absolute ecology LLP wildlife surveys

Preliminary Ecological Appraisal

Land at Lodge Dale Farm,

Main Road,

Hollington,

Staffordshire,

ST10 4HS

Notice to readers

This report has been prepared by Absolute Ecology LLP with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site, and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management (www. cieem.org.uk).

Non-technical summary

Absolute Ecology LLP were commissioned to undertake a Preliminary Ecological Appraisal of land at Lodge Dale Farm, Main Road, Hollington, Staffordshire, ST10 4HS. The Preliminary Ecological Appraisal was undertaken on the 8th of May 2014, by an experienced and licensed ecologist who is a member of the Chartered Institute of Ecology & Environmental Management (CIEEM).

It is understood that the construction zone of the proposed development affects only the improved grassland and bare ground on site, as well as the adjacent hardstanding, but not the hedgerow on the eastern boundary. On this basis, the proposed development poses an acceptably low risk of harm to protected species, and no further survey effort is required.

If there were to be any loss or major severance of the hedgerow (or a significant increase in light spill), then it would be recommended that bat transects were undertaken to check whether any important commuting routes are present.

Although no badger activity was observed on the site at the time of the survey, activity patterns of this species can change over a short time. In the event that badger activity is discovered on site prior to (or during) works, then all works must cease and the advice of a suitably qualified ecologist sought.

Nesting birds may be present in the hedgerow during the bird breeding season (March to August inclusive). If there were to be any works affecting the hedgerow during these months, then a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed.

It is not currently known whether the proposed development requires additional lighting. If so, then a lighting design around the new development should be considered at an early stage. Further details can be found in section 5 of this report.

Contents

1.0 Introduction

Background

1.1 Absolute Ecology LLP was commissioned to undertake a Preliminary Ecological Assessment of a site known as land at Lodge Dale Farm, Main Road, Hollington, Staffordshire, ST10 4HS.

1.2 The Assessment was undertaken on the 8th May 2014 by James Porter BSc(Hons), MSc; an experienced ecologist who is a member of the Chartered Institute of Ecology & Environmental Management (CIEEM). He has 4 years' experience of conducting Preliminary Ecological Appraisals (Phase 1), and holds a Class 1 Bat Licence, with 3 years' experience of bat inspection, as well as a Class 1 Great Crested Newt Licence and 3 years' experience of GCN surveying.

1.3 The objective of this report is to provide the client with information on any known or potential protected or rare species that may be using the site, and to outline recommendations on how to proceed with the works in a legal and ecologically sensitive manner.

1.4 Unless the client indicates to the contrary, information on the species found to be present on the site will be passed to the county biological records centre to update records held for the area.

Site Description

The survey area is a small horse paddock, situated in an agricultural setting, just to the west of the village of Hollington in Staffordshire. Broadmoor Wood is situated approx. 350m to the east, with a further area of woodland approx. 500m to the north, containing a small stream. Streams are also present approx. 840m southeast and 900m southwest. The site is surrounded by agricultural land (mainly pasture) and farm buildings in all directions.

2.0 Methodology

Desk Study

2.1 In order to compile background information on the site and immediate surroundings the Staffordshire Ecological Record (SER) was contacted.

2.2 Information requested was as follows:-

- Records of protected species within the 2 km of the site.
- Records of rare or notable species within the 2 km of the site.
- Non-statutory site designations on or within 2 km of the site.

2.3 Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2010) was used to establish whether any of the following were present:-

- Statutory site designations on or within 2 km of the site.
- Statutory sites designated for bats within 5 km of the site.

Habitat Survey

2.4 The site was visited on the 8th May 2014 and was surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2007). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

2.5 The observable higher plant species in each habitat type within the site, and their abundance, were recorded using the DAFOR scale:

D Dominant

A Abundant

F Frequent

O Occasional

R Rare

Fauna

2.6 Habitats present on the site were searched for obvious signs of faunal activity, *e.g.* presence of badger setts, mammal tracks or herpetofauna under refugia. Any buildings and mature trees on site were visually examined from the ground to identify features with the potential to support roosting bats.

Valuation of Ecological Features

2.7 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify

whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.

2.8 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

Survey Constraints

2.9 Data Search

Desk study data provides information on recorded species in the area and can be helpful for targeting survey. However, it is possible that protected species that have not been identified within the data search may occur on or adjacent to the site.

2.10 Field survey

Habitats within 30 m of the site boundary were inspected as far as access allowed. Ponds up to 500m from the site were viewed where there was public access.

The survey was undertaken in winter when not all botanical species are visible. However, given the lack of vegetative diversity and other evidence which indicates that the grassland is species-poor (see Section 4.3), this is unlikely to be a significant constraint.

Fauna species present may not always leave field signs and in addition, species may take up residence on site subsequent to the survey. If no development takes place within 12 months of this survey report, the findings should be reviewed and may need updating, and a full survey should be repeated within three years

Nomenclature

2.11 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2011) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

3.0 Legislation

3.1 The United Kingdom Biodiversity Action Plan (BAP) 1994 sets out a strategy for implementing the Convention on Biological Diversity, which was signed by the United Kingdom at the Rio de Janeiro Earth Summit in 1992. The published report contains action plans for the United Kingdom's most threatened species and habitat plans for the most vulnerable areas.

3.2 The Local BAP sets out the county's part in the UK biodiversity planning process, in the form of local habitat and species action plans. Local BAPs are intended to focus resources, to conserve and enhance biodiversity, by taking account of national and local priorities.

3.3 Schedule 1 Part 1 of The Wildlife and Countryside Act 1981 (and amendments) – this lists birds protected by special penalties at all times. It prohibits intentional killing/injuring, taking, possessing, disturbing and selling (including parts and derivatives, eggs, nests, *etc.* as applicable) as well as damaging, destroying or disturbing nests in current use or dependent young, *etc.*

3.4 Schedule 5 of The Wildlife and Countryside Act 1981 (and amendments) – this prohibits deliberate killing, injuring, taking, possessing, disturbing and selling (including parts and derivatives) as well as damaging, destroying or obstructing any structure or place of refuge of listed fauna, such as Dormouse, Otter and bat species.

3.5 The Conservation of Habitats and Species Regulations 2010, consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is illegal to kill, disturb, destroy eggs, breeding sites or resting places, to pick, collect, take cuttings, uproot or destroy in the wild as well as keep, transport, sell/exchange and offer for sale/exchange species listed.

3.6 The Countryside and Rights of Way Act 2000 – this increases protection given by The Wildlife and Countryside Act 1981 (and amendments). The offence to intentionally damage any structure or place that a wild animal listed in Schedule 5 of the Act uses for shelter or protection or deliberately disturbing any such animal while in such a structure or place is extended so that the offence also covers reckless damage or disturbance. The CRoW Act also places a duty on Ministers and Government Departments to have regard for the purpose of conserving biological diversity in accordance with the Convention on Biological Diversity.

3.7 The Protection of Badgers Act 1992 - this Act makes it illegal to wilfully kill, injure or take any Badger, or attempt to do so and it is an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a Badger sett.

3.8 The Natural Environment and Rural Communities Act, 2006 - as well as creating Natural England, this act gives all public authorities the duty to have regard for conserving biodiversity within the commission of their duties. This includes a duty to restore and enhance as well as maintain biodiversity. The act also strengthens protection for Sites of Special Scientific Interest (SSSI) and makes authorities liable for allowing damage to such sites or their features.

4.0 Results

Desk Study

4.1 There is one statutory designated site within 2 km of the site.

- The site itself and the surrounding area up to 1.5km to the east and at least 2km in all other directions is a Nitrate Vulnerable Zone (NVZ)

4.2 There are no statutory designated sites for bats within 5 km of the site.

4.3 There are no non-statutory sites within 2 km of the site.

4.4 SER provided the following records for protected and notable species within 2 km of the site boundary:

Amphibians	
Common Toad	Bufo bufo
Great Crested Newt	Triturus cristatus
Birds	
Lesser Redpoll	Acanthis cabaret
Northern Goshawk	Accipiter gentilis
Common Sandpiper	Actitis hypoleucos
Sky Lark	Alauda arvensis
Common Kingfisher	Alcedo atthis
Northern Pintail	Anas acuta
Northern Shoveler	Anas clypeata
Eurasian Teal	Anas crecca
Mallard	Anas platyrhynchos
Garganey	Anas querquedula
Gadwall	Anas strepera
Greater White-fronted Goose	Anser albifrons
Greylag Goose	Anser anser
Pink-footed Goose	Anser brachyrhynchus
Meadow Pipit	Anthus pratensis
Tree Pipit	Anthus trivialis
Common Swift	Apus apus
Short-eared Owl	Asio flammeus
Common Pochard	Aythya ferina
Tufted Duck	Aythya fuligula
Barnacle Goose	Branta leucopsis
Dunlin	Calidris alpina
European Nightjar	Caprimulgus europaeus
Little Plover	Charadrius dubius
Black-headed Gull	Chroicocephalus ridibundus
Eurasian Marsh Harrier	Circus aeruginosus
Stock Dove	Columba oenas
Common Cuckoo	Cuculus canorus
Whooper Swan	Cygnus cygnus
House Martin	Delichon urbicum
Little Egret	Egretta garzetta
Yellowhammer	Emberiza citrinella

Reed Bunting	Emberiza schoeniclus
Peregrine Falcon	Falco peregrinus
Eurasian Hobby	Falco subbuteo
Common Kestrel	Falco tinnunculus
Brambling	Fringilla montifringilla
Common Snipe	Gallinago gallinago
Eurasian Oystercatcher	Haematopus ostralegus
Barn Swallow	Hirundo rustica
Herring Gull	Larus argentatus
Common Gull	Larus canus
Lesser Black-backed Gull	Larus fuscus
a lesser black-backed gull	Larus fuscus subsp. graellsii
Great Black-backed Gull	Larus marinus
Mediterranean Gull	Larus melanocephalus
Yellow-legged Gull	Larus michahellis
Bar-tailed Godwit	Limosa lapponica
Linnet	Linaria cannabina
Common Crossbill	Loxia curvirostra
Wood Lark	Lullula arborea
Jack Snipe	Lymnocryptes minimus
Red Kite	Milvus milvus
Grey Wagtail	Motacilla cinerea
Yellow Wagtail	Motacilla flava
Yellow Wagtail	Motacilla flava subsp. flavissima
Spotted Flycatcher	Muscicapa striata
Eurasian Curlew	Numenius arquata
Whimbrel	Numenius phaeopus
Northern Wheatear	Oenanthe oenanthe
House Sparrow	Passer domesticus
Eurasian Tree Sparrow	Passer montanus
Willow Warbler	Phylloscopus trochilus
Green Woodpecker	Picus viridis
Willow Tit	Poecile montana
Marsh Tit	Poecile palustris
Dunnock	Prunella modularis
Common Bullfinch	Pyrrhula pyrrhula
Pied Avocet	Recurvirostra avosetta
Sand Martin	Riparia riparia
Whinchat	Saxicola rubetra
Eurasian Woodcock	Scolopax rusticola
Common Tern	Sterna hirundo
Arctic Tern	Sterna paradisaea
Common Starling	Sturnus vulgaris
Common Whitethroat	Sylvia communis
Little Grebe	Tachybaptus ruficollis
Ruddy Shelduck	Tadorna ferruginea
Wood Sandpiper	Tringa glareola
Common Greenshank	Tringa nebularia
Green Sandpiper	Tringa ochropus
Common Redshank	Tringa totanus
Redwing	Turdus iliacus
Song Thrush	Turdus philomelos
Fieldfare	Turdus pilaris

Mistle Thrush	Turdus viscivorus
Barn Owl	Tyto alba
Northern Lapwing	Vanellus vanellus

Plants

Little Kneeling Eyebright	Euphrasia confusa
Common Cudweed	Filago vulgaris
Tall Hawkweed	Hieracium acuminatum
Bluebell	Hyacinthoides non-scripta
Pennyroyal	Mentha pulegium
Yellow Bird's-nest	Monotropa hypopitys
Jacob's-ladder	Polemonium caeruleum
Wild Pansy	Viola tricolor

Mammals

European Water Vole	Arvicola amphibius
West European Hedgehog	Erinaceus europaeus
Brown Hare	Lepus europaeus
European Otter	Lutra lutra
Eurasian Badger	Meles meles
Polecat	Mustela putorius
Myotis Bat species	Myotis
Natterer's Bat	Myotis nattereri
Noctule Bat	Nyctalus noctula
Common Pipistrelle	Pipistrellus pipistrellus
Soprano Pipistrelle	Pipistrellus pygmaeus
Brown Long-eared Bat	Plecotus auritus

Reptiles

Grass Snake	Natrix natrix

Habitats

4.5 The following habitats or vegetation types were identified on the site during the course of the habitat survey.

- Improved grassland
- Bare ground
- Hedgerow

Improved grassland

4.6 The site is a horse paddock, the majority of which is semi-improved grassland. This is dominated by perennial ryegrass (Lolium perenne), with abundant crested dog's tail (Cynosurs cristatus) and white clover (Trifolium repens). Dandelion (Taraxacum officinale) and buttercups (Ranunculus sp.) are also frequent, with locally abundant stands of broad-leaved dock (Rumex obtusifolius) and creeping thistle (Cirsiurn arvense).

Bare ground

4.7 Towards the northern site boundary are areas of bare ground, located near to the gated entrance to the paddock.

Hedgerow

4.8 Just beyond the fence at the western boundary is a species-poor hedgerow. This is dominated by hawthorn (*Crataegus monogyna*), with occasional holly (*Ilex aquifolium*) and willow (*Salix sp.*). The hedgerow is low (approx. 1.5m) and regularly maintained.

Fauna

Bats

4.9 SER provided several records of bat species within 2 km of the site. There are no buildings, trees or other structures on site with features suitable for roosting bats.

4.10 The site provides good foraging habitat for a range of bat species. The hedgerow is likely to be used by foraging bats as well as for navigational flight lines.

Badgers

4.11 SER provided records of Badger within 2 km of the site. The majority of the site provides optimal foraging habitat for Badgers in the form of improved grassland. No evidence of Badger activity, such as setts, hairs, dung pits, latrines or snuffle marks, was discovered during the survey.

Dormice

4.12 There are no records of Dormice occurring within 2 km of the site. The potential for the site to support Dormice is low. The hedgerow provides only limited habitat and is too sparse to be

considered optimal Dormouse habitat. It is considered that Dormice are likely to be absent from the site.

Water Voles and Otters

4.13 There are records of Water Voles and Otters occurring within 2 km of the site. There was no water on site at the time of survey, and the site is some distance from the nearest watercourse. It is considered that Water Voles and Otters are likely to be absent from the site.

Other mammals

4.14 Records of Polecat, Brown Hare and Hedgehog were provided by SER. A few scattered Rabbit droppings were noted in a small number of locations on site, indicating the presence of Rabbits, which could be used as a food source by Polecat. With regard to other mammals the site comprises of habitat with limited cover, and as such is not expected to support populations of small mammals.

Birds

4.15 Records of a wide range of bird species were provided by SER within 2 km. The following were all either observed or heard on site during the survey: Magpie and Blackbird.

4.16 The site as a whole provides good foraging for a range of bird species. The hedgerow also offers good nesting habitat for a range of common birds.

Reptiles

4.17 There are records of Grass Snake occurring within 2 km of the site. The site is generally unsuitable for reptiles and lacks extensive areas of scrub with open basking areas typically associated with reptiles. The hedgerow provides the only cover and foraging habitat. There were no potential refugia on site available for inspection.

Amphibians

4.18 There are records of Great Crested Newt and Common Toad occurring within 2 km of the site. There was no water on site at the time of survey, and the site is some distance from the nearest watercourse (>500m). It is considered that amphibians are likely to be absent from the site.

Invertebrates

4.19 SER did not provide any records of protected or notable invertebrate species. The habitats on site are generally common and do not provide much potential for rare invertebrate species although they are expected to support a number of more common species.

5.0 Development Constraints and Recommendations

5.1 The site is the subject of a possible planning application for a ménage . Ecological constraints and recommendations with regard to any development are discussed below.

Designated Sites

5.2 There is one designated statutory site within 1 km of the site.

- The site itself and the surrounding area up to 1.5km to the east and at least 2km in all other directions is a Nitrate Vulnerable Zone (NVZ)

5.3 Nitrate Vulnerable Zones are an agricultural designation, and so the proposed development is unlikely to impact the area's status within this designation.

Habitats

5.4 Botanically, the site itself does not appear to have any rare species and it is not particularly diverse.

Potential Impacts of Works

5.5 If development is undertaken, then potential impacts are likely to include the following:

5.6 Removal of grassland and hedgerow may cause loss of bat foraging habitat. Loss or severance of hedgerows may affect bat commuting routes. Any increase in general light levels could also affect bat foraging and commuting.

5.7 Although no badger setts were observed on site, badger activity can change over a short time. If any setts are created on site prior to works, tunnels could be affected by ground works and vegetation removal and badgers could be harmed.

5.8 Loss of grassland and hedgerow may affect birds that use the site for breeding and foraging by causing a decrease in nesting sites and food resources. Loss of these habitats may directly harm nesting birds if carried out during the breeding season (March to August inclusive).

Recommendations

5.9 The following are general recommendations that are likely to be a minimum requirement for any future development of the site. To prevent potential delays, it would be prudent to undertake the recommended surveys well in advance of any master-planning and certainly before any planning application is made.

Bats

5.10 The habitats for foraging bats are limited within the site, and loss of grassland is unlikely to significantly impact local bat populations, particularly as any new residential development will also include gardens, which can be used by foraging bats. If the hedgerow are to be severed or removed, or likely to be affected by an increase in light spill, there may be significant impacts on commuting routes, particularly if there are roosts nearby.

5.11 If there were to be any loss or major severance of the hedgerow (or a significant increase in light spill), then it would be recommended that bat transects were undertaken to check whether any important commuting routes are present. Following Good Practice Guidelines for a small site of medium habitat quality, up to three activity transects would be undertaken within the peak activity season (May to August).

Badgers

5.12 Although no badger activity was observed on the site at the time of the survey, activity patterns of this species can change over a short time. In the event that badger activity is discovered on site prior to (or during) works, then all works must cease and the advice of a suitably qualified ecologist sought.

Birds

5.13 Where possible, habitats suitable for nesting and foraging birds should be retained, enhanced or created within any new development. The hedgerow habitat within the site is likely to be the most valuable to nesting birds, and should be retained as far as possible.

5.14 Nesting birds may be present in the hedgerow during the bird breeding season (March to August inclusive). If vegetation removal is planned during these months, then a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed.

5.15 It would be of conservation benefit to install a variety of nesting boxes for different bird species within the site in future (buildings and trees where suitable) to enhance the site for nesting birds and encourage bird diversity. Information on bird nesting boxes can be found at http://www.rspb.org.uk/advice/helpingbirds/nestboxes/. Enhancing existing hedgerows or planting new hedgerows and shrubs within any new development can benefit birds if a wide range of native species are used.

Other considerations

5.16 It is not currently known whether the proposed development requires additional lighting. If so, then a lighting design around the new development should be considered at an early stage. Light spill can affect the foraging and commuting strategy of many species and thus should be avoided on nearby trees and hedges/shrubs and should not exceed 200 lumens (150 watts). Any security lighting should be on a timer setting and faced downwards to prevent spillage onto nearby habitats. The height of any lighting columns around the development should not exceed 8 m to further reduce any ecological impact of light pollution. Low-pressure sodium lamps (SOX) fitted with hoods are recommended to direct light below the horizontal plane to minimize upward light spill.

6.0 References

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7.0 Plans

Extended Phase I Habitat Survey

8.0 Photographic Plates

Slide 1: Improved grassland & species-poor hedgerow

Slide 2: Bare ground next to gated entrance