



Ecological Scoping Survey on Land off Low Gate, Gosberton, Lincolnshire.



Client: Portess and Richardson

September 2016

Hillier Ecology Limited
127 Fletton Avenue, Peterborough, PE2 8BX
Office: 01733 894979 Mobile: 07730 758439
howardwhillier@btinternet.com

Contents

1.0	Summary	3
2.0	Introduction	3
3.0	Site Details	4-6
4.0	Survey Methodology	6-8
5.0	Survey Results	9-10
6.0	Conclusions	11
7.0	Recommendations	12
8.0	Legal Protection	13-14
9.0	References	15
10.0	Appendices	16-18

1.0 Summary

1.1 An ecological scoping survey covering the following species; bats *Chiroptera* sp., birds *Aves*, badger *Meles meles*, reptiles, Water Vole *Arvicola amphibius* and flora, has been carried out on land off Low Gate, Gosberton, Lincolnshire.

1.2 None of the trees on the site boundary offered potential roost features suitable for bat species.

1.3 Using the grading system the trees all came out as **negligible potential for roosting bats**.

1.4 Two species of birds were recorded during the survey, one of the species meadow pipit *Anthus pratensis* is on the amber list of Birds of Conservation Concern, the other species wood pigeon *Columba palumbus* is common and widespread.

1.5 There is suitable nesting habitat in the trees and hedgerow that abut the site, any loss of nesting habitat should be mitigated through the installation of nest boxes.

1.6 The survey for badgers produced a negative result with no evidence of badgers being recorded.

1.7 The site does not offer suitable habitat for reptiles.

1.8 The field drain that is located on the northern boundary of the site; was dry at the time of the survey, no evidence of water vole using the drain was recorded.

1.9 The botanical survey recorded sixteen common and widespread species of plants.

1.10 Overall the site is of low ecological value.

2.0 Introduction

2.1 Hillier Ecology Ltd were commissioned by Portess and Richardson to carry out an ecological scoping survey of land off Low Gate, Gosberton, Lincolnshire.

2.2 The survey was carried out to assess the ecological impact of the proposed development of the site.

3.0 Site Details

3.1 The site is located at NGR TF 2412031911 (Appendix 1).

3.2 The site is situated in village of Gosberton, the site and its surrounds are made up of the following habitats:

- Mature trees
- Hedgerow
- Dwellings
- Mature gardens
- Arable

3.3 The low diversity of habitats is thought to be sub-optimal for supporting protected species.

3.4 The survey area is shown in the photographs below and (Appendix 2).



Plate 2 Survey Area



Plate 3 Survey Area



Plate 4 Survey Area



Plate 5 Dry Field Drain

4.0 Survey Methodologies

Bats (Trees)

4.1 The survey involved a thorough search of all the trees looking for potential roost sites, which are the following:

- Cracks
- Cavities
- Loose Bark
- Broken Limbs
- Ivy

4.2 A search was made for the following signs:

- Faeces
- Urine staining
- Fur rubbing
- Live bats

4.3 The trees were graded using the assessment below.

Assessment of Potential to Support Roosting Bats - Categories for Trees	
Negligible potential	Tree contains no suitable features for roosting bats. These can include young trees without ivy and without loose bark and obvious cracks / fissures. Usually saplings, semi-mature specimens with a small girth or mature trees which do not tend to form fissures as readily such as sycamore.
Low potential	Tree contains limited features suitable for roosting bats. Usually young (sapling or semi-mature) trees with some ivy or some loose bark but no obvious cracks or fissures. No evidence of bats found (e.g. droppings / staining).
Moderate potential	Tree contains some features suitable for roosting bats. Trees with some cracks or fissures and/or large amounts of ivy / loose bark. Usually semi-mature or mature specimens. Trees tend not to have large splits, hollow trunks or woodpecker holes. No evidence of bats found.
High potential	Tree contains features that are highly desirable for roosting bats. Trees with woodpecker holes / large cracks and/or crevices. Often with a hollow trunk. May support very dense ivy. No evidence of bats found.
Confirmed roost	Bats discovered roosting within the tree, or recorded emerging / entering a tree at dusk / dawn. Trees found to contain conclusive evidence of occupation by bats, such as bat droppings. A confirmed roost record (as supplied by an established source such as the local bat group) would also fall into this category.

Birds

4.4 The site has been inspected for evidence of breeding birds.

Badgers

4.5 A walkover survey of the site has been carried out to search for the following signs (Harris et al 1989):

- Setts
- Latrines
- Dung
- Badger Hair
- Footprints
- Pathways

4.6 Evidence of badger activity if found will be recorded.

Reptiles

4.7 A habitat assessment has been made to assess the sites potential for reptiles.

4.8 A walkover of the site has been carried out to assess if the habitat is suitable to sustain a population of reptiles. The following habitats are looked for:

- Bare Ground
- Variety of Sward Heights
- Natural Refugia
- Basking Areas

Water Vole

4.9 The standard methodology for water vole (Strachan et al 2011) was used.

4.10 A metre by metre search of the watercourse to look for the following signs:

- Latrines
- Feeding Signs
- Footprints
- Burrows
- Runways in Vegetation
- Live Sightings

4.11 Habitat data was also recorded.

Flora

4.12 A walkover the site has been carried out to record all native plant species.

5.0 Survey Results

5.1 The surveys were carried out on the following date 11th August 2016.

5.2 The surveys were undertaken in following weather conditions; overcast, moderate breeze and a temperature of 17.3°C.

Bats

5.3 Howard Hillier who holds a Natural England Bat Survey Licence Number 2016-21564-CLS-CLS carried out the survey.

5.4 An assessment was carried out to look at the suitability of trees to support roosting bats, all of the trees that abutted the site were graded as having **negligible potential to support roosting bats.**

5.5 The trees, hedgerow and drain offer suitable foraging and commuting opportunities for bat species.

Birds

5.6 Two species of bird were recorded during the survey; one of the species meadow pipit is on the amber list of Birds of Conservation Concern.

5.7 The trees and hedgerow that abut the site offer suitable nesting habitat.

Badgers

5.8 The survey did not record any badger setts or evidence of badgers using the site.

Reptiles

5.9 The habitat assessment of the site did not meet the criteria as suitable reptile habitat; comprising in the main of arable land lacking in a variety of sward heights, bare ground and natural refugia.

Water Vole

5.10 The field drain was dry at the time of the survey and no evidence of water voles being present was recorded.

5.11 Habitat data for field drain is shown in Table 1 below.

Table 1 Habitat Data for Field Drain

Watercourse Field Drain	Width 1m	Depth None	Shore/Bank Type Earth	Current None
Habitat Drain	Bordering Land Use Arable	Bank Profile Shallow <45°	Vegetation: (DAFORN Scale) Bankside trees N Bushes N Herbs F Submerged weed N Reeds/Sedges A Tall Grass A Short Grass N	

Flora

5.12 Sixteen common and widespread species of plant were recorded; a full species list is shown in (Appendix 3).

6.0 Conclusions

Bats

6.1 The survey indicated that none of the trees present on site have potential to support roosting bats, with none of the following roost features present; cavities, cracks, loose bark, broken limbs or dense ivy.

6.2 The trees, hedgerow and drain offer suitable foraging and commuting opportunities for bats and lighting of the development should be sensitive to this.

Birds

6.3 Two species birds were recorded during the survey; one of the species meadow pipit s is on the amber list of Birds of Conservation Concern, the other species wood pigeon is common and widespread.

6.4 The trees and hedgerow offer suitable nesting habitat and any loss of these should be mitigated.

Badgers

6.5 No evidence of badger setts or badger activity was found to suggest that badgers are using the site.

Reptiles

6.6 The habitat assessment of the site did not meet the criteria as suitable reptile habitat; comprising in the main of arable land and lacking in a variety of sward heights, bare ground and natural refugia.

Water Vole

6.7 The field drain at the site boundary was recorded as dry during the survey, no evidence of water vole using the drain was recorded.

Flora

6.8 All species recorded are considered common and widespread.

6.9 Overall the site is of low ecological value.

7.0 Recommendations

Birds

7.1 Any work to the trees and hedgerow should be carried out outside of the bird breeding season (March to September inclusive). Where this is not possible an inspection should be made by a suitably qualified ecologist prior to work commencing.

7.2 If the development results in the loss of nesting habitat this should be mitigated through the installation of a variety of nest boxes; advice on the type and location of boxes should be sought from the ecologist.

Bats

7.3 Whilst the site did not have potential to support roosting bats, it is important to consider the value of the trees, hedgerow and drain as foraging and commuting habitat.

7.4 Care should be taken to avoid lighting the trees, hedgerow and drain; all external lighting should be kept to minimum and at a low level or directed downwards through the use of hoods and cowls.

8.0 Legal Protection

Bats

8.1 The Conservation of Habitats and Species Regulations 2010 transpose into UK law Council Directive 92/43/EEC of 1992 (often referred to as the Habitats Directive). All bats are listed under Annex IV and some (horseshoe bats, Bechstein's and Barbastelle) are also listed under Annex II which relates to Special Areas of Conservation. These Regulations make it an offence to:

- Deliberately capture, injure or kill a bat.
- Deliberately disturb bats in a way as to be likely significantly to affect the ability of any significant groups of bats to survive, breed or rear or nurture their young, or to affect the local distribution or abundance of that species.
- Damage or destroy a breeding site or resting place of a bat.
- Keep, transport, sell or exchange, or offer for sale or exchange a live or dead bat or any part of a bat.

8.2 In addition the Wildlife & Countryside Act 1981 (as amended) makes it an offence to:

Intentionally or recklessly

- Disturb any bat whilst it is occupying a structure or place which it uses for shelter or protection.
- Obstruct access to any structure or place which any bat uses for shelter or protection.

8.3 Penalties are fines of up to £5000 per bat and up to 6 months custodial sentence.

Birds

8.4 All bird's nests are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it an offence to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built.

Badgers

8.5 The badger receives legal protection under The Protection of Badgers Act 1992.

8.6 The following is a summary of the offences contained in the act. It is a criminal offence to commit any of the following:

- To interfere with a sett by damaging or destroying it.
- To obstruct access to, or any entrance of a badger sett.
- To disturb a badger when it is occupying a sett.

8.7 A badger sett is defined by the legislation as “any structure or place, which displays signs indicating current use by a badger” and this is taken by Natural England to include seasonally used setts.

Reptiles

8.8 The Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act (2000) make it an offence to intentionally or recklessly kill or injure reptiles.

Water Vole

8.9 Water Vole receives full protection through its inclusion in Section 9 of the Wildlife and Countryside Act 1981.

8.10 Full legal protection under the act makes it an offence to:

- Intentionally kill, injure or take water voles.
- Possess or control live or dead water voles.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection.
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.
- Sell water voles or offer or expose for sale or transport for sale.

10.0 References

Anon. (1998). Herpetofauna Groups of Britain and Ireland. Evaluating Local Mitigation/Translocation Programmes, Froglife, Halesworth, Unpubl.

Collins J (2016). Bat Surveys for Professional Ecologist – Good Practice Guidelines (3rd Edition), Bat Conservation Trust, London.

Eaton M.A, Brown A.F, Noble D G, Musgrove A.J, Hearn R.G, Aebischer N.J. Gibbons D.W, Evans A and Gregory R.D (2015). Birds of Conservation Concern 3, The Population Status of Birds in the United Kingdom, Channel Island and the Isle of Man, British Birds 102, 296-341, London.

Gent T and Gibson S. (2003). Herpetofanua Workers Manual, JNCC, Peterborough.

Harris S, Cresswell P, and Jefferies D (1989). Surveying Badgers, The Mammal Society, London.

Harris S, Jefferies D, Cheeseman C and Booty C 1994. Problems with Badgers. RSPCA. West Sussex.

HMSO (1981). Wildlife and Countryside Act. HMSO, London.

HMSO (2010). Conservation of Habitats and Species Regulations. HMSO, London.

HMSO (2000). Countryside and Rights of Way (CROW) Act. HMSO, London.

Macdonald, D. W, Mace, G & Rushton, S 1998 Proposals for Future Monitoring of British Mammals, DETR, London.

Mitchell-Jones A.J (2004). Bat Mitigation Guidelines, English Nature, Peterborough.

Mitchell-Jones, A. J & McLeish, A. P (1999). The Bat Workers Manual, JNCC, Peterborough.

Preston C.D, Pearman D.A & Dines T.D (2002) New Atlas of the British & Irish Flora, OUP, Oxford.

Strachan, R, Moorhouse, T and Gelling, M (2011). Water Vole Conservation Handbook (Third Edition), Wildcru, Oxford.

Appendix 1 Site Location



Based on the Ordnance Survey Map with Permission of the Controller of Her Majesty's Stationary Office Crown Copyright Reserved. Licence No 10045706

Appendix 2 Survey Area



Appendix 3 Species List Flora

<i>Acer pseudoplatanus</i>	Sycamore
<i>Arrhenatherum elatius</i>	False Oat Grass
<i>Calystegia sepium</i>	Field Bindweed
<i>Cirsium vulgare</i>	Spear Thistle
<i>Cirsium arvense</i>	Creeping Thistle
<i>Crataegus monogyna</i>	Hawthorn
<i>Epilobium hirsutum</i>	Great Willowherb
<i>Fraxinus excelsior</i>	Ash
<i>Geum urbanum</i>	Wood Aven
<i>Heracleum sphondylium</i>	Hogweed
<i>Phragmites australis</i>	Common Reed
<i>Rubus fruticosus</i>	Bramble
<i>Rumex crispus</i>	Curled Dock
<i>Senecio jacobaeae</i>	Common Ragwort
<i>Taraxacum agg</i>	Dandelion
<i>Urtica dioica</i>	Common Nettle