



BICESTER HERITAGE

HOTEL APPLICATION,  
BICESTER HERITAGE,  
BICESTER  
OXFORDSHIRE

## **Ecological Assessment**

### **COPYRIGHT**

The copyright of this document  
remains with Ecology Solutions  
The contents of this document  
therefore must not be copied or  
reproduced in whole or in part  
for any purpose without the  
written consent of Ecology Solutions.

### **PROTECTED SPECIES**

This report contains sensitive information  
relating to protected species.  
The information contained herein  
should not be disseminated without the  
prior consent of Ecology Solutions.

## **CONTENTS**

1	INTRODUCTION	1
2	SURVEY METHODOLOGY	2
3	ECOLOGICAL FEATURES	7
4	WILDLIFE USE OF THE SITE	12
5	ECOLOGICAL EVALUATION	14
6	PLANNING POLICY CONTEXT	21
7	SUMMARY AND CONCLUSIONS	25

## **PLANS**

PLAN ECO1	Application Site Location and Ecological Designations
PLAN ECO2	Ecological Features
PLAN ECO3	NVC Quadrat Locations

## **APPENDICES**

APPENDIX 1	Information Provided by TVERC
APPENDIX 2	Information obtained from MAGIC
APPENDIX 3	NVC Quadrat Data

## **1. INTRODUCTION**

### **1.1. Background & Proposals**

1.1.1. Ecology Solutions was commissioned by Bicester Heritage in 2018 to undertake an Ecological Assessment of lands at Bicester Heritage (Bicester Airfield), Bicester, Oxfordshire (see Plan ECO1), hereafter referred to as the application site.

1.1.2. The development proposals are for the provision of a new hotel, including associated access, parking and greenspace.

### **1.2. Application Site Characteristics**

1.2.1. Broadly, the application site comprises mown semi-improved grassland, a single hedgerow, a small remnant building and areas of hardstanding and bare ground. The Application Site lies within the wider Bicester Airfield which itself lies to the north-east of Bicester, Oxfordshire. The A4421 borders the application site to the west. The majority of the site has been designated as a Local Wildlife Site, on account of the grassland habitats it supports.

### **1.3. Ecological Assessment**

1.3.1. This document assesses the ecological interest of the application site as a whole. The importance of the habitats present is evaluated with regard to current guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM)<sup>1</sup>.

1.3.2. The report also sets out the existing baseline conditions for the application site, setting these in the correct planning policy and legal framework and assessing any potential impacts which may occur from the proposed development. Appropriate mitigation where necessary is identified such that it will offset any negative impacts and where possible provide for the ecological enhancement of the application site, in accordance with relevant planning policy.

---

<sup>1</sup> CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2<sup>nd</sup> Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.

## **2. SURVEY METHODOLOGY**

- 2.1. The methodology utilised for the survey work can be split into three areas, namely desk study, habitat survey and faunal survey. These are discussed in more detail below.

### **2.2. Desk Study**

- 2.2.1. In order to compile background information on the application site and its immediate surroundings, Ecology Solutions contacted the Thames Valley Ecological Records Centre (TVERC). Other third party organisations were also contacted that hold records for protected or notable species / species groups such as the Oxfordshire Bat Group, these records are referred to where appropriate.
- 2.2.2. Information has been provided by TVERC and is included at Appendix 1. This information is referenced within this report, where appropriate. Information regarding designated sites is also shown where appropriate on Plan ECO1.
- 2.2.3. Further information on designated sites from a wider search area was also obtained from the online Multi-Agency Geographic Information for the Countryside (MAGIC)<sup>2</sup> database. This information is reproduced at Appendix 2 and where appropriate on Plan ECO1.

### **2.3. Habitat Survey Methodology**

- 2.3.1. An initial habitat survey was carried out by Ecology Solutions on the 13<sup>th</sup> June 2018 with a further visit undertaken on 21<sup>st</sup> June 2018 to ascertain the general ecological value of the land contained within the boundaries of the application site and to identify the main habitats and associated plant species, with notes on fauna utilising the application site.
- 2.3.2. The application site was surveyed based around extended Phase 1 survey methodology<sup>3</sup>, as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be examined in more detail.

---

<sup>2</sup> <http://magic.defra.gov.uk>

<sup>3</sup> Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit*. England Field Unit, Nature Conservancy Council, reprinted JNCC, Peterborough.

- 2.3.3. Using the above method, the application site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.
- 2.3.4. All of the species that occur in each habitat would not necessarily be detected during survey work carried out at any given time of the year, since different species are apparent at different seasons. However given the habitats present, it is considered that an accurate and robust assessment has been made.
- 2.3.5. In addition to surveys undertaken by Ecology Solutions in 2018, previous surveys of the site were undertaken by BSG Ecology in April and June 2016 and by Thames Valley Environmental Records Centre (TVERC) in 2012 and 2014. The findings of these surveys were broadly in line with that recorded by Ecology Solutions in 2018, with some minor variation.
- 2.3.6. A National Vegetation Classification (NVC) survey was undertaken of the supported grassland habitats using an accepted methodology, whereby identified homogenous stands of vegetation were surveyed using randomly placed quadrats (2m x 2m), with a minimum of 5 quadrates per homogenous vegetation type.
- 2.3.7. The recorded quadrat data was analysed using the MAVIS computer programme, which generates a best fit list (i.e. more than one result is displayed) of NVC habitat types. The results generated are in a percentage format (i.e. 64% best fit to MG7 grassland). In accordance with the methodology, once the MAVIS analysis has been undertaken, the relevant NVC handbook is consulted and the habitat descriptions used to guide conclusions as to which vegetation type is present.

## 2.4. Faunal Survey

- 2.4.1. General faunal activity observed during the course of the survey was recorded, whether visually or by call. Specific attention was paid to the potential presence of any protected, rare, notable or Priority Species. In addition, specific surveys were undertaken for Badgers *Meles meles*, birds and reptiles.
- 2.4.2. **Bats.** Bat surveys were undertaken in June 2018 to assess the potential for roosting bats within trees on and adjacent to the application site. The work was overseen by an experienced bat worker and aimed to establish the likelihood of presence / absence of bats. This survey also provided an evaluation of the quality of habitats present within the site for foraging and commuting bats.
- 2.4.3. Field surveys were undertaken with regard to best practice guidelines issued by Natural England (2004<sup>4</sup>), the Joint Nature

---

<sup>4</sup> Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

Conservation Committee (2004<sup>5</sup>) and the Bat Conservation Trust (2016<sup>6</sup>).

- 2.4.4. A detailed internal and external inspection survey was undertaken to search for any evidence of use by roosting bats within buildings. All accessible voids within buildings were surveyed, with evidence of bat such as droppings, feeding remains or individual bats searched for. Furthermore, a detailed external survey was undertaken to identify any potential access points or features which could be utilised by bats.
- 2.4.5. The probability of a building being used by bats as a summer roost site increases if it:
- is largely undisturbed;
  - dates from pre 20<sup>th</sup> Century;
  - has a large roof void with unobstructed flying spaces;
  - has access points for bats (though not too draughty);
  - has wooden cladding or hanging tiles; and
  - is in a rural setting and close to woodland or water.
- 2.4.6. Conversely, the probability decreases if a building is of a modern or pre-fabricated design / construction, is in an urban setting, has small or cluttered roof voids, has few gaps at the eaves or is a heavily disturbed premises.
- 2.4.7. The main requirements for a winter / hibernation roost site is that it maintains a stable (cool) temperature and humidity. Sites commonly utilised by bats as winter roosts include cavities / holes in trees, underground sites and parts of buildings. Whilst different species may show a preference for one of these types of roost site, none are solely dependent on a single type.
- 2.4.8. All trees at the application site were assessed for their potential to support roosting bats. For a tree to be classed as having some potential for roosting bats it must usually have one or more of the following characteristics:
- obvious holes, e.g. rot holes and old woodpecker holes;
  - dark staining on the tree below a hole;
  - tiny scratch marks around a hole from bats' claws;
  - cavities, splits and/or loose bark from broken or fallen branches, lightning strikes etc.;
  - very dense covering of mature Ivy *Hedera helix* over trunk.
- 2.4.9. Habitats were evaluated for their potential to support foraging and commuting bats based on the presence of features of value for this

---

<sup>5</sup> Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2004). *Bat Workers' Manual*. 3<sup>rd</sup> edition. Joint Nature Conservation Committee, Peterborough.

<sup>6</sup> Collins, J. (Eds.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition)*. Bat Conservation Trust, London.

group, such as a rich network of hedgerows, woodland or other habitats offering significant connective or foraging function.

2.4.10. **Badgers.** Surveys were undertaken to search for evidence of Badgers on 13<sup>th</sup> June 2018, and comprised two main elements. The first of these was a thorough search for evidence of Badger setts. For any setts encountered each sett entrance would be recorded and plotted, even if the entrance appeared disused. The following information was recorded if appropriate:

- i) The number and location of well used or very active entrances; these are clear of any debris or vegetation and are obviously in regular use and may, or may not, have been excavated recently.
- ii) The number and location of inactive entrances; these are not in regular use and have debris such as leaves and twigs in the entrance or have plants growing in or around the edge of the entrance.
- iii) The number of disused entrances; these have not been in use for some time, are partly or completely blocked and cannot be used without considerable clearance. If the entrance has been disused for some time all that may be visible is a depression in the ground where the hole used to be and the remains of the spoil heap.

2.4.11. Secondly, evidence of Badger activity, such as well-worn paths and run-throughs, snagged hair, footprints, latrines and foraging signs, was also searched for in order to build up a picture of the use of the application site by Badgers.

2.4.12. **Reptiles.** An initial assessment to identify areas of suitable reptile habitat within the application site was undertaken on 13<sup>th</sup> June 2018. Given the current management of the Application Site as mown grassland, it is not considered that the majority of habitats within the site offer any significant opportunities for this group.

2.4.13. Longer grassland along the margins of the site may provide limited opportunities for reptile species. Given the retention of the majority of these areas within the development proposals and the use of an appropriate clearance methodology, where relevant, it is considered that there is little potential for significant impacts to reptiles within the proposals and as such no specific surveys for this group have been undertaken.

2.4.14. **Birds.** The site offers opportunities for nesting birds in terms of the single hedgerow along the western boundary, in addition to limited foraging opportunities within areas of grassland. It is noted however that similar opportunities are available within the wider area.

2.4.15. The Application Site was subject to a single breeding bird survey visit in June 2018.



- 2.4.16. **Amphibians.** While the Application Site supports suitable terrestrial habitat for Great Crested Newts *Triturus cristatus*, no waterbodies are present within, or within 500m of, the Application Site, which are not separated by major barriers to migration of this species. As such it is considered that the application site is not likely to support this species, or provide opportunities for a significant range of other amphibian species.

### 3. ECOLOGICAL FEATURES

3.1. The application site was subject to ecological survey in June 2018, April and June 2016, 2014 and 2012, with the most recent habitat / botanical survey work undertaken on 13<sup>th</sup> and 21<sup>st</sup> June 2018. The vegetation present enabled the habitat types to be satisfactorily identified and an accurate assessment of the ecological interest of the habitats to be undertaken.

3.2. The following main habitat / vegetation types were identified:

- Semi-improved calcareous grassland;
- Recolonising vegetation / disturbed ground;
- Hedgerow;
- Hardstanding; and
- A single building.

3.3. The location of these habitats is shown on Plan ECO2.

3.4. Each habitat present is described below with an account of their representative plant species.

#### 3.5. Semi-improved calcareous grassland

3.5.1. The majority of the application site is currently comprised of semi-improved calcareous grassland which is currently managed through regular close mowing.

3.5.2. Species present in the grassland include: Upright Browe *Bromus erectus*, Meadow Fescue *Schedonorus pratensis*, False Oat-grass *Arrhenatherum elatius*, Red Fescue *Festuca rubra*, Cock's-foot *Dactylis glomerata*, Common Bent *Agrostis capillaris*, Perennial Rye *Lolium perenne*, Yellow Oat-grass *Trisetum flavescens*, Smaller Cat's Tail *Phleum bertolonii*, Crested Dog's-tail *Cynosurus cristatus*, Rough Meadow-grass *Poa trivialis*, Smooth Meadow-grass *Poa pratensis*, Yorkshire Fog *Holcus lanatus*, Field Wood-rush *Luzula campestris*, Ribwort Plantain *Plantago lanceolata*, Greater Plantain *Plantago major*, Bird's-foot Trefoil *Lotus corniculatus*, Lesser Trefoil *Trifolium dubium*, Red Clover *Trifolium pratense*, Black Meddock *Medicago lupulina*, Common Vetch *Vicia sativa*, Yarrow *Achillea millefolium*, Lady's Bedstraw *Galium verum*, Common Mouse-ear *Cerastium fontanum*, Sticky Mouse-ear *Cerastium glomeratum*, Daisy *Bellis perennis*, Oxeye Daisy *Leucanthemum vulgare*, Dandelion *Taraxacum agg.*, Smooth Hawksbeard *Crepis capillaris*, Meadow Buttercup *Ranunculus acris*, Field Bindweed *Convolvulus arvensis*, Common Sorrel *Rumex acetosa*, Broad-leaved Dock *Rumex obtusifolius*, Curled Dock *Rumex crispus*, Thyme-leaved Sandwort *Arenaria serpyllifolia*, Burnet Saxifrage *Pimpinella saxifraga*, Great Lettuce *Lactuca virosa*, Prickly Sow-Thistle *Sonchus asper*, Ragwort *Senecio jacobaea*, Creeping Thistle *Cirsium arvense*, Greater Knapweed *Centaurea scabiosa*, Common Knapweed *Centaurea nigra*, Self-heal *Prunella vulgaris*, Perforate St. John's Wort *Hypericum perforatum*, Scarlet Pimpernel *Anagallis*

*arvensis*, Eyebright *Euphrasia* sp., Common Restharrow *Ononis repens*, Wild Mignonette *Reseda lutea*, Pyramidal Orchid *Anacamptis pyramidalis*, Germander Speedwell *Veronica chamaedrys*, Creeping Cinquefoil *Potentilla reptans*, Salad Burnet *Sanguisorba minor*, Field Forget-Me-Not *Myosotis arvensis*, Field Scabious *Knautia arvensis* and Cow Parsley *Anthriscus sylvestris*. Bryophyte cover, comprising Springy Turf-moss *Rhytidiadelphus squarrosus* was relatively sparse. Young Willow *Salix* sp. saplings were present along the western boundary of the grassland, encroaching from the adjacent hedgerow.

- 3.5.3. While the majority of the grassland was poor in herb species, with grasses very dominant, areas of species-rich grassland are present and limited to the margins of the grassland in the north-west of the site, in close proximity to the hedgerow present in this area, with the majority of herb species including Greater Knapweed, Common Knapweed, Field Scabious, Salad Burnet, Common Restharrow and Pyramidal Orchid only recorded within this area.
- 3.5.4. This habitat was subject to an NVC survey on 21<sup>st</sup> June 2018, an optimal period for carrying out surveys of calcareous grassland. Quadrat locations for these surveys have been illustrated on Plan ECO3 with species recorded, and their relative dominance, included within a series of NVC quadrat tables (Appendix 3).
- 3.5.5. The results of analysis of the NVC data using MAVIS, with the various quadrat groupings analysed, is included at Table 1, below.

Quadrat Groups	MAVIS Output									
	1	2	3	4	5	6	7	8	9	10
All Quadrats	MG5a 52.14	MG5 52.13	MG5b 50.42	MG6 50.21	MG1e 49.45	SD8a 49.09	MG6b 48.09	MG6c 47.57	SD8 47.21	MG6a 46.56
Quadrats 1,2 and 3	MG5 47.73	MG5a 46.91	MG5b 46.18	MG1e 46.04	MG6c 45.45	MG6 44.69	SD8a 44.36	MG5c 42.59	MG6b 42.43	MG4a 41.47
Quadrats 1,2,3,6 and 7	MG1e 50.96	MG6 49.91	SD8a 49.12	MG5a 48.67	MG5 48.59	MG1a 48.02	MG1 47.84	MG6c 47.74	MG6b 47.43	SD8 46.64
Quadrats 1,2,3 and 7	MG5a 52.65	MG5 51.78	MG1e 51.58	MG5b 49.98	MG6 49.61	MG6c 48.53	MG6b 48.42	MG4a 47.03	MG6a 46.56	SD8 45.62
Quadrats 1,2,3 and 6	MG5a 50.73	MG5 50.70	MG1e 49.15	MG6 48.38	MG5b 48.01	MG6c 47.00	MG4a 46.73	MG6a 46.37	MG6b 45.90	MG1 45.40
Quadrats 5,6 and 7	MG1e 47.45	MG5a 46.47	MG5b 46.46	MG5 46.38	SD8 45.93	MG1a 45.70	SD8a 44.58	MG1 44.38	MG6b 42.51	SD8d 42.47

**Table 1.** MAVIS NVC Outputs

- 3.5.6. As can be seen above, the MAVIS results for all quadrats surveyed showed strongest correlation with MG5 (*Cynosurus cristatus* – *Centaurea nigra* grassland) communities, particularly sub-community A (*Lathyrus pratensis* sub-community), with a coefficient match of 52.14.
- 3.5.7. This output is considered likely to be due to the abundance of species indicative of more neutral or improved conditions including Perennial Rye-grass, Crested Dog's-tail, Red Fescue, Cock's-foot, Ribwort Plantain and Red Clover.

- 3.5.8. Further analysis of various subsets of the quadrats surveyed produced broadly similar results, with MG1e (*Arrhenatherum elatius* grassland, *Centaurea nigra* sub-community) also matching at a coefficient of 47.45 and 50.96, for subsets which were more influenced by quadrats sampled in proximity to the western site hedgerow (5, 6 and 7) which may be representative of a transitional community in this area.
- 3.5.9. While the abundance of Upright Brome within each of the sampled quadrats does not appear to have overtly influenced the MAVIS NVC community results, it is considered that the species composition of this habitat indicate an affinity with NVC community CG3 (*Bromopsis erecta* grassland) and particularly sub-communities C (*Knautia arvensis* – *Bellis perennis*) and D (*Festuca rubra* – *Festuca arundinacea*). These sub-communities are described as being typically poor in herb species with more tussocky, rank grassland supported, with ranker mesotrophic grasses are frequent including Cock's-foot, Crested Dog's-tail, Yellow Oat-grass and Perennial Rye-grass.
- 3.5.10. Overall it is considered that while the grassland comprising the majority of the Application Site has potentially supported historical communities more clearly indicative of unimproved calcareous grassland, the vast majority of this habitat now supports a low density of herb species and relatively low species richness, with little variation, across the site. Furthermore the ongoing management of this habitat as a short sward and the presence of a number of species indicative of more improved conditions indicate that the species richness of this habitat is likely to further decline in quality in the future, in the absence of development. This conclusion is further evidenced by the findings of the NVC survey and analysis which indicate no clear match with particular calcareous grassland communities.

### 3.6. Recolonising vegetation / disturbed ground

- 3.6.1. A significant area of the southern part of the Application Site is comprised of recolonising vegetation which appears to be establishing following a long period of use as an area of bare ground. A single immature tree is also present in this area.
- 3.6.2. Species present in this area include Red Fescue, Sheep's Fescue *Festuca ovina*, Perennial Rye-grass, Crested Dog's-tail, Sweet Vernal Grass *Anthoxanthum odoratum*, Yorkshire Fog, Meadow Fescue, False Oat-grass, Common Bent, Smaller Cat's-tail, Timothy *Phleum pratense*, Common Couch *Elymus repens*, Barren Brome *Anisantha sterilis*, Upright Brome *Bromopsis erecta*, Rat's-tail Fescue *Vulpia myuros*, Annual Meadow-grass *Poa annua*, Cock's-foot, Fern-grass *Catapodium rigidum*, Glaucous Sedge *Carex flacca*, Hairy Sedge *Carex hirta*, Bird's-foot Trefoil, Lesser Trefoil, Hop Trefoil *Trifolium campestre*, Black Meddick, Red Clover, White Clover *Trifolium repens*, Common Vetch, Meadow Vetchling *Lathyrus pratensis*, Dandelion, Prickly Sow-thistle, Smooth Sow-thistle *Sonchus oleraceus*, Smooth Hawksbeard, Ragwort,

Groundsel *Senecio vulgaris*, Bristly Oxtongue *Helminthotheca echoides*, a Hawkweed *Hieracium sp.*, Spear Thistle *Cirsium vulgare*, Nodding Thistle *Carduus nutans*, Watted Thistle *Carduus crispus*, Common Knapweed, Curled Dock, Burnet Saxifrage, Hogweed *Heracleum sphondylium*, Rough Chervil *Chaerophyllum temulum*, Hemlock *Conium maculatum*, Wild Carrot *Daucus carota*, Yarrow *Achillea millefolium*, Oxeye Daisy, Daisy, Scented Mayweed *Matricaria chamomilla*, Hedge Mustard *Sisymbrium officinale*, Shepherds Purse *Capsella bursa-pastoris*, Wintercress *barbarea vulgaris*, Common Mouse-ear, Sticky Mouse-ear, Ribwort Plantain, Greater Plantain, Creeping Buttercup, Dove's-foot Cranesbill *Geranium molle*, Cut-leaved Cranesbill *Geranium dissectum*, Common Storksbill *Erodium cicutarium*, Perforate St. John's Wort, Trailing St. John's Wort *Hypericum humifusum*, Scarlet Pimpernel, Weld *Reseda luteola*, Wild Mignonette, Lady's Bedstraw, Field Madder *Sherardia arvensis*, Common Toadflax *Linaria vulgaris*, Thyme-leaved Sandwort, Eyebright sp., Creeping Cinquefoil, White Campion *Silene latifolia*, Musk Mallow *Malva moschata*, Field Forget-me-not, Field Bindweed, Common Field Speedwell *Veronica persica*, Fat Hen *Chenopodium album*, White Stonecrop *Sedum album*, Ivy, Blackthorn *Prunus spinosa* and Common Broomrape *Orobanche minor*.

- 3.6.3. Two scrubby trees, a Horse Chestnut *Aesculus hippocastanum* and Hawthorn *Crataegus monogyna*, are present in the centre of this area.
- 3.6.4. These areas are relatively species rich, given the varied soil condition and successional variation. However it is considered likely that these areas, in the absence of development, are likely to decrease in species richness over time with the vast majority of species indicative of more open and recolonising habitats, including Weld, Wild Mignonette and Hop Trefoil, likely to be lost as a more consistent sward, in line with the majority of the site, develops.
- 3.6.5. A further species Basil Thyme *Acinos arvensis*, a section 41 species mentioned in the LWS designation was recorded at low density in areas of disturbed ground in the north-east and east of the Application site, along the disturbed margins of the adjacent airfield track. These areas will be unaffected by the proposals.

### 3.7. Hedgerow / Tree line

- 3.7.1. The western boundary of the application site, adjacent to the A4421, is formed of a single gappy irregularly managed hedgerow / immature treeline. Species present within this hedgerow include Hawthorn, Blackthorn, English Elm *Ulmus minor var. vulgaris*, Ash *Fraxinus excelsior*, Field Maple *Acer campestre*, Wayfaring Tree *Viburnum lantana*, Spindle *Euonymus europaeus*, Wild Privet *Ligustrum vulgare*, Crab Apple *Malus sylvestris*, Cherry Plum *Prunus cerasifera*, Sycamore *Acer pseudoplatanus* and Norway Maple *Acer platanoides*.

### 3.8. **Building**

- 3.8.1. A single derelict pillbox building is present along the Application Sites western boundary. This building is constructed from red brick and is not considered to offer any potential opportunities for roosting bats.
- 3.8.2. The area around this building is comprised of recently tipped substrate which supports a number of species indicative of disturbed earth including Common Fumitory *Fumaria officinalis* and Common Poppy *Papaver rhoeas*.

### 3.9. **Hardstanding**

- 3.9.1. Areas of asphalt and concrete are present in the south and east of the application site in the form of the airfield track and access to the adjacent buildings. These areas support a limited number of recolonising species at a low density.

### 3.10. **Background Information**

- 3.10.1. The desk study undertaken with TVERC returned a small number of local plant records. The closest of these records is of Small Scabious *Knautia arvensis* returned from a location approximately 350m to the north of the application site boundary, within Bicester Airfield at its nearest point, from 2014.
- 3.10.2. This species was recorded during the Phase 1 survey, along the western boundary of the application site, adjacent to the hedgerow.

#### 4. WILDLIFE USE OF THE APPLICATION SITE

- 4.1. During the surveys that have been undertaken within the application site, general observations have been made of any faunal use, with specific attention paid to the potential presence of protected or notable species.

##### 4.2. Bats

- 4.2.1. No buildings or trees within the application site were considered to offer potential opportunities for roosting bat species.
- 4.2.2. The application site supports a single hedgerow, along the western boundary, which is likely to represent the only suitable feature for foraging and commuting bats within the Application Site. Given that this feature is to be largely retained and enhanced within the proposals it was considered that specific activity surveys of this feature would not be required.
- 4.2.3. It is considered likely that this feature, which does not provide a significant link to suitable habitats in the wider area, will be utilised on a regular basis by a low number of common and widespread bat species for the purposes of foraging and commuting.
- 4.2.4. **Background information.** The desk study undertaken with TVERC returned multiple bat records from the local area. The closest record was of an unidentified bat, with presence identified by droppings only, at a location approximately 120m south of the Application Site boundary at its closest point, from 2017. A further record of an unidentified bat was returned from a location 190m to the south of the Application Site, also from 2017. Individual records were also returned of Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Noctule *Nyctalus noctula* and Brown Long-eared *Plecotus auritus* from the local area.

##### 4.3. Badgers

- 4.3.1. No Badger setts were recorded within the Application Site. No other evidence of Badgers, in the form of setts, foraging pits, latrines, footprints or well-worn pathways were recorded within the site or the wider locality during any of the surveys undertaken.
- 4.3.2. **Background Information.** Information received from TVERC returned multiple records for Badger activity from local area, the closest of these records was returned from a location approximately 500m to the south-east of the Application Site at its closest point, from 2005.

##### 4.4. Reptiles

- 4.4.1. The vast majority of habitats within the site are considered unsuitable for reptile species. This includes areas of semi-improved grassland which is managed as a close mown sward.

- 4.4.2. Limited areas of longer grassland along the hedgerow in the west of the site are considered to have potential to support low numbers of reptile species. It is considered, given that these areas will be largely retained within the proposals, that there is little scope for impacts upon reptiles as a result of the proposals.

- 4.4.3. **Background Information.** The desk study undertaken with TVERC returned a number of reptile records from the local area. The closest of these was that of a Common Lizard *Zootoca vivipera* returned from a location approximately 500m to the south of the Application Site at its closest point, from 2017. Further records of Grass Snake *Natrix natrix* were returned from a location approximately 930m to the north-east of the application site, from 1991 to present.

#### 4.5. Birds

- 4.5.1. The application site offers some opportunities for nesting birds in terms of the hedgerows and scrub, although similar opportunities are available within the wider area.

- 4.5.2. Bird species recorded at the application site during the single breeding bird survey include: Wood Pigeon *Columba palumbus*, Robin *Erithacus rubecula*, Chiffchaff *Phylloscopus collybita*, Magpie *Pica pica*, Carrion Crow *Corvus corone*, Blue Tit *Cyanistes caeruleus*, and Wren *Troglodytes troglodytes* in low numbers, associated with the hedgerow along the western site boundary. Skylark *Alauda arvensis* were also recorded on the adjacent airfield site and foraging along the margins of the airfield track.

- 4.5.3. **Background Information.** The desk study undertaken with TVERC returned a number of UK Priority bird species. In total 50 species were recorded in the search area, although none are from the application site itself. These include 10 schedule 1 species, including: Red Kite *Milvus milvus*, Hobby *Falco subbuteo*, Peregrine *Falco peregrinus*, Little Ringed Plover *Charadrius dubius*, Greenshank *Tringa nebularia*, Green Sandpiper *Tringa ochropus*, Black Tern *Chlidonias niger*, Kingfisher *Alcedo atthis* and Redwing *Turdus iliacus*. The closest record is of a Swift *Apus Apus*, located approximately 90m to the west of the application site, from 2017.



## **5. ECOLOGICAL EVALUATION**

### **5.1. The Principles of Site Evaluation**

- 5.1.1. The latest guidelines for ecological evaluation produced by CIEEM propose an approach that involves professional judgement, but makes use of available guidance and information, such as the distribution and status of the species or features within the locality of the project.
- 5.1.2. The methods and standards for site evaluation within the British Isles have remained those defined by Ratcliffe<sup>7</sup>. These are broadly used across the United Kingdom to rank sites, so priorities for nature conservation can be attained. For example, current Site of Special Scientific Interest (SSSI) designation maintains a system of data analysis that is roughly tested against Ratcliffe's criteria.
- 5.1.3. In general terms, these criteria are size, diversity, naturalness, rarity and fragility, while additional secondary criteria of typicalness, potential value, intrinsic appeal, recorded history and the position within the ecological / geographical units are also incorporated into the ranking procedure.
- 5.1.4. Any assessment should not judge sites in isolation from others, since several habitats may combine to make it worthy of importance to nature conservation.
- 5.1.5. Further, relying on the national criteria would undoubtedly distort the local variation in assessment and therefore additional factors need to be taken into account, e.g. a woodland type with comparatively poor species diversity, common in the south of England may be of importance at its northern limits, say in the border country.
- 5.1.6. In addition, habitats of local importance are often highlighted within a local Biodiversity Action Plan (BAP).
- 5.1.7. Levels of importance can be determined within a defined geographical context from the immediate site or locality through to the International level.
- 5.1.8. The legislative and planning policy context are also important considerations and have been given due regard throughout this assessment.

---

<sup>7</sup> Ratcliffe, D A (1977). *A Nature Conservation Review: the Selection of sites of Biological National Importance to Nature Conservation in Britain*. Two Volumes. Cambridge University Press, Cambridge.

## 5.2. Habitat Evaluation

### Designated sites

- 5.2.1. **Statutory sites.** There are no statutory designated sites of nature conservation interest located within or immediately adjacent to the application site.
- 5.2.2. The closest statutory designated sites in the surrounding area is Stratton Audley Quarries Site of Special Scientific Interest (SSSI); this site is located approximately 0.8km to the north of the application site at its closest point (See Plan ECO1), and is designated on account of its geological interest, on the basis of the nature of the rock exposed during quarrying activity. This site is separated from the application site by a significant area of open space site and, given the nature of the designation, no potential adverse effects have been identified.
- 5.2.3. Ardley Cutting and Quarry SSSI, designated for its geological and biological interest, the latter primarily associated with the presence of limestone grassland, as well as scrub, ancient woodland and wetland habitats, is located approximately 3.2km west of the application site. There is limited connectivity between this designated site and the application site, on account of the multiple roads and residential development which separate them. As such it is not considered that the proposals have any potential to impact on this designated site.
- 5.2.4. Bure Park Local Nature Reserve (LNR) is located approximately 1.5km to the south west of the application site, and is designated on account of the supported habitats, including: meadow, young broad-leaved woodland, hedgerows and scrub. A pond on site also supports Great Crested Newt. This site is not directly connected to the application site and is separated from the application site by various roads and residential development.
- 5.2.5. Given the distance between the Application Site and Bure Park LNR it is considered that lighting and noise associated with both the construction and operations phases will not give rise to a significant adverse impact on the LNR.
- 5.2.6. In relation to recreational pressure, it is considered that the proposals would be unlikely to generate significant additional recreational use of the site, given the nature of the proposed development.
- 5.2.7. It is considered that due to the nature of the development proposals (including design and siting), the distances involved and existing management initiatives associated with the LNR, the proposed development is not likely to give rise to any significant adverse impacts on the LNR or any other statutory designated site.
- 5.2.8. **Non-statutory sites.** The entirety of the Application Site forms part of the Bicester Airfield Local Wildlife Site (LWS), on account of the

“species rich grassland”, and “open mosaic on previously developed land”, which the site supports.

- 5.2.9. A further LWS (Stratton Audley Quarry LWS) is located approximately 500m to the north of the application site at its closest point. This LWS is designated on account of the supported open mosaic on previously developed land and lowland calcareous grassland habitats.

#### Habitats within the application site

- 5.2.10. As discussed above the application site, which is considered likely to formerly comprise unimproved calcareous grassland, has been subject to management as a regularly mown short sward for an extended period. As a result the majority of the grassland within the Application Site supports a relatively low density of herb species, with grasses, including a number of species indicative of more neutral and improved conditions, being overwhelmingly dominant. While areas of species rich grassland are present within the site, these are limited to a narrow strip along the western hedgerow margin.
- 5.2.11. While the vast majority of grassland within the Application Site will be lost within the proposals, it is considered that the majority of species-rich grassland, in the west of the site, will be retained within the proposals.
- 5.2.12. While an area of recolonising vegetation is present in the central part of the site, which supports a relatively high botanical diversity, it is considered highly likely that the species diversity of this habitat will decline in future due to the development of a stable and consistent sward, which is in places already evident. This habitat will be lost as a result of the proposed development.
- 5.2.13. The single hedgerow, comprising the Application Site’s western boundary, will be largely retained within the proposals, with minor losses for the provision of an access road and areas of car parking. It is not considered that these losses are of any particular intrinsic ecological significance.
- 5.2.14. Other habitats within the site, including hardstanding, will be lost as a result of the proposals, while the single derelict building is to be retained within the proposals. It is not considered that these impacts are of any particular ecological significance.

#### *Habitat mitigation enhancements*

- 5.2.15. While large areas of grassland, which currently comprise a part of the Bicester Airfield LWS, are to be lost as a result of the proposals, these areas have not been subject to appropriate management to maintain and enhance their value for biodiversity in the long term through a process of benign neglect. The proposals will deliver significant areas of open space throughout, including areas of retained grassland in the west of the Application Site, areas of grassland around proposed car parking and on proposed earth

mounds (intended to function as mitigation for visual impacts associated with the car park). These areas will be delivered as species-rich calcareous grassland through the storage and re-use of soils removed as a result of clearance works to facilitate built development and the clearing of stockpiled arisings, where appropriate. Once the open space has been appropriately landscaped and cleared of arisings and other undesirable vegetation the grassland will be oversown using arisings taken from areas of species-rich grassland elsewhere within the wider LWS, including areas of species rich grassland along the western site boundary.

- 5.2.16. A management plan will be produced and implemented to ensure that the proposed grassland establishes properly, allowing the existing seed bank to re-establish whilst preventing the growth and spread of pernicious weeds and scrub species. These areas will be subsequently managed as a long sward, subject to twice yearly cutting (early-spring and autumn), with the arisings removed to ensure that the soil conditions are enhanced in the long term and that the maximum species diversity of these areas is achieved.
- 5.2.17. A number of new trees and shrubs will be delivered, in order to mitigate for landscape and visual impacts and for losses to small numbers of trees within sections of hedgerow to be lost within the proposals. These will comprise a range of native species of known value to wildlife. Where tree planting is proposed within areas of grassland these will be at a low density and as such will have little impact on the species diversity of the surrounding grassland, furthermore providing opportunities for a range of nesting bird species.
- 5.2.18. Existing retained boundary vegetation will be enhanced with any gaps planted with native hedgerow species, any dead or diseased specimens removed and replaced and a sensitive management strategy implemented to ensure the health and longevity of the supported hedgerow.
- 5.2.19. Overall it is considered that the proposals will fully mitigate for any impacts to biodiversity through the long term management and enhancement of the existing habitats of ecological value within the Application Site, in addition to the provision and appropriate management of areas of the site for their botanical and ecological interest in the long term.

### 5.3. Faunal Evaluation

#### Bats

- 5.3.1. **Legislation.** All bats are protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations"), as amended. These include provisions making it an offence:

- Deliberately to kill, injure or take (capture) bats;
  - Deliberately to disturb bats in such a way as to:-
    - (i) be likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or to hibernate or migrate; or
    - (ii) affect significantly the local distribution or abundance of the species to which they belong;
  - To damage or destroy any breeding or resting place used by bats;
  - Intentionally or recklessly to obstruct access to any place used by bats for shelter or protection.
- 5.3.2. While the legislation is deemed to apply even when bats are not in residence, Natural England guidance suggests that certain activities such as re-roofing can be completed outside sensitive periods when bats are not in residence provided these do not damage or destroy the roost.
- 5.3.3. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.
- 5.3.4. The offence of damaging or destroying a breeding site or resting place (which can be interpreted as making it worse for the bat) is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.
- 5.3.5. European Protected Species licences are available from Natural England in certain circumstances, and permit activities that would otherwise be considered an offence.
- 5.3.6. Licences can usually only be granted if the development is in receipt of full planning permission and it is considered that:
- (i) The activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
  - (ii) There is no satisfactory alternative; and
  - (ii) The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 5.3.7. **Application Site Evaluation.** There are no trees or buildings with potential to support roosting bats within the application site.
- 5.3.8. Habitats within the application site which offer limited potential for foraging and commuting bats are limited to the single hedgerow comprising the western application site boundary. This feature is not considered to provide a significant link between habitats in the wider area and currently supports significant gaps. This feature will be largely retained within the proposals.

- 5.3.9. **Mitigation and Enhancements.** It is considered that the site is of limited value for bat species. The provision of new tree / shrub planting and hedgerow bolstering will enhance foraging resources for bats in the local area and will ensure that opportunities for bat species are safeguarded post development.
- 5.3.10. In order to provide new roosting opportunities for bats, it is recommended that a number of bat boxes are installed on suitable trees within the application site.
- 5.3.11. Furthermore it is recommended that the lighting scheme for the development is designed to avoid significant adverse impacts from artificial lighting to retained and newly provided habitats, in particular boundary habitat features. The use of hoods and cowls to reduce light spill and to direct lighting away from these features is recommended, along with consideration of low level bollard type lighting where appropriate.

#### Reptiles

- 5.3.12. **Legislation.** Rare, endangered or declining species receive 'full protection' under the Wildlife and Countryside Act 1981 as well as protection under The Conservation of Habitats and Species Regulations 2017, which transposed into UK law the European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, more commonly known as the Habitats Directive. Species that are fully protected include Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis*. These receive the following protection from:
- killing, injuring, taking;
  - possession or control (of live or dead animals, their parts or derivatives);
  - damage to, destruction of, obstruction of access to any structure or place used for shelter or protection;
  - disturbance of any animal occupying such a structure or place; and
  - selling, offering for sale, possession or transport for purposes of sale (live or dead animal, part or derivative).
- 5.3.13. These species are not relevant to the application site given their specific habitat requirements.
- 5.3.14. Due to their abundance in Britain, Common Lizard, Slow-worm *Anguis fragilis*, Grass Snake *Natrix natrix* and Adder *Vipera berus* are only 'partially protected' under the Wildlife and Countryside Act 1981 (as amended) and as such only receive protection from:
- deliberate killing and injuring;
  - being sold or other forms of trading.

- 5.3.15. **Application Site Evaluation.** While a small strip of grassland along the application sites western boundary is considered to have limited potential to support reptile species, the vast majority of the site is managed as short mowed grassland and as such offers no potential opportunities for this group.
- 5.3.16. **Mitigation / Enhancements.** The proposals would have the potential to directly impact upon reptiles during site clearance and construction operations. It is considered that through the implementation of an appropriate clearance methodology, involving a habitat manipulation exercise, encouraging reptiles to move into suitable habitats in the wider area, will ensure that no reptiles are killed or injured during construction works.
- 5.3.17. Within the proposals, there would be a significant amount of suitable reptile habitat delivered, through the retention and creation of areas of long species-rich grassland and their continued management as a long tussocky sward.
- 5.3.18. It is considered that the proposals have little potential to result in any significant impacts to reptile species and will moreover deliver an enhancement of the application site for this group.

#### Birds

- 5.3.19. **Legislation.** Section 1 of the Wildlife and Countryside Act is concerned with the protection of wild birds, whilst Schedule 1 lists species which are protected by special penalties.
- 5.3.20. **Application Site Evaluation.** There are some opportunities for nesting birds in the form of a single hedgerow along the application sites western boundary. A single breeding bird survey visit, undertaken by Ecology Solutions, recorded the presence of a limited range of common and widespread species utilising this hedgerow. It is therefore considered that the site is of no particular significance for its supported bird assemblage.
- 5.3.21. **Mitigation and Enhancements.** As all species of birds receive general protection whilst nesting, to avoid a possible offence it is recommended that any minor clearance of hedgerows is undertaken outside the breeding season (March to September inclusive) or alternatively that checks be made for nesting birds by an ecologist immediately prior to any vegetation removal.
- 5.3.22. The development proposals for the site will provide a significant increase in nesting opportunities for birds, in the form of tree and shrub planting, including hedgerow bolstering. While the site does not currently provide nesting opportunities for breeding ground nesting birds, such as Skylark, it is considered that the proposals, which will deliver significant areas of long, tussocky grassland, will provide significantly enhanced opportunities for ground nesting birds.

## 6. PLANNING POLICY CONTEXT

The planning policy framework that relates to nature conservation in Bicester, Oxfordshire is issued at two main administrative levels: nationally through the National Planning Policy Framework (NPPF); and at the local level through policies in the Cherwell Local Plan 2011-2031 in addition to saved policies in the Cherwell Local Plan 1996 and policies in the Non-Statutory Cherwell Local Plan 2011. Any proposed development will be judged in relation to the policies contained within these documents.

### 6.1. National Policy

#### National Planning Policy Framework

- 6.1.1. The National Planning Policy Framework (NPPF) sets out the Government's requirements for the planning system and was adopted on 27<sup>th</sup> March 2012. It replaces previous national planning policy, including Planning Policy Statement 9 (Biodiversity and Geological Conservation) [PPS9] which was published in 2005.
- 6.1.2. The key element of the NPPF is that there should be '*a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking*' (paragraph 14). It is important to note that this presumption '*does not apply where development requiring Appropriate Assessment under the Birds or Habitats Directives is being considered, planned or determined*' (paragraph 119).
- 6.1.3. The NPPF also considers the strategic approach which Local Authorities should adopt with regard to the protection, enhancement and management of green infrastructure, priority habitats and ecological networks, and the recovery of priority species.
- 6.1.4. Paragraph 118 of the NPPF comprises a number of principles which Local Authorities should apply, including encouraging opportunities to incorporate biodiversity in and around developments; provision for refusal of planning applications if significant harm cannot be avoided, mitigated or compensated for; applying the protection given to European sites to potential SPAs, possible SACs, listed or proposed Ramsar sites and sites identified (or required) as compensatory measures for adverse effects on European sites; and the provision for the refusal for developments resulting in the loss or deterioration of 'irreplaceable' habitats—unless the need for, and benefits of, the development in that location clearly outweigh the loss.
- 6.1.5. National policy therefore implicitly recognises the importance of biodiversity and that with sensitive planning and design, development and conservation of the natural heritage can co-exist and benefits can, in certain circumstances, be obtained.



## 6.2. Local Policy

### Cherwell Local Plan 2011-2031

- 6.2.1. The principal document for planning control purposes in Cherwell District is the Cherwell Local Plan 2011-2031, Part 1 of which was adopted in July 2015 and re-adopted in December 2016. The Plan provides the strategic planning policy framework for the District, and outlines the basis for decisions on land use planning affecting the Cherwell District.
- 6.2.2. It is noted that the application site is located beyond the southern boundary of a Strategic Development site – Policy Bicester 8 (Former RAF Bicester).
- 6.2.3. There are four policies relevant to ecology and nature conservation in the Local Plan.
- 6.2.4. Policy ESD9 relates specifically to the protection of Oxford Water Meadows Special Area of Conservation (SAC). Given the distance between this designated site and the application site, this policy is not considered to be of any relevance in this case.
- 6.2.5. Policy ESD10 is the primarily policy in the Local Plan which relates to ecology and nature conservation, and is concerned with the protection and enhancement of biodiversity and the natural environment. The policy makes reference to the protection afforded to sites of international, national, regional or local importance and notes that proposals will be expected to incorporate features to encourage biodiversity, as well as maintain and enhance existing ecological networks and provide new green infrastructure.
- 6.2.6. Policy ESD11 refers to the approach to be adopted in Conservation Target Areas (CTA). The application site does not lie within or adjacent to a CTA, and as such this policy is not considered to be of any relevance in this case.
- 6.2.7. Policy ESD17 relates to green infrastructure, and highlights the importance of maintaining and improving the green infrastructure network, with reference made to its contribution to biodiversity and nature conservation.
- 6.2.8. Part 2 of the Local Plan is being prepared and will contain detailed planning policies to assist with the implementation of strategic policies and the development management process. The policies contained within this document will replace saved policies of the Local Plan 1996, once adopted (see below).
- 6.2.9. Part 1 of the Local Plan will also be undergoing a partial review as the Council considers how to contribute to Oxford's unmet housing need.

#### Cherwell Local Plan 1996

- 6.2.10. The Cherwell Local Plan 1996 was adopted in November 1996 and contains a number of saved policies which remain part of the statutory development plan in determining planning applications.
- 6.2.11. There are three saved policies within the Local Plan 1996 that relate to nature conservation. Policy C1 relates to the protection of statutory and non-statutory designated sites, while policy C2 relates to protected species. Policy C4 refers to the creation of new habitats.

#### Non-Statutory Cherwell Local Plan 2011

- 6.2.12. There are also a number of policies relevant to ecology and nature conservation in the Non-Statutory Cherwell Local Plan 2011. The original intention was that this plan would replace the policies in the Cherwell Local Plan 1996; however work was discontinued prior to adoption of this plan.
- 6.2.13. Whilst policies in the Non-Statutory Local Plan 2011 are not part of the statutory development plan, the document has been approved as interim planning policy for development control purposes. As such some weight may also be given to the policies contained in this document.
- 6.2.14. There are nine policies within the Non-Statutory Local Plan 2011 that relate to nature conservation.
- 6.2.15. Policy EN1 states that in determining planning applications the Council will take into account the likely impact of the proposal on the natural environment. Policy EN2 relates to environmental replacement through provision of compensatory habitat. Policy EN6 refers to the impact of light pollution, while policy EN13 relates to development adjacent to watercourses. Policy EN22 states that development proposals will be expected to incorporate features of nature conservation interest, and retain and enhance features of value where possible. Policy EN23 relates to ecological surveys, while policies EN24 and EN25 relate to the protection of designated sites and species respectively. Policy EN27 states that development proposals should also incorporate the creation of new habitats.

### **6.3. Discussion**

- 6.3.1. Recommendations have been put forward in this report that would fully safeguard the existing ecological interest of the application site, and wherever possible, measures to enhance ecological and biodiversity value have been set out. Based on surveys undertaken and assessment, the presence and potential presence of protected species has been given due regard and measures to enhance the application site for such species have been put forward.
- 6.3.2. In conclusion, implementation of the measures set out in this report would enable the emerging development proposals for the application site to fully accord with planning policy for ecology and nature conservation at all administrative levels.

## **7. SUMMARY AND CONCLUSIONS**

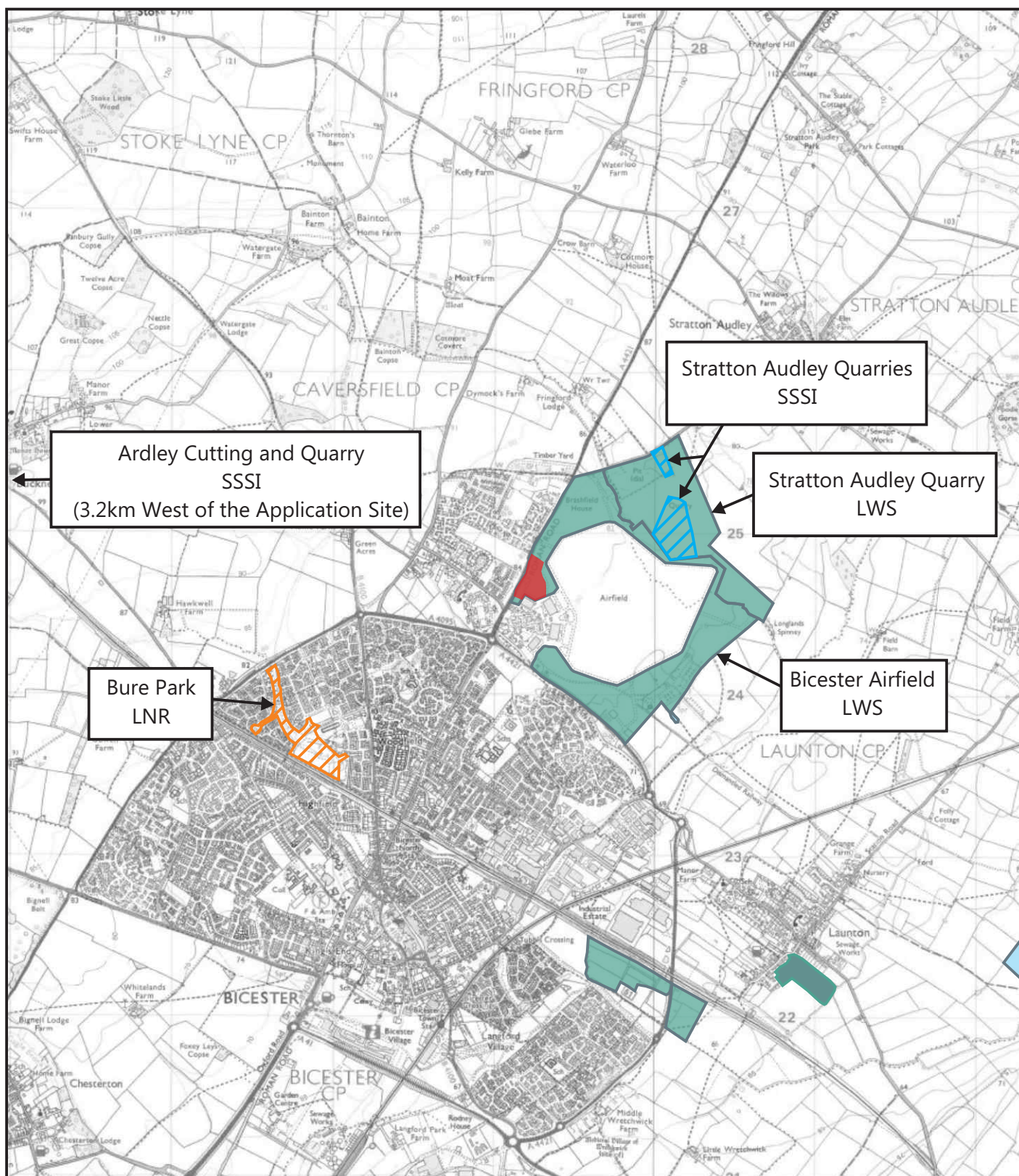
- 7.1. Ecology Solutions was commissioned by Bicester Heritage in May 2018 to undertake an Ecological Assessment of lands at Bicester Heritage (Bicester Airfield), Bicester, Oxfordshire.
- 7.2. It is considered that the proposed development is not likely to give rise to any significant adverse impacts on any statutory designated sites.
- 7.3. The Application Site forms a part of the Bicester Airfield Local Wildlife Site. The proposals will result in the loss of habitats included within the designation features of the LWS however, given the nature of the species composition of the habitats supported in addition to the retention of areas of relatively species rich grassland and proposed mitigation measures, it is considered that the proposals will mitigate for any adverse impacts to the LWS.
- 7.4. The vast majority of the site is comprised of short mown grassland which is considered to be calcareous semi-improved grassland which has been subject to protracted regular mowing leading to the establishment of a range of species indicative of more improved and neutral conditions and a low herb richness and species diversity. It is further considered that in the absence of development this habitat is likely to decrease in quality in future. Areas of species rich grassland along the western site boundary will be largely retained within the proposals. An area of recolonising vegetation is present in the central areas of the site and is also considered likely, in the absence of development, to decrease in botanical diversity over the long term. The single hedgerow supported within the application site will be largely retained and enhanced within the proposals. Mitigation measures including the provision and future management of areas of long tussocky calcareous grassland and tree and hedgerow planting will appropriately mitigate for any losses to the habitats supported within the site, post development.
- 7.5. The site provides limited potential habitat for reptiles, the implementation of an appropriate clearance methodology will ensure that no significant impacts to this group occur as a result of the proposals. The hedgerow offers limited nesting and foraging opportunities for birds, and also offers very limited suitable foraging and navigational resources for bats.
- 7.6. Appropriate mitigation and enhancement measures have been proposed and subject to the implementation of these measures opportunities for protected species will be retained and moreover enhanced post-development.
- 7.7. In conclusion, on the evidence of the ecological surveys undertaken, the application site supports habitat of some interest from an ecology and nature conservation perspective. The design of the proposed development and the implementation of mitigation measures as recommended in this report will ensure that there are no adverse effects on any designated sites or protected species as a result of development at the application site.

- 7.8. It is considered that the proposals therefore fully accord with current legislation and policy pertinent to ecology and nature conservation.

## PLANS

## **PLAN ECO1**

### **Site Location and Ecological Designations**



# KEY:

- APPLICATION SITE
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- LOCAL NATURE RESERVE (LNR)
- LOCAL WILDLIFE SITE (LWS)
- PROPOSED LOCAL WILDLIFE SITE (pLWS)
- WOODLAND TRUST RESERVE



ecology solutions ltd

7884: HOTEL APPLICATION,  
BICESTER HERITAGE,  
BICESTER

PLAN ECO1: SITE LOCATION &  
ECOLOGICAL DESIGNATIONS

## **PLAN ECO2**

### **Ecological Features**





KEY:

- APPLICATION SITE BOUNDARY
- SEMI-IMPROVED CALCAREOUS GRASSLAND
- RECOLONISING VEGETATION / DISTURBED GROUND
- TREES
- HEDGEROW / TREELINE
- BUILDING
- HARDSTANDING



ecology solutions ltd

7884: HOTEL APPLICATION,  
BICESTER HERITAGE,  
BICESTER



PLAN ECO2:  
ECOLOGICAL FEATURES

**PLAN ECO3**

**NVC Quadrat Locations**



KEY:

-  APPLICATION SITE BOUNDARY
-  NVC QUADRAT LOCATION



ecology solutions ltd

7884: HOTEL APPLICATION,  
BICESTER HERITAGE,  
BICESTER

PLAN ECO3:  
NVC QUADRAT LOCATIONS

## **APPENDICES**

## **APPENDIX 1**

### **Information Provided by TVERC**



# BIODIVERSITY REPORT

Site: Bicester Heritage

TVERC Ref: TVERC/18/095

Prepared for: Ecology Solutions

On: 21/05/2018

By: Thames Valley Environmental Records Centre  
01865 815 451  
datasearch@tverc.org  
www.tverc.org

**This report should not to be passed on to third parties or published without prior permission of TVERC.**

**Please be aware that printing maps from this report requires an appropriate OS licence.**



## TABLE OF CONTENTS

The following are included in this report:

### GENERAL INFORMATION:

- ☒ Terms & Conditions
- ☒ Species data statements

### PROTECTED & NOTABLE SPECIES INFORMATION:

- ☒ Table of legally protected and notable species within 3x4km search area
- ☒ Table of Invasive species records within 3x4km search area
- ☒ Species status key
- ☒ Data origin key

### DESIGNATED WILDLIFE SITE INFORMATION:

- ☒ Map of non-statutory designated wildlife sites within 5x6km search area
- ☒ Descriptions/citations for designated wildlife sites
- ☒ Designated wildlife sites guidance

## TERMS AND CONDITIONS

The copyright for this document and the information provided is retained by Thames Valley Environmental Records Centre. The copyright for some of the species data will be held by a recording group or individual recorder. Where this is the case, and the group or individual providing the data is known, the data origin will be given in the species table.

TVERC must be acknowledged if any part of this report or data derived from it is used in a report. The whole document may be used as an appendix within your report.

The data in this report can only be used for the project for which it was requested. It cannot be passed on to third parties without permission of TVERC (this excludes reports presented to clients and Local Authorities).

The data should be considered valid for a maximum 12 months from the date on the cover of this report. If the data is to be used after that time an update should be requested. The data must not be added to any permanent database system.

The absence of any species or habitat data for any site, area or location does not mean that any species or habitat is not present.

## MAPS

To reproduce the Ordnance Survey mapping you must hold a relevant licence for the use of Ordnance Survey mapping or it can be copied at a printers or copyshop that holds a licence to carry out search work (see the Ordnance Survey website).



## DATA STATEMENTS

### STATEMENT ON OXFORDSHIRE BAT GROUP DATA

TVERC has agreed an exchange of data with Oxfordshire Bat Group (OBG) which enables us to provide records belonging to them with the grid reference given to 1 km precision. Such records are indicated by the term "Confidential, refer to OBG for further details" in the location column and OBG in the data origin column of the species table. Enquirers are recommended to contact OBG for further information.

David Endacott  
27 Hedge Hill Road  
East Challow  
Wantage  
Oxon  
OX12 9SD

[davidendacott@hotmail.com](mailto:davidendacott@hotmail.com)

### STATEMENT ON BIRD RECORDS IN OXFORDSHIRE (DATA MARKED AS OOS" IN THE DATA ORIGIN COLUMN

The majority of bird records in Oxfordshire, except those in the north of the county, have been provided by the Oxford Ornithological Society. Such records have a value of OOS in the data origin column . Please note that:

- a. Not all species are subject to the same degree of recording; the absence of records of a species in a given geographical area does not necessarily indicate absence of that species.
- b. Not all parts of the county are subject to the same degree of recording; the absence of records for a given area does not necessarily indicate the absence of bird species.
- c. Records of species regarded as sensitive have been provided with reduced information about location. Any requests for more precise information about the location of such "confidential" sites should be addressed directly to OOS ([www.oos.org.uk](http://www.oos.org.uk)) You can use the following email contacts [chairman@oos.org.uk](mailto:chairman@oos.org.uk) (the chairman) and [ian@recorder.fsnet.co.uk](mailto:ian@recorder.fsnet.co.uk) (the county bird recorder).

### STATEMENT ON WILDLIFE TRUST WATER VOLE DATA

Since 2008 data has been collected as positive or negative sections of watercourses. Positive sections crossing into search areas are included within the data. These are shown with the central grid reference for the stretch of watercourse. This may fall outside the search area but the stretch will be at least partly within the search area. The location information shows the beginning and end points of the stretch of watercourse.

## USE OF NBN GATEWAY DATA

Commercial organisations and members of the public may refer to the National Biodiversity Network (NBN) Gateway for wildlife records and habitat and designated site information for their own private use.

The NBN Gateway's Terms and Conditions state "*You may not republish wholesale the material, data and/or information made available to you, or exploit it for commercial or academic research purposes without first obtaining written permission from the relevant data provider*". This means that environmental consultants cannot use NBN data in ecology reports for planning applications unless they have obtained written permission from all the data providers. If NBN Gateway data are also provided for this project please make sure that the NBN Gateway's terms and conditions are followed precisely.

The National Planning Policy Framework states that "planning policies and decisions should be based on up-to date information about the natural environment and other characteristics of the area". The NBN Gateway does not hold the most up-to-date, comprehensive or highest resolution information on protected and notable species, local sites or habitats in Berkshire and Oxfordshire.

TVERC have advised planning authorities in Berkshire and Oxfordshire that ecology reports using only NBN data should not usually be validated and the NBN has requested that suspected breaches of NBN terms and conditions are reported to the NBN Data Access Officer, who will take appropriate action. Further detail is available on our website: <http://www.tverc.org/cms/content/ecological-survey-reports-planning-applications>.

## STATEMENT ON GRID REFERENCES

The following types of grid references are provided:

- Six figure grid references. Many of these will be an assigned relatively central grid reference for a site though with small sites the assigned grid reference for a site could be close to the edge. The record may have come from anywhere within the site. Where additional location information is provided the reference may be more accurate or central to a subsite within the larger site. Where the location is not site based, the grid reference should be within 100 metres of the location.
- Four figure grid references. Generally these are 1km square records often with some location information to give an idea of which part of the 1km square the record was found. Sometime this information can be quite accurate. Where a large site is referred to the location should be in that part of the 1km square that is within the site. In some case these may be tetrad records with grid reference referring to a 2km x 2km square. This includes some confidential records from Oxford Ornithological Society. Other tetrad data is rarely included.
- Eight and ten figure grid references: These are generally accurately worked out to the location where the species was found. However for small and narrow sites eight figure grid references may be used as a central grid reference for a site.

- TVERC intends to start tagging data to qualify these grid references but at present only a limited amount of qualification is provided. 1km square records are tagged as 1km record and 2km square records are tagged as 2km record.

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Amphibians												
Smooth Newt	Lissotriton vulgaris	1 Male	07/04/2009	SP59872520		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a		
Smooth Newt	Lissotriton vulgaris	2 Females	07/04/2009	SP59872520		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a		
Smooth Newt	Lissotriton vulgaris	2 Females	07/04/2009	SP59912525		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a		
Smooth Newt	Lissotriton vulgaris		26/02/1991	SP603251		Stratton Audley Quarry	field record	OBRC		WACA-Sch5-s9.5a		
Great Crested Newt	Triturus cristatus	1 Male	07/04/2009	SP59872520		Stratton Audley Quarry		OLWS	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Great Crested Newt	Triturus cristatus	1 Female	07/04/2009	SP59912525		Stratton Audley Quarry		OLWS	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Great Crested Newt	Triturus cristatus		20/03/1988	SP599252		Stratton Audley Quarry	field record	LN	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Great Crested Newt	Triturus cristatus	Immatures	19/06/1992	SP599252		Stratton Audley Quarry	field record	LN	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Great Crested Newt	Triturus cristatus		20/03/1988	SP603251		Stratton Audley Quarry	field record	LN	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Great Crested Newt	Triturus cristatus	1 Adult Male	27/04/2004	SP61782308		Upper Laurels Farm, Launton	egg	BBOWT	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a	NERC-S41	
Common Frog	Rana temporaria	Spawn	25/03/2016	SP5881025179		Bicester, OX27 8FB	field record	ARGUK	HabDir-A5	WACA-Sch5-s9.5a		
Common Frog	Rana temporaria	1	31/07/2008	SP605246		Stratton Audley Quarry		OLWS	HabDir-A5	WACA-Sch5-s9.5a		
Common Frog	Rana temporaria	2	31/07/2008	SP605246		Stratton Audley Quarry		OLWS	HabDir-A5	WACA-Sch5-s9.5a		
Birds												
Mute Swan	Cygnus olor	2	20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mute Swan	Cygnus olor	2	05/08/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mute Swan	Cygnus olor	2	11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mallard	Anas platyrhynchos	1 Female; 5 Juveniles	20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mallard	Anas platyrhynchos		11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mallard	Anas platyrhynchos		05/08/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mallard	Anas platyrhynchos		31/07/2008	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Mallard	Anas platyrhynchos		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC				Bird-Amber
Grey Partridge	Perdix perdix	10 Individuals	10/07/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
Grey Partridge	Perdix perdix	17 Individuals	10/07/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
Grey Partridge	Perdix perdix	2	11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Grey Partridge	Perdix perdix		31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Red Kite	Milvus milvus	1 Individual	28/07/2006	SP5725	1 km record	Caversfield	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	1 Individual	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	1 Individual	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	1 Individual	18/07/2006	SP5823	1 km record	Bicester	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	1 Individual	21/02/2006	SP5825	1 km record	Caversfield	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	1 Individual	21/02/2006	SP5825	1 km record	Caversfield	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Red Kite	Milvus milvus	2	19/07/2012	SP601241		Bicester Airfield		OLWS	BirdsDir-A1	WACA-Sch1-p1		RL-Global-post2001-NT
Kestrel	Falco tinnunculus	1 Individual	10/10/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
Kestrel	Falco tinnunculus	1 Nest; 2 Individuals	15/05/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
Kestrel	Falco tinnunculus	1	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
Kestrel	Falco tinnunculus	1	31/07/2008	SP601250		Stratton Audley Quarry		OLWS				Bird-Amber
Kestrel	Falco tinnunculus	1	31/07/2008	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Kestrel	Falco tinnunculus		28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Kestrel	Falco tinnunculus	1	20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Kestrel	Falco tinnunculus	1	11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Kestrel	Falco tinnunculus		15/09/1982	SP603251		Stratton Audley Quarry	field record	OBRC				Bird-Amber
Kestrel	Falco tinnunculus		23/09/1987	SP603251		Stratton Audley Quarry	field record	OBRC				Bird-Amber

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
<i>Kestrel</i>	Falco tinnunculus	1	10/06/2003	SP6224	1 km record	Poundon Hill	field record	OOS				Bird-Amber
<i>Hobby</i>	Falco subbuteo	1 Individual	15/09/2006	SP52S	1 km record	Confidential, refer to OOS for further details	field record	OOS		WACA-Sch1-p1		
<i>Hobby</i>	Falco subbuteo	1 Individual	28/08/2006	SP52S	1 km record	Confidential, refer to OOS for further details	field record	OOS		WACA-Sch1-p1		
<i>Hobby</i>	Falco subbuteo	2 Individuals	15/08/2006	SP52S	1 km record	Confidential, refer to OOS for further details	field record	OOS		WACA-Sch1-p1		
<i>Hobby</i>	Falco subbuteo	1 Individual	10/06/2006	SP52W	1 km record	Confidential, refer to OOS for further details	field record	OOS		WACA-Sch1-p1		
<i>Hobby</i>	Falco subbuteo	1	04/07/2003	SP62H	1 km record	Confidential, refer to OOS for further details	field record	OOS		WACA-Sch1-p1		
<i>Peregrine</i>	Falco peregrinus	1 Individual	26/02/2006	SP52S	1 km record	Confidential, refer to OOS for further details	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		
<i>Little Ringed Plover</i>	Charadrius dubius	4	28/05/2009	SP602250		Stratton Audley Quarry		OLWS		WACA-Sch1-p1		
<i>Little Ringed Plover</i>	Charadrius dubius	1	31/07/2008	SP602250		Stratton Audley Quarry		OLWS		WACA-Sch1-p1		
<i>Little Ringed Plover</i>	Charadrius dubius	2	11/06/2003	SP602250		Stratton Audley Quarry		OLWS		WACA-Sch1-p1		
<i>Little Ringed Plover</i>	Charadrius dubius		30/07/2009	SP602250		Stratton Audley Quarry		OLWS		WACA-Sch1-p1		
<i>Little Ringed Plover</i>	Charadrius dubius		15/05/1996	SP602251		Stratton Audley Quarry	field record	OBRC		WACA-Sch1-p1		
<i>Lapwing</i>	Vanellus vanellus	50 Individuals	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus	50 Individuals	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus	300 Individuals	30/12/2006	SP5925	1 km record	Balscote: Balscote Quarry	field record	OOS			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus		09/07/2007	SP598253			field record	EC			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus	6	28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus	7	10/06/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
<i>Lapwing</i>	Vanellus vanellus	3	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
<i>Common Sandpiper</i>	Actitis hypoleucos	1	31/07/2008	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Snipe</i>	Gallinago gallinago	19 Individuals	30/12/2006	SP5925	1 km record	Balscote: Balscote Quarry	field record	OOS				Bird-Amber
<i>Snipe</i>	Gallinago gallinago	1	31/07/2008	SP601250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Snipe</i>	Gallinago gallinago		15/09/1982	SP603251		Stratton Audley Quarry	field record	OBRC				Bird-Amber
<i>Redshank</i>	Tringa totanus	2	28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Greenshank</i>	Tringa nebularia	2 Individuals	03/08/2006	SP5724	1 km record	Caversfield	field record	OOS		WACA-Sch1-p1		Bird-Amber
<i>Green Sandpiper</i>	Tringa ochropus	1 Individual	07/12/2006	SP5725	1 km record	Bucknell	field record	OOS		WACA-Sch1-p1		Bird-Amber
<i>Green Sandpiper</i>	Tringa ochropus	1 Individual	15/12/2006	SP5725	1 km record	Bucknell	field record	OOS		WACA-Sch1-p1		Bird-Amber
<i>Green Sandpiper</i>	Tringa ochropus	1 Individual	30/12/2006	SP5925	1 km record	Balscote: Balscote Quarry	field record	OOS		WACA-Sch1-p1		Bird-Amber
<i>Green Sandpiper</i>	Tringa ochropus	1	31/07/2008	SP602250		Stratton Audley Quarry		OLWS		WACA-Sch1-p1		Bird-Amber
<i>Lesser Black-backed Gull</i>	Larus fuscus	30	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
<i>Lesser Black-backed Gull</i>	Larus fuscus		05/08/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Lesser Black-backed Gull</i>	Larus fuscus		30/07/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Herring Gull</i>	Larus argentatus	30	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Red
<i>Great Black-backed Gull</i>	Larus marinus	1 Individual	30/12/2006	SP5925	1 km record	Balscote: Balscote Quarry	field record	OOS				Bird-Amber
<i>Black-headed Gull</i>	Chroicocephalus ridibundus	3	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
<i>Black-headed Gull</i>	Chroicocephalus ridibundus		28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Black Tern</i>	Chlidonias niger		15/05/1996	SP602251		Stratton Audley Quarry	field record	OBRC	BirdsDir-A1	WACA-Sch1-p1		
<i>Common Tern</i>	Sterna hirundo	Breeding	09/07/2007	SP598253			field record	EC	BirdsDir-A1			Bird-Amber
<i>Common Tern</i>	Sterna hirundo		30/07/2009	SP602250		Stratton Audley Quarry		OLWS	BirdsDir-A1			Bird-Amber
<i>Stock Dove</i>	Columba oenas	2	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
<i>Stock Dove</i>	Columba oenas		28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Stock Dove</i>	Columba oenas	1	20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Stock Dove</i>	Columba oenas	8	11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Stock Dove</i>	Columba oenas		31/07/2008	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
<i>Turtle Dove</i>	Streptopelia turtur		01/06/1998	SP5925	1 km record	Bicester: Bicester Quarry	field record	OOS			NERC-S41	Bird-Red
<i>Turtle Dove</i>	Streptopelia turtur	6	31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
<i>Tawny Owl</i>	Strix aluco	1 Individual	28/12/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
<i>Tawny Owl</i>	Strix aluco	2 Individuals	07/08/2006	SP5825	1 km record	Caversfield	field record	OOS				Bird-Amber
<i>Swift</i>	Apus apus		2009	SP582230		New Road, Bicester	Flying	CSP				Bird-Amber
<i>Swift</i>	Apus apus		2010	SP582230		New Road, Bicester	Flying	CSP				Bird-Amber
<i>Swift</i>	Apus apus	3 Nests	2015	SP58352376		21 Windmill Avenue, Bicester	nest	CSP				Bird-Amber
<i>Swift</i>	Apus apus	3 Nests	2014	SP58352376		21 Windmill Avenue, Bicester	nest	CSP				Bird-Amber

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Swift	Apus apus	12 Adults	01/01/2010-31/12/2010	SP58512376		Windmill Avenue, Bicester	Flying	RSPB				Bird-Amber
Swift	Apus apus		2012	SP58512378		83 Windmill Avenue, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2013	SP58512378		83, Windmill Avenue, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus	3 Adults	01/01/2007-31/12/2007	SP58522382		OX26 3XW (Larch Close, Bicester)	Flying	RSPB				Bird-Amber
Swift	Apus apus		2017	SP58552374		Windmill Avenue, Bicester	Flying	CSP				Bird-Amber
Swift	Apus apus		2013	SP58552376		87, Windmill Avenue, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2012	SP58552376		87 Windmill Avenue, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2010	SP586239		Soutwold Estate, off of Buckingham Road, Banbury	Flying	CSP				Bird-Amber
Swift	Apus apus		2012	SP58932329		6 Nuffield Close, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2012	SP58962337		2 Keble Road, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2017	SP58982470		Manzel Road, Caversfield	Flying	CSP				Bird-Amber
Swift	Apus apus		2015	SP5899023328		8 Merton Walk, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2014	SP5899023328		8 Merton Walk, Bicester	nest	CSP				Bird-Amber
Swift	Apus apus		2012	SP59002331		Merton Walk, Bicester	Flying	CSP				Bird-Amber
Swift	Apus apus		2014	SP59062469		Turnpike Road, Caversfield	Flying	CSP				Bird-Amber
Swift	Apus apus		2017	SP59062469		Turnpike Road, Caversfield	Flying	CSP				Bird-Amber
Swift	Apus apus		2013	SP59062469		Turnpike Road, Caversfield	Flying	CSP				Bird-Amber
Swift	Apus apus	1	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
Swift	Apus apus		28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Swift	Apus apus		11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Swift	Apus apus	1	20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Swift	Apus apus		30/07/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Kingfisher	Alcedo atthis	1 Individual	10/09/2006	SP52S	1 km record	Confidential, refer to OOS for further details	field record	OOS	BirdsDir-A1	WACA-Sch1-p1		Bird-Amber
Kingfisher	Alcedo atthis		14/08/2003	SP60202345		Bicester Airfield		OLWS	BirdsDir-A1	WACA-Sch1-p1		Bird-Amber
Kingfisher	Alcedo atthis	1	31/07/2008	SP602250		Stratton Audley Quarry		OLWS	BirdsDir-A1	WACA-Sch1-p1		Bird-Amber
Willow Warbler	Phylloscopus trochilus	56	1980	SP597245		Bicester Airfield		LN				Bird-Amber
Willow Warbler	Phylloscopus trochilus		20/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Willow Warbler	Phylloscopus trochilus	1	05/08/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Willow Warbler	Phylloscopus trochilus	20	11/06/2003	SP602250		Stratton Audley Quarry		OLWS				Bird-Amber
Willow Warbler	Phylloscopus trochilus		17/06/2014	SP611231		Land at Grange Farm, Launton	field record	EC				Bird-Amber
Skylark	Alauda arvensis		20/08/2002	SP599252		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	6	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	5	31/07/2008	SP601250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	4	20/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	2	11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis		20/08/2002	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	1	04/07/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	4	10/06/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	8	04/07/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	1	10/06/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Skylark	Alauda arvensis	7	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
House Martin	Delichon urbicum	1	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
Meadow Pipit	Anthus pratensis	40 Individuals	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
Meadow Pipit	Anthus pratensis	40 Individuals	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
Meadow Pipit	Anthus pratensis	1	19/07/2012	SP601241		Bicester Airfield		OLWS				Bird-Amber
Yellow Wagtail	Motacilla flava subsp. flavissima	15 Individuals	29/09/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
Grey Wagtail	Motacilla cinerea	2 Individuals	15/10/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Red
Grey Wagtail	Motacilla cinerea		28/05/2009	SP602250		Stratton Audley Quarry		OLWS				Bird-Red

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Dunnock	Prunella modularis		2016 - 2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		12/04/2000-31/05/2000	SP591242		Caversfield Park, Bicester	field record	EC			NERC-S41	Bird-Amber
Dunnock	Prunella modularis	44	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Amber
Dunnock	Prunella modularis	1	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		20/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Dunnock	Prunella modularis		31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Redstart	Phoenicurus phoenicurus	1 Individual	06/08/2006	SP5725	1 km record	Caversfield	field record	OOS				Bird-Amber
Song Thrush	Turdus philomelos		2016 - 2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC			NERC-S41	Bird-Red
Song Thrush	Turdus philomelos	10	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Song Thrush	Turdus philomelos	1	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Red
Song Thrush	Turdus philomelos		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Redwing	Turdus iliacus	1	1980	SP597245		Bicester Airfield		LN		WACA-Sch1-p1		Bird-Red
Willow Tit	Poecile montana	4	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Marsh Tit	Poecile palustris	2	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Marsh Tit	Poecile palustris		05/08/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris		12/04/2000-31/05/2000	SP591242		Caversfield Park, Bicester	field record	EC			NERC-S41	Bird-Red
Starling	Sturnus vulgaris	1	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Starling	Sturnus vulgaris	50	27/09/2006	SP59902537		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris	1	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris		17/06/2014	SP611231		Land at Grange Farm, Launton	field record	EC			NERC-S41	Bird-Red
Starling	Sturnus vulgaris	1	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Starling	Sturnus vulgaris	2	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
House Sparrow	Passer domesticus		2016 - 2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC			NERC-S41	Bird-Red
House Sparrow	Passer domesticus		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
House Sparrow	Passer domesticus		17/06/2014	SP611231		Land at Grange Farm, Launton	field record	EC			NERC-S41	Bird-Red
Tree Sparrow	Passer montanus	6	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Linnet	Linaria cannabina	50 Individuals	18/12/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		20/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		05/08/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Linnet	Linaria cannabina		31/07/2008	SP605246		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Bullfinch	Pyrrhula pyrrhula		2016 - 2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula	2	13/07/2012	SP596230		Jarvis Lane		OLWS			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula	38	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula	2	19/07/2012	SP601241		Bicester Airfield		OLWS			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula	1	11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula		31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	Bird-Amber
Bullfinch	Pyrrhula pyrrhula		31/07/2008	SP605246		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Yellowhammer	Emberiza citrinella	17	1980	SP597245		Bicester Airfield		LN			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella		28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella	8	11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella	3	10/06/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella	5	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red



Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Yellowhammer	Emberiza citrinella	11	04/07/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella	1	04/07/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Yellowhammer	Emberiza citrinella	9	14/05/2003	SP6224	1 km record	Poundon Hill	field record	OOS			NERC-S41	Bird-Red
Reed Bunting	Emberiza schoeniclus	2 Individuals	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus	2 Females	26/02/2006	SP5725	1 km record	Caversfield	field record	OOS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus		31/07/2008	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus	8	11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus	8	28/05/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	Bird-Amber
Reed Bunting	Emberiza schoeniclus		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	Bird-Amber
Higher Plants - Flowering Plants												
Bluebell	Hyacinthoides non-scripta		25/04/2009	SP60172513		Stratton Audley Quarry	field record	LN		WACA-Sch8		
Galingale	Cyperus longus		21/06/2006-09/07/2007	SP598253			field record	EC				Status-NS RL-Eng-post2001-NT RL-GB-post2001-NT
Quaking-grass	Briza media	R (DAFOR)	31/07/2008	SP601250		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Lesser Spearwort	Ranunculus flammula		05/07/2013	SP600236		Skimmingdish Lane, Bicester	field record	EC				RL-Eng-post2001-VU
Lesser Spearwort	Ranunculus flammula		08/07/1981	SP603251		Stratton Audley Quarry	field record	OBRC				RL-Eng-post2001-VU
Wild Strawberry	Fragaria vesca	R (DAFOR)	15/08/2014	SP597253		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	O (DAFOR)	15/08/2014	SP595251		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	R (DAFOR)	15/08/2014	SP597249		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	O (DAFOR)	15/08/2014	SP597253		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	R (DAFOR)	19/07/2012	SP59822379		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	R (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Hoary Plantain	Plantago media	R (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Heath Speedwell	Veronica officinalis	O (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Heath Speedwell	Veronica officinalis	R (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Basil Thyme	Clinopodium acinos	LF (DAFOR)	15/08/2014	SP597253		Bicester Airfield		OLWS			NERC-S41	RL-Eng-post2001-VU RL-GB-post2001-VU
Basil Thyme	Clinopodium acinos	R (DAFOR)	19/07/2012	SP59822379		Bicester Airfield		OLWS			NERC-S41	RL-Eng-post2001-VU RL-GB-post2001-VU
Basil Thyme	Clinopodium acinos	O (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS			NERC-S41	RL-Eng-post2001-VU RL-GB-post2001-VU
Corn Mint	Mentha arvensis	R (DAFOR)	15/08/2014	SP597253		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Corn Mint	Mentha arvensis	R (DAFOR)	31/07/2008	SP605246		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Eyebright	Euphrasia nemorosa	LF (DAFOR)	27/09/2006	SP59902537		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Spiny Restharrow	Ononis spinosa		May-99	SP591243		Buckingham Road Field	field record	CDC				RL-Eng-post2001-NT
Spiny Restharrow	Ononis spinosa		May-99	SP591243		Buckingham Road Field	field record	CDC				RL-Eng-post2001-NT
Spiny Restharrow	Ononis spinosa		May-99	SP591243		Buckingham Road Field	field record	CDC				RL-Eng-post2001-NT
Jacob's-ladder	Polemonium caeruleum		25/05/2009	SP60172513		Stratton Audley Quarry	field record	LN				Status-NR
Hairy Rock-cress	Arabis hirsuta		10/09/2009	SP60172513		Stratton Audley Quarry	field record	LN				RL-Eng-post2001-NT
Shepherd's Cress	Teesdalia nudicaulis		05/07/2013	SP600236		Skimmingdish Lane, Bicester	field record	EC				RL-Eng-post2001-NT RL-GB-post2001-NT
Marsh Ragwort	Senecio aquaticus		23/09/1987	SP603251		Stratton Audley Quarry	field record	OBRC				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	LA (DAFOR)	19/07/2012	SP59402413		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	LA (DAFOR)	19/07/2012	SP59502405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	R (DAFOR)	15/08/2014	SP595251		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	LF (DAFOR)	03/08/2012	SP60162405		Bicester Airfield		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis		20/08/2002	SP602251		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis		20/08/2002	SP602251		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis		23/09/1987	SP603251		Stratton Audley Quarry	field record	OBRC				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	R (DAFOR)	31/07/2008	SP605246		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Field Scabious	Knautia arvensis	R (DAFOR)	31/07/2008	SP605246		Stratton Audley Quarry		OLWS				RL-Eng-post2001-NT
Invertebrates - Ants, Bees, Sawflies & Wasps												



Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
<i>Backthorn Mining Bee</i>	Andrena (Andrena) varians		20/04/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
<i>Southern Bronze Furrow Bee</i>	Halictus (Seladonia) confusus		2003	SP602251		Stratton Audley Quarry		OLWS				RL-GB-pre94-R
<i>Orange-footed Furrow Bee</i>	Lasioglossum (Lasioglossum) xanthopus		13/06/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
<i>Sharp-collared Furrow Bee</i>	Lasioglossum (Evylaeus) malachurum		07/07/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
<i>Lobe-spurred Furrow Bee</i>	Lasioglossum (Evylaeus) pauxillum	1 Adult Male	30/07/2012	SP590253		Caversfield, Bicester		LN				Notable-A
<i>Lobe-spurred Furrow Bee</i>	Lasioglossum (Evylaeus) pauxillum		16/05/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-A
<i>White-footed Furrow Bee</i>	Lasioglossum (Dialictus) leucopus		16/05/2003	SP602251		Stratton Audley Quarry		OLWS				RL-GB-pre94-R
<i>Swollen-thighed Blood Bee</i>	Sphecodes crassus		13/06/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
<i>Red-tailed Mason Bee</i>	Osmia (Neosmia) bicolor		13/06/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
<i>Small Tiphia</i>	Tiphia minuta		07/07/2003	SP602251		Stratton Audley Quarry		OLWS				Notable-B
Invertebrates - Beetles												
<i>A Beetle</i>	Microplontus campestris		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC				Notable-B
<i>A Beetle</i>	Microplontus campestris		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC				Notable-B
<i>A Beetle</i>	Thamiocolus viduatus	Adults	18/06/2013	SP5922	1 km record	Gavray Drive, Bicester		WBBRS				Notable-B
<i>A Beetle</i>	Rhinocyllus conicus	Adults	18/06/2013	SP5922	1 km record	Gavray Drive, Bicester		WBBRS				Notable-A
<i>A Beetle</i>	Sepedophilus pedicularius		16/01/2003	SP6022	1 km record	Gavray Drive Meadows	Collection from 'grass-tussocks'	OBRC				Notable
<i>A Beetle</i>	Haploglossa picipennis		14/03/2000	SP602251		Stratton Audley Quarry	field record	OBRC				Notable
<i>A Beetle</i>	Philonthus fumarius		16/01/2003	SP5922	1 km record	Gavray Drive Meadows	Collection from 'grass-tussocks'	OBRC				Notable-B
<i>Bombadier Beetle</i>	Brachinus (Brachinus) crepitans		18/08/1988	SP603251		Stratton Audley Quarry	field record	LN				Notable-B
<i>Bombadier Beetle</i>	Brachinus (Brachinus) crepitans	21 to 100 Adults; Immature Males	27/07/1988	SP603251		Stratton Audley Quarry	field record	LN				Notable-B
<i>A Beetle</i>	Bembidion (Semicampa) gilvipes		16/01/2003	SP5922	1 km record	Gavray Drive Meadows	Collection from 'grass-tussocks'	LN				Notable-B
<i>A Beetle</i>	Bembidion (Diplocampa) clarkii		14/03/2000	SP598251		Stratton Audley Quarry	Collection from 'grass-tussocks'	OBRC				Notable-B
<i>A Beetle</i>	Bembidion (Diplocampa) clarkii		13/03/2000	SP598251		Stratton Audley Quarry	field record	LN				Notable-B
<i>A Beetle</i>	Pterostichus (Pseudomaseus) anthracinus		27/07/1988	SP603251		Stratton Audley Quarry	field record	LN				Notable-B
<i>A Beetle</i>	Ophonus (Ophonus) azureus		27/07/1988	SP603251		Stratton Audley Quarry	field record	LN				Notable-B
<i>A Beetle</i>	Lebia (Lamprias) chlorocephala		26/02/1991	SP599252		Stratton Audley Quarry	field record	OBRC				Notable-B
<i>A Beetle</i>	Cryptocephalus aureolus		02/06/2004	SP599252		Stratton Audley Quarry	field record	OBRC				Notable-B
<i>A Beetle</i>	Cryptocephalus aureolus		02/06/2004	SP599252		Stratton Audley Quarry	field record	OBRC				Notable-B
<i>A Beetle</i>	Cryptocephalus aureolus		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC				Notable-B
Invertebrates - Butterflies												

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Grizzled Skipper	Pyrgus malvae	1 Adult	18/05/1997	SP5723	1 km record	Bicester N W	field record	BC			NERC-S41	RL-GB-post2001-VU
Grizzled Skipper	Pyrgus malvae	1	18/05/1997	SP5723	1 km record		field record	BBOWT			NERC-S41	RL-GB-post2001-VU
Grizzled Skipper	Pyrgus malvae		30/07/2009	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-VU
Wood White	Leptidea sinapis	10 to 29	1995	SP601245			field record	BBOWT		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-EN
Wall	Lasiommata megera		1980	SP597245		Bicester Airfield		LN			NERC-S41	RL-GB-post2001-NT
Wall	Lasiommata megera		10/08/1983	SP599252		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Wall	Lasiommata megera	Adults	02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Wall	Lasiommata megera		10/08/1983	SP603251		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	2 to 9	18/05/1997	SP5723	1 km record	Bicester N W	field record	BC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	1 Adult	06/07/1997	SP5823	1 km record	Bicester N	field record	BC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		1980	SP597245		Bicester Airfield		LN			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		27/09/2006	SP59902537		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		08/07/1991	SP599252		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	02/06/2004	SP599252		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	20/08/2002	SP599252		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	2	05/08/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		20/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		07/07/2003	SP602251		Stratton Audley Quarry	field record	LN			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	3; Adults	16/07/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	20/08/2002	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	34; Adults	06/08/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	Adults	13/06/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	57; Adults	27/08/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	30; Adults	17/06/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	12; Adults	15/09/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	9; Adults	29/05/2003	SP602251		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus		08/07/1981	SP603251		Stratton Audley Quarry	field record	OBRC			NERC-S41	RL-GB-post2001-NT
Small Heath	Coenonympha pamphilus	1	31/07/2008	SP605246		Stratton Audley Quarry		OLWS			NERC-S41	RL-GB-post2001-NT
Black Hairstreak	Satyrium pruni	3 Adults	03/06/2011	SP61502344		Railway North of Launton	field record	BC		WACA-Sch5-s9.5a		RL-GB-post2001-EN
Black Hairstreak	Satyrium pruni	3 Adults	25/06/2010	SP61522344		Launton railway footpath	field record	BC		WACA-Sch5-s9.5a		RL-GB-post2001-EN
Black Hairstreak	Satyrium pruni	4 Adults	28/06/2010	SP61522344		Launton - area by pond and railway	field record	BC		WACA-Sch5-s9.5a		RL-GB-post2001-EN
Small Blue	Cupido minimus	1 Adult	2002	SP599252		Stratton Audley Quarry	field record	BC		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT
Small Blue	Cupido minimus	Adults	20/08/2002	SP599252		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
Small Blue	Cupido minimus	1 Adult	2002	SP602251		Stratton Audley Quarry	field record	BC		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT
Small Blue	Cupido minimus	Adults	20/08/2002	SP602251		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT
Small Blue	Cupido minimus	Adults	20/08/2002	SP602251		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT
Small Blue	Cupido minimus	Adults	20/08/2002	SP602251		Stratton Audley Quarry		OLWS		WACA-Sch5-s9.5a	NERC-S41	RL-GB-post2001-NT
Adonis Blue	Polyommatus bellargus		1980	SP597245		Bicester Airfield		LN		WACA-Sch5-s9.5a		RL-GB-post2001-NT
Invertebrates - Moths												
Ghost Moth	Hepialus humuli		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Oak Hook-tip	Watsonalla binaria		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Blood-vein	Timandra comae		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Small Phoenix	Ecliptopera silaceata		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Latticed Heath	Chiasmia clathrata		08/08/1986	SP603251		Stratton Audley Quarry	field record	OBRC			NERC-S41	
Buff Ermine	Spilosoma lutea		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
White Ermine	Spilosoma lubricipeda		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Cinnabar	Tyria jacobaeae		1980	SP597245		Bicester Airfield		LN			NERC-S41	
Cinnabar	Tyria jacobaeae	4	19/07/2012	SP59822379		Bicester Airfield		OLWS			NERC-S41	
Cinnabar	Tyria jacobaeae	Adults	02/06/2004	SP599252		Stratton Audley Quarry	field record	OBRC			NERC-S41	
Cinnabar	Tyria jacobaeae		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Cinnabar	Tyria jacobaeae		03/08/2012	SP60162405		Bicester Airfield		OLWS			NERC-S41	
Cinnabar	Tyria jacobaeae		31/07/2008	SP605246		Stratton Audley Quarry		OLWS			NERC-S41	
Knot Grass	Acronicta rumicis		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Mottled Rustic	Caradrina morpheus		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Dusky Brocade	Apamea remissa		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Large Nutmeg	Apamea anceps		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Broom Moth	Ceramica pisi		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Shoulder-striped Wainscot	Leucania comma		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Small Square-spot	Diarsia rubi		06/06/2004	SP600240		Bicester Airfield	field record	LN			NERC-S41	
Invertebrates - True Bugs												
A True Bug	Macropsis glandacea		08/08/1986	SP603251		Stratton Audley Quarry	field record	OBRC				Notable-B RL-GB-pre94-Insu
Mammals - Terrestrial (bats)												
Bats	Chiroptera	1 Dropping; Droppings	06/01/2017	SP59282441		Building 103, Bicester Heritage, Buckingham Road, Bicester	dung/droppings/frass/pellet, etc.	EC	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	RL-Global-post2001-NT
Bats	Chiroptera	1 Sign; Signs	06/01/2017	SP59282448		Building 103, Bicester Heritage, Buckingham Road, Bicester	Dung or other signs	EC	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	RL-Global-post2001-NT
Unidentified Bat	Myotis	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A2np HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	RL-Global-post2001-NT
Natterer's Bat	Myotis nattereri		09/10/1993	SP595259		Bicester	field record	NE	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
Noctule Bat	Nyctalus noctula		07/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
Noctule Bat	Nyctalus noctula		03/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
Noctule Bat	Nyctalus noctula		21/09/2016	SP59152412		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
Noctule Bat	Nyctalus noctula	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
Common Pipistrelle	Pipistrellus pipistrellus		29/12/1999	SP609258			field record	OBRC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
Nathusius's Pipistrelle	Pipistrellus nathusii	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus	Droppings	24/07/2015	SP58102530		St Lawrences Church, Caversfield	dung/droppings/frass/pellet, etc.	NE	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		03/05/2017	SP58932426		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		07/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		21/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		22/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		24/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		04/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		03/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		23/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		05/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus		21/09/2016	SP59152412		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Common Pipistrelle</i>	Pipistrellus pipistrellus	1 Individual	27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b		
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		23/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		05/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		04/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		21/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		22/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		03/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		24/09/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		07/05/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus		11/10/2016	SP59102409		Land adjacent to Skimmingdish Lane, Bicester	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Soprano Pipistrelle</i>	Pipistrellus pygmaeus	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Brown Long-eared Bat</i>	Plecotus auritus	Droppings	24/07/2015	SP58102530		St Lawrences Church, Caversfield	dung/droppings/frass/pellet, etc.	NE	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Brown Long-eared Bat</i>	Plecotus auritus	Flying	31/08/2016-27/09/2016	SP60652592		Squash Court, Stratton Audley Hall	aural bat detector	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<i>Brown Long-eared Bat</i>	Plecotus auritus	10 Droppings	19/08/2016	SP60652592		Squash Court, Stratton Audley Hall	dung/droppings/frass/pellet, etc.	EC	HabDir-A4	HabReg-Sch2 WACA-Sch5-s9.4b/s9.4c/s9.5a/s9.5b	NERC-S41	
<b>Mammals - Terrestrial (excl. bats)</b>												
<i>West European Hedgehog</i>	Erinaceus europaeus	1 alive	2012	SP579240		Confidential	hibernating	PTES			NERC-S41	

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
West European Hedgehog	Erinaceus europaeus	3 alive	2014	SP581230		Confidential	hibernating	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	1	30/10/2006	SP582229		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	2	19/08/2006	SP585239		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	1	16/08/2006	SP586243		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	3	31/08/2007	SP587238		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	1	31/08/2007	SP587238		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	2	18/10/2006	SP587241		Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	1	07/11/2006	SP591232		Churchill Road, Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	1	27/09/2006	SP591250		Caversfield, Bicester	field record	PTES			NERC-S41	
West European Hedgehog	Erinaceus europaeus	2	07/11/2006	SP596235		Bicester	field record	PTES			NERC-S41	
Eurasian Badger	Meles meles	1	25/06/2006	SP581248		B4100, just south of Home Farm	dead on road	LN		Badgers-1992		
Eurasian Badger	Meles meles	1	13/08/2005	SP594241		Skimmingdish Lane, Bicester		LN		Badgers-1992		
Eurasian Badger	Meles meles		23/04/2011	SP596256			dead on road	LN		Badgers-1992		
Eurasian Badger	Meles meles	1 Sett	12/04/2016	SP600238		Skimmingdish Lane, Caversfield	Sett	EC		Badgers-1992		
Eurasian Badger	Meles meles		05/07/2013	SP60112378		Skimmingdish Lane, Bicester	Sett	EC		Badgers-1992		
Eurasian Badger	Meles meles		05/07/2013	SP60182373		Skimmingdish Lane, Bicester	Sett	EC		Badgers-1992		
Eurasian Badger	Meles meles	Signs	31/07/2008	SP602250		Stratton Audley Quarry		OLWS		Badgers-1992		
Eurasian Badger	Meles meles	Droppings	09/04/2015	SP611230		Land at Grange Farm, Launton	Dung or other signs	EC		Badgers-1992		
Eurasian Badger	Meles meles	Signs	09/04/2015	SP611230		Land at Grange Farm, Launton	Dung or other signs	EC		Badgers-1992		
Eurasian Badger	Meles meles	Tracks	09/04/2015	SP611230		Land at Grange Farm, Launton	tracks/trail	EC		Badgers-1992		
Eurasian Badger	Meles meles	Signs	01/06/2015	SP615239		Bicester	Sett	EC		Badgers-1992		
Eurasian Badger	Meles meles	Signs	01/06/2015	SP617239		Bicester	Sett	EC		Badgers-1992		
European Water Vole	Arvicola amphibius		01/06/2003	SP580230		Bicester		BBOWT		WACA-Sch5-s9.4a/s9.4b/s9.4c	NERC-S41	
European Water Vole	Arvicola amphibius		08/04/1999	SP580236		Ray Catchment		BBOWT		WACA-Sch5-s9.4a/s9.4b/s9.4c	NERC-S41	
Brown Hare	Lepus europaeus		1980	SP597245		Bicester Airfield		LN			NERC-S41	
Brown Hare	Lepus europaeus		11/06/2003	SP602250		Stratton Audley Quarry		OLWS			NERC-S41	
Brown Hare	Lepus europaeus	2 Adults	02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC			NERC-S41	
Reptiles												
Common Lizard	Zootoca vivipara	1 Female; 3 Adults; 3 Juveniles	29/09/2017	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	1 Juvenile	07/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	3 Males; 3 Females; 6 Juveniles	05/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	1 Juvenile; 2 Females; 3 Males	02/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	1 Juvenile; 1 Male; 1 Female; 2 Adults	09/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	1 Female; 5 Juveniles	11/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
Common Lizard	Zootoca vivipara	2 Juveniles	15/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	European Directives	UK Legislation	NERC s41	Other Designations
<i>Common Lizard</i>	Zootoca vivipara	1 Female; 2 Juveniles; 3 Adults	18/10/2016	SP590241		Land adjacent to Skimmingdish Lane, Bicester	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Individual	25/05/2016	SP600238		Skimmingdish Lane, Caversfield	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult	04/06/2015	SP611230		Land at Grange Farm, Launton	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult	11/06/2015	SP611230		Land at Grange Farm, Launton	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult	03/06/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult Female	07/05/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult	07/05/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	3 Adult Males	04/06/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult Male	11/06/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Common Lizard</i>	Zootoca vivipara	1 Adult Female	03/06/2015	SP611230		Land at Grange Farm, Launton	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica	2 Individuals	25/05/2016	SP600239		Skimmingdish Lane, Caversfield	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica		08/07/1991	SP602251		Stratton Audley Quarry	field record	OBRC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica	Adults	08/07/1981	SP603251		Stratton Audley Quarry	field record	OBRC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica	1 Individual	19/04/2016	SP6066423598		Skimmingdish Lane, Caversfield	field record	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica	1 Adult	16/07/2014	SP6090225775		Stratton Audley, OX27 9AS	field record	ARGUK		WACA-Sch5-s9.1k/s9.5a	NERC-S41	
<i>Grass Snake</i>	Natrix helvetica	1 Adult	11/06/2015	SP611230		Land at Grange Farm, Launton	Reptile Refugia	EC		WACA-Sch5-s9.1k/s9.5a	NERC-S41	

Taxon Name	Common Name	Abundance / Sex / Stage	Date	Grid Ref.	Grid Ref. Qualifier	Location	Type of Record	Data Origin	Invasive Status
<b>Higher Plants - Flowering Plants</b>									
<i>Nuttall's Waterweed</i>	<i>Elodea nuttallii</i>		20/08/2002	SP602251		Stratton Audley Quarry		OLWS	INNS-Priority-2015
<i>Nuttall's Waterweed</i>	<i>Elodea nuttallii</i>		20/08/2002	SP602251		Stratton Audley Quarry		OLWS	INNS-Priority-2015
<i>Nuttall's Waterweed</i>	<i>Elodea nuttallii</i>		31/07/2008	SP605246		Stratton Audley Quarry		OLWS	INNS-Priority-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>	R (DAFOR)	24/08/2015	SP590242		Skimmingdish Lane Balancing Pond		TVERC	INNS-Other-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>		01/04/2017	SP59072423		Land adjacent to Skimmingdish Lane, Bicester	field record	EC	INNS-Other-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>	R (DAFOR)	13/07/2012	SP596230		Jarvis Lane		OLWS	INNS-Other-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>	R (DAFOR)	19/07/2012	SP59702397		Bicester Airfield		OLWS	INNS-Other-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>	R (DAFOR)	15/08/2014	SP597253		Bicester Airfield		OLWS	INNS-Other-2015
<i>Butterfly-bush</i>	<i>Buddleja davidii</i>		02/06/2004	SP602251		Stratton Audley Quarry	field record	OBRC	INNS-Other-2015
<i>Italian Alder</i>	<i>Alnus cordata</i>		01/04/2017	SP59152412		Land adjacent to Skimmingdish Lane, Bicester	field record	EC	INNS-Other-2015
<i>Winter Heliotrope</i>	<i>Petasites fragrans</i>		07/04/2009	SP602250		Stratton Audley Quarry		OLWS	INNS-Other-2015
<b>Invertebrates - Crustaceans</b>									
<i>A Crustacean</i>	<i>Crangonyx pseudogracilis</i>		20/03/2006	SP613256		Stratton Audley, Audley Brook		EA	INNS-Other-2015

# **Status Key. Produced January 2014 by Thames Valley Environmental Records Centre**

## **EUROPEAN DIRECTIVES**

- BirdsDir-A1 - Species listed on Annex 1 of EC Directive 79/409/EEC on the Conservation of Wild Birds.
- HabDir-A2, HabDir-A4 & HabDir-A5 - Annex 2 and Annexes 4/5 respectively of the EC Habitats Directive. This is the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora.

## **UK LEGISLATION: CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2010**

This legislation translates the European Habitats Directive (see above) into UK law where species are listed in Schedule 2 and Schedule 4. Species are tagged as HabReg-Sch2 or HabReg-Sch4.

## **UK LEGISLATION: WILDLIFE AND COUNTRYSIDE ACT 1981**

### **Schedule 1 Wild Birds**

prohibits the intentional killing, injuring or taking of any wild bird and the taking, damaging or destroying of the nest (whilst being built or in use) or eggs. It prohibits possession of wild birds (dead or alive) or their eggs. In addition:

- WACA-Sch1(pt 1) – There are additional penalties for offences relating to birds on this schedule and it is also an offence to disturb such birds at the nest or with dependent young.
- WACA-Sch1(pt 2) – Covers the protection of birds which may be killed during the open season.

(Please note that some schedule 1 bird records will refer to species that do not breed in the county, e.g. over-wintering birds such as Redwing or Fieldfare. Although we include them in the annotated records, only they and their nests, eggs and dependent young enjoy extra protection under the W&C 1981 act. If you are in any doubt about the breeding status of a bird please contact us at TVERC)

### **Schedule 5 Wild Animals**

- WACA-Sch5\_sect9.1 – covers intentional killing injuring or taking (species are covered by all or some of these)
- WACA-Sch5\_sect9.2 – Covers possession or control (live or dead animal, part or derivative)
- WACA-Sch5\_sect9.4a – Covers damage to or destruction of any structure or place used by a scheduled animal for shelter or protection.
- WACA-Sch5\_sect9.4b – Covers disturbance of animal occupying such a structure or place.
- WACA-Sch5\_sect9.4c – Covers obstruction of access to any structure or place which any such animal uses for shelter or protection
- WACA-Sch5\_sect9.5a – Covers selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative).
- WACA-Sch5\_sect9.5b – Covers advertising for buying or selling such things.

### **Schedule 8 Wild Plants**

- WACA-Sch8 - Covers any picking, uprooting or destruction of plants listed on the Schedule. It also prohibits the sale, etc, or possession for the purpose of sale of any plants on the Schedule.



## PRIORITY NERC S.41 2006

Species listed in Section 41 of the Natural Environment and Rural Communities Act 2006 as a species of principle importance. These are very similar to the list of UKBAP and have superseded them. Species are tagged NERC S.41.

## OTHER DESIGNATIONS: RED LISTS

**Global Red List Species** (tagged GlobalRed) - Species listed by the International Union for Conservation of Nature (IUCN) in the IUCN Red List of Threatened Species. Species included are from post 1994 and post 2001 lists.

**GB Red List Species** (tagged GBRed) - Species included in national red lists. Species included are from pre 1994 and post 2001 lists. Please note not all taxon groups are currently covered, for example fungi.

Abbreviations:

**EX** – Extinct A taxon is Extinct when there is no reasonable doubt that the last individual has died.

**EW** – Extinct in the Wild. Species known to survive only in cultivation, in captivity or as a naturalised population(s) well outside the past range.

**CR** – Critically Endangered (CR) Species facing an extremely high risk of extinction in the wild in the immediate future.

**EN** – Endangered: Species that are not Critically Endangered but is facing a very high risk of extinction in the wild in the near future.

**VU** – Vulnerable: A species is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future

**NT** – Near Threatened – A taxon considered to likely to become endangered in the near future.

**LR(cd)** – Lower risk (conservation dependent)

**DD** – Data deficient – A taxon with insufficient data to make an assessment of its risk of extinction.

**RE** – Regionally Extinct – Taxa that are considered extinct within the region but populations exist elsewhere in the world.

**Inde** – indeterminate – based on a pre 1994 category: Taxa which are known to be Endangered, Vulnerable or Rare but with insufficient data to place them in one of the categories.

**Insu** – Insufficiently known - based on a pre 1994 category which equates to data deficient.

Species included here are from information compiled by JNCC (The Joint Nature Conservation Committee).

## OTHER DESIGNATIONS: NATIONALLY NOTABLE SPECIES

This covers invertebrate species not falling within IUCN categories but never the less uncommon in Britain.

**Nationally Notable A** (Tagged Notable-A): Taxa which occur in <30 10 km (hectad) squares or for less well recorded groups within <7 vice counties.

**Nationally Notable B** (Tagged Notable-B): Taxa which don't fall within IUCN categories but are uncommon in Britain and occur in 31-100 10 km sq/ or for less or for less well recorded groups between 8 and 20 vice counties

**Notable** (Tagged Notable): Taxa known to be scarce (occurring in between 16 and 100 10km squares) but for which there is insufficient information to assign them to the above categories.

This designation comes from the National Biodiversity Network (NBN) species dictionary but is supported by JNCC.

#### OTHER DESIGNATIONS: NATIONALLY RARE OR SCARCE SPECIES

This designation covers species that are recognised to occur in only a few locations in Britain.

**Rare** (tagged as Status-NR) = occurring in 15 or fewer hectads (10 km squares) in the UK

**Scarce** (tagged as Status-NS) = occurring in 16 – 100 hectads in the UK.

#### OTHER DESIGNATIONS: BIRDS OF CONSERVATION CONCERN LISTS & RED LIST FUNGI

These lists were drawn up by leading governmental and non-governmental conservation organizations including the RSPB and British Trust for Ornithology. The most recent version was published in May 2009.

**Red List** (tagged Bird-Red) - species are those that are globally threatened, whose population or range has declined rapidly in recent years (i.e. by more than 50% in 25 years), or which have declined historically and not recovered.

**Amber List** (tagged Bird-Amber) - Amber list species are those whose population or range has declined moderately in recent years (by more than 25% but less than 50% in 25 years), those whose population has declined historically but recovered recently, rare breeders (fewer than 300 pairs), those with internationally important populations in the UK, those with localised populations, and those with an unfavourable conservation status in Europe.

**Red List Fungi** – This designation uses the Red Data List of Threatened British Fungi (preliminary assessment) by Shelley Evans (BMS Conservation Officer). Species are designated as:

**Fungi Red-CR** – Critically Endangered

**Fungi Red-EN** – Endangered

**Fungi Red-NT** – Near Threatened

**Fungi Red-VU** – Vulnerable

These follow current IUCN guidelines (2001) as closely as possible but with adaptations to take into account the fungal lifestyle and associated practicalities of fungal recording.

#### OTHER DESIGNATIONS: LOCAL BAP SPECIES

For any Local Authority that has drawn up a list of BAP species. Designations will only apply to species recorded from the Local Authority area.

Currently, only Bracknell Forest Council have such a BAP list and relevant records are tagged Bracknell LBAP.

## INVASIVE NON-NATIVE SPECIES

Species appearing on the Environment Agency list of non-native invasive species 2014. Species may have the following designations:

**Priority Species:** Species affecting EA interests the most

**Rapid Response Species:** Very invasive species that are not yet established

## DATA ORIGIN KEY – March 2018

Data Origin Abbreviation	Origin Details
ABFG	Association of British Fungus Groups
AC	Academic Researcher
AN	Abingdon Natural History Society
ARC	Amphibian & Reptile Conservation
ANHSO	Ashmolean Natural History Society (& Rare Plant Group)
ARGUK	UK Amphibian & Reptile Groups
BAT	Bat Licence Returns (from licenced Bat Recorders)
BBG	Binfield Badger Group
BBOWT	Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust
BC	Butterfly Conservation (includes Upper Thames and National Data)
BDS	British Dragonfly Society
BENHS	British Entomological Natural History Society
BFC	Bracknell Forest Council
BFVT	Bracknell Forest Veteran Tree Survey
BGG	Bicester Green Gym
BIG	Berkshire Invertebrate Group
BLS	British Lichen Society
BLWS	Berkshire Local Wildlife Sites Project
BMG	Berkshire Mammal Group
BOC	Berkshire Bird Clubs
BOS	Banbury Ornithological Society
BRAG	Berkshire Reptile & Amphibian Group
BRC	Biological Record Centre (Monk's Wood)
BSBBG	Berks & South Berks Bat Group
BSBI	Botanical Society of the British Isles
BTC	Banbury Town Council
BTO	British Trust for Ornithology
BUWG	Bracknell Urban Wildlife Group
BWARS	Bees Wasps & Ants Recording Society
CalRS	National Calliphoridae Recording Scheme
CBT	Childe Beale Trust
CDC	Cherwell District Council
COS	County Ornithological Services (also known as BCS)
CRPG	Cotswold Rare Plant Group
CSP	Cherwell Swift Project
EA	Environment Agency (formally the National Rivers Authority)
EC	Professional Ecological Consultant
ESB	Earthworm Society of Great Britain
ET	The Earth Trust (formally the Northmoor Trust)
FFF	Friends of Faringdon Folly