Landscape Architecture
Masterplanning
Ecology

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# STATION ROAD, HOOK NORTON

## ECOLOGICAL APPRAISAL

**Prepared for Nursery Ground Ltd**

**by**

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**APPENDICES**

## 1 INTRODUCTION

1.1 This report describes an ecological appraisal including Phase 1 Bat Scoping and Badger surveys of approximately 2.3ha of land off Station Road, Hook Norton, Oxfordshire, hereinafter referred to as 'the site'. The site centre is located by National Grid Reference SP 3625 3371. The study was commissioned by Nursery Ground Ltd in July 2014.

1.2 The site comprises a section of a single arable field located on the north-eastern edge of Hook Norton. The site is bordered to the south by Station Road and newly built residential development beyond; to the west by a wooded path and residential development beyond; to the north by arable farmland; and to the east by continuation of the same arable field comprising the site, which is bordered the east by a strip of broadleaved woodland. The location and boundary of the site are shown in *Appendix B*.

1.3 Current proposals for the site include the development of 48 residential properties with associated gardens, infrastructure, open space and landscaping (Site layout, dwg. no. 14045 - SK01-A).

1.4 The aims of the study are:

i. To assess the likely nature conservation importance of habitats within the site;
ii. To assess the likely presence of protected species and species of principal importance (NERC, 2006);
iii. To identify any potential constraints to development due to the above;
iv. To identify requirements for any additional ecological surveys; and
v. To identify measures to avoid and mitigate potential effects of development on identified features of ecological interest.

## 2 METHODOLOGY

### 2.1 Desk study

2.1.1 Existing ecological and nature conservation data relevant to the site was collated from various sources including the 'Multi Agency Geographic Information for the Countryside' (MAGIC) online database (http://magic.defra.gov.uk) and Wiltshire and Swindon Biological Records Centre (TVERC). A check for protected species records and non-statutory designated sites was carried out for an area of approximately 2km around the site and a check for statutory designated sites within 10km of the site was carried out using the Magic database. The findings of the desk study are summarised in Section 3 below and the full results are given in Appendix A.

### 2.2 Field survey

2.2.1 The field survey comprised an extended Phase 1 Habitat survey (JNCC, 2007), a Phase 1 Bat survey and a full Badger Survey carried out by Alex Leishman on 5th August 2014.

*Extended Phase 1 Habitat Survey*

2.2.2 The extended Phase 1 habitat survey involved walking over the site, mapping the main habitat types and compiling detailed 'target notes'. Target notes record habitat features and a list of vascular plant species noted, together with a qualitative assessment of relative abundance, where appropriate. The full results of the Phase 1 Habitat Survey are given in *Appendix B*. Botanical names follow Stace (1997) for higher plants.

*Phase 1 Bat Scoping Survey*

2.2.3 The Phase 1 Bat Scoping Survey comprised an assessment of the potential for built structures and trees within the site to support bats. This involved external ground-level inspections of all built structures and trees to identify features potentially used by roosting bats, such as gaps in brickwork and soffits, and missing tiles etc. in the case of built structures, and loose bark, splits and hollows in the case of trees.

2.2.4 In accordance with current best practice guidelines (BCT, 2012), trees were categorised into one of five categories. Categorisation was based on the nature, size, location and quality of features present in each tree:

- Known or confirmed bat roost;
- BCT Category 1* - Trees with multiple, highly suitable features capable of supporting larger roosts;
- BCT Category 1 - Trees with definite bat potential, supporting fewer suitable features than Category 1* trees or with potential for use by single bats;
- BCT Category 2 - Trees with no obvious potential, although the tree is of a size and age that elevated surveys might result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats; and
- BCT Category 3 - Trees with no potential to support bats.

2.2.5 Built structures were classified as having ‘high’, ‘moderate’, ‘low’ or ‘negligible’ potential to support roosting bats. Assessment of bat roosting potential requires consideration of a number of criteria including the design and construction of the structure, the size and location of potential features and access points, the position of the structure, aspect, surrounding habitat use and adjacent landscape linkages.

2.2.6 The results of the Phase 1 Bat Scoping survey determine the need for further surveys in relation to built structures and trees. The locations of features identified as having potential to support roosting bats within the site are shown on the plan in *Appendix B*.

2.2.7 [redacted]

[redacted]

2.2.8 Observations on the presence, or potential presence, of other protected species were recorded as incidental information to the extended Phase 1 Habitat Survey and this information should not be relied on as a comprehensive assessment of the presence or otherwise of all protected species on the site. This is because there is a wide range of protected species, many of them can occur on one site and most require specialist expertise to locate them and/ or season-critical survey techniques to confirm their presence, and this is outside the scope of the present report.

2.2.9 A total of 1.5 hours was spent carrying out the field survey. Weather conditions were mild and cloudy with rain showers.

**2.3 Evaluation Criteria**

2.3.1 The evaluation of the site, and the habitats within it, is based on the results of the field surveys described above, any designations pertaining to the site and existing ecological information collected during the desk study.

2.3.2 Each ecological resource (site, habitat, species or feature) was assigned a value at the following geographic scales (IEEM, 2006):

- International
- National (England/ Scotland/ Wales/ Northern Ireland)
- Regional
- County / Metropolitan
- District / Borough
- Local/ Parish
- within immediate zone of influence only (negligible)

2.3.3 Assigning value is relatively straightforward in the case of designated sites, and undesignated sites meeting designation criteria. However, in most cases evaluation of ecological resources is not straightforward and requires a degree of knowledge, training, experience and professional judgement (Usher, 1986; Spellerberg, 1992). Evaluation of an ecological resource was based on a number of criteria (Ratcliffe, 1977; IEEM 2006). These are summarised in *Appendix D*.

2.3.4 The potential for protected species and species of principal importance (NPPF, 2012; ODPM, 2005 as amended) to be present within the site has been assessed based on the habitats and features present within the site and the results of the desk study.

## 2.4 Limitations

2.4.1 The desk study and field survey were not subject to any significant constraints.

# 3 DESK STUDY

## 3.1 Introduction

3.1.1 The following section summarises the findings of the desk study. The original data are given in *Appendix A*. The findings of the field surveys and an assessment of the importance of the site for protected species and species of principal importance are given in Sections 4 and 5 respectively.

## 3.2 Designated Sites

3.2.1 No statutory or non-statutory nature conservation designations pertain to the site. There are no international nature conservation designations (Ramsar sites, SPAs or SACs) within 10km and no National Nature Reserves (NNRs) or Local Nature Reserves (LNRs) within 5km of the site. This is confirmed by information from the Magic online database and TVERC.

### Statutory designated areas

3.2.2 There are two Sites of Special Scientific Interest (SSSIs) located within 5km of the site, the closest of which to the site is 'Hook Norton Cutting and Banks'. Hook Norton Cutting and Banks SSSI is located approximately 1.3km south of the site and is designated for its mosaic of habitats including unimproved chalk grassland habitat, supporting a diverse assemblage of flora and flora.

3.2.3 The second closest SSSI to the site is Sharp's Hill Quarry which is located approximately 3.1km north-west of the site and designated for its palaeontological interest.

### Non-statutory designated areas

3.2.4 One non-statutory designated nature conservation sites is located within 2km of the site. 'Cradle and Grounds Farm Banks Farm Banks' Local Wildlife Sites (LWS) is located approximately 630m south-east of the site at its closest point and is designated for its calcareous grassland, lowland fen, meadow and wetland habitats where a number of protected and notable species have previously been recorded including Great Crested Newt, Grass Snake, Wood White and Yellowhammer, as well as a high diversity of flora.

3.2.5 There are no woodland areas listed on Natural England's Inventory of Ancient Woodland exist within 2km of the site. The closest area of Ancient Woodland is Heath Spinney, located approximately 3.1km to the south-east of the site.

### 3.3 Biodiversity Action Plan (BAP) Habitats and Species

3.3.1 The UK Biodiversity Action Plan (HMSO 1995, 1998, UKBAP 2007) lists species and habitats which have undergone significant declines in recent years and for which conservation is a priority in order to preserve biodiversity in the UK. The BAPs provide a list of actions to be implemented to halt or reverse these declines.

3.3.2 These species and habitats are identified as Habitats and Species of Principal Importance for the conservation of biological diversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The 2012 NPPF and underpinning guidance (ODPM 2005) requires that these habitats and species are a material consideration in the planning process.

3.3.3 The Oxfordshire Local Biodiversity Action Plan includes targets for BAPs for 19 habitats considered of biodiversity importance within the county. Examples of priority habitats listed within the BAP which may be relevant to the site include hedgerow and arable field margin habitats.

3.3.4 The Oxfordshire Local Biodiversity Action Plan uses the Conservation Target Area (CTA) approach to deliver BAP habitat targets. The aim of CTAs is to restore biodiversity at a landscape-scale through the maintenance, restoration and creation of BAP priority habitats. Although the site does not lie within a CTA, the 'Swere Valley and Upper Stour' CTA is located approximately 150m south of the site. Oxfordshire Biodiversity Action Plan habitats associated with this CTA include calcareous grassland, lowland meadow, fen and swamp, wet woodland, rivers, arable field margins and hedgerows.

### 3.4 Protected Species

3.4.1 No records of protected or notable species relating directly to the site were provided during the desk study.

3.4.2 [redacted]

3.4.3 *Bats*

3.4.3.1 Twenty-seven records of bats were provided for the desk study area including Brown Long-eared *Plecotus auritus*, Common Pipistrelle *Pipistrellus pipistrellus*, Daubenton's *Myotis daubentonii*, Lesser Horseshoe *Rhinolophus hipposideros*, Natterer's *Myotis nattereri*, Noctule *Nyctalus noctula*, Barbastelle *Barbastella barbastellus* and Long-eared bat species *Plecotus* sp. No records of bats pertaining to the site were provided and the

closest record provided relates to a Noctule bat within Hook Norton, approximately 190m south-west of the site, dating from 2009. All other records, other than two low resolution records of Long-eared bat and Natterer's dating from 1984 and 1988, pertain to the Hook Norton Cutting and Banks SSSI and date from between 2002 and 2009.

3.4.3.2 All UK bat species are protected under The Conservation of Habitats and Species Regulations 2010, which implements the EC Habitats Directive 92/43/EEC in the United Kingdom. In relation to European Protected Species (EPS), the 2010 Regulations make it an offence to:

- Deliberately capture, injure or kill any wild animal of an EPS.
- Deliberately disturb wild animals of any such species, in particular any disturbance which is likely to: (i) impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or to hibernate or migrate; (ii) affect significantly the local distribution or abundance of the species to which they belong.
- Damage or destroy a breeding site or resting place of such an animal.
- To (a) be in possession of, or to control; (b) to transport any live or dead animal or any part of an animal; (c) to sell or exchange or (d) offer for sale or exchange any live or dead animal or part of an animal of an EPS.

3.4.3.3 In addition, all UK bats are protected under the Wildlife and Countryside Act 1981 (as amended). All species are listed on Schedule 5 of the Act and are subject to the provisions of Sections 9.4b and 9.4c, which make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat.

3.4.3.4 Seven species of bat (Barbastelle, Bechstein's, Noctule, Soprano Pipistrelle, Brown Long-eared, Greater Horseshoe and Lesser Horseshoe) are included as priority species on the UKBAP.

3.4.4 *Otter*

3.4.4.1 One record of Otter was provided by TVERC for the desk study area potentially pertaining to the River Swere corridor, approximately 900m south-west of the site.

3.4.4.2 The Otter is protected through its inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (see *Section 3.4.3.3*) and is a European Protected Species (EPS) through the EC Habitats Directive 1992 as implemented by the Conservation of Habitats and Species Regulations 2010 (as amended) (see *Section 3.4.3.2*). It is also a priority species on the UKBAP.

3.4.5 *Amphibians*

3.4.5.1 One record of Great Crested Newt was provided for the desk study area, pertaining to Cradle and Grounds Farm Banks LWS, approximately 800m south of the site and dating from 1987.

3.4.5.2 The Great Crested Newt is protected through its inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (see *Section 3.4.3.3*) and is a European Protected Species (EPS) through the EC Habitats Directive 1992 as implemented by the Conservation of Habitats and Species Regulations 2010 (as amended) (see *Section 3.4.3.2*). It is also a priority species on the UKBAP.

3.4.5.3 Two records for Common Toad were provided for the desk study area. The closest record relates to Common Frog, pertaining to the River Swere approximately 800m south of the site. Common Toad is a Biodiversity Action Plan species for the UK.

3.4.6 *Invertebrates*

3.4.6.1 Eleven records of White-clawed Crayfish were provided for the desk study area dating from 2006 and 2010. These records pertains to a point along a stream located approximately 500m south-west of the site on the western edge of Hook Norton.

3.4.6.2 The White-clawed Crayfish is protected through its inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally take White-clawed Crayfish from the wild; or
- Sell, or attempt to sell, any part of a White-clawed Crayfish, alive or dead, or advertise that one buys or sells, or intends to buy or sell any part of a white-clawed crayfish.

3.4.6.3 The White-clawed Crayfish is also a priority species on the UKBAP.

3.4.6.4 No other records of protected invertebrates were provided by TVERC other than Small Blue and Wood White butterflies which are protected against commercial exploitation through their inclusion on Schedule 5 of the Wildlife and Countryside Act. Other notable species records provided include Small Heath, Wall and Cinnabar, all of which area UKBAP priority species. The closest of these records to the site relates to a Wall butterfly recorded in a churchyard in Hook Norton, approximately 700m south-west.

3.4.7 [redacted]

3.4.7.2 [redacted]

- [redacted]
- [redacted]
- [redacted]

[redacted]

3.4.8 *Reptiles*

3.4.8.1 Five reptile records were provided for the desk study area, all relating to Grass Snake. The closest record pertains to residential development in the western area of Hook Norton approximately 900m west of the site. There are also records pertaining to Cradle and Grounds Farm Banks LWS approximately 1km south-east of the site and the disused railway cutting, approximately 1.1km south of the site.

3.4.8.2 All native reptiles are protected against killing and injuring under the Wildlife and Countryside Act 1981 (as amended) and listed as priority species on the UKBAP.

3.4.9 *Birds*

3.4.9.1 Forty-four records of notable birds were provided for the desk study area, many of which originate from surveys carried out at Cradle and Grounds Farm Banks LWS and Hook Norton Cutting and Banks SSSI located approximately 800m south-east and 1.3km south of the site respectively. Records provided include:

- Two species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) (Fieldfare and Hobby);
- Six listed as Red List species (RSPB, 2009), i.e. generally those species whose population or range is declining rapidly (Fieldfare, Linnet, Song Thrush, Spotted Flycatcher, Turtle Dove and Yellowhammer);
- Seven species listed as Amber List species (RSPB, 2009), i.e. generally those declining moderately or have small UK populations (Bulfinch, Dunnock, Green Woodpecker, Kestrel, Lesser Black-backed Gull, Swallow and Swift); and
- Twenty-one species listed as priority species on the UKBAP (Bulfinch, Linnet, Song Thrush, Spotted Flycatcher, Turtle Dove and Yellowhammer).

3.4.10 *Plants*

3.4.10.1 No records of protected plants were provided by TVERC other than Bluebell which is protected against commercial exploitation through its inclusion on Schedule 8 of the Wildlife and Countryside Act. Four other records of notable plant species were provided for the desk study area including Large-flowered Hemp-nettle, which is listed as 'vulnerable' on the Great British Red List of vascular plants, and Nottingham Catchfly and Sainfoin which are listed as 'near threatened'.

3.4.11 *Other Species*

3.4.11.1 Other notable species records provided by TVERC include single records for Brown Hare and Polecat which are UKBAP priority species. Both records pertain to land to the south-west of Hook Norton approximately 1.6km south-west of the site.

3.4.11.2 No records of Hazel Dormouse or other protected or notable species were provided for the desk study area.

## 3.5 Planning Policies

3.5.1 Current local planning policy for the district of Cherwell consists of the saved policies from the Cherwell Local Plan, adopted in 1996. Relevant policies relating to nature conservation and the environment include:

**C1 – Protection of sites of nature conservation value**

*"The council will seek to promote the interests of nature conservation. Development which would result in damage to or loss of sites of special scientific interest or other areas of designated wildlife or scientific importance will not normally be permitted. Furthermore, the council will seek to ensure the protection of sites of local nature conservation value. The potential adverse effect of development on such sites will be a material consideration in determining planning applications."*

**C2 – Development affecting protected species**

*"Development which would adversely affect any species protected by Schedule 1, Schedule 5 and Schedule 8 of the 1981 wildlife and countryside act, and by the E.C. Habitats Directive 1992 will not normally be permitted."*

**C4 – Creation of new habitats**

*"The council will seek to promote the creation of new habitats. In urban areas the council will promote the interests of nature conservation within the context of new development and will establish or assist with the establishment of ecological and nature conservation areas, where such areas would further the opportunity for environmental education and passive recreation and would not conflict with other policies in the plan."*

## 4 PHASE 1 HABITAT SURVEY

### 4.1 General description

4.1.1 The results of the Phase 1 habitat survey are presented in map form with target notes (represented by numbered dots) in *Appendix B*. A brief non-technical description of the habitats and features of the site is given below. Numbers in brackets refer to target notes.

4.1.2 In general terms, the site comprises the western half of an intensively farmed arable field located upon the site of a disused opencast ironstone quarry. The margins of the site mostly comprise steep banks with exposed rock and earth supporting secondary regenerated scrub and trees.

### 4.2 Arable farmland

4.2.1 The site comprises the western half of an intensively farmed arable field which at the time of survey supported a Barley *Hordeum vulgare* crop (1). Occasional Potato *Solanum tuberosum* plants were recorded growing in the field margins which suggests that the field is used for growing a variety of crops. The margins of the field within the site were narrow (1-2m) and were either very sparse where shaded by boundary scrub and trees or were dominated by dense ruderal vegetation and grasses.

### 4.3 Scrub and trees

4.3.1 As a result of the site's previous use as an opencast ironstone quarry, the south-western, western and northern boundaries of the site comprise steep 2m high banks, which now support secondary regenerated scrub and trees. The western (4) and northern boundaries (3) are generally steep and undercut with exposed stone whilst the bank at the western end of the southern site boundary (2) slopes a little more gently up to the verge of Station Road.

4.3.2 The banks supported mostly outgrown scrub and young trees with frequent early mature trees and a small number of larger mature trees. The dominant scrub species on the south-western bank (1) was Hawthorn *Crataegus monogyna* and on the western boundary Ash *Fraxinus excelsior*. Other frequent species included Blackthorn *Prunus spinosa*, Elder *Sambucus nigra*, Horse Chestnut *Aesculus hippocastanum* with occasional Hazel *Corylus avellana* and Pedunculate Oak *Quercus robur*. Tree species included Norway Maple *Acer platanoides*, Sycamore *Acer pseudoplatanus*, Holly *Ilex aquifolium*, Red Oak *Quercus rubra* and Ash. The northern boundary also supported Field Maple *Acer campestre*, Elm *Ulmus procera* and Crab Apple *Malus sylvestris*. On the southern boundary (2) at the top of the embankment along the verge of Station Road, dense stands of Blackthorn and Bramble *Rubus fruticosa* agg. scrub occur.

4.3.3 The ground flora within the scrub and tree margins was often very sparse due to overshading and dominated by Nettle *Urtica dioica* and Ivy *Hedera helix*. Other less frequent species present on the site margins included Cleavers *Galium aparine*, Wood Avens *Geum urbanum*, Hogweed *Heracleum sphondylium*, Perennial Ryegrass *Lolium perenne*, Yorkshire Fog *Holcus lanatus*, Couch Grass *Elymus repens*, Garlic Mustard *Alliaria petiolata*, Great Willowherb *Epilobium hirsutum*, Herb Robert *Geranium robertianum*, Field Bindweed *Convolvulus arvensis* and Lords-and-Ladies *Arum maculatum*.

**4.4 Hedgerow**

4.4.1 At the eastern end of the southern boundary the gradient between the site and Station Road levels out (3). A defunct hedgerow runs along the southern site boundary at the eastern end and comprises a line of scattered Hazel, Elder and Hawthorn. Mature, outgrown Hawthorn and Elder trees occur in the south-eastern corner of the site.

**4.5 Tall ruderals**

4.5.1 A significant area of tall ruderal vegetation occurs adjacent to the south-eastern defunct hedgerow (3). The site margin and road verge at this location are dominated by Nettles with abundant Creeping Thistle *Cirsium arvense*, Cocksfoot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Hogweed, Creeping Bent *Agrostis stolonifera*, Hedge Bindweed, Burdock *Arctium* sp., Broad-leaved Dock *Rumex obtusifolius*, Rosebay Willowherb *Chamerion angustifolium* and Bittersweet *Solanum dulcamara*.

**4.6 Other Habitats**

4.6.1 The northern verge of Station Road to the south of the site is dominated by managed species-poor amenity grassland with occasional trees including Silver Birch *Betula pendula* and Norway Maple.

4.6.2 In the south-west corner of the site is an opening to a disused tunnel beneath Station Road (7), associated with the ironstone quarry. The tunnel opening has been completely blocked up.

## 5 PROTECTED AND NOTABLE SPECIES

**5.1 Bat Scoping Survey**

*Phase 1 tree survey*

5.1.1 A mature Red Oak tree located along the southern boundary of the site was assessed as having BCT Category 2 (BCT, 2012) potential to support roosting bats. The location of this tree is shown on the plan in *Appendix B*. There are very few other mature trees within the site and a number of early-mature trees and mature hedgerow shrubs, all of which were assessed as having negligible (BCT Category 3) roost potential.

5.1.2 There are no built structures within the site other than the opening to the disused tunnel beneath Station Road in the south-western corner of the site. The tunnel opening is completely blocked up and there are no suitable crevices or access points for roosting bats to enter from the northern end.

*Foraging and commuting habitat*

5.1.3 The arable land dominating the site offers low quality habitat for foraging bats. Outgrown scrub and tree habitats and on the southern, western and northern boundaries of the site however provide suitable opportunities for foraging and commuting bats although the importance of the site for the local bat population is likely to be limited due to its small extent and the relative abundance of suitable foraging and commuting habitat in the wider area.

**5.2** [redacted]

5.2.1 [redacted]

**5.3 Great Crested Newts**

5.3.1 There is no standing water within the site which could provide suitable Great Crested Newt breeding habitat. The intensively farmed arable land dominating the site is considered highly suboptimal for Great Crested Newts and the narrow site margins supporting scrub, ruderal vegetation and trees provide very limited areas of suitable terrestrial habitat within the site itself.

5.3.2 A review of the 1:10,000 OS plan for the area suggests that the nearest pond to the site is located approximately 180m to the south but is relatively isolated from the site by residential development and Station Road. Other ponds within 500m of the site are located approximately 250m north, 300m east and 300m south-east of the site, which are beyond the typical maximum migratory distance of Great Crested Newt during terrestrial phases (Cresswell and Whitworth, 2004). Substantial areas of suitable terrestrial habitat are located in the vicinity of these ponds. In addition, the pond located to the north of the site is a large permanent waterbody with fish, which are predatory to newt larvae and eggs, and so it is considered to provide suboptimal breeding habitat for Great Crested Newt.

5.3.3 In view of the above, it is considered highly unlikely that Great Crested Newts are present within the site during their aquatic or terrestrial phases.

**5.4 Dormouse**

5.4.1 No evidence of Dormouse was recorded during the survey. Potentially suitable Dormouse habitat is limited to the boundaries of the site included dense and scattered scrub and trees. These habitats are however considered sub-optimal for Dormice due to their relatively recent establishment and dominance of species less favoured by foraging Dormice. The site is also fairly isolated from areas of higher quality Dormouse habitat in the wider area such as ancient broad-leaved woodland. In addition, the distribution of Dormouse is generally well documented and no records were provided by TVERC for the desk study area. In view of this, it is considered highly unlikely that this species is present within the site.

**5.5 Birds**

5.5.1 The arable land, scrub, trees and hedgerow within the site offer nesting and foraging opportunities for a number of bird species. It is likely that the site supports a number of breeding birds typical of garden, farmland and woodland edge habitats, although due to the limited extent of these habitats and the abundance of similar habitat in the wider area the site is unlikely to be of local importance for this group.

**5.6 Reptiles**

5.6.1 The arable land dominating the site is generally unsuitable for reptiles. The narrow margins of the arable field including scrub, ruderal vegetation and grasses provide a very narrow strip of habitat suitable for common and widespread reptile species. Due to the limited extent of the available habitat and relative abundance of similar opportunities in the surrounding area, any populations of reptiles present are unlikely to be of local interest.

**5.7 Invertebrates**

5.7.1 The site is dominated by an intensively managed arable field with narrow margins of scrub, trees and ruderal vegetation. These habitats are generally limited in diversity and are relatively abundant within the local area. Although the site comprises part of a disused quarry which can provide habitats suitable for a range of invertebrate species, areas of exposed stone and earth are generally limited to the tops of embankments on the western and northern site boundaries, which are considered unlikely to provide habitat of local interest to invertebrates. It is therefore considered unlikely that the site supports a notable invertebrate assemblage in a local context.

## 6 NATURE CONSERVATION EVALUATION

6.1 The habitats within the site have been assessed against the findings of the Phase 1 Habitat Survey, the [redacted] and the Phase 1 Bat scoping survey with consideration given to the criteria summarised in *Appendix C* of this report (Ratcliffe 1977; IEEM 2006). A summary of the site habitat evaluation is given in Table 1. Numbers in brackets refer to target notes.

**Table 1**: Site Habitat Evaluation

| Value | Habitats Present |
|---|---|
| **International** | None |
| **National** | None |
| **Regional** | None |
| **County** | None |
| **District** | None |
| **Local** | Moderate - Boundary scrub, hedgerow and trees (2,3.4,5) |
| **Negligible** | All other habitats recorded |

6.2 Current knowledge suggests that there are no habitats of International, National, Regional, County or District conservation importance within the site.

6.3 The habitat of highest nature conservation interest associated with the site is the network of linear scrub and tree habitats along the southern, western and northern boundaries of the site, which in combination are considered to be of **moderate local** nature conservation value. Although these features are not exceptionally botanically diverse and support frequent naturalised species, and individually are likely to be of only low local value in their own right, they provide potential habitat for a range of species, appreciably enhance the nature conservation interest of the site and in combination contribute to a wider network of linear semi-natural habitats facilitating the movement of wildlife across the site and surrounding countryside.

6.4 Current knowledge suggests that all other habitats associated with the site including the arable land with narrow field margins, ruderal vegetation and amenity grassland are of less than local/ negligible nature conservation interest in their own right. Where appropriate, consideration of the potential presence of protected or notable species is given below.

## 7 RECOMMENDATIONS

7.1 This section describes any further survey and mitigation requirements identified during the extended Phase 1 Habitat Survey, [redacted] and Phase 1 Bat Scoping Survey. It also provides recommendations for ecological enhancements to be incorporated into the development design in accordance with planning policy and guidance and the 2006 NERC Act.

### 7.2 Habitats

7.2.1 The majority of the site, comprising arable land with narrow field margins supporting ruderal vegetation and grasses, is considered to be of negligible nature conservation interest in its own right. Habitats of nature conservation interest do however exist on the site margins including the linear scrub and tree habitats on southern, western and northern site boundaries, including the south-eastern defunct hedgerow. In combination, these features are considered to be of moderate local value as they appreciably enrich the nature conservation interest of the site and its immediate surrounds, provide habitat for a range of species and contribute to a network of habitats facilitating the movement of wildlife across the site and the wider area.

7.2.2 Where possible, development proposals should seek to retain scrub, hedgerow and trees on the site boundaries. If these habitats cannot be retained (e.g. for site access), then any loss should be minimised and mitigated through provision of suitable replacement habitats at appropriate locations elsewhere within the site to maintain current levels of connectivity around the site margins. The development should also give consideration to the potential presence of protected species within the site which may use these habitats such as birds and reptiles. This is discussed further in *Section 7.3* below.

7.2.3 Development proposals should also seek to enhance the site to provide new opportunities for wildlife in accordance with national and local planning policy and guidance (NPPF, 2012; ODPM, 2005) and the 2006 NERC Act. Opportunities arising from development of the site for the enhancement of retained habitats and creation of new habitats are identified in *Section 7.4*.

### 7.3 Protected Species

7.3.1 Recommendations relating to protected species identified as potentially occurring at the site are provided below.

#### Bats

7.3.2 It is understood that the Red Oak tree, located on the southern boundary of the site, which was identified as having potential to support roosting bats will be retained as part of the proposed scheme. In the event that this Category 2 tree or an individual tree feature with

bat roosting potential needs to be felled (e.g. for reasons of health and safety), it should be first subject to appropriate surveys, a climbing inspection and/or be soft felled in accordance with BCT 2012 Guidelines in order to ensure compliance with UK nature legislation.

7.3.3 Due to the limited extent of the habitats present, it is unlikely that the site is of importance to the local bat population. Notwithstanding this, the field margins, scrub, hedgerow and trees located around the boundaries of the site provide opportunities for foraging and commuting bats. In view of the development proposals for the site however, it is likely that the vast majority of this habitat will be retained other than a short section of scrub on the southern site boundary to provide road access to the development.

7.3.4 It is recommended that the lighting scheme for the site be designed to minimise light spill onto the site boundaries and any new and retained natural areas to maintain the integrity of foraging and commuting habitat for bats and other nocturnal wildlife. Consideration should be given to the use of directional, hooded and low level lighting where appropriate, whilst maintaining a minimum level required for safety, and it is recommended that the lighting scheme for the site is developed in consultation with a suitably qualified ecologist at the detailed design stage.

7.3.5 [redacted]

**Birds**

7.3.6 The site is considered unlikely to support an important assemblage of breeding birds and no further survey for this group is recommended. Notwithstanding this, removal of trees, scrub, hedgerow and ground vegetation should avoid the bird breeding season (generally taken as March to September inclusive), as wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended). In the event that vegetation clearance is required during this period (for example, to facilitate vegetation removal within the reptile active season) a search for nesting birds should be undertaken by a suitably qualified ecologist immediately prior to vegetation removal. In the event that breeding birds

are discovered, sufficient habitat will need to be retained to ensure birds are not disturbed until nesting activity has been completed and the nest vacated.

**Reptiles**

7.3.7 It is considered unlikely that the site would support locally significant numbers of reptiles and no further survey with respect to this group is proposed at this time. Notwithstanding this, any development works affecting limited areas of potential reptile habitat including scrub, hedgerow, ruderals and rough grass on the site margins, should give due regard to the legislation protecting common and widespread reptile species i.e. protection against injury and killing. This could be achieved through the displacement of any reptiles present into areas of retained habitat within and adjacent to the site prior to construction works commencing through the following approach:

- Progressive removal of suitable low-lying vegetation, including long grass, scrub and ruderals, using hand-held tools. The final stages of clearance to ground level should take place during suitable climatic conditions at a time of year when reptiles are active (generally April to September inclusive).
- Dismantling of any potential hibernacula or refugia by hand, including compost heaps and log piles.
- Where appropriate, ground level clearance work should be carried out under the supervision of a suitably qualified ecologist who would relocate any reptiles encountered to an area of suitable retained habitat within the site.
- Following the clearance of vegetation, the vegetation should be maintained at ground level to prevent recolonisation prior to works commencing.

## 7.4 Enhancements

7.4.1 Notwithstanding the limited nature conservation value of the site, development proposals should seek to enhance the site to provide new opportunities for wildlife in accordance with national and local planning policy and guidance (NPPF, 2012; ODPM, 2005) and the 2006 NERC Act. A selection of measures is given below which could be included to increase the long-term nature conservation interest of the site and provide enhanced habitat for protected and notable species:

- Creation of new wetland habitats as part of the SuDS proposals. This could include a selection of ditches, swales, ponds, reedbeds and/or wet grassland habitats.
- Inclusion of habitats of high nature conservation interest within areas of open space including meadow grassland and native species-rich scrub and trees;
- Enhancement of existing boundary scrub/tree habitats through sensitive management, infilling of gaps in hedgerows and complimentary adjacent scrub and tree planting using native species appropriate to the local area;

- Prioritise use of native species typical of the local area in landscape planting where appropriate to do so and avoid invasive species and cultivars. Where possible these should be sourced from stock of local provenance;
- Provision of new opportunities for movement of wildlife within and across the site through strengthening of existing or creation of new hedgerows and treelines, and corridors of semi-natural habitat;
- Provision of bat roosting opportunities and bird boxes, including boxes suitable for Swifts, on new buildings and retained trees;
- Provision of log and brash piles around the site boundaries to provide refuge and hibernation habitats for invertebrates, amphibians and reptiles; and
- Use of nectar- and pollen-rich and fruit- and nut-producing species within formal landscaping schemes.

## 8 CONCLUSION

8.1 Current knowledge suggests that there are no areas of National, Regional, County or District nature conservation importance on the site. The majority of the site is considered to be of less than local or negligible nature conservation value, being dominated by intensively farmed arable land with narrow margins of ruderals and grasses. Embankments on the southern, western and northern boundaries of the site supporting outgrown scrub and trees, and the defunct hedgerow along the south-east boundary are considered in combination to be of moderate local interest and development proposals should seek to retain and where appropriate enhance these habitats wherever possible or provide suitable replacement opportunities for wildlife at appropriate locations within the site.

8.2 In addition to this, it will be necessary to avoid conflict with nature conservation legislation relating to protected species that potentially occur at the site, and where possible provide new opportunities for wildlife within the development proposals in accordance with planning policy and the 2006 NERC Act. This could be achieved through implementation of the impact avoidance and enhancement measures described in *Section 7* of this report.

8.3 Subject to the implementation of the recommendations outlined in *Section 7* to avoid impacts on common and widespread protected and notable species and the maintenance of habitat connectivity provided by boundary scrub, hedgerow and trees, no significant loss of ecological interest of the site is likely to arise as a result of the site's development. Furthermore, subject to the implementation of opportunities for provision of new habitat for wildlife outlined in *Section 7.4*, development of the site could enhance the current habitat resource provided by the site. It is therefore concluded that, beyond the normal

requirements to avoid impacts on protected species, there appear to be no overriding nature conservation constraints that would preclude development of the site.

## 9 REFERENCES


Bat Conservation Trust (2007) *Bat Surveys: Good Practice Guidelines.* Bat Conservation Trust, London.

Bright, P. Morris, P. & Mitchell-Jones, T. (1996) *The Dormouse Conservation Handbook.* English Nature, Peterborough.

Cresswell, W. and Whitworth, R. (2004). *English Nature Research Reports, Number 576: An Assessment of the Efficiency of Capture Techniques and the Value of Different Habitats for the Great Crested Newt* Triturus cristatus. English Nature, Peterborough.

Department for Communities and Local Government (2012) *National Planning Policy Framework (NPPF).*

Froglife (1999) *Reptile survey. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation.* Froglife Advice Sheet 10. Froglife, Halesworth.

Harris S, Cresswell P and Jefferies D (1991) *Surveying Badgers.* The Mammal Society, Bristol.

IEEM (2006) *Guidelines for Ecological Impact Assessment: June 2006*. Institute of Ecology and Environmental Management.

Joint Nature Conservation Committee (2007) *Handbook for Phase 1 Habitat survey: a technique for environmental audit*. JNCC, Peterborough.

MAGIC (2011) *Interactive Map.* Available from: http://magic.defra.gov.uk/website/magic/ [Accessed October 2014].

ODPM (2005) *Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system.* Office of the Deputy Prime Minister, August 2005.

Ratcliffe, D.A. (ed.) (1977) *A Nature Conservation Review, Vols. 1 and 2*. Cambridge University Press, Cambridge.

Royal Society for the Protection of Birds (2009) *Birds of Conservation Concern 3*. RSPB, Bedfordshire.

Stace, C. (1997) *New Flora of the British Isles (Second edition).* Cambridge University Press, Cambridge.

Spellerberg, I.F. (1992) *Evaluation and Assessment for Conservation.* Chapman & Hall, London.

UKBAP (2007) *UK Biodiversity Action Plan*. UK Biodiversity Partnership. Available from: http://www.ukbap.org.uk.

Usher, M.B. (ed.) (1986) *Wildlife Conservation Evaluation.* Chapman & Hall, London.

**HDA Document Control and Quality Assurance Record**

Project Title: Station Road, Hook Norton: Ecology
Project Reference: 723.2
Document Title: Ecological Appraisal
Commissioning Party: Nursery Ground Ltd

| Issue | Description | Date of Issue | Signed |
|---|---|---|---|
| 1 | Ecological Appraisal | October 2014 |  |
| 2 | | | |
| 3 | | | |

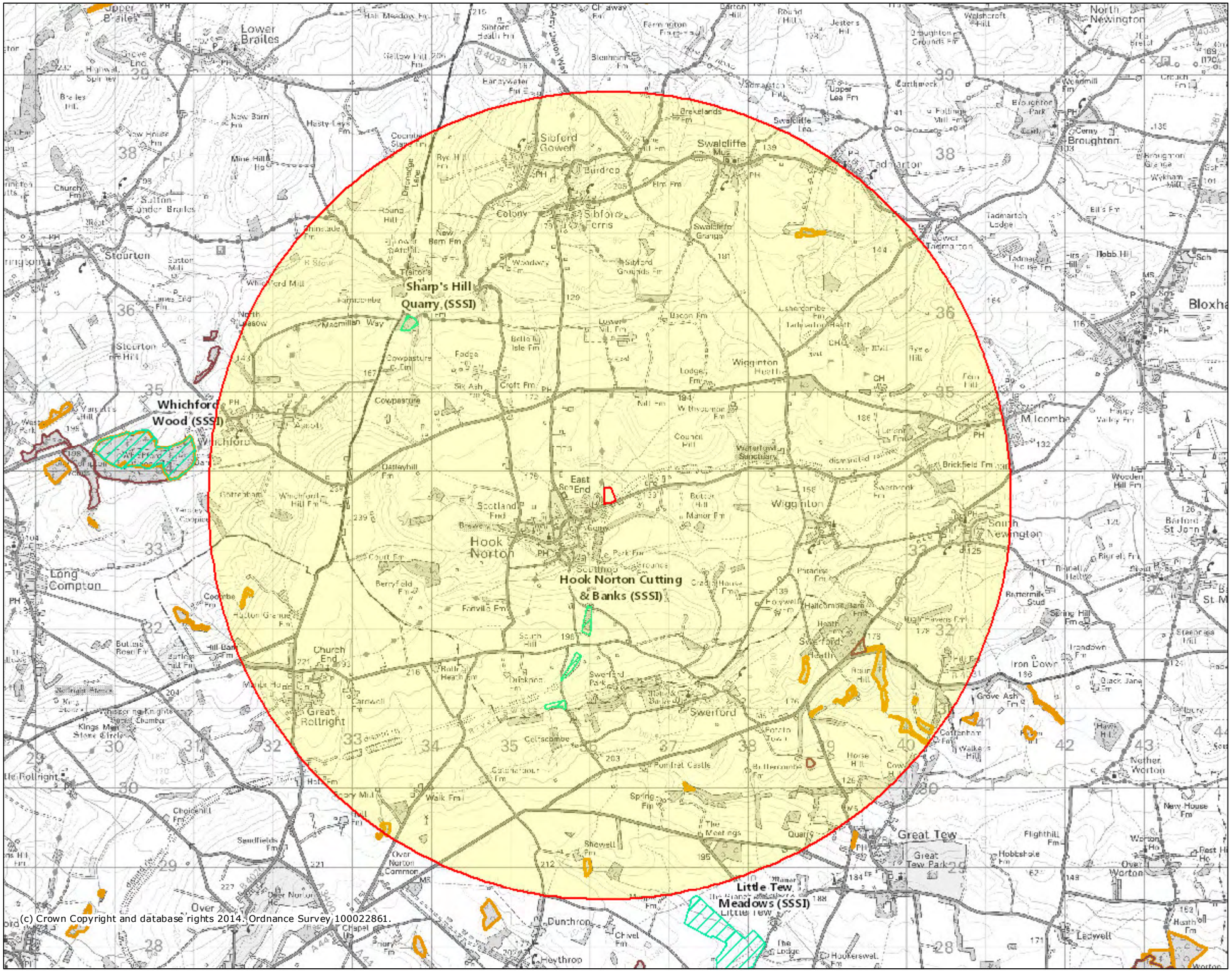
| | Personnel | Position |
|---|---|---|
| Author | Alex Leishman GradIEEM | Ecologist |
| Approved for issue | Adrian Meurer MIEEM | Director |

**APPENDIX A**

**Desk Study Results**

MAGIC

# Designated sites within 5km




## Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36
xmin = 428200
ymin = 228000
xmax = 444400
ymax = 239600
Map produced by MAGIC on 26 September, 2014.

**COUNTY:** OXFORDSHIRE **SITE NAME:** HOOK NORTON CUTTING AND BANKS

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

**Local Planning Authorities:** Cherwell District Council

**National Grid Reference:** SP360320

**Ordnance Survey Sheet 1:50,000:** 151 **1:10,000:** SP33 SE

**Date Notified (Under 1949 Act):** 1971 **Date of Last Revision:** 1977

**Date Notified (Under 1981 Act):** 1986 **Date of Last Revision:**

**Area:** 6.8 ha 16.7 ac

**Other information:** Site boundary revised in 1972 and 1985.

## Description and Reasons for Notification

(a) Geological

Jurassic rock sections here form the type-section of the widely recognised late Bajocian/early Bathonian 'Hook Norton Member' of the Chipping Norton Formation. The cuttings are amongst the most important sections of the formation in existence, particularly as they lie in the type-area of this rock unit. They are of considerable regional stratigraphic importance, potentially exhibiting a section from the top of the Upper Lias (Toarcian) up to at least the Sharp's Hill Formation (Middle Bathonian). The section is a vital one for understanding some of the fundamental changes which occur within the Middle Jurassic successions as they are traced from the Gloucestershire/Oxfordshire area into the east Midlands.

(b) Biological

This site contains a variety of sheltered, semi-natural and man-made habitats associated with the limestone outcrops all within a comparatively small area. It is of particular interest for its calcareous grassland flora, and bee and butterfly fauna, which include rare and uncommon species.

Unimproved species-rich calcareous grassland covers most of the slopes of the southernmost section. The community is dominated by upright brome *Bromus erectus*, false oat grass *Arrhenatherum elatius*, common quaking grass *Briza media* and glaucous sedge *Carex flacca*. Common broadleaved species include field scabious *Knautia arvensis*, burnet saxifrage *Pimpinella saxifraga*, bird's-foot trefoil *Lotus corniculatus*, cowslip *Primula veris*, ox-eye daisy *Leucanthemum vulgare* and centaury *Centaurium erythraea*. Kidney vetch *Anthyllis vulneraria* and wild carrot *Daucus carota* are notably abundant.

The railway track (from which the ballast was never removed) possesses a distinctive flora which includes woolly thistle *Cirsium eriophorum*, common spotted orchid *Dactylorhiza fuchsii* and basil thyme *Acinos arvensis* in the southern section and rosebay willowherb *Epilobium angustifolium*, common figwort *Scrophularia nodosa*, nettle *Urtica dioica*, meadow cranesbill *Geranium pratense*, hedgerow cranesbill *G. pyrenaicum* and brooklime *Veronica beccabunga* in the damper northern section.

The retaining walls along the railway track support lichens which include *Caloplaca aurantia, Lecanora calcarea* and *Xanthoria parietina*. Rue-leaved saxifrage *Saxifraga tridactylites* and biting stonecrop *Sedum acre* also occur. Berms extending back from the walls in the southern section support the uncommon mosses *Polytrichum piliferum, Racomitrium heterostichium* and *R. lanuginosum*.

**COUNTY:** OXFORDSHIRE **SITE NAME:** SHARP'S HILL QUARRY

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

**Local Planning Authorities:** Cherwell District Council, Oxfordshire County Council

**National Grid Reference:** SP338359

**Ordnance Survey Sheet 1:50,000:** 151 **1:10,000:** SP33 NE

**Date Notified (Under 1949 Act):** 1955 **Date of Last Revision:** 1977

**Date Notified (Under 1981 Act):** 1986 **Date of Last Revision:**

**Area:** 2.4 ha 5.8 ac

## Description and Reasons for Notification

Sharp's Hill Quarry is the type locality and one of the finest exposures of the richly fossiliferous Sharp's Hill Formation (probably corresponds with the *progracilis* Zone). The underlying Lower Bathonian Chipping Norton Formation ('Swerford Beds' Facies) is also present in the section. The site is critical for the sedimentological and stratigraphical interpretation of the north Oxfordshire Bathonian succession and for lithostratigraphic correlation between Oxfordshire and Northamptonshire. Snails from the so-called *'Viviparus* Marl' of Sharp's Hill were once the subject of a considerable controversy over the freshwater/marine palaeoautecology (habitat preference) of *Bathonella (Viviparus)*.

Since the closure of the railway in 1965, scrub, principally of hawthorn, blackthorn and brambles has spread into the cutting from boundary hedges. The reversion to woodland is apparent on the steep slopes of the north section of the cutting which are covered by mature secondary woodland dominated by ash and pedunculate oak with occasional field maple and sycamore. The shrub layer is mainly of crack willow, sallow, hawthorn and brambles. Areas of scree within the wood support male fern *Dryopteris filix-mas*, hart's-tongue *Phyllitis scolopendrium*, bracken *Pteridium aquilinum* and ploughman's spikenard *Inula conyza*. On the lower slopes some grassland species survive, including adder's tongue *Ophioglossum vulgatum* and wild basil *Clinopodium vulgare*.

Hook Norton Cutting is notable for its bee fauna. One species, *Andrena bucephala*, is recorded from only three other sites in Britain. The site is unusual in having eight species of the genus *Lasioglossum* (family Halictidae) occurring in close proximity. Butterflies recorded include marbled white, meadow brown, dark green fritillary and white-letter hairstreak.

Forty-seven species of bird have been recorded of which greater spotted woodpecker, green woodpecker, cuckoo, garden warbler, blackcap, whitethroat, lesser whitethroat and goldcrest are thought to breed.

Common lizards occur in open areas and badgers are active with setts present in the north section of the cutting.

Hook Norton Bank is an area of steep, south facing, close-grazed limestone grassland by the River Swere. The herb-rich sward includes abundant autumn felwort *Gentianella amarella*, common eyebright *Euphrasia nemorosa*, harebell *Campanula rotundifolia*, clustered bellflower *C. glomerata*, horseshoe vetch *Hippocrepis comosa*, common rockrose *Helianthemum nummularium*, basil thyme *Acinos arvensis*, devil's-bit scabious *Succisa pratensis*, carline thistle *Carlina vulgaris*, dropwort *Filipendula vulgaris* and mouse-ear hawkweed *Hieracium pilosella*. Bee orchids *Ophrys apifera* occur on the eastern side of the bank.

At the base of the slope the grass is tall and dominated by water mint *Mentha aquatica* with hard rush *Juncus inflexus*, hairy sedge *Carex hirta*, hairy bird's-foot trefoil *Lotus subbiflorus* and marsh marigold *Caltha palustris*.

The hedge at the western end of the field includes buckthorn, English elm, blackthorn and elder.

Invertebrates recorded from the limestone areas include the butterflies small blue, large skipper and small skipper, and the molluscs *Monacha cantiana* and *Helicella itala*, the latter being typically associated with dry calcareous grassland with a long stable history.

# Biodiversity Report

Site: Land north of Station Road, Hook Norton

TVERC Ref: O142.14

Prepared for: Hankinson Duckett Associates

Date: 19th August 2014

By Thames Valley Environmental Records Centre

TVERC

# 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 records (2 km search area)
- ☑ Species status key
- ☑ Data origin key

### DESIGNATED WILDLIFE SITE INFORMATION:

- ☑ A map of designated wildlife sites (2 km search area)
- ☑ Descriptions/citations for designated wildlife sites
- ☑ Designated wildlife sites guidance

## TERMS AND CONDITIONS



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

# DATA STATEMENTS

## 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) You can use the following email contacts chairman@oos.org.uk (the chairman) and 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 Group | Common Name | Scientific name | Abundance and/or Sex/Stage | Date | Grid Ref | Grid Ref. Qualifier | Location | Further Location Information | Type of Record | Comment | Data Origin | European Directives | UK Legislation | Priority NERC S.41 | Other Designations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| amphibian | Common Frog | Rana temporaria | | 1977 - 1987 | SP358328 | | Southdrop Pasture | | field record | | BBOWT | HabDir-A5 | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Common Frog | Rana temporaria | | 08/08/2006 | SP35773312 | | Hook Norton Stream (Bottom of gardens on Well Bank) | | field record | | EA | HabDir-A5 | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Common Frog | Rana temporaria | 2 Adults | 10/10/2006 | SP36643350 | | Hook Norton Stream (Stream along bottom of Moors House Garden to confluence with trib from N) | | field record | | EA | HabDir-A5 | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Common Frog | Rana temporaria | 3 | 22/07/2009 | SP369329 | | Cradle and Grounds Farm Banks | Small field | | Juveniles | OLWS | HabDir-A5 | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Common Frog | Rana temporaria | 1 | 22/05/2010 | SP35943209 | | Hook Norton | | | seen during Butterfly Transect | BBOWT | HabDir-A5 | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Common Toad | Bufo bufo | Adults | 23/06/2003 | SP361328 | | Hook Norton | | field record | | OBRC | | WACA-Sch5_sect9.5a, 9.5b | NERC S.41 | |
| amphibian | Common Toad | Bufo bufo | 1 | 24/04/2011 | SP35943209 | | Hook Norton | | | | BBOWT | | WACA-Sch5_sect9.5a, 9.5b | NERC S.41 | |
| amphibian | Great Crested Newt | Triturus cristatus | | 1977 - 1987 | SP362328 | | Cradle and Grounds Farm Banks | GROUNDS FARM PASTURE WEST (3632) | field record | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| amphibian | Smooth Newt | Lissotriton vulgaris | | 14/10/1993 | SP360325 | | Hook Norton Cutting Reserve | North Embankment | field record | | LN | | WACA-Sch5_sect9.5a, 9.5b | | |
| amphibian | Smooth Newt | Lissotriton vulgaris | | 14/10/1993 | SP360325 | | Hook Norton Cutting Reserve | North Embankment | field record | | LN | | WACA-Sch5_sect9.5a, 9.5b | | |
| bird | Barn Swallow | Hirundo rustica | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | | | | Bird-Amber |
| bird | Barn Swallow | Hirundo rustica | | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | | Bird-Amber |
| bird | Common Bullfinch | Pyrrhula pyrrhula | 5 | 14/12/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | NERC S.41 | Bird-Amber |
| bird | Common Bullfinch | Pyrrhula pyrrhula | | 12/01/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | NERC S.41 | Bird-Amber |
| bird | Common Bullfinch | Pyrrhula pyrrhula | | 11/05/2009 | SP35943209 | | Hook Norton | | field record | | BBOWT | | | NERC S.41 | Bird-Amber |
| bird | Common Kestrel | Falco tinnunculus | 1 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | | Bird-Amber |
| bird | Common Linnet | Carduelis cannabina | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | | | NERC S.41 | Bird-Red |
| bird | Common Swift | Apus apus | Nest | 01/05/2008 - 31/08/2008 | SP35363314 | | Houses opposite Baptist Church, Netting St, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | Pair | 01/05/2009 - 30/07/2009 | SP35363314 | | Houses opposite Baptist Church, Hook Norton | | field record | exact breeding site not known | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | Pair | 01/05/2009 - 30/07/2009 | SP355329 | | North side of Burycroft Road, Hook Norton | | field record | exact breeding site not known | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | Pair | 01/05/2009 - 30/07/2009 | SP35633332 | | Redlands Farmhouse, Chapel Street, Hook Norton | | nest | nest site/s identified | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 01/05/2010 - 30/07/2010 | SP35333315 | | Glyndwr House, Netting Street, Hook Norton | | nest | nest site/s identified | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 01/05/2010 - 30/07/2010 | SP3552332880 | | Boswells, Bury Croft Road, Hook Norton | | nest | nest site/s identified | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | 2 Breeding Pairs | 01/05/2010 - 30/07/2010 | SP3558833149 | | The Village Shop, High Street, Hook Norton | | nest | nest site/s identified | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | 4 Breeding Pairs | 01/05/2010 - 30/07/2010 | SP35633332 | | Redlands Farmhouse, Chapel Street, Hook Norton | | nest | nest site/s identified | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35333315 | | Glyndwr House, Netting Street, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35503309 | | Haymakers, High street, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP3552332880 | | Boswells, Burycroft, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35573314 | | Dial House, High Street, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35593315 | | Village shop, High Street, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35633332 | | Redlands Farmhouse, Chapel Street, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP35703347 | | Alpine Cottage, Sibford Road, Hook Norton | | nest | | LN | | | | Bird-Amber |
| bird | Common Swift | Apus apus | | 2012 | SP3833 | 1 km record | Wiggington | | field record | 1km square record. Parish surveyed. Swifts recorded in 2012 but do not seem to be breeding | LN | | | | Bird-Amber |
| bird | Eurasian Hobby | Falco subbuteo | 1 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | WACA-Sch1_part1 | | |
| Bird | European Turtle Dove | Streptopelia turtur | 1 | 17/06/2004 | SP3533 | 1 km record | Hook Norton | | Field Record | garden of HN Manor | OOS | | | NERC S.41 | Bird-Red |
| bird | Fieldfare | Turdus pilaris | | 12/01/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | WACA-Sch1_part1 | | Bird-Red |

| Taxon Group | Common Name | Scientific name | Abundance and/or Sex/Stage | Date | Grid Ref | Grid Ref. Qualifier | Location | Further Location Information | Type of Record | Comment | Data Origin | European Directives | UK Legislation | Priority NERC S.41 | Other Designations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| bird | Fieldfare | Turdus pilaris | | 14/12/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | WACA-Sch1_part1 | | Bird-Red |
| bird | Green Woodpecker | Picus viridis | | 1977 - 1987 | SP347325 | | Flanville Head Bank | | field record | | BBOWT | | | | Bird-Amber |
| bird | Green Woodpecker | Picus viridis | | 09/02/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | | Bird-Amber |
| bird | Green Woodpecker | Picus viridis | | 09/06/2006 | SP35943209 | | Hook Norton | | | | BBOWT | | | | Bird-Amber |
| bird | Green Woodpecker | Picus viridis | 1 | 22/07/2009 | SP366328 | | Cradle and Grounds Farm Banks | Lowland meadow | | | OLWS | | | | Bird-Amber |
| bird | Green Woodpecker | Picus viridis | | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | | Bird-Amber |
| bird | Hedge Accentor | Prunella modularis | | 09/02/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | NERC S.41 | Bird-Amber |
| bird | Hedge Accentor | Prunella modularis | 1 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | NERC S.41 | Bird-Amber |
| bird | Lesser Black-backed Gull | Larus fuscus | | 12/01/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | | Bird-Amber |
| bird | Song Thrush | Turdus philomelos | | 09/02/2003 | SP35963211 | | Hook Norton | | | | BBOWT | | | NERC S.41 | Bird-Red |
| bird | Song Thrush | Turdus philomelos | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | | | NERC S.41 | Bird-Red |
| bird | Song Thrush | Turdus philomelos | 2 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | | NERC S.41 | Bird-Red |
| Bird | Spotted Flycatcher | Muscicapa striata | 2 | 30/06/2004 | SP3533 | 1 km record | Hook Norton | | Field Record | feeding 4 young | OOS | | | NERC S.41 | Bird-Red |
| bird | Yellowhammer | Emberiza citrinella | | 1977 - 1987 | SP358328 | | Southdrop Pasture | | field record | | BBOWT | | | NERC S.41 | Bird-Red |
| Bird | Yellowhammer | Emberiza citrinella | 10 | 17/07/2003 | SP3432 | 1 km record | Hook Norton | | Field Record | | OOS | | | NERC S.41 | Bird-Red |
| bird | Yellowhammer | Emberiza citrinella | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | | | NERC S.41 | Bird-Red |
| bird | Yellowhammer | Emberiza citrinella | | 22/07/2009 | SP366328 | | Cradle and Grounds Farm Banks | Lowland meadow | | | OLWS | | | NERC S.41 | Bird-Red |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 16/08/2005 | SP35733308 | | Hook Norton, Old Rectory Garden | | | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35043318 | | Hook Norton Stream (behind Pear Tree Cottage and PH.) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35293298 | | Hook Norton Stream (Field behind St Valentine House W. of footbridge) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35313296 | | Hook Norton Stream (Field behind St Valentine House W. of footbridge) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35633301 | | Hook Norton Stream (Footbridge from Woodbine cottage, east past the 2 stone road bridges.) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35743308 | | Hook Norton Stream (Behind Endeavour, Old Rectory & Brooklands) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP35873320 | | Hook Norton Stream (Down stream of stone bridge, Pews Close) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 08/08/2006 | SP36193329 | | Hook Norton Stream (East of old ruined railway viaduct) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | 7 Adults | 10/10/2006 | SP36313337 | | Hook Norton Stream (along western field of 3 along Cutting, downstream of viaduct pillars) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 10/10/2006 | SP36643350 | | Hook Norton Stream (Stream along bottom of Moors House Garden to confluence with trib from north) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | 3 Adults | 10/10/2006 | SP37113323 | | Hook Norton Stream (Section south of Sewage works opposite Manor Farm, between footbridges) | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 04/10/2010 | SP35883321 | | Hook Norton Stream: Prews Close | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 04/10/2010 | SP36263334 | | Hook Norton Stream: near viaduct | | field record | | EA | HabDir-A2* | | | |
| bony fish (Actinopterygii) | Bullhead | Cottus gobio | | 13/10/2010 | SP36443342 | | Hook Norton Stream: field west of The Moors | | field record | | EA | HabDir-A2* | | | |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 2 Adults | 08/08/2006 | SP35863319 | | Hook Norton Stream (Down stream of stone bridge, Pews Close, Hook Norton) | | caught | | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 2 Males | 08/08/2006 | SP35863319 | | Hook Norton Stream (Down stream of stone bridge, Pews Close, Hook Norton) | | caught | | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Female | 08/08/2006 | SP35863319 | | Hook Norton Stream (Down stream of stone bridge, Pews Close, Hook Norton) | | caught | | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 3 Juveniles | 08/08/2006 | SP35863319 | | Hook Norton Stream (Down stream of stone bridge, Pews Close, Hook Norton) | | caught | | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Adult Female | 04/10/2010 | SP3585833190 | | Hook Norton Stream | | field record | Glair glands visible, carapace =22.2mm | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |

| Taxon Group | Common Name | Scientific name | Abundance and/or Sex/Stage | Date | Grid Ref | Grid Ref. Qualifier | Location | Further Location Information | Type of Record | Comment | Data Origin | European Directives | UK Legislation | Priority NERC S.41 | Other Designations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Juvenile Male | 04/10/2010 | SP3586333194 | | Hook Norton Stream | | field record | carapace =15.3mm | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Adult | 04/10/2010 | SP3586933199 | | Hook Norton Stream | | field record | escapee | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Adult | 04/10/2010 | SP3586933199 | | Hook Norton Stream | | field record | escapee | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Juvenile | 04/10/2010 | SP3586933199 | | Hook Norton Stream | | field record | too small to handle | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Juvenile | 04/10/2010 | SP3586933199 | | Hook Norton Stream | | field record | too small to handle | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| crustacean | White-clawed Freshwater Crayfish | Austropotamobius pallipes | 1 Juvenile Female | 04/10/2010 | SP3587733206 | | Hook Norton Stream | | field record | carapace =17.2mm | EA | HabDir-A2*,HabDir-A5 | WACA-Sch5_sect9.1(taking), sect9.5a, 9.5b | NERC S.41 | GlobalRed-post2001-EN |
| flowering plant | Bluebell | Hyacinthoides non-scripta | | 1977 - 1987 | SP358328 | | Southdrop Pasture | | field record | | BBOWT | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | | 1977 - 1987 | SP372330 | | Cradle and Grounds Farm Banks | CRADLE FARM (3632) | field record | | BBOWT | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | | 1977 - 1987 | SP374329 | | Pasture South of Manor Farm | | field record | | BBOWT | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | | 16/06/2000 - 26/07/2000 | SP369330 | | Cradle and Grounds Farm Banks | Marsh, stream and scrub (south facing bank) | | | OLWS | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | Occasional (DAFOR) | 03/05/2001 | SP362334 | | Hook Norton Disused Railway | Section B | | | LN | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | Rare (DAFOR) | 11/06/2013 | SP36163275 | | Wood South East of Hook Norton | | | | TVERC | | WACA-Sch8 | | |
| flowering plant | Bluebell | Hyacinthoides non-scripta | Locally Abundant (DAFOR) | 11/06/2013 | SP364334 | | Woods West of Hook Norton | | | | TVERC | | WACA-Sch8 | | |
| flowering plant | Large-flowered Hemp-nettle | Galeopsis speciosa | | 1977 - 1981 | SP361330 | | Park Farm Railway Bank | | field record | | BBOWT | | | | GBRed-post2001-VU |
| flowering plant | Nottingham Catchfly | Silene nutans | | 1977 - 1981 | SP363327 | | Quarry South of Park Farm | | field record | | BBOWT | | | | GBRed-post2001-NT, Nat. Scarce |
| flowering plant | Sainfoin | Onobrychis viciifolia | | 1977 - 1981 | SP366340 | | Grassland South of Nill Farm | | field record | | BBOWT | | | | GBRed-post2001-NT |
| flowering plant | Sainfoin | Onobrychis viciifolia | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | | | | GBRed-post2001-NT |
| insect - beetle (Coleoptera) | a Beetle | Limnebius papposus | | 21/07/1989 | SP371355 | | Nill Farm Pond | | field record | | PC | | | | GBRed-post2001-NT |
| insect - beetle (Coleoptera) | a Beetle | Limnebius papposus | | 30/03/1990 | SP371355 | | Nill Farm Pond | | field record | | PC | | | | GBRed-post2001-NT |
| insect - beetle (Coleoptera) | Flax Flea Beetle | Longitarsus parvulus | | 14/10/1993 | SP360334 | | Hook Norton Cutting Reserve | North Section | field record | | LN | | | | Notable-A |
| insect - butterfly | Small Blue | Cupido minimus | 1 | 17/05/2002 | SP359321 | | Hook Norton | | field record | | BBOWT | | WACA-Sch5_sect9.5a, 9.5b | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Small Blue | Cupido minimus | 3 | 17/05/2002 | SP35943209 | | Hook Norton | | | | BBOWT | | WACA-Sch5_sect9.5a, 9.5b | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Small Heath | Coenonympha pamphilus | 1 Adult | 1994 | SP33 | 2 km record | Wigginton Heath Oxon tetrad 3834 | | field record | | UTBC | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Small Heath | Coenonympha pamphilus | 1 Adult | 1994 | SP3834 | 1 km record | Wigginton Heath Oxon tetrad 3834 | | field record | | UTBC | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Small Heath | Coenonympha pamphilus | 1 | 12/06/2003 | SP359321 | | Hook Norton | | field record | | BBOWT | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Small Heath | Coenonympha pamphilus | 1 | 12/06/2003 | SP35943209 | | Hook Norton | | | | BBOWT | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Wall | Lasiommata megera | | 19/08/1982 | SP359321 | | Hook Norton Cutting Reserve | Middle Cutting | field record | | OBRC | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Wall | Lasiommata megera | | 19/08/1982 | SP359321 | | Hook Norton Cutting Reserve | Middle Cutting | field record | | OBRC | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Wall | Lasiommata megera | | 19/08/1982 | SP360325 | | Hook Norton Cutting Reserve | North Embankment | field record | | OBRC | | | NERC S.41 | GBRed-post2001-NT |
| insect - butterfly | Wall | Lasiommata megera | 1 Adult | 1991 | SP356332 | | Hook Norton Churchyard | | field record | | UTBC | | | NERC S.41 | GBRed-post2001-NT |

| Taxon Group | Common Name | Scientific name | Abundance and/or Sex/Stage | Date | Grid Ref | Grid Ref. Qualifier | Location | Further Location Information | Type of Record | Comment | Data Origin | European Directives | UK Legislation | Priority NERC S.41 | Other Designations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| insect - butterfly | Wood White | Leptidea sinapis | 1 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | WACA-Sch5_sect9.5a, 9.5b | NERC S.41 | GBRed-post2001-EN |
| insect - moth | Cinnabar | Tyria jacobaeae | 1 | 06/05/2011 | SP35943209 | | Hook Norton | | | | BBOWT | | | NERC S.41 | |
| reptile | Common Lizard | Zootoca vivipara | | 19/08/1982 | SP360325 | | Hook Norton Cutting Reserve | North Embankment | field record | | OBRC | | WACA-Sch5_sect9.1(kill/injuring), sect9.5a, 9.5b | NERC S.41 | |
| reptile | Grass Snake | Natrix natrix | | Jun-82 | SP359321 | | Hook Norton Cutting Reserve | Middle Cutting | field record | | OBRC | | WACA-Sch5_sect9.1(kill/injuring), sect9.5a, 9.5b | NERC S.41 | |
| reptile | Grass Snake | Natrix natrix | 1 | 23/07/2009 | SP371330 | | Cradle and Grounds Farm Banks | | | | OLWS | | WACA-Sch5_sect9.1(kill/injuring), sect9.5a, 9.5b | NERC S.41 | |
| reptile | Grass Snake | Natrix natrix | 1 | 30/04/2010 | SP35943209 | | Hook Norton | | | seen during Butterfly Transect | BBOWT | | WACA-Sch5_sect9.1(kill/injuring), sect9.5a, 9.5b | NERC S.41 | |
| reptile | Grass Snake | Natrix natrix | 1 Juvenile | 17/07/2012 | SP353334 | | The Bourne, Hook Norton, Oxon | | field record | Found under refugium during reptile survey. Found once only. | EC | | WACA-Sch5_sect9.1(kill/injuring), sect9.5a, 9.5b | NERC S.41 | |
| terrestrial mammal | Brown Hare | Lepus europaeus | 5 | 17/11/2007 | SP348325 | | Fanville Fm., near Hook Norton | | field record | | TVERC | | | NERC S.41 | |
| terrestrial mammal | Brown Long-eared Bat | Plecotus auritus | | 16/01/1988 | SP359321 | | Hook Norton Cutting Reserve | | field record | | OBG | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Brown Long-eared Bat | Plecotus auritus | 1 | Jan-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Brown Long-eared Bat | Plecotus auritus | 2 | 14/12/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Brown Long-eared Bat | Plecotus auritus | 4 | 12/01/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Common Pipistrelle | Pipistrellus pipistrellus | | 02/10/2002 | SP360322 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Common Pipistrelle | Pipistrellus pipistrellus | 1 | 15/07/2009 - 15/07/2009 | SP35973210 | | Hook Norton - 2 | | field record | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Common Pipistrelle | Pipistrellus pipistrellus | 3+ | 18/07/2009 | SP36093343 | | Crooked Cottage, East End, Hook Norton | | aural bat detector | at least 3 heard on bat detector but not seen | EC | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Common Pipistrelle | Pipistrellus pipistrellus | 2 | 18/07/2009 | SP36093343 | | Crooked Cottage, East End, Hook Norton | | field record | | EC | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | 1 | Jan-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | 3 | Feb-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | | 02/10/2002 | SP360322 | | Hook Norton | | aural bat detector | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | 4 | 14/12/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | 5 | 09/02/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Daubenton's Bat | Myotis daubentonii | 3 | 12/01/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial [redacted] | [redacted] | [redacted] | | [redacted] | [redacted] | | [redacted] | | [redacted] | | [redacted] | | [redacted] | | |
| [redacted] | [redacted] | [redacted] | | [redacted] | [redacted] | | [redacted] | | [redacted] | | [redacted] | | [redacted] | | |
| [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | | [redacted] | | [redacted] | [redacted] | [redacted] | | [redacted] | | |

| Taxon Group | Common Name | Scientific name | Abundance and/or Sex/Stage | Date | Grid Ref | Grid Ref. Qualifier | Location | Further Location Information | Type of Record | Comment | Data Origin | European Directives | UK Legislation | Priority NERC S.41 | Other Designations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| terrestrial [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | | [redacted] | | [redacted] | | [redacted] | | [redacted] | | |
| [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] | | [redacted] | | [redacted] | | [redacted] | | [redacted] | | |
| [redacted] | [redacted] | [redacted] | | [redacted] | [redacted] | | [redacted] | [redacted] | | [redacted] | [redacted] | | [redacted] | | |
| terrestrial mammal | European Otter | Lutra lutra | 1 | 01/10/2007 - 30/11/2007 | SP358327 | | Hook Norton, Opposite valley | | field record | | OS | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | GlobalRed-post2001_NT |
| terrestrial mammal | Lesser Horseshoe Bat | Rhinolophus hipposideros | 1 | Feb-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Lesser Horseshoe Bat | Rhinolophus hipposideros | 2 | 14/12/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Lesser Horseshoe Bat | Rhinolophus hipposideros | 1 | 09/02/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Lesser Horseshoe Bat | Rhinolophus hipposideros | 1 | 12/01/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Long-eared Bat species | Plecotus | | 19/12/1984 | SP3531 | 1 km record | | | other | | OBG | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | | 28/04/1988 | SP3833 | 1 km record | | | dung/droppings/frass/pellet, etc. | Droppings in church porch | OBG | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | 5 | Jan-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | 4 | Feb-02 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | 7 | 14/12/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | 10 | 09/02/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Natterer's Bat | Myotis nattereri | 10 | 12/01/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | | |
| terrestrial mammal | Noctule Bat | Nyctalus noctula | 1 | 18/07/2009 | SP36093343 | | Crooked Cottage, East End, Hook Norton | | aural bat detector | heard on bat detector but not seen | EC | HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | |
| terrestrial mammal | Polecat | Mustela putorius | 1 Male | 24/03/1995 | SP349326 | | Hook Norton | | dead on road | | LN | HabDir-A5 | HabReg-Sch4 | NERC S.41 | |
| terrestrial mammal | Western Barbastelle | Barbastella barbastellus | 1 | 12/01/2003 | SP35943209 | | Hook Norton | | | | BBOWT | HabDir-A2*,HabDir-A4 | HabReg-Sch2, WACA-Sch5_sect9.4b, 9.5a, 9.5b, 9.4c | NERC S.41 | GlobalRed-post2001_NT |

# 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 llikely 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.

# DATA ORIGIN KEY

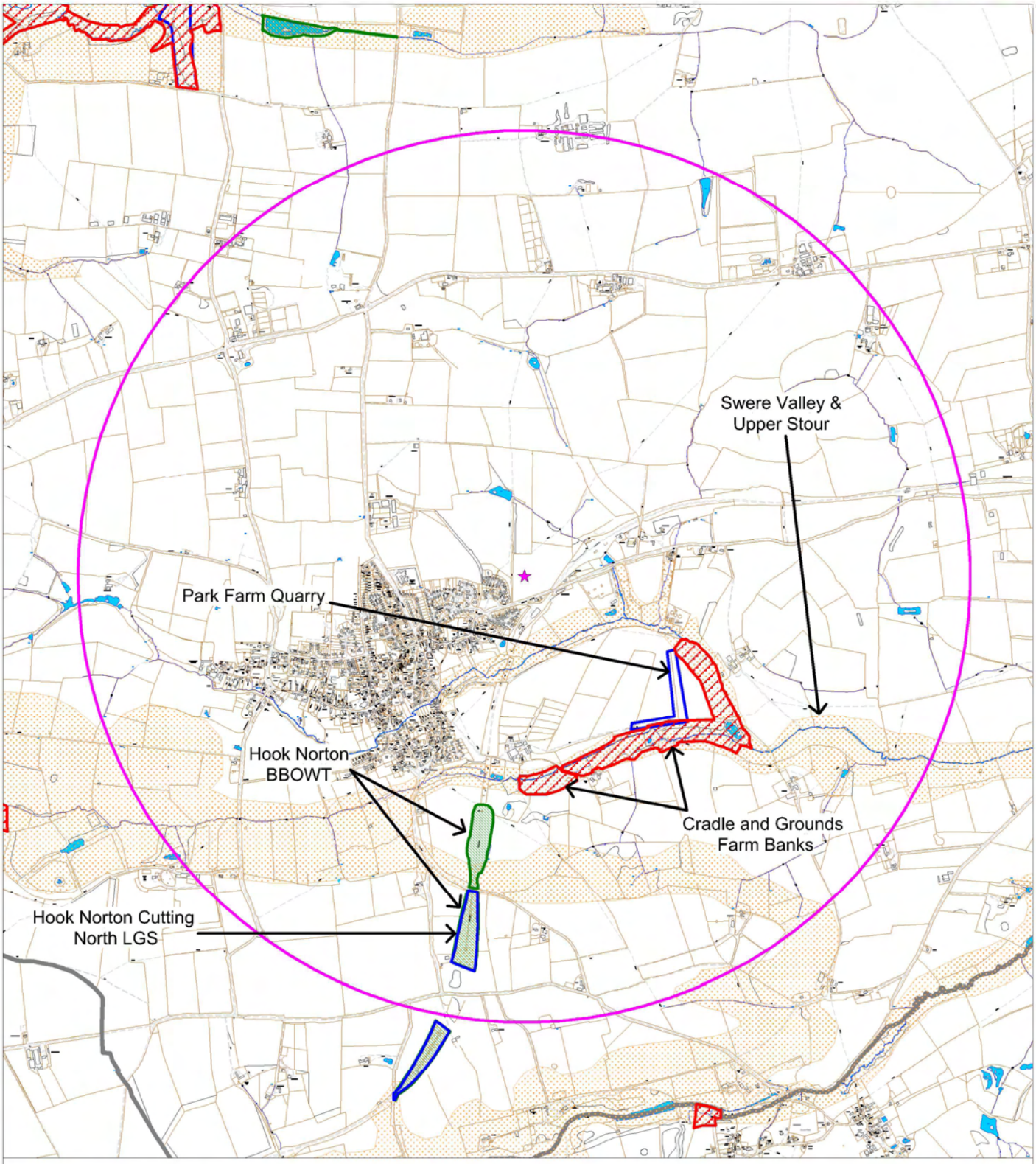
| Data Origin Abbreviation | Origin Details |
|---|---|
| AN | Abingdon Natural History Society |
| ANHSO | Ashmolean Natural History Society (& Rare Plant Group) |
| BBG | Binfield Badger Group |
| BBOWT | Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust |
| BC | Butterfly Conservation (includes Upper Thames and National Data) |
| BDS | British Dragonfly Society |
| BENHS | British Entomological Natural History Society |
| BFC | Bracknell Forest Council |
| BIG | Berkshire Invertebrate Group |
| 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 |
| CBT | Childe Beale Trust |
| CDC | Cherwell District Council |
| CRPG | Cotswold Rare Plant Group |
| EA | Environment Agency (formally the National Rivers Authority) |
| EC | Professional Ecological Consultant |
| ET | The Earth Trust (formally the Northmoor Trust) |
| FLC | Friends of Longcot Churchyard |
| FWAG | Farmland Wildlife Advisory Group |
| HA | Highways Agency |
| LN | Local/National Expert (known to TVERC) |
| LWVP | Lower Windrush Valley Project |
| MGLG | Moor Green Lakes Group |
| MOP | Member of the Public |
| NE | Natural England/EN/NCC |
| NFC | Newbury Field Club |
| NHM | Natural History Museum |
| NPD | National Ponds Database |
| NRG | Newbury Ringing Group |
| NT | National Trust |
| OBG | Oxfordshire Bat Group |
| OBRC | Oxfordshire Biological Record Centre (TVERC precursor) |
| OCC | Oxfordshire County Council |
| OLWS | Oxfordshire Local Wildlife Sites Project |
| OMG | Oxfordshire Mossing Group |
| OOS | Oxfordshire Ornithological Society |
| ORAG | Oxfordshire Reptile & Amphibian Group |
| OS | Otter Spotter Project |

# DATA ORIGIN KEY (Contd)

| Data Origin Abbreviation | Origin Details |
|---|---|
| OUNHM | Oxford University Natural History Museum |
| OUWG | Oxford Urban Wildlife Group |
| OX | Oxford City Council |
| PC | Pond Conservation |
| PL | Plantlife |
| PTES | People's Trust for Endangered Species |
| RBC | Reading Borough Council |
| RBWM | Royal Borough of Windsor & Maidenhead |
| RDNHS | Reading and District natural History Society |
| RM | Reading Museum |
| RSPB | Royal Society for the Protection of Birds |
| RUWG | Reading Urban Wildlife Group |
| RWP | Reading Woodlands Plan |
| SODC | South Oxfordshire District Council |
| SW | Shotover Wildlife |
| TVERC | Thames Valley Environmental Record Centre |
| TVFG | Thames valley Fungus Group |
| TW | Thames Water |
| U | Unknown |
| VCH | Victoria County History (historical records) |
| VWH | Vale of White Horse District Council |
| WB | West Berkshire District Council |
| WBC | Wokingham Borough Council |
| WIA | Wildlife in Ascot Group |
| WILDCRU | Wildlife Conservation Research Unit |
| WMUWG | Windsor & Maidenhead Urban Wildlife Group |
| WODC | West Oxfordshire District Council |
| WS | Wytham Survey |
| WWT | Wildfowl & Wetlands Trust |
| YE | Yattendon Estate |

# Land north of Station Road, Hook Norton
# Designated Wildlife Sites Map

TVERC




Scale: 1:25000

Central site grid reference (SP3623 3370)

2 km search area

Local Wildlife Site

Local Geological Site

Berks, Bucks & Oxon Wildlife Trust Reserve

Conservation Target Area

## Oxfordshire Local Wildlife Site description

### CRADLE AND GROUNDS FARM BANKS

Site Code: 33R01

Grid Reference: SP369330

Area (ha): 15.7

Local Authority: Cherwell

Last Survey Date(s): July 2009

Designation Date: 2005

**Site Description**

The site consists of two valleys formed by the upper reaches of the Swere and a southern tributary. There is a mosaic of habitats with steep, flower-rich banks, swamp (at the base of the slope), wet grassland, ponds, wooded areas and scrub. The flower rich banks are on lias siltstone and mudstone which give the sward both calcareous and acidic influences. There are a number of rare and unusual plants found here, including bitter vetch, lousewort and wood club-rush which are all currently on the Oxfordshire Rare Plants Register. There are older records for southern marsh orchid, heath spotted orchid and bog stitchwort. The site is located towards the east of Hook Norton and Hook Norton Cutting and Banks SSSI lies within half a kilometre of the site.

A number of birds use the site, as well as invertebrates, including marbled white, ringlet and small copper butterflies, emperor dragonflies, four spotted chasers, banded demoiselles and azure damselflies.

NERC ACT S41 HABITATS: Lowland meadow, ponds, lowland calcareous grassland, lowland fen

NERC ACT S41 SPECIES: Great crested newt, Song thrush, Dunnock, Yellowhammer, Wood White and Grass snake

LEGALLY PROTECTED SPECIES: Great crested newt, Grass snake, Common frog, Eurasian Hobby, Bluebell, Wood White, Badger

RED DATA BOOK SPECIES: none recorded

NATIONALLY SCARCE or NOTABLE SPECIES: none recorded

BIRDS OF CONSERVATION CONCERN:

Red list: Song thrush, Yellowhammer

Amber list: Green Woodpecker, Common swift, Dunnock, Swallow, Common Kestrel

TYPICAL SPECIES OF LOWLAND CALCAREOUS GRASSLAND: Quaking grass, Woolly thistle, Dropwort, Meadow oat-grass, Field scabious, Mouse-ear hawkweed, Burnet-saxifrage, Hoary plantain, Common Milkwort, Cowslip, Salad burnet, Small scabious, Wild thyme, Hairy violet

TYPICAL SPECIES OF LOWLAND DRY ACID GRASSLAND: Tormentil, Gorse, Pignut, Sheep's sorrel, Harebell, Lesser hawkbit, Devil's-bit Scabious, Common dog-violet, Bitter vetch, Betony, Mouse-ear hawkweed

TYPICAL SPECIES OF LOWLAND MEADOW: Smooth brome, Marsh marigold, Cuckooflower, Brown sedge, Glaucous sedge, Common knapweed, Southern marsh-orchid, Meadowsweet, Marsh bedstraw, Lady's bedstraw, Meadow crane's-bill, Meadow vetchling, Autumn hawkbit, Rough hawkbit, Oxeye Daisy, Common bird's-foot-trefoil, Ragged-robin, Adder's tongue, Lousewort, Meadow saxifrage, Quaking grass, Dropwort, Common milkwort, Cowslip, Salad burnet, Harebell, Tormentil, Devil's-bit scabious, Betony, Pignut, Lady's mantel

TYPICAL SPECIES OF LOWLAND FEN: Blunt-flowered rush, Fool's water-cress, Greater pond-sedge, Lesser pond-sedge, Common spike-rush, Floating sweet-grass, Reed canary-grass, Common club-rush, Branched bur-reed, Lesser Bulrush, Bulrush, Brooklime, Wild angelica, Hedge Bindweed, Marsh Thistle, Greater Willowherb, Purple-loosestrife, Water mint, Bittersweet, Common vetch, Marsh marigold, Southern marsh-orchid, Meadowsweet, Marsh bedstraw, Greater bird's-foot-trefoil, Ragged-robin

## Citation

NAME: Hook Norton Cutting (north)

SITE CODE: LGS46

GRID REF: SP359321

DATE RECORDED: 9/3/2000

DISTRICT: Cherwell

RIGS STATUS: Approved 29/04/2002

PARISH COUNCIL: Hook Norton

SITE TYPE: Railway

REASONS FOR LISTING: Scissum beds present. Geomorphology - landslip - perfect example, limestone over clay useful to expalin ideas such as valley bulging. Public access, beautiful, quiet rural location, ideal for public. Potential for leaflet, trial,boards and educaional project.

STRATIGRAPHY: Sharps Hilll beds to Scissum beds overlying Upper Lias. Toarcian to Lower Bathonian, Lower to Middle Jurassic

## Citation

NAME: Park Farm Quarry

SITE CODE: LGS27

GRID REF: SP367333

DATE RECORDED: 18/09/2000

DISTRICT: Cherwell

RIGS STATUS: Approved 4/12/2001

PARISH COUNCIL: Hook Norton

SITE TYPE: Disused Quarry

REASONS FOR LISTING: Highly fossiliferous - possibly tetrarhynchia tetrahedra (Rhynconella tetrahedra) Ref Arkell1947 p 19 - whole beds appear to be made of this fossil brachiopod. Safe - low faces and ideal for schools - collecting possible.

STRATIGRAPHY: Lower Jurassic. Stage: upper Pleinsbachian. Marlstone rock formation. Marlstonbe rock bed. Middle Lias clays / silts.

## Swere Valley and Upper Stour CTA (Conservation Target Area)

The Swere Valley from Barford St Michael to its source south east of Great Rollright. The area includes tributary valleys extending west of Hook Norton and then north across the watershed to the valleys and quarries at Sibford Ferris where the source of the River Stour is found.

**Joint Character Area:** Cotswolds

**Landscape Types:** Farmland Slopes and Valley Sides to the west and River Meadowlands to the east.

**Geology:** The valley has a complex geology with siltstones and mudstone, the iron rich limestone, known as Marlstone Rockbed, oolitic and Chipping Norton limestones. These latter two limestones are particularly prominent at South Newington, along the main Swere Valley south west of Hook Norton and in the area of the Upper Stour. East of Hook Norton, alluvium is found alongside the River.

**Topography:** To the east there is a wide valley with gently sloping sides. Further west the valley and that of the tributaries and the Stour are narrower with steeper banks.

**Area of CTA:** 838 hectares

**Biodiversity:**

- Lowland meadow: This is largely found on the banks on the mudstone and is often quite acidic in nature. In places though it is quite calcareous in nature, reflecting the complex geology. On some sites small flushes are found in association with the lowland meadow habitat. The main sites are between South Newington and Hook Norton, Another site is found at Berryfields Farm, to the west of Hook Norton. Remnants are found in some riverside meadows including a field near Barford.
- Limestone grassland: The main concentration is found west of Swerford. These include Hook Norton Bank and Cutting SSSI as well as a road verge near Walk Farm. Further areas are found in the Upper Stour area on banks and in disused quarries.
- Swamp and fen. Swamp habitat is found in a number of sites along the base of the valley including in the old river channel at Wigginton, at South Newington, Cradle Farm, in an old pond at Priory Mill and near Swerford. Rush and sedge dominated flushes are found on banks amongst lowland meadow habitat.
- Wet Woodland: a few small areas are present including an area at Priory Mill.
- Lowland Mixed Deciduous Woodland: Restricted to a few small sites at South Newington, west of Swerford and at Priory Mill. Scrubby secondary woodland is also found in the old quarries in the area of the Upper Stour.
- Other habitat: Eutrophic standing water at Lambs Pool and parkland at Swerford Park.
- Species: The Swere west of Swerford has a good population of white-clawed crayfish.
- Geological Interest: Hook Norton Banks and Cutting SSSI includes a geological SSSI while one of the quarries at Temple Mills is a Local Geological Site.

**Access:** Hook Norton Railway Cutting and Lambs Pool are nature reserves.

### Oxfordshire Biodiversity Action Plan Targets associated with this CTA:

1. Lowland meadow – management[1], restoration and creation.
2. Fen (and swamp) – management and restoration.
3. Limestone (lowland calcareous) grassland – management, restoration and creation (particularly on the steep banks).
4. Wet woodland (adjoining the rivers) and lowland mixed deciduous woodland - management

5. Rivers – management (resource protection of the high quality limestone rivers, including the tufa deposits; protection, management and monitoring of white-clawed crayfish).
6. Arable field margins (and arable in-field options) – management and creation (with particular emphasis on arable wildflowers and farmland birds on arable fields and margins).
7. Hedgerows – management and creation.

[1] "Management" implies both maintaining the quantity, and maintaining and improving the quality of existing BAP habitat and incorporates the following target definitions: "Maintaining extent" and "Achieving Condition".

# GUIDANCE ON THE VARIOUS STATUTORY AND NON-STATUTORY WILDLIFE SITE DESIGNATIONS.

## SITE DESIGNATIONS THAT PROTECT THE UK'S NATURAL HERITAGE THROUGH STATUTE

### LOCAL NATURE RESERVES (LNRS) (IN ENGLAND, SCOTLAND AND WALES)

Under the National Parks and Access to the Countryside Act 1949 LNRs may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.

### NATIONAL NATURE RESERVES (NNRS)

NNRs contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them.

NNRs are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981. In Northern Ireland, Nature Reserves are designated under the Amenity Lands Act (Northern Ireland) 1965.

### RAMSAR SITES

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. Originally intended to protect sites of importance especially as waterfowl habitat, the Convention has broadened its scope over the years to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. The Convention adopts a broad definition of wetland, namely "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres". Wetlands "may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands".

There is only one Ramsar site in Berkshire or Oxfordshire, South West London Waterbodies.

## SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI) (ENGLAND, SCOTLAND AND WALES)

The SSSI series has developed since 1949 as the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. These sites are also used to underpin other national and international nature conservation designations. Most SSSIs are privately-owned or managed; others are owned or managed by public bodies or non-government organisations.

Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs have been renotified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

## SPECIAL AREAS OF CONSERVATION (SAC) AND SITES OF COMMUNITY IMPORTANCE (SCI)

SACs are designated under the EC Habitats Directive. SACs are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are designated under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). New and/or amended Habitats sites which have been submitted to the European Commission by Government, but not yet formally adopted by the Commission, are referred to as candidate Special Areas of Conservation (cSACs). Sites which have been adopted by the EC, but not yet formally designated by governments of Member States are known as Sites of Community Importance (SCIs). In the UK, designation of SACs is devolved to the relevant administration within each country.

SACs, together with SPAs, form the Natura 2000 network.

## SPECIAL PROTECTION AREAS (SPA)

SPAs are classified by the UK Government under the EC Birds Directive. SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union. SPAs in terrestrial areas and territorial marine waters out to 12 nautical miles are classified under the Wildlife and Countryside Act 1981.

SPAs, together with SACs, form the Natura 2000 network.

# NON-STATUTORY NATURAL HERITAGE CONSERVATION DESIGNATIONS

## LOCAL WILDLIFE SITES

Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

Most Local Wildlife Sites systems involve a panel of ecologists and others in the development of local criteria and the selection of the sites. Panels usually include a local government ecologist, an Natural England representative, the Local Wildlife Trust, the Local Environmental Record Centre and sometimes include a representative of local landowners and local naturalists.

These sites, which may be given various titles such as 'County Wildlife Sites' (CWS), 'Local Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), or Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local plans under the Town and Country Planning system and the National Planning Policy Framework and are a material consideration when planning applications are being determined.

As part of a national standardisation process these sites have recently been renamed as Local Wildlife Sites in Oxfordshire and Berkshire. Previously they were known as County Wildlife Sites in Oxfordshire and Wildlife Heritage Sites in Berkshire. Although the use of these names, especially in citations and descriptions, is being edited and replaced with Local Wildlife Sites or LWS it is likely that some references will remain to these former names until this is complete.

## PROPOSED LOCAL WILDLIFE SITES AND EXTENSIONS

These are also included on designated sites maps. They are areas thought to include important areas of UKBAP habitat or priority or protected species populations. Extensions are likely to have similar habitats to the adjacent Local Wildlife Sites. Local Authorities are made aware of these sites. They will not have been fully surveyed and taken to the selection panel as yet.

## NGO PROPERTIES / NATURE RESERVES

A variety of non-governmental organisations such as the John Muir Trust, Plantlife, the Royal Society for the Protection of Birds, Wildlife Trusts and Woodland Trust own or manage nature reserves or other areas of land that are important for biodiversity. These sites may be intended primarily for nature conservation, or for other purposes such as protection of landscape features or the provision public access to the countryside. These areas of themselves have no statutory basis, but a large number are also designated SSSIs / NNRs / SPAs / SACs / Ramsar sites, etc.

In Berkshire and Oxfordshire, BBOWT (Berks, Bucks & Oxon Wildlife Trust), Woodland Trust and RSPB sites fall into this category.

## LOCAL GEOLOGICAL SITES (LGS)

Local Geological Sites formerly known as Regionally Important Geological and Geomorphological Sites (RIGS) are the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). As part of a national standardisation process these sites have recently been renamed as Local Geological Sites in Oxfordshire and Berkshire. Sites are selected under locally-developed criteria, according to their value for education, scientific study, historical significance or aesthetic qualities. Whilst not benefiting from statutory protection, LGS are equivalent to Local Wildlife Sites, and "...*consideration of their importance becomes integral to the planning process*".

## OTHER SITES

Occasionally other sites might be shown on maps. These are likely to be sites with some wildlife interest, usually managed by local groups, local authorities or town councils but which do not have a specific statutory or non-statutory designation.

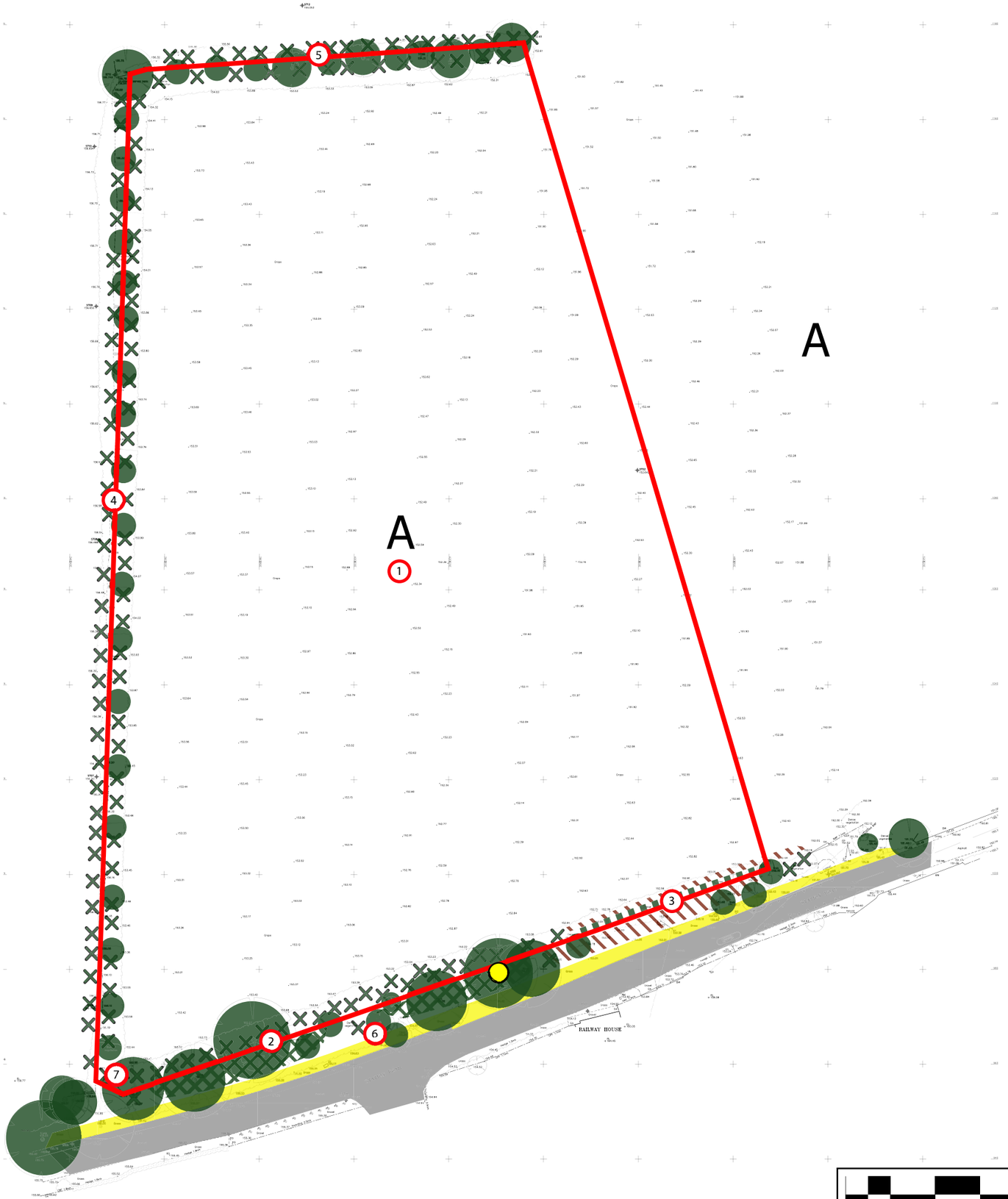
Some local authorities within Oxfordshire and Berkshire have identified other sites which are protected through policies in their local plans, including sites of local importance to nature conservation (SLINCs) in oxford city and district wildlife sites in Cherwell. For SLINCs we only show sites on maps that are not local wildlife sites or proposed local wildlife sites.

## CONSERVATION TARGET AREAS/ BIODIVERSITY OPPORTUNITY AREAS

These landscape scale areas have been identified as supporting high concentrations of UKBAP habitats and species populations and the potential to restore habitats at a landscape scale. These areas act as a focus for targeting resources into habitat management and restoration.

**APPENDIX B**

**Phase 1 Habitat Survey and Bat Scoping: Plan and Target Notes**




1:1250
0 25m 50m

north

## KEY

- Site boundary
- Scattered trees
- Defunct species-poor hedgerow
- Dense scrub
- Scattered scrub
- A — Arable land
- Tall ruderals
- Amenity grass
- Hardstanding
- 1 — Target note

Phase 1 Bat Scoping Survey

*Trees*

- Category 2 Tree

All other trees within and bordering the site are Category 3 (negligible bat roost potential).

CLIENT:
Nursery Ground Ltd

PROJECT:
Station Road, Hook Norton: Ecology

TITLE:
Phase 1 Habitat Survey and Bat Scoping Plan

SCALE AT A3:
1:1250

DATE:
October 2014

723.2 / 01


The Stables, Howbery Park, Benson Lane, Wallingford, OX10 8BA
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Landscape Architecture
Masterplanning
Ecology

hda

**Target Notes**

1. **Arable land**

The site comprises the western half of an intensively farmed arable field which at the time of survey supported a Barley *Hordeum vulgare* crop. Potato *Solanum tuberosum* plants growing around the margins of the field suggest that the field is used for growing a variety of crops on a rotational basis. The margins of the field within the site were very narrow (1-2m) and often shaded by boundary scrub and trees.

2. **Southern boundary scrub and trees**

The western end of the southern site boundary comprises a steep 2m high bank up to the verge of Station Road which supports outgrown scrub and scattered trees. The dominant scrub species included Hawthorn *Crataegus monogyna* with frequent Blackthorn *Prunus spinosa*, Elder *Sambucus nigra*, Horse Chestnut *Aesculus hippocastanum* and occasional Hazel *Corylus avellana* and Pedunculate Oak *Quercus robur*. The trees are mostly young or early mature with a small number of larger mature specimens. Tree species included Norway Maple *Acer platanoides*, Sycamore *Acer pseudoplatanus*, Holly *Ilex aquifolium* and Red Oak *Quercus rubra*.

The ground flora is generally sparse due to heavy shading and dominated by Nettle *Urtica dioica* and Ivy *Hedera helix*. Other less frequent species present included Cleavers *Galium aparine*, Wood Avens *Geum urbanum*, Hogweed *Heracleum sphondylium*, Perennial Ryegrass *Lolium perenne*, Yorkshire Fog *Holcus lanatus*, Couch Grass *Elymus repens*, Garlic Mustard *Alliaria petiolata*, Great Willowherb *Epilobium hirsutum*, Herb Robert *Geranium robertianum*, Field Bindweed *Convolvulus arvensis* and Lords-and-Ladies *Arum maculatum*.

3. **South-eastern boundary**

To the east of the southern boundary the gradient between the site and Station Road levels out. A defunct hedgerow runs along the eastern end of the southern site boundary. The hedgerow comprised a line of scattered Hazel, Elder and Hawthorn and at the time of the survey was overgrown with tall ruderal vegetation. Mature, outgrown Hawthorn and Elder trees occur in the south-eastern corner of the site.

Adjacent to the hedgerow the site margin and road verge support tall ruderal vegetation dominated by Nettles with abundant Creeping Thistle *Cirsium arvense*, Cocksfoot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Hogweed, Creeping Bent *Agrostis stolonifera*, Hedge Bindweed, Burdock *Arctium* sp., Broad-leaved Dock *Rumex obtusifolius*, Rosebay Willowherb *Chamerion angustifolium* and Bittersweet *Solanum dulcamara*.

4. **Western boundary**

The western boundary of the site comprises a steep, 2m high bank supporting secondary regenerated scrub and trees. In comparison to the vegetated bank on the southern boundary of the site, the banks on the western and northern boundaries are generally steeper and undercut with exposed stone in association with the site's previous use as an Iron stone quarry. A path runs along the corridor of scrub and trees just beyond the site boundary.

The scrub habitats with scattered trees on the western boundary are dominated by Ash *Fraxinus excelsior* with Horse Chestnut, Elder, Hawthorn, Norway Maple and Sycamore. The vegetation overhangs the margins of arable field which are dominated by dense ruderals including Hedge Bindweed, Nettle and Ivy.

5. **Northern boundary**

The northern boundary of the site comprises an undercut bank of around 2m high supporting a band of scattered trees and occasional scrub. Other scrub species present in addition to those on

the southern and western site boundaries included Field Maple *Acer campestre*, Elm *Ulmus procera* and Crab Apple *Malus sylvestris*.

**6. Station Road verge**

The verge of Station Road comprises managed species-poor amenity grassland with occasional trees including Silver Birch *Betula pendula* and Norway Maple. Adjacent to the site boundary at the top of the embankment, dense stands of Blackthorn and Bramble *Rubus fruticosa* agg. scrub occur.

**7. Tunnel opening**

An opening to a disused tunnel beneath Station Road, associated with the site's previous use as part of an ironstone quarry. The tunnel opening has been completely blocked up.

**APPENDIX C**

**Evaluation Criteria**

**Criteria used for the evaluation of ecological receptors (based on Ratcliffe, 1977; IEEM 2006)**

Assigning value is relatively straightforward in the case of designated sites, and undesignated sites meeting designation criteria. However, in most cases evaluation of ecological resources is not straightforward and requires a degree of knowledge, experience and professional judgement (Usher, 1986; Spellerberg, 1992). Evaluation of an ecological receptor was based on a number of criteria (Ratcliffe, 1977; IEEM 2006) summarised below:

- Site designations; SPA, SAC, Ramsar, SSSI, NNR, LNR, SINC or equivalent.
- Site designation criteria; e.g. Guidelines for the Selection of Biological SSSIs, JNCC, 1989.
- Conservation status; whether a habitat or species is rare, declining or threatened at a given geographic scale.
- Geographic location; the value of a habitat or species may change depending on whether it is being assessed in the south of England or the north of Scotland.
- Distribution; habitats or species on the edge of their distribution, particularly where that distribution is changing as a result of global trends and climate change and endemic species or locally distinct sub-populations of a species are more valuable;
- Rarity; the presence of habitats, species, subspecies or varieties that are rare or uncommon at a given geographic scale.
- Diversity; of habitats, or species, particularly of vascular plants. Species-rich assemblages of plants or animals are likely to be important in terms of biodiversity;
- Naturalness; habitats least affected by human disturbance are normally of relatively higher importance.
- Size; larger areas are generally more valuable than lots of small ones. Notably large populations of animals or concentrations of animals considered uncommon or threatened in a wider context may be important.
- Fragility; sensitivity to, and probability of, human impact.
- Typicalness; a good example of the type, particularly plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities.
- Potential value (if restored to favourable conservation status).
- Secondary or supporting value; value of a receptor in supporting the integrity or conservation status of another valued receptor.
- Ability to be recreated; the more difficult a habitat is to re-create, were it to be destroyed, the greater the importance usually attached to it.