London.

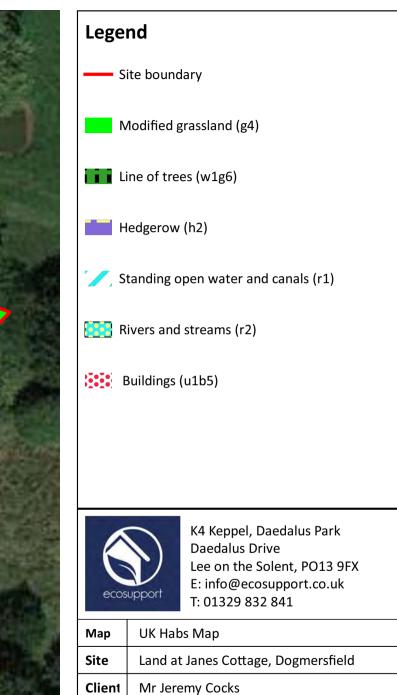
HMSO (1981). The Wildlife & Countryside Act 1981. HMSO, London.

JNCC (2010) Handbook for Phase 1 Habitat Survey

ILP / BCT (2018) Guidance Note 08/18 Bats and Artificial Lighting in the UK

Natural England, 2011 Badgers and Development: A Guide to Best Practice and Licensing





Date 24/11/2022

© This map is the copyright of Ecosupport Ltd. Any unauthorised reproduction or usage by any person is prohibited.