



Inspection Survey for Badgers

Wingerworth, Chesterfield

February 2014

Notice to readers

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Non-technical summary

This report has been prepared in relation to the identification and location of badgers in and around the proposed development on land known as land off Derby Road, Wingerworth Chesterfield, Derbyshire. The site comprises a large arable field with field margins of between 0.5 m and 2 m wide, semi-improved grassland, hedgerow/scrub boundaries and young to mature trees.

The site survey was conducted on the 12th February 2014. No badger setts were identified within 30m of the proposed development; therefore, the development will have no negative impact on badgers, thus no further surveys or mitigation will be required.

Contents

Notice to readers

Non-technical summary

Contents

1.0 Introduction

Background

Site Characteristics

2.0 Legislation and Status

3.0 Methodology

Inspection Survey

4.0 Results

Inspection Survey

5.0 Evaluation

6.0 Impacts and Recommendations

Impacts

Recommendations

Care and Vigilance During Works

7.0 References

8.0 Plans

Location Plan

9.0 Photographic Plates

10.0 Appendix 1

1.0 Introduction

Background

- 1.1 Absolute Ecology LLP was commissioned to undertake an inspection survey for the badger potential of an agricultural field on a site known as land off Derby Road, Wingerworth Chesterfield, Derbyshire. The site comprises a large arable field with field margins of between 0.5 m and 2 m wide, semi-improved grassland, hedgerow/scrub boundaries and young to mature trees. It is proposed that the site be developed for residential housing.
- 1.2 The scope of this report has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity – Code of practice for planning and development'. This report has been prepared with due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)¹ and the emerging BS 42020
- 1.3 The aim of the survey was to undertake an appraisal of the buildings to establish the following:
 - Establish the current status of badgers in the area
 - Suitable food resources and habitat requirements
 - Development impact assessment in relation to badgers
 - Whether additional surveys are required
- 1.4 The information was subsequently used in conjunction with the knowledge of the proposed development to determine:
 - What impact the development would likely have on badgers and their setts
 - Whether such an impact would be acceptable
 - The need for a licence application to be made in respect of activities concerning the protected species
 - Recommendations for any mitigation measures that would be required

Site Description

- 1.5 The site comprises a large arable field with species-poor gappy hedgerow and fencing boundaries. The residential estates of Wingerworth lie immediately to the north and the remaining landscape comprises mixed agricultural fields, woodland and ponds.

2.0 Legislation and Status

Legislation

- 2.1 Badgers are listed in Schedule 6 of the Wildlife and Countryside Act (1981). As such, they receive protection under Section 11 of this Act, which prohibits the use of self-locking snares, bows, explosives, or the use of live mammals or birds as decoys for the capture and killing of any wild animal. It also prohibits the use of traps, snares, nets, poisons, electrical devices, dazzling devices and automatic weapons, night shooting devices, gas or smoke for killing, injuring, or taking animals listed in Schedule 6.
- 2.2 The Protection of Badgers Act 1992 added further protection to this and makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so, or intentionally or recklessly interfere with a sett.
- 2.3 A sett is classified as any structure that displays signs indicating current use by a badger (Natural England, 2007). The Act does not define 'current use'. However, Natural England (2009a) has issued an advice note on the interpretation of 'current use' as follows: 'Displaying signs indicating current use is NOT synonymous with current occupation; A Badger sett is protected by the legislation if it "displays signs indicating current use by a Badger". A sett is therefore protected as long as such signs remain present. In practice, this could potentially be for a period of several weeks after the last actual occupation of the sett by a Badger or Badgers; Demonstration of the fact that a sett is not occupied by Badgers does NOT necessarily exempt it from the protection afforded by the Act if it still displays signs otherwise indicative of current use; A sett is likely to fall outside the definition of a sett in the Act if the evidence available indicates that it is NOT in use by Badgers; e.g. absence of Badger field signs, debris in sett entrances etc. In practice, such a sett may have been unused for several weeks.'
- 2.4 Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.
- 2.5 The Act does not define 'disturbance'. Natural England has issued an advice note on the interpretation of 'Disturbance in relation to Badgers occupying a sett' (Natural England, 2009b). Within this guidance, Natural England define disturbance to a badger sett. It is Natural England's view that badgers are relatively tolerant of moderate levels of noise and/or activity around their setts and that '...low or moderate levels of apparent disturbance at or near to Badger setts do not necessarily disturb the Badgers occupying those setts'.
- 2.6 Examples of activities at or near setts that Natural England do not consider likely to cause disturbance to badgers, and therefore would not normally expect to require a licence, include: 'Development, or other activities occurring close to Badger setts (use of hand tools and/or machinery), where there is no reason to believe that the disturbance will be greater than that which Badgers commonly tolerate, and therefore any Badger(s) occupying the sett are unlikely to be disturbed; Vegetation removal (including felling small trees or shrubs) over or adjacent to setts (using hand tools and/or machinery); Clearing out of ditches/watercourses using machinery and/or hand tools where Badger setts are present.'

- 2.7 Natural England requires a judgment to be made on a case-by-case basis as to whether a particular action may or may not cause disturbance to badgers.
- 2.8 Where interference with a sett showing signs of current use cannot be avoided during the development, a licence must be sought from Natural England, which permits activities that would otherwise be illegal. Natural England will generally only issue licences to permitted activities during the period 1st July to 30th November, as this avoids the badgers' protracted breeding period. Natural England will only issue a licence after detailed planning permission has been granted, where applicable, so that there is no conflict with the planning process.
- 2.9 Under Section 40 of the Natural Environment and Rural Communities Act (2006), public bodies, including Local and Regional Planning Authorities, have a duty to 'have regard' to the conservation of biodiversity in England when carrying out their normal functions, which includes consideration of planning applications. In compliance with Section 41 of the Act, the Secretary of State has published a list of species considered to be of principal importance for conserving biodiversity in England.

3.0 Methodology

Inspection Survey

- 3.1 The inspection survey was conducted on 12th February 2014 by an experienced badger consultant. Weather conditions on the day of the survey were overcast with a light breeze and a temperature of 5 °C.
- 3.2 The assessment was carried out to determine whether badgers are active within the site, to identify ecological constraints that could affect the proposed work and to identify whether further surveys are required.

The methodology broadly follows the guidelines outlined in the 'Badgers & Development' handbook published by Natural England (NE).

The site was assessed for evidence of and its potential to support badgers, and the area was surveyed for potential signs, particularly the following characteristics:

- signs of badger activity
- setts
- hair
- badger paths
- snuffle holes
- scratch marks on trees
- footprints
- dung pits (latrines)

These characteristics were searched for within 50m of the proposed development area boundary.

If a sett were identified, all holes would be examined closely and the number of entrances and evidence of its usage would be recorded. Where possible, setts identified during the survey would be categorised using nationally recognised sett classification criteria (Kruuk, 1978; Cresswell et al., 1990; Wilson et al., 1997), as described below:

Main sett: These are large with a number of active holes and conspicuous spoil heaps. They are well established with well-used paths to and from the sett and between entrances. They are normally in continuous use and most likely to be where cubs are born. There is only one main sett per social group of badgers.

Annexe sett: These occur in close association with the main sett (normally less than 150m away) and are linked to the main sett by clear, well-worn paths and track ways. Should a second litter of cubs be born, they may be reared here. They normally have several entrances but they may not all be in use at the same time.

Subsidiary sett: These are smaller and usually consist of three to five entrances, and are not in continuous use. They are usually more than 50m away and may not have well-used paths connecting them to other setts.

Outlier sett: These consist of one to three holes. Usually, they have small spoil heaps, indicating that underground they are not very extensive and may only be used sporadically. Outliers serve multiple functions, including allowing efficient and safe travel to important parts of their home range.

Individual holes within an identified badger sett would be classified as being active, partially used, or disused, as follows:

Active: entrances are clear of any leaf litter, debris or vegetation, are in obvious regular use, and may or may not have been excavated recently.

Partially used: entrances are not in regular use and have debris such as leaves or twigs in the entrance, or have moss and/or other plants growing in or around the entrance. Partially used holes could be in regular use after a minimal amount of clearance.

Disused: entrances have not been in use for some time, are partially or completely blocked, and cannot be used without a considerable amount of clearance. If the hole has been disused for some time, all that may be visible is a depression in the ground where the hole used to be, and the remains of the spoil heap, which may be covered by moss or plants.

- 3.3 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. A list of all species recorded on site and those mentioned in the text but not necessarily occurring on site together with scientific names all 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.

4.0 Results

Inspection Survey

Surrounding Landscape

- 4.1 The site and surroundings provide potential foraging habitat for badgers. The adjacent gardens, woodlands and fields could be used by badgers to forage and to create setts. The surrounding landscape comprises of residential gardens, agricultural fields and woodland and is likely to support badgers if present.

Development Site

- 4.1 It was noted during the badger survey that the proposed development site has been ploughed, which would potentially prevent badgers from creating setts, although the field margins would provide foraging opportunities and the possible sett creation opportunity. The site boundary provides sufficient access for badgers to gain entry to the development site, but no badger setts were evident. A search was also conducted within a 30-metre radius of the development site to locate badger setts. To the south and west is a small wooded area, which would provide potential badger opportunities, although no evidence was found to suggest that badgers have created or are creating setts within 30m of the proposed development site. During the survey a notable small number of rabbit warrens were observed near to the boundary of the proposed development.

5.0 Evaluation

- 5.1 A summary of the results and an evaluation of the development site to support badgers is presented in Table 1.

Table 1: Classification of badger potential

Badger Potential	Rationale
Moderate	The development site shows possible badger sett creation opportunity on the field margins and adjacent woodland though no evidence was identified.

6.0 Impacts and Recommendations

Impacts

- 6.1 The development is to have new residential housing.
- No badger setts were found within a 30-metre radius; therefore, the potential impact on badgers is considered to be low, as no badgers or setts will be affected negatively.

Recommendations

- 6.1 No further surveys or mitigation is required.
- 6.2 Care Ensure that habitats of importance for foraging badgers are not fragmented or isolated by development, such that badgers can move freely between them and their setts. Maximum landscape connectivity should be developed by retention of the known badger pathway which was identified on the southern boundary and western boundary should retain 1-2 meters buffer zone to allow badgers maintain commuting and foraging grounds also the incorporate native tree species with a high proportion of fruit-bearing species such as Rowan and Elder should be incorporated into the planting scheme.

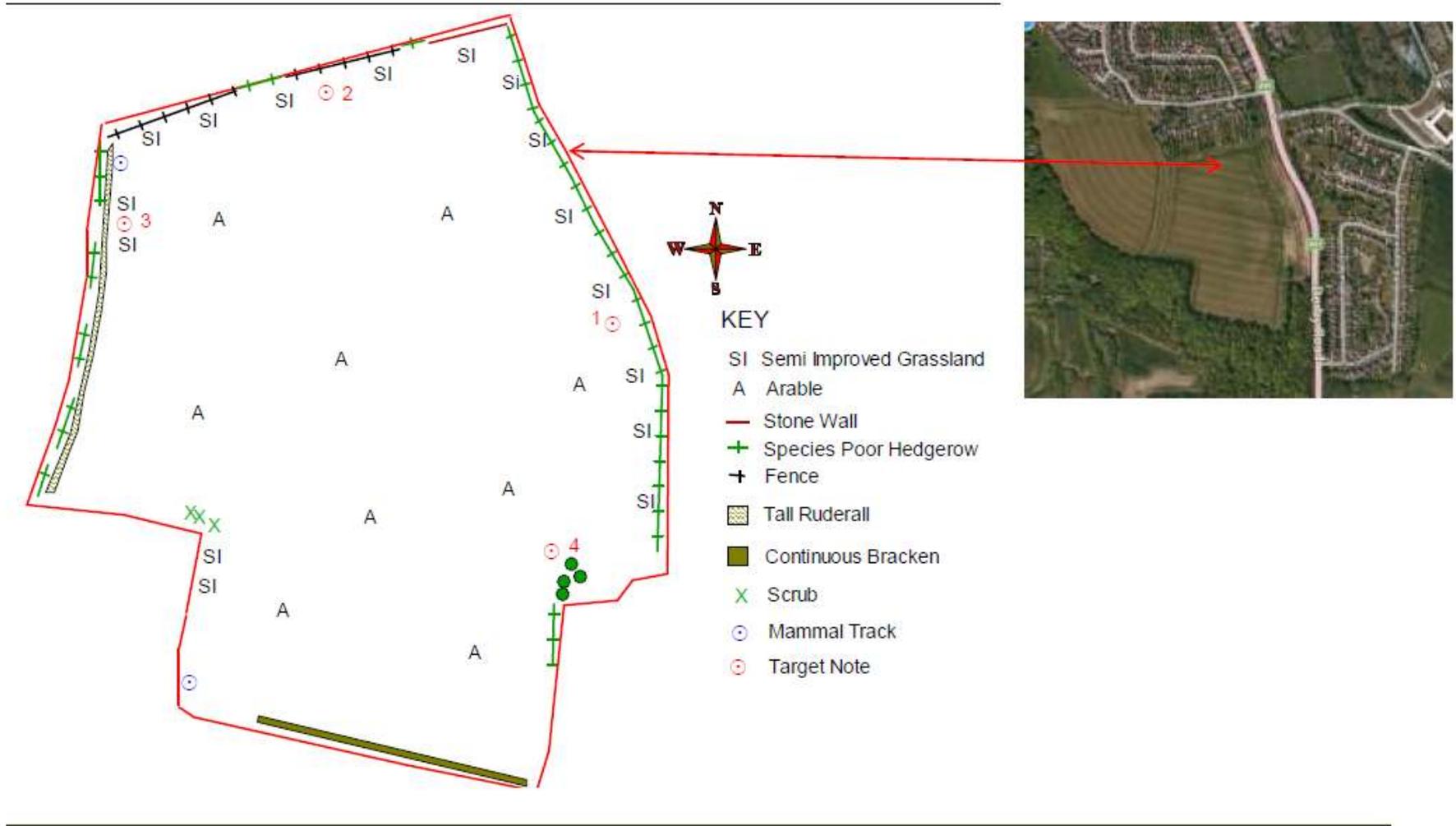
Care and Vigilance During Works

- 6.3 During the works, the contractor should be advised to adhere to the following:
- As badgers may access the site for foraging or commuting, it is recommended that if site works do not commence within 12 months of the report, a further survey should be undertaken to check that they have not colonised the site in the interim period.
 - If any signs that badgers have colonised the site are found once the development begins, work should cease and an ecologist contacted for advice.
 - No chemicals to be used in the immediate area of the existing areas of grassland and woodland to be retained unless they known to be safe for animals. Chemicals should be stored safely away from this area.
 - Any trenches or other excavations should be backfilled before the end of the day, or a ramp left to allow animals to escape. Trenches left in this manner should be inspected first thing each morning and a ramp provided in case animals have not located the existing ramp.
 - All open pipes with an inside diameter greater than 150 mm should be capped off overnight.

7.0 References

- Cresswell, P., Harris S., & Jeffries, D.J. (1990) The history, distribution, status and habitat requirements of the badger in Britain. Nature Conservancy Council, Peterborough.
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- Kruuk, H. (1978) Spatial organisation and territorial behaviour of the European badger *Meles meles*. *Journal of Zoology* 184, 1-19.
- Kruuk H. (1989) The social badger: ecology and behaviour of a group-living carnivore (*Meles meles*). Oxford University Press, Oxford.
- English Nature (2002) *Badgers and development*. English Nature.
- RSPB (2002) *The population Status of Birds in the UK 2002-2007*.
- Michael Clark (2001) *Badgers*.

8.0 Plans



9.0 Photographic Plates



Slide 1: Woodland west of site



Slide 2: Woodland south of site



Slide 3: Rabbit hole