



# Land at Ounces Barn Livery

## Ecological Appraisal



**For Inert Recycling Ltd**

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## Executive Summary

Contents	Summary
<b>Site Location</b>	The site is located east of Boxgrove Quarry south east of the village of Halnaker, West Sussex and is centred at Ordnance Survey National Grid Reference SU 92052 08238. The site comprises fields of grassland used for grazing horses, amenity grassland and an access road leading to Ounces Barn and to the Boxgrove Quarry Restoration Project.
<b>Proposals</b>	The proposals are to reprofile the land using inert material in order to improve drainage within the fields.
<b>Scope of this Survey(s)</b>	The scope of the survey is to conduct an Ecological Appraisal including a desk-based study and an extended Phase 1 habitat survey of the site. The desk-based study used online resources and information sourced from the LERC.
<b>Results</b>	<p><b>Designated Sites</b> No impacts on any designated sites are considered.</p> <p><b>Habitats</b> The habitats on site consisted of poor semi-improved grassland, bare ground, scattered scrub, tall ruderal vegetation, plantation woodland and amenity grassland.</p> <p><b>Protected Species</b> The habitats on the site have potential to support foraging and commuting bats and breeding birds.</p>
<b>Recommendations</b>	Removal of any scattered scrub, or plantation woodland should be undertaken outside of the bird nesting season (March-September inclusive) or following a nesting bird check by an ecologist.



## Glossary

Badger Act	Protection of Badgers Act 1992
BCT	Bat Conservation Trust
BoCC	Bird(s) of Conservation Concern
BSI	British Standard Institute
BTO	British Trust for Ornithology
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
DEFRA	Department for the Environment, Food and Rural Affairs
EcIA	Ecological Impact Assessment
EPS	European Protected Species
EPSL	European Protected Species Licence
GCN	Great Crested Newt
Habitat Regulations	Conservation of Habitats and Species Regulations 2017 (as amended)
HAP	Habitat Action Plan
HPI	Habitat(s) of Principal Importance
JNCC	Joint Nature Conservation Committee
LERC	Local Environmental Record Centre
LBAP	Local Biodiversity Action Plan
LNR	Local Nature Reserve
LPA	Local Planning Authority
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
PEA	Preliminary Ecological Appraisal
SAC	Special Area of Conservation
SAP	Species Action Plan
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
SxBRC	Sussex Biodiversity Records Centre
TPO	Tree Preservation Order
W&CA	Wildlife & Countryside Act 1981 (as amended)



## 1.0 Introduction

### 1.1 Background

WYG was commissioned by Inert Recycling Ltd on 6<sup>th</sup> March 2020 to undertake an Ecological Appraisal of the site known as Land at Ounces Barn Livery.

This report has been prepared by Senior Ecologist John Simper MCIEEM and the conditions pertinent to it are provided in Appendix A.

### 1.2 Site Location

The 'site' is located at east of Boxgrove Quarry south east of the village of Halnaker, West Sussex and is centred at Ordnance Survey National Grid Reference SU 92052 08238 – see Figure 1. The site comprises fields of grassland used for grazing horses and an access road leading to Ounces Barn to the Boxgrove Quarry Restoration Project.

### 1.3 Development Proposals

The proposals are to reprofile the land using inert material in order to improve drainage within the fields.

### 1.4 Purpose of the Report

The purpose of this report is to complete:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected / notable species within the site and its zone of influence;
- An extended Phase 1 Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species; and
- An assessment of the potential ecological receptors present on site, identify any constraints they pose to future development and (if possible) any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

A summary of the key legislation is also provided in Appendix B.



## 2.0 Methodology

### 2.1 Desk Study

#### 2.1.1 Local Ecological Records Centre

Information was requested from the Sussex Biodiversity Records Centre (SxBRC) for information on any nature conservation designations and protected or notable species records within 2 km of the site.

The data search covered:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely LWS;
- Legally protected species, such as great crested newts *Triturus cristatus* (GCN), badger *Meles meles* and bats;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance (HPIs or SPIs); and,
- Priority habitats or species within the Sussex LBAP (Sussex Biodiversity Partnership 1996).

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

#### 2.1.2 Online Resources

A search for relevant information was also undertaken using the MAGIC website of the area within 2 km of the boundary of the site. This is DEFRA's interactive, web-based database of statutory designations and European Protected Species Licences (EPSL) applications that have been granted since 2010.

## 2.2 Field Surveys

The following methodologies have been used to identify the ecological receptors present on or near the site, which are relevant to the proposed development.

#### 2.2.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on 6<sup>th</sup> March 2020 by WYG Senior Ecologist John Simper MCIEEM. The weather conditions were fine and dry during the survey.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (JNCC, 2010). Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2019). The site was also appraised for its suitability to support notable flora, with regard to the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017).



## 2.2.2 Protected & Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRoW Act, those given extra protection under the NERC Act, and species included in the Sussex LBAP.

### Great Crested Newt

The site was appraised for its suitability to support GCN. The assessment was based on Guidance outlined in the *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

### Bats

#### Roosting Bats – Buildings / Structures / Trees

Any suitable buildings, structures or trees on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) – hereafter referred to as the 'BCT Guidelines'. The categories used to classify the bat roost suitability of any features found, are provided in Table 1.

**Table 1: Categories of Bat Roost Suitability (BCT Guidelines)**

Suitability	Typical Roosting Features
<b>Negligible</b>	Negligible habitat feature on site likely to be used by roosting bats.
<b>Low</b>	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
<b>Moderate</b>	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
<b>High</b>	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

#### Foraging / Commuting Bats

The BCT Guidelines use the criteria in Table 2 to categorise the potential value of habitats and features for use by foraging and commuting bats and these have been used to characterise the value of this site.





**Table 2: Categories of Habitat Suitability (BCT Guidelines)**

Suitability	Typical Foraging & Commuting Features
<b>Negligible</b>	Negligible habitat features on site likely to be used by commuting or foraging bats.
<b>Low</b>	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
<b>Moderate</b>	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
<b>High</b>	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

### Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the *Herpetofauna Workers' Manual* (Gent & Gibson, 2003).

### Badgers

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell & Jefferies, 1989).

### Hazel Dormice

The site was surveyed for its suitability to support hazel dormice. The assessment was based on guidance outlined in Bright, Morris and Mitchell-Jones (2006).

### Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development* (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

#### 2.2.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed *Reynoutria japonica* (formerly *Fallopia japonica*), Indian (Himalayan) balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, wall cotoneaster *Cotoneaster horizontalis* and rhododendron



*Rhododendron ponticum* × *Rhododendron maximum*. A full list of all invasive plant species is provided in Appendix B.

## 2.3 Limitations

The optimal period to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in March which is outside the optimal survey window. As such this is not considered to be a limitation to the accurate assessment of the habitats and the dominant species of the respective vegetation types were visible and identifiable.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

The details of this report will remain valid for a period of **two years** from the date of the survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

## 3.0 Baseline Conditions

### 3.1 Designated Sites

The designated sites for nature conservation in Table 3 have been identified within 2 km of the site.

**Table 3: Designated Sites Within 2 km**

Site Name	Distance & Direction	Summary of features
Halnaker Chalk Pit SSSI	15 m North East	This partially vegetated pit with scrub and woodland is important for its large population of the nationally rare plant, broad leaved cudweed <i>Filago pyramidata</i> , which was a typical cornfield flower before the advent of modern agricultural practices.

In addition to the above designations, the nearest Natura 2000 site is the Dunton to Bignor Escapement SAC which is approximately 6.5 km to the north east of the site. This is designated for its botanical interest.

### 3.2 Habitats

Six habitats were identified during the survey. These are described in Section 3.2.1 to Section 3.2.6 including the use of detailed Target Notes (TN#) provided in Appendix C.



### 3.2.1 Poor semi-improved grassland

All the fields within the survey area were used for grazing. Due to grazing by horses the sward height was very short in the fields north of the access track (TN1). The dominant species were Yorkshire fog *Holcus lanatus* and cocksfoot *Dactylis glomerata*. Grazing pressure by fallow deer *Dama dama* had resulted a patchwork of short and longer swards in the field south of the access track (TN2). A slightly higher diversity of herbaceous species was recorded in the wetter areas within the west of the southernmost field (TN3).

### 3.2.2 Bare Ground

A track constructed with hardstanding was present bisecting the centre of the site and along the access road that runs along the eastern boundary (TN4). This trackway was subject to very frequent use by lorries entering Boxgrove Quarry and no vegetation was present. Patches of bare ground were also present along a bank on the southern side of the trackway.

### 3.2.3 Scattered scrub

Occasional patches of low bramble *Rubus fruticosus* and buddleja *Buddleja davidii* scrub were present either side of the trackway and along fence lines within the fields (TN5). Tall Ruderal

Patches of tall ruderal vegetation were also present in places along the banks either side of the trackway leading into Boxgrove Quarry (TN6) dominated by stinging nettle *Urtica dioica* with teasels *Dipsacus fullonum* and broad-leaved dock *Rumex obtusifolius*.

### 3.2.4 Plantation Woodland

A very small area of recently planted woodland was present to the south of Ounces Barn (TN7) species present included field maple *Acer campestre*, English oak *Quercus robur*, alder *Alnus glutinosa*, beech *Fagus sylvatica* and hawthorn *Crataegus monogyna*.

### 3.2.5 Amenity Grassland

An area of amenity grassland was present to the south of Ounces Barn (TN8) containing species such as perennial ryegrass *Lolium perenne* and annual meadow grass *Poa annua* and dandelion *Taraxacum officinale*.

## 3.3 Protected & Notable Species

### 3.3.1 Great Crested Newts

The desk study returned one record of GCN within 2 km of the site, within the last ten years. The closest current record was recorded approximately 1.9 km to the south of the site in the village of Tangmere. A search of data on MAGIC identified no granted EPSL for GCN within a 2 km radius of the site.

A search using MAGIC showed one water body present within 500 m of the site The pond was found at SU 92711 07973 and was found to be a small lined pond surrounded by small trees and scrub.

The closely grazed grassland within the survey area is not suitable for GCN in their terrestrial phase due to a lack of refuge places. Between the pond and the survey area are patches of woodland that



are considered suitable habitat for GCN. It is considered that the site has no potential to support GCN in their terrestrial phase.

### 3.3.2 Reptiles

There were 10 records of reptiles from within 2 km of the site from the last 10 years. This comprised records of common lizard *Zootica vivipara*, slow worm *Anguis fragilis* and grass snake *Natrix helvetica*. These are summarised in Table 6.

**Table 6: Reptile records within 2 km of the site**

Species	Number of records	Nearest Record to Site* (km)
Common lizard	8	3 records from Boxgrove Quarry.
Slow worm	1	1.7 km South East.
Grass snake	2	1 record from Boxgrove Quarry.
*Only current records were considered for the location of the nearest record to the site. Current records were records within last 10 years.		

The short grazed grassland and recently established vegetation along the trackway are unsuitable for reptiles due to a lack of cover for foraging and sheltering. The site has been assessed as having negligible potential for reptiles.

### 3.3.3 Bats

There were 18 records of bats from the last ten years returned via the SxBRC data search of at least four bat species within 2 km of the site boundary, these are summarised in Table 7. None of the records were located within the site.

**Table 7: Bat records returned within 2km of the site**

Common Name	No. of Records	Nearest Record to Site* (km)
Barbastelle <i>Barbastella barbastellus</i>	6	Location not provided.
Pipistrelle sp. <i>Pipistellus</i>	3	1.1 km, W
Common pipistrelle <i>Pipistrellus pipistrellus</i>	2	1.8 km, SW
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	2	Location not provided.
Unidentified long-eared bat <i>Plecotus sp.</i>	2	1.1 km W
Brown long-eared bat <i>Plecotus auritus</i>	3	0.5 km N

A search of data on MAGIC identified one granted EPSL for bats within a 2 km radius of the site. This involved the destruction of a resting place for brown long-eared bat, common pipistrelle and whiskered bat *Myotis mystacinus* (Ref number:2014-352-EPS-MIT).



### Roosting bats.

There were no buildings or trees within the survey area and the site has been assessed as having negligible potential to be suitable for roosting bats.

### Foraging and commuting bats.

The grassland and trees / woodland edge along the west of the survey area provide suitable connected habitats for bats to forage and commute through the site and within the wider landscape. Overall, habitats within the site are assessed as providing low suitability for foraging and commuting bats in accordance with the BCT classifications (Collins 2016) provided in tabl 2.

### 3.3.4 Badgers

The desk study undertaken by SxBRC did not any records of badgers from within 2 km of the site.

No evidence of badgers was recorded within the survey area, although the horse grazed grassland has foraging potential for the species, there is no suitable habitat for sett building. It is therefore considered that the site offers negligible potential to support badgers.

### 3.3.5 Hazel Dormice

The desk study undertaken by SxBRC did not reveal any records of hazel dormice within 2 km of the site.

No suitable habitats for dormice was present within the survey area.

### 3.3.6 Birds

The desk study undertaken by SxBRC returned records of 109 species of birds including 29 species Red Listed as Birds of Conservations Concern (BoCC) including cuckoo *Cuculus canorus*, grey partridge *Perdix perdix*, lapwing *Vanellus vanellus*. The returned records included also 25 species of principal importance for the purposes of conserving biodiversity listed on NERC Act Section 41 including turtle dove *Streptopelia turtur*, skylark *Alauda arvensis* and tree pipit *Anthus trivialis*. The poor semi-improved grassland habitat within the survey area had foraging potential for a range of species typical of grassland and woodland edge habitats. Nesting habitat was restricted to a few small patches of scattered scrub adjacent to the track. The site is unlikely to support a significant assemblage of breeding or wintering birds.

### 3.3.7 Invertebrates

The desk study undertaken by SxBRC returned records of 21 species of invertebrates including three species listed in accordance with Section 41 of the NERC Act. These were the stag beetle *Lucanus cervus*, small heath *Coenonympha pamphilus*, and the shaded broad-bar *Scotopteryx chenopodiata*.

Vegetated habitats within the site were considered likely to support a range of common and widespread invertebrates.

## 3.4 Importance of Ecological Features

In line with the CIEEM PEA Guidelines, and based on the above baseline information, the importance of each ecological feature recorded within the study area is given in Table 8 below. The categories used are those which are defined in Section 4 of the CIEEM EcIA Guidelines (2018 v1.1).



**Table 8: Importance of Ecological Features**

Feature	Importance	Rationale
Halnaker Chalk Pit SSSI	National	Nationally designated site.
Habitats	Negligible	All habitat types were considered common and widespread in the wider landscape.
GCN	Negligible	Considered likely to be absent from the site.
Reptiles	Negligible	Considered likely to be absent from the site.
Bats	Negligible	The site was considered unlikely to support an assemblage of commuting and foraging bats of any significance.
Badgers	Negligible	Considered likely to be absent from the site.
Hazel Dormice	Negligible	Considered likely to be absent from the site
Birds	Low	Some foraging and nesting habitat present, but the site was considered unlikely to support a notable assemblage of breeding and / or wintering birds.
Invertebrates	Negligible	Notable invertebrates considered likely to be absent from the site.

**Either:** International (incl. European) / National / Regional / County / Local / Negligible  
**Or:** Unknown (i.e. further surveys/information needed)

The potential for the proposals to have adverse or beneficial impacts on these features, along with the need for any mitigation or enhancement measures are discussed in detail below.

## 4.0 Relevant Planning Policy & Legislation

### 4.1 Revised National Planning Policy Framework

A revised NPPF was issued on 19<sup>th</sup> February 2019 (Ministry of Housing Communities and Local Government, 2019) and currently supplements government Circular 06/2005, *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System* (Office of the Deputy Prime Minister, 2005).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 170 of the NPPF also states that:

*“Planning policies and decisions should contribute to and enhance the natural environment by:*

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)*



- b) *recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*
- c) *maintaining the character of the undeveloped coast, while improving public access to it where appropriate*
- d) *minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*
- e) *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and*
- f) *remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

The conservation and enhancement of wildlife is also specifically reference re: development within the National Parks or the Broads.

Paragraph 174 then goes on to confirmed that:

*"When 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 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 on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- 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; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."*

Regarding EcIA's and HRA's – any sites identified, or required, as compensatory measures for adverse effects on any Natura 2000/habitats site should also be given the same level as protection as the pSPA's and cSAC's themselves. In addition, when an application is being determined, Paragraph 177 clarifies that:

*"The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or*



projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site."

Paragraph 180 is also relevant as;

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:...

- c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation."

## 4.2 Biodiversity 2020: A strategy for England’s Wildlife & Ecosystem Services

Biodiversity 2020 (DEFRA, 2011) replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix B for further details).

## 4.3 Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Sussex LBAP (Sussex Biodiversity Partnership 1996), is the relevant document for this site and it contains the following Habitat & Species Action Plans given in Table 9 and Table 10.

**Table 4: Sussex BAP SAPs**

Species Action Plans	
Common toad <i>Bufo bufo</i>	GCN <i>Triturus cristatus</i>
Slow worm <i>Anguis fragilis</i>	Common Lizard <i>Zootoca vivipara</i>
Grass Snake <i>Natrix helvetica</i>	Adder <i>Vipera berus</i>
Butterflies & moths*	Bumblebees*
Stag beetle <i>Lucanus cervus</i>	Water vole <i>Arvicola amphibius</i>
Skylark <i>Alauda arvensis</i>	Tree Pipit <i>Anthus trivialis</i>
Nightjar <i>Caprimulgus europaeus</i>	Cuckoo <i>Cuculus canorus</i>
Lesser spotted woodpecker <i>Dryobates minor</i>	Yellowhammer <i>Emberiza citrinella</i>
Reed bunting <i>Emberiza schoeniclus</i>	Herring gull <i>Larus argentatus</i>





Species Action Plans	
Woodlark <i>Lullula arborea</i>	Spotted flycatcher <i>Muscicapa striata</i>
House sparrow <i>Passer domesticus</i>	Tree sparrow <i>Passer montanus</i>
Wood warbler <i>Phylloscopus sibilatrix</i>	Willow tit <i>Poecile montana</i>
Marsh tit <i>Poecile palustris</i>	Dunnock <i>Prunella modularis</i>
Bullfinch <i>Pyrrhula pyrrhula</i>	Turtle dove <i>Streptopelia turtur</i>
Starling <i>Sturnus vulgaris</i>	Song thrush <i>Turdus philomelos</i>
Lapwing <i>Vanellus vanellus</i>	Brown hare <i>Lepus europaeus</i>

\*Group of species.

**Table 5: LBAP HAPs**

Habitats Action Plans	
Lowland heathland	Open water (ponds)
Wood pasture and parkland	Woodland
Ancient woodland	-

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats / species, rather than to protect a county-scarce feature (for example).

## 4.4 Local Plan

As the site is located within the Chichester District of West Sussex, the relevant local planning policy pertaining to the site is contained in the Adopted Chichester Local Plan: Key Policies 2014-2029.

Policy 49 states that planning permission for development will be granted where the following criteria are met:

- *The biodiversity value of the site is safeguarded;*
- *Demonstrable harm to habitats or species which are protected or which are of important to biodiversity is avoided or mitigated;*
- *The proposal has incorporated features that enhance biodiversity as part of good design and sustainable development;*
- *The proposal protects, manages and enhances the District’s network of ecology, biodiversity and geological sites, including the international, national and local designated sites (statutory and non-statutory), priority habitats, wildlife corridors and stepping stones that connect them;*
- *Any individual or cumulative adverse impacts on sites are avoided;*
- *The benefits of development outweigh any adverse impact on the biodiversity on the site. Exceptions will be made where no reasonable alternatives are available; and planning conditions and / or planning obligations may be imposed to mitigate or compensate for the harmful effects of the development.*



The site also falls within the area governed by the West Sussex Waste Local Plan (2014).

Policy W14 states that proposals for waste development will be permitted provided that:

- a) *areas or sites of international biodiversity importance are protected unless there are no appropriate alternative solutions and there are overriding reasons which outweigh the need to safeguard the value of sites or features, and provided that favourable conservation status is maintained;*
- b) *there are no adverse impacts on areas or sites of national biodiversity or geological conservation importance unless the benefits of the development clearly outweigh the impact on the objectives of the designation and on the wider network of such designated areas or sites;* (c) *there are no adverse impacts on areas, sites or features of regional or local biodiversity or geological conservation importance unless the benefits of the development clearly outweigh the impact on the objectives of the designation;*
- c) *where development would result in the loss of or adversely affect an important area, site or feature, the harm is minimised, mitigated, or compensated for, including, where practicable, the provision of a new resource elsewhere which is of at least equivalent value;*
- d) *where appropriate, the creation, enhancement, and management of habitats, ecological networks, and ecosystem services is secured consistent with wider environmental objectives including Biodiversity Opportunity Areas and the South Downs Way Ahead Nature Improvement Area; and*
- e) *where necessary, the investigation, evaluation, and recording of important sites and features is undertaken and, where appropriate, representative features are preserved.*

## 4.5 Legislation

Full details of the UK legislation and offences which are relevant to the ecological receptors identified are included in Appendix B. However, based on the findings of our assessment, it is considered that the proposals will need to consider the following legal provisions:

- The W&CA 1981 (as amended) – relating to the potential for effects on nesting birds.

## 5.0 Discussion

### 5.1 Designated Sites

There are no designated sites within the zone of influence of effects arising from the proposals.

### 5.2 Habitats

#### 5.2.1 Impacts

The development proposals will result in the loss of poor semi-improved grassland, scattered scrub and recently planted plantation woodland. This habitat has been assessed as being of low ecological importance and is common and widespread in the surrounding landscape. Following completion of the infilling works grassland will be re-established to provide continued grazing for horses.



Whilst enhancement is not a legal requirement, it is encouraged within the site as it helps to meet the government objectives for planning to protect and enhance biodiversity, minimise impacts and provide net gains for biodiversity in accordance with the NPPF (see Section 4.1).

It is therefore recommended as an enhancement that native planting could be incorporated into the landscaping design within the proposed site (in accordance with Policy 49 of the in the Adopted Chichester Local Plan). This could include the planting of a native hedgerow along the trackway that bisects the site. The areas of plantation woodland lost as part of the proposals should also be replanted where possible.

### 5.3 Protected & Notable Species

Scattered scrub present along the track to Boxgrove Quarry is considered to offer habitat for a common assemblage of nesting birds. It is recommended that scattered scrub vegetation is removed outside of the breeding season (March to September inclusive). If this is not possible, a pre-works inspection is to be conducted by an experienced ecologist no earlier than 24 hours before works commence. If nesting birds are located, the ecologist will suggest a suitable buffer to be instated to prevent potential disturbance.

The site is not considered to be important for foraging and commuting bats, any effects are likely to be temporary and the suitability if the site for foraging and commuting bats will be improved with the enhancements proposed.

No other protected or notable species are considered likely to be affected by the proposals.

## 6.0 Summary

As summary of the findings of this report are provided below:

- Due to the nature of the proposals no designated sites are expected to be affected.
- The poor semi-improved grassland that dominates the site is of low ecological value and will be replaced by a grassland of similar ecological value as part of the proposals.
- The site could be enhanced by the addition of a native hedgerow along the edge of the track that bisects the site. This is likely to benefit, foraging and commuting bats, breeding birds and invertebrates.
- Birds – A nesting bird check will be completed prior to the removal of any scrub during the nesting bird season (March to September inclusive). If active bird nests are located, the ecologist will suggest suitable buffers are put in place to prevent disturbance until chicks have fledged.
- Due to the nature of the proposals no further surveys are required to assess the status of commuting / foraging bats.



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# FIGURES

**Figure 1 – Site Location Plan**

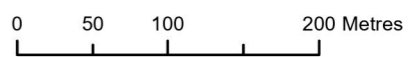
**Figure 2 – Phase 1 Habitat Plan**



Rev	Date	Notes
A	17/06/20	Initial map production

**Legend**

 Site boundary



**Site Location Plan**

**Land at Ounces Barn Livery  
Inert Recycling Ltd**

Scale at A3: 1:5,000	Project No: A117091	Drawing No: Figure 1	Revision: A
Drawn by: Maddie Errington	Drawn date: 17/06/2020	Approved by: John Simper	

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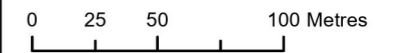
C:\Users\merrington\OneDrive\Documents\A117091\_LandatOuncesBarn\WYG\A117091\_LandatOuncesBarn.dwg



Rev	Date	Notes
A	17/06/20	Initial map production

**Legend**

- Site boundary
- Broadleaved woodland - plantation
- Scrub - scattered
- SI Poor semi-improved grassland
- Tall ruderal
- A Amenity grassland
- Bare ground
- Target note



**Phase 1 Habitat Plan**

**Land at Ounces Barn Livery  
Inert Recycling Ltd**

Scale at A3: 1:3,000	Project No: A117091	Drawing No: Figure 2	Revision: A
Drawn by: Maddie Errington	Drawn date: 17/06/2020	Approved by: John Simper	

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## Appendix A – Report Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of [Inert Recycling Ltd] (“the Client”) for the proposed uses stated in the report by [WYG Environment Planning Transport Limited] (“WYG”). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder’s permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.





# Appendix B – Key Legislation

## Bern Convention

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1<sup>st</sup> December 2009, European legislation has been adopted by the European Union.

## Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or ‘Bonn Convention’ was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

## Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the ‘Habitats Directive’, is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

## Birds Directive

The EC Directive on the Conservation of Wild Birds (79/409/EEC) or ‘Birds Directive’ was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.



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

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

<https://www.legislation.gov.uk/uksi/2018/1307/note/made>

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:

Schedule 2 – European Protected Species of Animals	Schedule 5 – European Protected Species of Plants
Horseshoe bats <i>Rhinolophidae</i> - all species	Shore dock <i>Rumex rupestris</i>
Common bats <i>Vespertilionidae</i> - all species	Killarney fern <i>Trichomanes speciosum</i>
Large Blue Butterfly <i>Maculinea arion</i>	Early gentian <i>Gentianella anglica</i>
Wild cat <i>Felis sylvestris</i>	Lady’s-slipper <i>Cypripedium calceolus</i>
Dolphins, porpoises and whales <i>Cetacea</i> – all sp.	Creeping marsh-wort <i>Apium repens</i>
Dormouse <i>Muscardinus avellanarius</i>	Slender naiad <i>Najas flexilis</i>
Pool frog <i>Rana lessonae</i>	Fen orchid <i>Liparis loeselii</i>
Sand lizard <i>Lacerta agilis</i>	Floating-leaved water plantain <i>Luronium natans</i>
Fisher’s estuarine moth <i>Gortyna borelii lunata</i>	Yellow marsh saxifrage <i>Saxifraga hirculus</i>
Great crested newt <i>Triturus cristatus</i>	
Otter <i>Lutra lutra</i>	
Lesser whirlpool ram’s-horn snail <i>Anisus vorticulus</i>	
Smooth snake <i>Coronella austriaca</i>	
Sturgeon <i>Acipenser sturio</i>	
Natterjack toad <i>Epidalea calamita</i>	
Marine turtles <i>Caretta caretta</i> , <i>Chelonia mydas</i> , <i>Lepidochelys kempji</i> , <i>Eretmochelys imbricata</i> , <i>Dermodochelys coriacea</i>	

**Wildlife & Countryside Act 1981 (as amended)**

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the ‘Bern Convention’ and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) intentionally:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use; or
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.



In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant;
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

**Schedule 1 - Birds which are protected by special penalties**

Avocet	<i>Recurvirostra avosetta</i>	Osprey	<i>Pandion haliaetus</i>
Bee-eater	<i>Merops apiaster</i>	Owl, Barn	<i>Tyto alba</i>
Bittern	<i>Botaurus stellaris</i>	Owl, Snowy	<i>Nyctea scandiaca</i>
Bittern, Little	<i>Ixobrychus minutus</i>	Peregrine	<i>Falco peregrinus</i>
Bluethroat	<i>Luscinia svecica</i>	Petrel, Leach's	<i>Oceanodroma leucorhoa</i>
Brambling	<i>Fringilla montifringilla</i>	Phalarope, Red-necked	<i>Phalaropus lobatus</i>
Bunting, Cirl	<i>Emberiza cirlus</i>	Plover, Kentish	<i>Charadrius alexandrinus</i>
Bunting, Lapland	<i>Calcarius lapponicus</i>	Plover, Little Ringed	<i>Charadrius dubius</i>
Bunting, Snow	<i>Plectrophenax nivalis</i>	Quail, Common	<i>Coturnix coturnix</i>
Buzzard, Honey	<i>Pernis apivorus</i>	Redstart, Black	<i>Phoenicurus ochruros</i>
Capercaillie	<i>Tetrao urogallus</i>	Redwing	<i>Turdus iliacus</i>
Chough	<i>Pyrrhocorax pyrrhocorax</i>	Rosefinch, Scarlet	<i>Carpodacus erythrinus</i>
Corncrake	<i>Crex crex</i>	Ruff	<i>Philomachus pugnax</i>
Crake, Spotted	<i>Porzana porzana</i>	Sandpiper, Green	<i>Tringa ochropus</i>
Crossbills (all species)	<i>Loxia</i>	Sandpiper, Purple	<i>Calidris maritima</i>
Curlew, Stone	<i>Burhinus oedicnemus</i>	Sandpiper, Wood	<i>Tringa glareola</i>
Divers (all species)	<i>Gavia</i>	Scaup	<i>Aythya marila</i>
Dotterel	<i>Charadrius morinellus</i>	Scoter, Common	<i>Melanitta nigra</i>
Duck, Long-tailed	<i>Clangula hyemalis</i>	Scoter, Velvet	<i>Melanitta fusca</i>
Eagle, Golden	<i>Aquila chrysaetos</i>	Serim	<i>Serinus serinus</i>
Eagle, White-tailed	<i>Haliaetus albicilla</i>	Shorelark	<i>Eremophila alpestris</i>
Falcon, Gyr	<i>Falco rusticolus</i>	Shrike, Red-backed	<i>Lanius collurio</i>
Fieldfare	<i>Turdus pilaris</i>	Spoonbill	<i>Platalea leucorodia</i>
Firecrest	<i>Regulus ignicapillus</i>	Stilt, Black-winged	<i>Himantopus himantopus</i>
Garganey	<i>Anas querquedula</i>	Stint, Temminck's	<i>Calidris temminckii</i>



Godwit, Black-tailed	<i>Limosa limosa</i>	Swan, Bewick's	<i>Cygnus bewickii</i>
Goshawk	<i>Accipiter gentilis</i>	Swan, Whooper	<i>Cygnus cygnus</i>
Grebe, Black-necked	<i>Podiceps nigricollis</i>	Tern, Black	<i>Chlidonias niger</i>
Grebe, Slavonian	<i>Podiceps auritus</i>	Tern, Little	<i>Sterna albifrons</i>
Greenshank	<i>Tringa nebularia</i>	Tern, Roseate	<i>Sterna dougallii</i>
Gull, Little	<i>Larus minutus</i>	Tit, Bearded	<i>Panurus biarmicus</i>
Gull, Mediterranean	<i>Larus melanocephalus</i>	Tit, Crested	<i>Parus cristatus</i>
Harriers (all species)	<i>Circus</i>	Tree-creeper, Short-toed	<i>Certhia brachydactyla</i>
Heron, Purple	<i>Ardea purpurea</i>	Warbler, Cetti's	<i>Cettia cetti</i>
Hobby	<i>Falco subbuteo</i>	Warbler, Dartford	<i>Sylvia undata</i>
Hoopoe	<i>Upupa epops</i>	Warbler, Marsh	<i>Acrocephalus palustris</i>
Kingfisher	<i>Alcedo atthis</i>	Warbler, Savi's	<i>Locustella luscinioides</i>
Kite, Red	<i>Milvus milvus</i>	Whimbrel	<i>Numenius phaeopus</i>
Merlin	<i>Falco columbarius</i>	Woodlark	<i>Lullula arborea</i>
Oriole, Golden	<i>Oriolus oriolus</i>	Wryneck	<i>Jynx torquilla</i>
<b>Animal (Vertebrate) Species Listed in Schedule 5 (full legal protection at all times)</b>			
Horseshoe Bats (all species)	<i>Rhinolophidae</i>	Newt – Great Crested	<i>Triturus cristatus</i>
Typical Bats (all species)	<i>Vespertilionidae</i>	Snake – Smooth	<i>Coronella austriaca</i>
Dolphin – Bottle-nosed	<i>Tursiops truncatus (tursio)</i>	Toad, Natterjack	<i>Epidalea calamita</i>
Dolphin – Common	<i>Delphinus delphis</i>	Turtles – All Species	<i>Cheloniidae &amp; Dermochelyidae</i>
Dormouse – Hazel	<i>Muscardinus avellanarius</i>	Basking Shark	<i>Cetorhinus maximus</i>
Pine Marten	<i>Martes martes</i>	Burbot	<i>Lota lota</i>
Porpoise – Harbour	<i>Phocaena phocaena</i>	Goby – Giant	<i>Gobius cobitis</i>
Otter – Eurasian	<i>Lutra lutra</i>	Goby – Couch's	<i>Gobius couchii</i>
Squirrel – Red	<i>Sciurus vulgaris</i>	Seahorse – Short-snouted <sup>1</sup>	<i>Hippocampus hippocampus</i>
Walrus	<i>Odobenus rosmarus</i>	Seahorse – Spiny	<i>Hippocampus guttulatus</i>
Water Vole	<i>Arvicola amphibia</i>	Sturgeon	<i>Acipenser sturio</i>
Whales – All Species	<i>Cetacea</i>	Vendace	<i>Coregonus albula</i>
Wildcat	<i>Felis sylvestris</i>	Whitefish	<i>Coregonus lavaretus</i>
Lizard – Sand	<i>Lacerta agilis</i>		
<b>Animal (Vertebrate) Species Protected under Section 9 (1) part: Killing and Injuring &amp; Section 9 (5) Sale</b>			
Adder	<i>Vipera berus</i>	Slow-worm	<i>Anguis fragilis</i>
Lizard – Viviparous	<i>Zootoca vivipara</i>	Snake – Grass	<i>Natrix helvetica (natrix)</i>
<b>Animals (Vertebrate) Species Protected under Section 9 (5) Sale only</b>			
Frog – common	<i>Rana temporaria</i>	Newt – Smooth	<i>Lissotriton vulgaris</i>
Newt – Palmate	<i>Lissotriton helvetica</i>	Toad – Common	<i>Bufo bufo</i>
<b>Animals (Vertebrate) Species Protected under Section 9 (1) (4)(a): Killing, Injuring &amp; Taking and Damage / Destruction of place of shelter / protection only</b>			
Allis Shad	<i>Alosa alosa</i>	Shark – Angel	<i>Squatina squatina</i>
Twaite Shad	<i>Alosa fallax</i>		
<b>Butterflies &amp; Moths – Full Protection under Schedule 5<sup>2</sup> at all times</b>			
High brown fritillary	<i>Argynnis adippe</i>	Fisher's Estuarine Moth	<i>Gortyna borelii</i>
Large Blue	<i>Maculinea arion</i>	Barberry Carpet	<i>Pareulype berberata</i>

<sup>1</sup> Both sea horse species are protected in England only.

<sup>2</sup> Viper's Bugloss Moth *Hadena irregularis* was removed from Schedule 5 in 1996 as it is believed to be extinct.



Heath Fritillary	<i>Mellicta athalea</i>	Black-veined Moth	<i>Siona lineata</i>
Marsh Fritillary	<i>Eurodryas aurinia</i>	Sussex Emerald	<i>Thalera fimbrialis</i>
Swallowtail	<i>Papilio machaon britannicus</i>	Essex Emerald	<i>Thetidia smaragdalis</i>
Large Copper	<i>Lycaena dispar</i>	Fiery Clearwing	<i>Bembecia chrysidiformis</i>
Reddish-buff Moth	<i>Acosmetia caliginosa</i>	New-Forest Burnet	<i>Zygaena viciae</i>
<b>Butterflies – Protected under Section 9 (5) Sale Only</b>			
Purple Emperor	<i>Apatura iris</i>	Adonis Blue	<i>Lysandra bellargus</i>
Northern Brown Argus	<i>Aricia artaxerxes</i>	Chalkhill Blue	<i>Lysandra coridon</i>
Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>	Glanville Fritillary	<i>Melitaea cinxia</i>
Chequered Skipper	<i>Carterocephalus palaemon</i>	Large Tortoiseshell	<i>Nymphalis polychloros</i>
Large Heath	<i>Coenonympha tullia</i>	Silver-studded Blue	<i>Plebejus argus</i>
Small Blue	<i>Cupido minimus</i>	Black Hairstreak	<i>Strymonidia pruni</i>
Mountain Ringlet	<i>Erebia epiphron</i>	White-letter Hairstreak	<i>Strymonidia w-album</i>
Duke of Burgundy	<i>Hamearis lucina</i>	Brown Hairstreak	<i>Thecla betulae</i>
Silver-spotted Skipper	<i>Hesperia comma</i>	Lulworth Skipper	<i>Thymelicus acteon</i>
Wood White	<i>Leptidea sinapis</i>		
<b>Other Invertebrates – Full Protection under Schedule 5 at all times</b>			
Rainbow Leaf-beetle	<i>Chrysolina cerealis</i>	Tadpole Shrimp	<i>Triops cancriformis</i>
Spangled Diving-beetle	<i>Graphopterus zonatus</i>	Trembling Sea-mat	<i>Victorella pavidia</i>
Lesser Silver Water-beetle	<i>Hydrochara caraboides</i>	De Folin's Lagoon Snail	<i>Caecum armoricum</i>
Moccas Beetle	<i>Hypebaeus flavipes</i>	Sandbowl Snail	<i>Catinella arenaria</i>
Violet Click-beetle	<i>Limoniscus violaceus</i>	Freshwater Pearl Mussel	<i>Margaritifera margaritifera</i>
Bembridge Beetle	<i>Parcymus aeneus</i>	Glutinous Snail	<i>Myxas glutinosa</i>
New Forest Cicada	<i>Cicadetta montana</i>	Lagoon Snail	<i>Paludinella littorina</i>
Wart-Biter	<i>Decticus verrucivorus</i>	Lagoon Sea Slug	<i>Tenellia adspersa</i>
Mole-Cricket	<i>Gryllotalpa gryllotalpa</i>	Northern Hatchet-shell	<i>Thyasira gouldi</i>
Field-Cricket	<i>Gryllus campestris</i>	Tentacled Lagoon-worm	<i>Alkmaria romijni</i>
Norfolk Hawker Dragonfly	<i>Aeshna isosceles</i>	Lagoon Sand-worm	<i>Armandia cirrhosa</i>
Southern Damselfly	<i>Coenagrion mercuriale</i>	Medicinal Leech	<i>Hirudo medicinalis</i>
Fen Raft Spider	<i>Dolomedes fimbriatus</i>	Marine Hydroid	<i>Clavopsella navis</i>
Ladybird Spider	<i>Eresus niger (cinaberinus)</i>	Ivell's Sea Anemone	<i>Edwardsia ivelli</i>
Fairy Shrimp	<i>Chirocephalus diaphanus</i>	Starlet Sea Anemone	<i>Nematosella vectensis</i>
Lagoon Sand Shrimp	<i>Gammarus insensibilis</i>	Atlantic Stream (White-clawed) Crayfish	<i>Austropotamobius pallipes</i>
<b>Other Invertebrates Protected under Section 9 (1) Possession &amp; 9 (2) (5) Sale only</b>			
Stag Beetle	<i>Lucanus cervus</i>	Roman Snail <sup>3</sup>	<i>Helix pomatia</i>
Fan Mussel	<i>Atrina fragilis</i>	Pink Sea-fan	<i>Eunicella verrucosa</i>
<b>Other Invertebrates Protected under Section 9 (4) (a) Damage / Destruction of Place of Shelter / Protection only</b>			
Mire Pill Beetle	<i>Curimopsis nigrita</i>		
<b>Vascular Plant Species - Full Protection under Schedule 8 at all times (previous Scientific name in brackets)</b>			
Adder's-tongue Least	<i>Ophioglossum lusitanicum</i>	Lily – Snowdon	<i>Gagea serotina (Lloydia serotina)</i>
Alison- Small	<i>Alyssum alyssoides</i>	Marsh-mallow – Rough	<i>Malva setigera (Althaea hirsuta)</i>

<sup>3</sup> England only



Broomrape – Bedstraw	<i>Orobanche caryophyllacea</i>	Milk-parsley – Cambridge	<i>Selinum carvifolia</i>
Broomrape – Oxtongue	<i>Orobanche picridis</i>	Mudwort – Welsh	<i>Limosella aquatica</i>
Broomrape – Thistle	<i>Orobanche reticulata</i> <sup>4</sup>	Naiad – Holly-leaved	<i>Najas marina</i>
Cabbage – Lundy	<i>Coincya wrightii</i> ( <i>Rhynchosinapis wrightii</i> )	Orache – Stalked	<i>Atriplex pedunculata</i> ( <i>Halimione pedunculata</i> )
Calamint – Wood	<i>Clinopodium menthifolium</i> ( <i>Calamintha sylvatica</i> )	Orchid – Early Spider	<i>Ophrys sphegodes</i>
Catchfly – Alpine	<i>Silene suecica</i> ( <i>Lychnis alpina</i> )	Orchid – Ghost	<i>Epipogium aphyllum</i>
Centaury – Slender	<i>Centaureum tenuiflorum</i>	Orchid – Lapland Marsh	<i>Dactylorhiza lapponica</i>
Cinquefoil – Rock	<i>Potentilla rupestris</i>	Orchid – Late Spider	<i>Ophrys fuciflora</i>
Clary – Meadow	<i>Salvia pratensis</i>	Orchid – Lizard	<i>Himantoglossum hircinum</i>
Club-rush – Triangular	<i>Schoenoplectus triqueter</i> ( <i>Scirpus triqueter</i> )	Orchid – Military	<i>Orchis militaris</i>
Colt's-foot – Purple	<i>Homogyne alpina</i>	Orchid – Monkey	<i>Orchis simia</i>
Cotoneaster – Wild	<i>Cotoneaster cambricus</i> ( <i>C. integerrimus</i> )	Pear – Plymouth	<i>Pyrus cordata</i>
Cotton-grass – Slender	<i>Eriophorum gracile</i>	Pennycress – Perfoliate	<i>Microthlaspi perfoliatum</i> ( <i>Thlaspi perfoliatum</i> )
Cow-wheat – Field	<i>Melampyrum arvense</i>	Pennyroyal	<i>Mentha pulegium</i>
Crocus – Sand	<i>Romulus columnae</i>	Pigmyweed	<i>Crassula aquatica</i>
Cudweed – Broad-leaved	<i>Filago pyramidata</i>	Pine - Ground	<i>Ajuga chamaepitys</i>
Cudweed – Jersey	<i>Gnaphalium luteoalbum</i>	Pink – Cheddar	<i>Dianthus gratianopolitanus</i>
Cudweed – Red-tipped	<i>Filago lutescens</i>	Pink – Childing	<i>Petrorhagia nanteuillii</i>
Cut-grass	<i>Leersia oryzoides</i>	Ragwort – Fen	<i>Jacobaea paludosa</i> ( <i>Senecio paludosa</i> )
Deptford Pink	<i>Dianthus armeria</i>	Ramping-fumitory – Martin's	<i>Fumaria reuteri</i> ( <i>F. martinii</i> )
Diapensia	<i>Diapensia lapponica</i>	Rampion – Spiked	<i>Phyteuma spicata</i>
Eryngo – Field	<i>Eryngium campestre</i>	Restharrow – Small	<i>Ononis reclinata</i>
Fern – Dickie's-bladder	<i>Cystopteris dickieana</i>	Rock-cress – Alpine	<i>Arabis alpina</i>
Fleabane – Alpine	<i>Erigeron borealis</i>	Rock-cress – Bristol	<i>Arabis scabra</i>
Fleabane – Small	<i>Pulicaria vulgaris</i>	Sandwort – Norwegian	<i>Arenaria norvegica</i> <sup>5</sup>
Galingale – Brown	<i>Cyperus fuscus</i>	Sandwort – Teesdale	<i>Minuartia stricta</i>
Gentian – Alpine	<i>Gentiana nivalis</i>	Saxifrage – Drooping	<i>Saxifraga cernua</i>
Gentian - Dune	<i>Gentianella amarella</i> subsp. <i>occidentalis</i> ( <i>Gentianella uliginosa</i> )	Saxifrage – Tufted	<i>Saxifraga cespitosa</i>
Gentian – Fringed	<i>Gentianopsis ciliata</i> ( <i>Gentianella ciliata</i> )	Solomon's-seal – Whorled	<i>Polygonatum verticillatum</i>
Gentian - Spring	<i>Gentiana verna</i>	Sow-thistle – Alpine	<i>Cicerbita alpina</i>
Germander – Cut-leaved	<i>Teucrium botrys</i>	Spearwort – Adder's-tongue	<i>Ranunculus ophioglossifolius</i>
Germander – Water	<i>Teucrium scordium</i>	Speedwell – Fingered	<i>Veronica triphyllos</i>
Gladiolus – Wild	<i>Gladiolus illyricus</i>	Speedwell – Spiked	<i>Veronica spicata</i> <sup>6</sup>
Goosefoot – Stinking	<i>Chenopodium vulvaria</i>	Spike-rush – Dwarf	<i>Eleocharis parvula</i>

<sup>4</sup> The Weeds Act 1959 does not apply to thistles *Cirsium* & *Carduus* species supporting this broomrape.

<sup>5</sup> All subspecies occurring in the UK

<sup>6</sup> Both subspecies: *spicata* & *hybrida*



Grass-poly	<i>Lythrum hyssopifolia</i>	South-stack Fleawort	<i>Tephrosia integrifolia</i> <i>ssp. maritima</i>
Hare's-ear – Sickle-leaved	<i>Bupleurum falcatum</i>	Star-of-Bethlehem – Early	<i>Gagea bohemica</i>
Hare's-ear – Small	<i>Bupleurum baldense</i>	Starfruit	<i>Damasonium alisma</i>
Hawk's-beard – Stinking	<i>Crepis foetida</i>	Strapwort	<i>Corrigiola littoralis</i>
Hawkweed – Northroe	<i>Hieracium northroense</i>	Violet – Fen	<i>Viola persicifolia</i>
Hawkweed – Shetland	<i>Hieracium zetlandicum</i>	Viper's-grass	<i>Scorzonera humilis</i>
Hawkweed – Weak-leaved	<i>Hieracium attenuatifolium</i>	Water-plantain – Ribbon-leaved	<i>Alisma gramineum</i>
Heath – Blue	<i>Phylodoce caerulea</i>	Wood-sedge – Starved	<i>Carex depauperata</i>
Helleborine – Red	<i>Cephalanthera rubra</i>	Woodsia – Alpine	<i>Woodsia alpina</i>
Horsetail – Branched	<i>Equisetum ramosissimum</i>	Woodsia – Oblong	<i>Woodsia ilvensis</i>
Hound's-tongue – Green	<i>Cynoglossum germanicum</i>	Wormwood – Field	<i>Artemisia campestris</i>
Knawel – Perennial	<i>Scleranthus perennis</i> <sup>7</sup>	Woundwort - Downy	<i>Stachys germanica</i>
Knot-grass – Sea	<i>Polygonum maritimum</i>	Woundwort – Limestone	<i>Stachys alpina</i>
Leek – Round-headed	<i>Allium sphaerocephalon</i>	Yellow-rattle – Greater	<i>Rhinanthus angustifolius</i>
Lettuce – Least	<i>Lactuca saligna</i>		
<b>Vascular Plant Species – Partial Protection under Section 13 (2) Protection from commercial exploitation and sale</b>			
Bluebell	<i>Hyacinthoides non-scripta</i>		
<b>Bryophytes – Full Protection under Schedule 8 at all times</b>			
Anamodon – Long-leaved	<i>Anomodon langifolius</i>	Flamingo Moss	<i>Desmatodon cernuus</i>
Blackwort	<i>Southbya nigrella</i>	Frostwort	<i>Gymnomitrium apiculatum</i>
Crystalwort – Lizard	<i>Riccia bifurca</i>	Glaucous Beard Moss	<i>Barbula glauca</i>
Earwort – Marsh	<i>Jamesoniella undulifolia</i>	Green Shield Moss	<i>Buxbaumia viridis</i>
Feathermoss – Polar	<i>Hygrohypnum polare</i>	Hair Silk Moss	<i>Plagiothecium piliferum</i>
Flapwort – Norfolk	<i>Leiocolea rutheana</i>	Knothole Moss	<i>Zygodon forsteri</i>
Grimmia – Blunt-leaved	<i>Grimmia unicolor</i>	Large Yellow Feather Moss	<i>Scorpidium turgescens</i>
Petalwort	<i>Petalophyllum ralfsii</i>	Millimetre Moss	<i>Micromitrium tenerum</i>
Lindenberg's Leafy-Liverwort	<i>Adelanthus lindenbergianus</i>	Multi-fruited River Moss	<i>Cryphaea lamyana</i>
Feather-moss Slender Green	<i>Drepanocladus vernicosus</i>	Nowell's Limestone Moss	<i>Zygodon gracilis</i>
Alpine Copper-Moss	<i>Melichoferia melicoferia</i>	Rigid Apple Moss	<i>Bartramia stricta</i>
Baltic Bog-Moss	<i>Sphagnum balticum</i>	Round-leaved feather Moss	<i>Rhynchostegium rotundifolium</i>
Blue Dew-Moss	<i>Saelania glaucescens</i>	Schleicher's Thread Moss	<i>Bryum schleicheri</i>
Blunt-leaved bristle-Moss	<i>Orthotrichum obtusifolium</i>	Triangular Pygmy Moss	<i>Acaulon triquetrum</i>
Bright-Green Cave-Moss	<i>Cyclodictyon laetevirens</i>	Turpswort	<i>Geocalyx graveolens</i>
Cordate Beard Moss	<i>Barbula cordata</i>	Vaucher's Feather Moss	<i>Hypnum vaucheri</i>
Cornish Path Moss	<i>Ditrichum cornubicum</i>	Western Rustwort	<i>Marsupella profunda</i>
Derbyshire Feather Moss	<i>Thamnobryum angustifolium</i>		

<sup>7</sup> Includes both subspecies: *perennis* & *prostratus*



<b>Stoneworts – Full Protection under Schedule 8 at all times</b>			
Bearded Stonewort	<i>Chara canescens</i>	Foxtail Stonewort	<i>Lamprothamnium papulosum</i>
<b>Lichens – Full Protection under Schedule 8 at all times</b>			
New Forest Beech Lichen	<i>Enterographa elaborata</i>	Forked Hair Lichen	<i>Bryoria furcellata</i>
Snow Caloplaca	<i>Caloplaca nivalis</i>	Golden Hair Lichen	<i>Teloschistes flavicans</i>
Tree Catapyrenium	<i>Catapyrenium psoromoides</i>	Orange-fruited Elm Lichen	<i>Caloplaca luteoalba</i>
Laurer’s Catillaria	<i>Catillaria laurei</i>	River Jelly Lichen	<i>Collema dichotomum</i>
Convolute Cladonia	<i>Cladonia convoluta</i>	Starry Breck Lichen	<i>Buellia asterella</i>
Upright Mountain Cladonia	<i>Cladonia stricta</i>	Caledonia Pannaria	<i>Pannaria ignobilis</i>
Goblin Lights	<i>Catolechia wahlenbergii</i>	New Forest Parmelia	<i>Parmelia minarum</i>
Elm Gyalecta	<i>Gyalecta ulmi</i>	Oil Stain Parmentaria	<i>Parmentaria chilensis</i>
Tarn Lecanora	<i>Lecanora archariana</i>	Southern Grey Physcia	<i>Physcia tribacioides</i>
Copper Lecidea	<i>Lecidea inops</i>	Ragged Pseudo-cyphellaria	<i>Pseudocyphellaria lacerata</i>
Arctic Kidney Lichen	<i>Nephroma arcticum</i>	Rusty Alpine Psora	<i>Psora rubiformis</i>
Ciliate Strap Lichen	<i>Heterodermia leucomelos</i>	Rock Nail	<i>Calicium corynellum</i>
Coralloid Rosette Lichen	<i>Heterodermia propagulifera</i>	Serpentine Selanopsora	<i>Selanopsora liparina</i>
Ear-lobed Dog Lichen	<i>Peltigera lepidophora</i>	Sulphur Tresses	<i>Alectoria ochroleuca</i>
<b>Lichens – Partial Protection under Section 13 (2) Commercial Exploitation and Sale Only</b>			
Tree Lungwort	<i>Lobaria pulmonaria</i>		
<b>Fungi – Full Protection under Schedule 8 at all times</b>			
Royal Bolete	<i>Boletus regius</i>	Oak Polypore	<i>Buglossosporus pulvinus</i>
Hedgehog Fungus	<i>Hericium erinaceum</i>	Sandy Stilt Ball	<i>Battaria phalloides</i>
<b>Invasive plant species listed in Schedule 9</b>			
Australian swamp stonecrop or New Zealand pygmyweed	<i>Crassula helmsii</i>	Japanese rose	<i>Rosa rugosa</i>
Californian red seaweed	<i>Pikea californica</i>	Japanese seaweed	<i>Sargassum muticum</i>
Curly waterweed	<i>Lagarosiphon major</i>	Laver seaweeds (except native species)	<i>Porphyra</i> spp
Duck potato	<i>Sagittaria latifolia</i>	Parrot’s-feather	<i>Myriophyllum aquaticum</i>
Entire-leaved cotoneaster	<i>Cotoneaster integrifolius</i>	Perfoliate alexanders	<i>Smyrnium perfoliatum</i>
False Virginia creeper	<i>Parthenocissus inserta</i>	Pontic rhododendron	<i>Rhododendron ponticum</i>
Fanwort or Carolina water-shield	<i>Cabomba caroliniana</i>	Purple dewplant	<i>Disphyma crassifolium</i>
Few-flowered garlic	<i>Allium paradoxum</i>	Red algae	<i>Grateloupia luxurians</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>	Rhododendron	<i>Rhododendron ponticum</i> × <i>Rhododendron maximum</i>
Floating water primrose	<i>Ludwigia peploides</i>	Small-leaved cotoneaster	<i>Cotoneaster microphyllus</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>	Three-cornered garlic	<i>Allium triquetrum</i>
Giant kelp	<i>Macrocystis</i> spp.	Variiegated yellow archangel	<i>Lamiastrum galeobdolon</i> subsp. <i>argentatum</i>
Giant knotweed	<i>Fallopia sachalinensis</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Giant rhubarb	<i>Gunnera tinctoria</i>	Wakame	<i>Undaria pinnatifida</i>
Giant salvinia	<i>Salvinia molesta</i>	Wall cotoneaster	<i>Cotoneaster horizontalis</i>
Green seafringers	<i>Codium fragile</i>	Water fern	<i>Azolla filiculoides</i>





Himalayan cotoneaster	<i>Cotoneaster simonsii</i>	Water hyacinth	<i>Eichhornia crassipes</i>
Hollyberry cotoneaster	<i>Cotoneaster bullatus</i>	Water lettuce	<i>Pistia stratiotes</i>
Hooked asparagus seaweed	<i>Asparagopsis armata</i>	Water primrose	<i>Ludwigia grandiflora</i>
Hottentot fig	<i>Carpobrotus edulis</i>	Water primrose	<i>Ludwigia uruguayensis</i>
Hybrid knotweed	<i>Fallopia japonica</i> × <i>Fallopia sachalinensis</i>	Waterweeds	<i>Elodea</i> spp.
Indian (Himalayan) balsam	<i>Impatiens glandulifera</i>	Yellow azalea	<i>Rhododendron luteum</i>
Japanese knotweed	<i>Reynoutria japonica</i>		

**Protection of Badgers Act 1992**

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

**Natural Environment and Rural Communities Act 2006**

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

**Hedgerow Regulations 1997**

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.



**Birds of Conservation Concern**

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

**Global IUCN Red List**

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

**Local Biodiversity Action Plan (LBAP)**

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.




**Wild Mammals (Protection) Act 1996**

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.



Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.




## Appendix C – Target Notes

Target Note	Description	Photograph
P1	<p>Pond 1 SU 92711 07974 Area = 520<sup>2</sup>m</p> <p>Surrounded by goat willow and blackthorn. The pond is lined and small amounts of vegetation was present in around the edge mainly in the form of reedmace <i>Typha latifolia</i></p>	
TN 1	<p>Poor semi-improved grassland (grazed) Short ward height, grazed by horses. Yorkshire fog <i>Dactylis glomerata</i> – Dominant Perennial ryegrass <i>Lolium perenne</i> – Frequent Broadleaved dock, <i>Rumex obtusifolius</i> – Occasional Stinging Nettle <i>Urtica dioica</i> – Occasional Ragwort <i>Jacobaea vulgaris</i> Occasional Creeping cinquefoil, <i>Potentilla reptans</i> – Occasional</p>	
TN 2	<p>Poor semi-improved grassland Ungrazed Yorkshire fog <i>Dactylis glomerata</i> – Dominant Perennial ryegrass <i>Lolium perenne</i> – Frequent Broadleaved dock, <i>Rumex obtusifolius</i> – Occasional Stinging Nettle <i>Urtica dioica</i> – Occasional Ragwort <i>Jacobaea vulgaris</i> – Occasional Red fescue <i>Festuca rubra</i> – Occasional</p>	




Target Note	Description	Photograph
TN3	<p>Poor semi-improved grassland                      Ungrazed                      Yorkshire fog <i>Dactylis glomerata</i> – Dominant                      Perennial ryegrass <i>Lolium perenne</i> – Frequent                      Broadleaved dock, <i>Rumex obtusifolius</i> – Occasional                      Stinging Nettle <i>Urtica dioica</i> – Occasional                      Ragwort <i>Jacobaea vulgaris</i> – Occasional                      Red fescue <i>Festuca rubra</i> – Occasional                      Black meddick, <i>Medicago lupulina</i> – Occasional                      Ground ivy, <i>Glechoma hederacea</i> – Occasional                      Creeping buttercup, <i>Ranunculus repens</i> – Occasional</p>	
TN4	<p>Bare Ground                      Access road, almost no vegetation present due to regular use by lorries entering Boxgrove Quarry.</p>	



Target Note	Description	Photograph
TN5	Scattered Scrub Buddleja, <i>Buddleja daviddi</i> – Occasional Bramble, <i>Rubus fruticosus</i> – Occasional	
TN6	Tall Ruderal Teasel, <i>Dipsacus fullonum</i> – Frequent Stinging nettle, <i>Urtica dioica</i> – Frequent Broad-leaved Dock, <i>Rumex obtusifolius</i> – Occasional Ragwort, <i>Jacobaea vulgaris</i> – Occasional	
TN7	Planation woodland Young plantation woodland. Field maple, <i>Acer campestre</i> – Occasional Alder, <i>Alnus glutinosa</i> – Occasional Hawthorn <i>Crataegus monogyna</i> – Occasional English oak, <i>Quercus robur</i> – Occasional	



Target Note	Description	Photograph
TN8	Perennial ryegrass, <i>Lolium perenne</i> – Dominant Couch grass, <i>Elymus repens</i> – Dominant Dandelion, <i>Taraxacum officinale</i> – Occasional Daisy, <i>Bellis perennis</i> – Occasional	



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