SOUTH COAST ECOLOGY

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| Client Name | Mr A Brazil |
| Site Name | Sunny Mead |
| Report Title | Preliminary Ecological Appraisal |
| Date of Report | 03/07/2025 |
| Version | FINAL |
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**Summary**

South Coast Ecology Ltd were commissioned by Mr Brazil to undertake a Preliminary Ecological Appraisal (PEA) at Sunny Mead Farm. This was to ascertain the baseline ecological conditions to assess the likely impacts in the absence of mitigation relating to the proposed introduction of five Gypsy/Traveller Plots. This assessment also provides appropriate recommendations to ensure proposals are in line with legislation and policy.

The PEA involved both a desk study and field survey. It is considered the site has potential for commuting and foraging bats. Badgers and Hedgehogs. Extensive habitat creation will be required on site to compensate for previous works. This report provides the findings and recommendations to enhance the scheme for biodiversity.

## Table of Contents


**1.0 INTRODUCTION 5**

**1.1 BACKGROUND 5**
**1.2 AIM 5**
**1.3 OBJECTIVE 5**
**1.4 REPORT LIFESPAN 5**
**1.5 SITE DESCRIPTION 5**
**1.6 PROPOSALS 6**

**2.0 METHODOLOGY 7**

**2.1 DESK STUDY 7**
2.1.1 SITE INFORMATION 7
2.1.2 DESIGNATED SITE INFORMATION 7
2.1.3 SPECIES RECORDS 7
2.1.4 HABITAT INFORMATION 7
**2.2 SITE VISIT 7**
**2.3 IMPACT ASSESSMENT 8**
2.3.1 VALUATION 8
2.3.2 MAGNITUDE OF EFFECT 8
2.3.3 SIGNIFICANCE OF EFFECT 8
**2.4 LIMITATIONS 8**

**3.0 RESULTS 9**

**3.1 DESK STUDY 9**
3.1.1 DESIGNATED SITE INFORMATION 9
3.1.2 SPECIES RECORDS 9
3.1.3 HABITAT INFORMATION 9
**3.2 SITE VISIT 9**
MODIFIED GRASSLAND (G4) SECONDARY CODE SCATTERED TREES (32) 9
ARTIFICIAL UNSEALED SURFACE (U1C) 11
BUILDING (U1B5) 12

**4.0 EVALUATION 13**

**4.1 ASSESSMENT OF THE LIKELY IMPORTANCE OF THE HABITATS PRESENT 13**
**4.2 ASSESSMENT OF THE LIKELY PRESENCE OF PROTECTED AND PRIORITY SPECIES 13**
4.2.1 BATS 13
4.2.2 BADGERS AND HEDGEHOGS 13
4.2.3 NESTING BIRDS 13
4.2.4 REPTILES 13
4.2.5 GCN 13
4.2.6 DORMICE 13
**4.3 LIKELY IMPACTS IN THE ABSENCE OF MITIGATION 13**
4.3.1 DURING CONSTRUCTION (WILDLIFE) 13
4.3.2 ONCE OPERATIONAL 14

**5.0 RECOMMENDATIONS 15**

**5.1 LIGHTING 15**
**5.2 BADGERS AND HEDGEHOGS 15**
**5.3 REPTILES 15**

**6.0 ECOLOGICAL ENHANCEMENTS 16**

**6.1 NATIVE PLANTING 16**
6.1.1 TREES 16
6.1.2 SCRUB AND HEDGEROWS 16
6.1.3 BORDERS AND FLOWER BEDS 16
**6.2 NESTING BIRDS 17**

**7.0 CONCLUSION 18**

**8.0 REFERENCES 19**

**APPENDIX I – LEGISLATION AND POLICY 21**

**PLAN 1 – HABITATS MAP. 25**

## 1.0 Introduction

### 1.1 Background

As defined by CIEEM a Preliminary Ecological Appraisal (PEA) is the process of assessing the ecological features present, or potentially present, within a site and the zone of influence of any proposal(s). It comprises a desk study and a walkover survey.

South Coast Ecology Ltd were commissioned by Mr Brazil to undertake a Preliminary Ecological Appraisal (PEA) at Sunny Mead Farm to assess the likely impacts relating to the introduction of five Gypsy/Traveller Plots.

The information gained during the assessment process has been collated and presented within this report.

### 1.2 Aim

The aim of this PEA is to:

- identify the habitats on site and record species encountered,
- classify suitability for legally protected and/or notable species,
- identify likely ecological constraints associated with a project,
- identify any mitigation measures likely to be required,
- identify any additional surveys that may be required, and
- identify the opportunities to deliver ecological enhancement.

### 1.3 Objective

The overall objective of this report is to ensure proposals are in line with local and national policy and legislation (**Appendix I**), resulting in a net gain for biodiversity.

### 1.4 Report Lifespan

This report will remain valid for 18 months after the execution of the survey work. After this point an updating site visit will be required by a professional ecologist to ensure the findings and recommendations remain in line with the status of the site (CIEEM, 2019).

### 1.5 Site Description

The site is located along North End Road (grid reference SU 98141 04368) (**Figure 1**). The site is bound by the train line to the north with North End Road running along the western boundary. The east and south consists of garden space and infrastructure associated with neighbouring properties. The surrounding area is of a rural nature.

**Figure 1.** Location of site (GoogleMaps, 2025).

### 1.6 Proposals

The proposals involve change of use to 5no. Gypsy/Traveller Plots.

## 2.0 Methodology

The survey work was undertaken by Tristanna Boxall BSc (Hons) MCIEEM Senior Ecologist (Natural England license Class Level 1 for GCN and Dormice and Class Level 2 for bats) with 12 years experience.

## 2.1 Desk Study

### *2.1.1 Site Information*

A search utilising the online planning portal of the relevant planning authority was undertaken to identify any local ecological issues that have been raised. In addition, web-based aerial photos and Ordnance Survey maps were utilized to gather initial information about the site and surrounding area, giving an indication of the type of habitats and species likely to be present.

### *2.1.2 Designated Site Information*

A search for designated nature conservation sites was undertaken using online resources. The location of each designated site, distance from the redline boundary, connectivity to the project site and reason(s) for designation were recorded.

### *2.1.3 Species Records*

A search for granted licenses within 2km of the site allows an assessment of the likelihood of such species being present on site and/or being impacted directly or indirectly by proposals.

### *2.1.4 Habitat Information*

Existing information on the habitat types within the site boundary and the surrounding area was gained via the use of online resources.

A search for ponds within 250m was also undertaken.

## 2.2 Site Visit

This took place on 30th June 2025. Weather conditions consisted of temperatures of 28°C, 0% cloud cover, minimal wind and no precipitation. The habitats present were recorded along with species encountered. UK Habitat Classification (UKHab) methodology was utilised. A thorough and systematic search for evidence of legally protected and notable species was undertaken whilst on site. The habitats were assessed as to their potential to support such species.

## 2.3 Impact Assessment

### *2.3.1 Valuation*

As part of this assessment Ecological receptors have been assigned importance in terms of biodiversity conservation value on a geographic scale. Value is assigned based on legal protection and national and local biodiversity policy:

- International and European
- National
- Regional
- County
- Local
- Site

### *2.3.2 Magnitude of Effect*

The magnitude of effect represents the degree of change in an ecological receptor. These are either temporary or permanent, direct or indirect and adverse or beneficial.

### *2.3.3 Significance of Effect*

This combines the above factors to determine the significance of effects. Impacts are categorised as Major, Moderate, Minor or Negligible.

## 2.4 Limitations

The site had been cleared of vegetation months before arrival. Early-stage succession was taking place providing a good indication of the habitats previously present (combined with aerial imagery). Therefore, the survey represents the site at the time of survey. Lack of evidence of a particular species does not confirm absence. Similarly, species may take up residence and/or begin to utilize the site and/or area impact following the completion of the survey.

This survey does not constitute a full site assessment for invasive species, such as Japanese Knotweed (*Fallopia japonica*).

## 3.0 Results

### 3.1 Desk Study

*3.1.1 Designated Site Information*

The only designated site within 2km was South Downs National Park 1.5km to the north.

*3.1.2 Species Records*

No EPS license returns were identified within 2km of the site.

*3.1.3 Habitat Information*

No Priority Habitat was recorded on, or adjacent to, site.

3.1.4 Water Bodies

A pond was identified within 60m northwest of the site however it is separated via North End Road and the trainline which are both considered to act as dispersal barriers.

### 3.2 Site Visit

During the assessment no evidence of Badgers or other legally protected /notable species was identified on site.

Please see **Plan 1** for habitat map.

*Modified grassland (g4) secondary code scattered trees (32)*

On arrival to site the vegetation had already been stripped however this has begun to reestablish (**Figure 3**). Yorkshire Fog (Holcus lanatus), Perennial Rye-grass (Lolium perenne), Prickly Sow Thistle (Sonchus asper), Common Nettle (Urtica dioica), Dock (Rumex Sp.), Greater Plantain (Plantago major), Dandelion (Taraxacum agg.), Clover (Trifolium Sp.) and Creeping Buttercup (Ranunculus repens) were recorded. As a result, it is considered likely the majority of the site was previously modified grassland.

**Figure 3.** Area previously consisted of grassland view looking east (June, 2025).

**Figure 4.** Area previously consisted of grassland view looking west (June, 2025).

It is considered likely previously the scrub associated with the trainline (**Figure 5)** was encroaching on to the site based on the ground flora and online imagery.

**Figure 5.** Scrub habitat offsite (June, 2025).

*Artificial unsealed surface (u1c)*
The access to the bungalow currently consists of gravel (**Figure 4**).

**Figure 6.** Artificial unsealed surface (June, 2025).

*Building (u1b5)*

On site there is a bungalow (evident in **Figure 6** above).

The western boundary had been cleared and replaced with a fence however street view suggests there was previously a hedgerow with mature trees present. It appears the composition was mostly native although Laurel is also visible (Native Hedgerow (h2a) with secondary code hedgerow with trees (11).

## 4.0 Evaluation

### 4.1 Assessment of the likely importance of the habitats present

It is considered likely the habitats on site were previously of 'site' level of ecological value.

### 4.2 Assessment of the likely presence of protected and priority species

*4.2.1 Bats*

It is considered highly likely foraging and commuting bats will utilise the site particularly given the trainline runs parallel to the site.

*4.2.2 Badgers and Hedgehogs*

[redacted]

*4.2.3 Nesting Birds*

It is considered prior to clearance the site had potential to support nesting birds. As a result, the site was likely of site value.

*4.2.4 Reptiles*

The site is not currently suitable for reptiles however previously there may have been a varied sward structure in the grassland which had potential to support reptiles. As a result, it is considered the site had potential to be of site value for reptiles.

*4.2.5 GCN*

As above, the site is not considered likely to support terrestrial amphibians currently however it is considered unlikely GCN would have been present prior to clearance given the distance from local water bodies and/or dispersal barriers.

*4.2.6 Dormice*

The linear vegetation associated with the trainline has potential to support Dormice if present. It is not possible to establish whether previous scrub habitat was suitable however the hedgerow along North End Road appears to have provided both shelter and foraging resource.

### 4.3 Likely Impacts in the Absence of Mitigation

*4.3.1 During Construction (Wildlife)*

If excavations are required for any element of the works, there is a risk that animals (such as Badgers) could become trapped and therefore harmed or injured by falling into trenches and/or excavations. Therefore, works have potential for moderate, adverse impacts at site level.

If the grassland is allowed to re-establish it could become suitable for reptiles thus encouraging them into the area of impact. There would then be a risk they could be harmed or killed. This would have a potential adverse impact at site level.

*4.3.2 Once Operational*

Any increases in lighting have potential to result in a negative impact at site-local level towards nocturnal wildlife.

## 5.0 Recommendations

### 5.1 Lighting

The following is from guidance published by the Institution of Lighting Professionals (ILP) (2023) relating to bats and lighting and should be considered when choosing luminaires and their potential impact:

- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability
- A warm white light source (2700Kelvin or lower) should be adopted to reduce blue light component
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012)
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt
- Where appropriate, external security lighting should be set on motion-sensors and set to as short a possible a timer as the risk assessment will allow. For most general residential purposes, a 1 or 2 minute timer is likely to be appropriate

### 5.2 Badgers and Hedgehogs

[redacted]

### 5.3 Reptiles

All vegetation within the works area shall be maintained at a maximum height of 30mm through regular mowing in order to discourage reptiles from using the site.

## 6.0 Ecological Enhancements

### 6.1 Native Planting

Native species should be utilised on site. Where not appropriate, pollen rich species benefitting wildlife should be chosen. The following species are recommended:

#### *6.1.1 Trees*

The trees that have been removed will be replaced and additional trees planted to compensate. Not only will trees provide nesting bird opportunities once matured but also roosting and foraging potential for bats. The following species are recommended (Gunnel et al. 2012):

Oak,
Willow
Beech
Ash
Elm
Birch

#### *6.1.2 Scrub and Hedgerows*

Similarly, the hedgerow along North End Road will be replaced by a native hedgerow. In addition, a buffer will be created parallel to the trainline. Here scrub and tree planting will take place to compensate for the habitats previously lost. The following species provide fruit for small mammals and birds:

Hawthorn
Holly
Elder
Hazel
Rowan

#### *6.1.3 Borders and Flower Beds*

The gardens associated with each plot will utilise flowers that vary in colour, fragrance and time of flowering are encouraged especially those with landing platforms (i.e. Daisy family), umbellifers (i.e. Carrot family) and long pollen-tubes as they are likely to attract an array of pollinating insects. For example (BCT, 2018):

Lavender
Marjoram
Borage
Hemp Agrimony
Verbena
Sea Holly
Oxeye Daisy
Cosmos

### 6.2 Nesting Birds

At least three woodcrete bird nest boxes will be erected on site. An open fronted, 32mm circle entrance and 26mm circle entrance hole will be introduced. As there is no mature vegetation on site it is recommended these be attached to the fencing.

## 7.0 Conclusion

The site in its current state is considered to have negligible ecological value however it is likely previous habitats were at least of site value and had potential to support at least nesting birds with potential for additional species. As a result, compensatory planting will take place on site. It is considered the habitats to be created will reinstate opportunities for wildlife with scope to enhance the site, result in a net gain.

## 8.0 References


ARGUK (2010) 'Advice Note 5 - Great Crested Newt Habitat Suitability Index - ARG Advice Note 5'.

BCT (2018) 'Stars at Night' Available online at: https://www.bats.org.uk/advice/gardening-for-bats/bed-and-breakfast (BCT, Wildlife Trust and RHS). 2018.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2019) Advice Note on the Lifespan of Ecological Reports and Surveys Chartered Institute of Ecology and Environmental Management, Winchester.

Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Edgar, P., Foster, J., & Baker, J., (2010) Reptile Management Handbook, Amphibian and Reptile Conservation (ARC)

Gunnel, K., Grant, G. and Williams, C. (2012) 'Landscape and urban design for bats and biodiversity' BCT.

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

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

HMSO (2006) Natural Environment and Rural Communities Act 2006. HMSO, London.

HMSO (2017) The Conservation of Habitats and Species Regulations 2017. HMSO, London.

HMSO (2021) The Environment Act 2021. HMSO, London.

Institution of Lighting Professionals (ILP) (2023) 'Bats and Artificial Lighting at Night' Guidance Note 08/23.

Natural England (2011). *Badgers and Development: A Guide to Best Practice and Licensing*. Available from: http://www.wildlifeco.co.uk/wp-content/uploads/2014/03/badgers-and-development.pdf

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus).* Herpetological Journal 10(4), 143-155.

## APPENDIX I – Legislation and Policy

### Legislation

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

The primary 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).

The Wildlife & Countryside Act (1981) states that it is an offence to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9 art II of the Act. This list over 30 plants including Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*) and Parrots Feather (*Myriophyllum aquaticum*).

*The Countryside and Rights of Way Act (2000)*

This Act strengthens the Wildlife & Countryside Act by the addition of "reckless" offences in certain circumstances, such as where there is the likelihood of protected species being present. The Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

*Protection of Badgers Act (1992)*
This 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, damage to or destroying a Badger sett and disturbing a Badger while it is occupying a sett including causing a dog to enter a set.

*Natural Environment and Rural Communities Act (2006)*

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.*

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

The Conservation of Habitats and Species Regulations 2017 (the “Habitats Regulations 2017”) consolidate and update the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations 2010”).

The Conservation of Habitats and Species Regulations 2017 transposed 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.

**Schedule 2 - European Protected Species (animals)**

| **Common name** | ***Scientific name*** |
|---|---|
| Bats (all species) | Vespertilionidae |
| Eurasian Beaver | Castor fiber |
| Large Blue Butterfly | Maculinea arion |
| Wild Cat | Felis silvestris |
| Dolphins, porpoises and whales (all species) | Cetacea |
| Dormouse | Muscardinus avellanarius |
| Pool Frog | Rana lessonae |
| Sand Lizard | Lacerta agilis |
| Fisher's Estuarine Moth | Gortyna borelii lunata |
| Great Crested Newt | Triturus cristatus |
| Common Otter | Lutra lutra |
| Lesser Whirlpool Ram's-horn Snail | Anisus vorticulus |
| Smooth Snake | Coronella austriaca |
| Sturgeon | Acipenser sturio |
| Natterjack Toad | Bufo calamita |

| | |
|---|---|
| Marine Turtles | Caretta caretta<br>Chelonia mydas<br>Lepidochelys kempii<br>Eretmochelys imbricata<br>Dermochelys coriacea |

The Conservation of Habitats and Species Regulations 2019 (EU Exit) made changes 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 legislation ensures the existing protections of the Wildlife and Countryside Act 1981 continue.

*The Environment Act (2021)*

The Environment Act 2021includes the protection of water quality, clean air and biodiversity. Part 6 of The Environment Act relates to nature and biodiversity. This section makes provision for biodiversity net gain. The legislation specifies biodiversity enhancement and includes a requirement for authorities to publish biodiversity reports including local nature recovery strategies.

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.

**Policy**

*National*

The National Planning Policy Framework (NPPF) (2025) sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

Chapter 15 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity, the wider benefits from natural capital and ecosystem services, minimising impacts on and providing net gains for biodiversity.

The NPPF states that plans should distinguish between the hierarchy of international, national and locally designated sites and that the scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

To protect and enhance biodiversity plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation and promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species and identify and pursue opportunities for securing measurable net gains for biodiversity.

The NPPF states determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a SSSI, 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 on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;

c) 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;

d) 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.

## Legend

- New Hedge
- Modified grassland
- Mixed scrub
- Vegetated Garden
- Artificial unvegetated unsealed surface
- Scattered Trees
- Redline

| | |
|---|---|
| **Map** | Pre-development Habitat Map |
| **Site** | Sunny Mead |
| **Client** | Mr Brazil |
| **Date** | 07/07/2025 |