

Preliminary Ecological Appraisal

Greenway Hall Golf Club, Staffordshire

Date: 6th January 2014

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).

No part of this document may be reproduced without prior written approval of Absolute Ecology LLP.

Non-technical summary

Absolute Ecology LLP were commissioned to undertake a Preliminary Ecological Appraisal of land at Greenway Hall Golf Club, Stanley Road, Stockton Brook, Stoke-on-Trent, ST9 9LJ. The Preliminary Ecological Appraisal was undertaken on 6th January 2013 by an experienced and licensed ecologist who is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM).

The site comprised of semi improved grassland and amenity grassland.

Any landscaping relating to the proposed development should also take into consideration bats and other wildlife, and it is recommended that only native tree species are planted. In particular, no plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during the landscaping of this development. For further details of Schedule 9 plants, visit the Defra website: www.defra.gov.uk/wildlife-pets/non-native.

Contents

Notice to readers

Non-technical summary

Contents

1.0 Introduction

Background

Site Description

2.0 Methodology

Desk Study

Habitat Survey

Fauna

Valuation of Ecological Features

Nomenclature

3.0 Legislation

4.0 Results

Desk Study

Habitats

Fauna

5.0 Development Constraints and Recommendations

Designated Sites

Habitats

Protected and Notable Species

6.0 References

7.0 Plans

8.0 Proposed Golfing Driving Range Shelter Error! Bookmark not defined.

1.0 Introduction

Background

- 1.1 Absolute Ecology LLP was commissioned to undertake a Preliminary Ecological Assessment of a site known as Stanley Road, Stockton Brook, Stoke-on-Trent ST9 9LJ.
- 1.2 The assessment was undertaken on the 6th January 2014 by Matthew James Haydock an experienced ecologist who is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM) whom has been involved in many projects including designing and undertaking ecological habitat surveys and site nature conservation evaluations; writing and implementing site management plans; acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures; protected species surveys under Natural England licence for survey and development; undertaking ecological impact assessment, appropriate assessment. Matthew has a National Diploma in ecology and Landscape studies and holds higher National Diploma in Environmental Management.
- 1.3 It is proposed to create a golfing driving range shelter on an existing golfing driving range.
- 1.4 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 future works in a legal and ecologically sensitive manner.
- 1.5 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

- 1.6 The site includes an existing golfing driving range which is surrounded to the north by residential development and to the south by open countryside of mixed farmland.



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 7th January 2013 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 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 4.6), this is unlikely to be a significant constraint.

Nomenclature

- 2.10 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.

- Bagnall Road Wood (LNR) - Bagnall Road Wood is the site of a Victorian tree nursery. This woodland is dominated by deciduous trees such as beech, hornbeam and oak and botanical species include bluebells and wood sorrel adorn the woodland floor.

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

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

Plants – 24 records

Mammals – Whiskered/Brandt's Bat (2 Records), Common Pipistrelle (73 Records), Brown Long-eared Bat (5 Records), Eurasian Badger (11 Records), Polecat (2 Records), European Water Vole (10 Records),

Birds – 140 records

Amphibian- Great Crested Newt (1 Record)

Reptile -Slow-worm (2 Records), Grass Snake (22 Records), Adder (3 Records), Common Lizard (1 Record)

Habitats

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

- Amenity grassland
- Semi Improved grassland

Amenity grassland

- 4.5 The proposed driving range consists of amenity grassland. The grassland was regularly mown with a short sward length, and included annual Perennial rye-grass *Lolium perenne*, daisy *Bellis perennis*, dandelion *Taraxacum officinalis*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens* and germander speedwell *Veronica chamaedrys*.

Semi Improved grassland

- 4.6 There is circa. 450m² of semi improved grassland which contains Perennial rye-grass *Lolium perenne* with patches of white clover *Trifolium repens*, and common nettle. The sward length was shorter, less tussocky and more patchy, and herbs were infrequent. The grassed area was damp with patches of *Iris* sp.

Although many grassland herb species are annual and may not be present in January, the field has been assessed to comprise species-poor semi-improved grassland and amenity grassland. The evidence supporting this is summarised as follows:

- Grasses present were low in diversity and typical of semi-improved and amenity grassland
- Herbs present were sparse, lacking in diversity and typical of improvement
- There were no key indicator herbs of more species-rich grassland present (for example, ribwort plantain, black knapweed, meadow buttercup, common cat's-ear, sedges etc - even in winter these herbs would have vegetative parts showing within the sward)
- The area of the golf course is regularly mowed which can reduce species diversity as flowering herbs and grasses tend to be eaten before they set seed.

Fauna

Bats

- 4.7 SER provided several records of bat species within 2 km of the site. The site did not appear to offer any potential roosting sites such as buildings or trees.
- 4.8 The site provides good foraging habitat for a range of bat species. The adjacent woodland, woodland edge, and hedgerows are likely to be used by foraging bats as well as navigational

flight line though these features will not be affected by the proposed development of the golfing range shelter.

Badgers

- 4.9 SER provided records of Badger within 2 km of the site. The site provides potential for foraging badgers, such as the amenity grassland and woodland. There is some potential for badger setts on site, although none were observed either on or within 30 m of the site. No evidence of badger activity, such as hairs, dung pits, latrines or snuffle marks, was discovered during the survey.

Dormice

- 4.10 SER provide no records of Dormice occurring within 2 km of the site. The potential for the site to support Dormice is low as no trees or woodlands would be affected by the golfing range.

Water Voles

- 4.11 There SER provided no records of Water Voles occurring within 2 km of the site. Within 20 meters of the proposed driving range golfing shelter is a stream. The stream provides sub-optimal habitat for water vole, due to the shallow water level and lack of dense marginal vegetation.

Birds

- 4.12 The SER Records show records of Hobby, and Kingfisher. The following were all either observed or heard on site during the survey: Wren, Magpie, Blackbird, Feral Pigeon, and Woodpigeon.
- 4.13 The site as a whole provides limiting foraging and nesting habitat for bird species due to the lack of trees, hedgerows and the lack of dense grassland due to the management of the site. Though the amenity grassland provides foraging for nesting birds. No trees or hedgerows will be affected by the development of the golfing range.

Reptiles

- 4.14 SER did provide records of reptiles within 2km. The lack of dense structure in the sward of the semi improved and amenity grassland and the compacted soil creates a low level of cover for foraging and sheltering reptiles.

Amphibians

- 4.15 SER provided records of amphibian species within 2 km of the site. There are two pond on the OS maps both a 260 meters from the proposed golfing range. Given that the proposed golfing range will maintain majority of the grassland the only land intake will be the construction of a metal framed range canopy this will uptake circa. 450m². of semi improved grassland, no amphibian hibernacula's or areas of rest were identified and the land intake is minimal it is considered that the golfing range will have little impact on amphibian's particular great crested newts if present within the local or wider landscape.

Invertebrates

- 4.16 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 the creation of a golfing range shelter. Ecological constraints and recommendations with regard to any development are discussed below.

Designated Sites

- 5.1 There is a single LNR (Bagnall Road Wood) site within 2km of the proposed development site. Given the physical distances between them and considering the geographical features that also separate them, including open farmland built development and roads; it is very unlikely that the proposed development would affect any of these areas.

Habitats

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

Potential Impacts of Works

- 5.3 There are existing plans for the site; however given the managed habitat which is of low ecological importance and that only land intake is 450m² of semi improved grassland no impacts on wildlife is envisaged with this site.

Recommendations

- 5.4 Any landscaping relating to the proposed development should also take into consideration bats and other wildlife, and it is recommended that only native tree and shrub species are planted. In particular, no plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 should be planted during the landscaping of this development. For further details of Schedule 9 plants, visit the Defra website: www.defra.gov.uk/wildlife-pets/non-native.
- 5.5 Standing trees should be retained where possible, and any new planting should contain native species of trees.

Table 3: List of native tree species

	Species	Planting Time
Native Tree Species	Ash (<i>Fraxinus excelsior</i>)	January/February
	Aspen (<i>Populus tremula</i>)	January/February
	Field maple (<i>Acer campestre</i>)	January/February
	Bird Cherry (<i>Prunus padus</i>)	January/February
	English Elm (<i>Ulmus minor var vulgaris</i>)	January/February
	Oak (<i>Quercus robur</i>)	January/February

- 5.6 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

BSBI (2011). *BSBI 2007 List*. [Online]. Available at: <http://www.bsbi.org.uk/html/database.html> [accessed on 27th September 2011].

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, SI 2007/1843, London: HMSO.

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Institute of Ecology and Environmental Management (2007). *Guidelines for Ecological Impact Assessment in the United Kingdom*. [Online]. Available at: <http://www.ieem.net/ecia/> [accessed on 27th September 2011].

Joint Nature Conservation Committee (2007) *Handbook for Phase I Habitat Survey – a Technique for Environmental Audit*. JNCC: London.

Multi-Agency Geographical Information for the Countryside (20010). MAGIC. [Online]. Available at: www.magic.gov.uk/ [accessed on 27th September 2011].

Natural Environment and Rural Communities Act 2006, (c.16), London: HMSO.

Office of the Deputy Prime Minister. (2005) *Planning Policy Statement 9: Biodiversity and Geological Conservation*, The Stationary Office, Norwich.

The Protection of Badgers Act 1992, (c.51), London: HMSO.

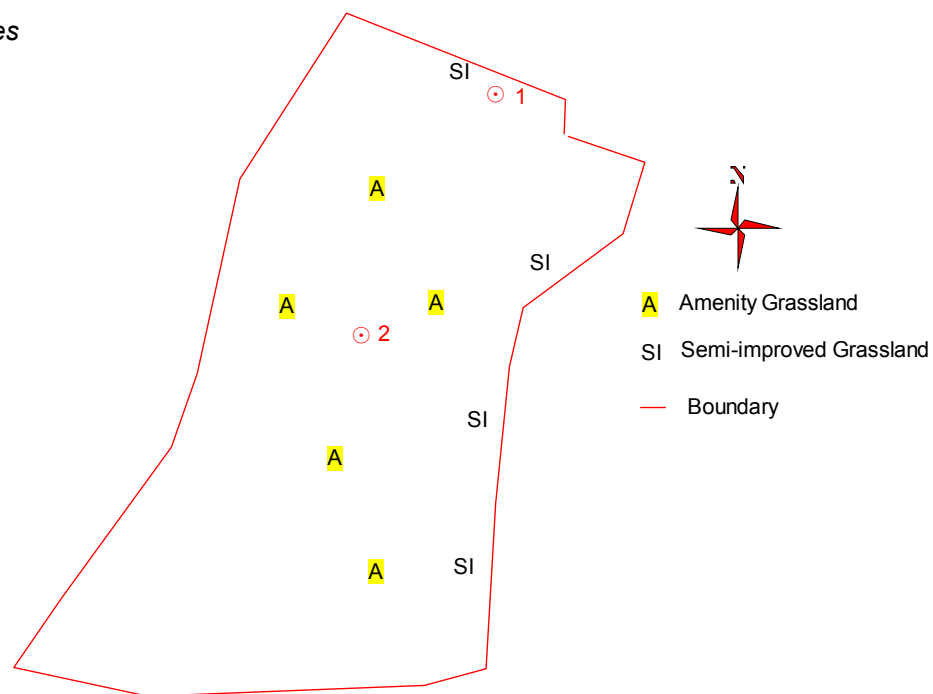
UK BAP (2008) *Priority Habitat Descriptions* [Online]. Available at: <http://www.ukbap.org.uk/library/UKBAPPriorityHabitatDescriptionsfinalAllhabitats20081022.pdf> [accessed on 27th September 2011]

Wildlife and Countryside Act 1981 (and amendments). (c.69), London: HMSO

7.0 Plans

Extended Phase I Habitat Survey

Table 2: Target Notes



Number	Target Note
1	Semi-improved grassland 450m2 land intake.
2	Short compacted amenity grassland

8.0 Proposed Golfing Driving Range Shelter

