



BADGER SURVEY REPORT
Flemingston
St Athan
Vale of Glamorgan
Central Grid Reference ST0115969632

On Behalf of Edenstone Homes

July 2016

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Appendix I Map Showing Features/ Habitats surveyed

Table 1 showing features surveyed and signs found

1 Introduction

1.1 Survey Brief

TerrAqua Ecological Services Ltd were commissioned by Edenstone Homes to undertake an assessment of all habitats within parcel of proposed development land at Flemingston, St Athan, Vale of Glamorgan, approximate central grid reference ST 0115969632, in order to ascertain the importance of the site, if any, to Badger (*Meles meles*) The survey boundary was taken as that supplied by Mr Richard Kelso acting on behalf of Edenstone Homes.

The potential for some habitats within the site to be used by badger was identified during the extended Phase I Habitat Survey of the site undertaken in February 2016 (TerrAqua ecological Services). This report sets out the results of the survey undertaken to assess the presence or otherwise of the species within the site boundary.

1.2 Client Details

The survey was undertaken on behalf of Edenstone Homes, Priory House, Priory Street, Usk NP115 1BJ following instructions to proceed by Mr Richard Kelso acting for Edenstone Homes.

2 Background

2.1 Rationale

The survey was commissioned as by the client prior to the submission of a planning application for the development of the above site following recommendations made in the Extended Phase I Habitat survey undertaken by TerrAqua Ecological Services Ltd. The Phase I Habitat Survey identified some habitats within and adjacent to the site as having the potential to be used by badger (TerrAqua Ecological Services, 2016).

2.2 Site Description

The site lies in a semi-rural location on the outskirts of the villages of St Athan to the west and Flemingston to the east, within the Vale of Glamorgan. The site comprises a series of fields managed as agricultural grasslands. The fields are separated by a hedgerow system. To the south an area of amenity land with planted trees and areas of hard standing, referred to as Annington Land, is also included within the site. The main potential development area has a slope to the north where the watercourse of Nant y Stepsau runs in a west to east direction along the southern boundary). The hedgerow system, vegetated stream corridor and woodland blocks have the potential to be used by badger for set building while the open grasslands provide potential foraging areas.

2.3 Legal Status

The Protection of Badgers Act 1992 provides legal protection for the Eurasian badger (*Meles meles*) in England, Wales and Scotland. The Act makes the following actions an offence:

- To kill, injure or take a badger, or attempt to do so
- To interfere with a badger set by damaging a set or any part of one, destroy a set, obstruct access to any entrance of a set, or disturb a badger when it is occupying a set.

2.4 Badger Ecology

Adult badgers grow up to a metre long and males can weigh up to 14 kg. They have strong claws and legs with which they dig and move earth. They are omnivorous and their diet typically consists of worms, insects, grain and fruits. During late summer and autumn they accumulate fat reserves. Badgers do not hibernate over winter but they are much less active and stay below ground especially during very cold or wet weather.

Badgers live in family or social groups of related mature and young adults and cubs, sometimes known as clans. Their “home ranges” consist of feeding grounds and one or more setts. A badger sett is defined in the legislation as “any structure or place which displays signs indicating current use by a badger”. Further consideration of defining the type of setts is considered further in Section 4.3 below.

3 Survey Methodology

The survey methodology as used to assess the use of the site by badgers is outlined below. These are accepted by both local authority and conservation bodies as the standard assessment methodologies.

3.1 Survey Dates and Personnel

The survey was conducted over a single day in late July 2015 by Carmen Jones MSc MCIEM Principal Ecological Consultant and Dyfrig Jones BSc Principal Ecological Consultant. Both experienced ecologists with extensive experience in both ecological assessment and species specific issues.

3.2 Survey Area

To verify the use of the whole site by badgers, the whole site was fully assessed for badgers including all hedgerows, vegetated watercourse corridors and woodlands. The survey extended for some 50m outside the proposed development boundary in addition to all land north of the site referred to as the potential mitigation land.

3.3 Field Survey Methodology

The survey area around the site was systematically searched for setts and other signs of badger activity. These included:

- Dung pits and latrines,
- Badger paths and tracks,
- Hairs,
- Footprints,
- Signs of foraging.

Each badger sett and the level activity associated with it can be classified according to the following definitions:

- **Main setts:** These are in continuous use; they are large, well-established, and often extensive and may have large spoil heaps outside the entrances. There are likely to be well-worn paths leading to the set.
- **Annexe setts:** These occur in close association with the main sett (usually within 150m), and are linked to the main set by clear well-used paths.
- **Subsidiary setts:** These comprise five holes on average, but are not in continuous use and are usually some distance from the main sett (50m or more). There is no obvious path connecting them to the main sett.
- **Outlying setts:** These consist of only one or two holes. They can be found anywhere within the territory and usually have small spoil heaps, indicating that they are not very extensive underground. There are no obvious paths connecting them to other setts.

The size, status and level of activity of each sett can be assessed by counting the number of entrance holes. The degree of use of each entrance hole can be classified as follows:

- **Well-used holes:** These are clear of any debris or vegetation, are obviously in regular use, and may or may not have been excavated recently.

- Partially-used holes: These are not in regular use and have debris such as leaves and twigs in the entrance, or have moss and/or other plants growing in or around the entrance.

Disused holes: These have not been in use for some time, are partially or completely blocked, and could not be used without a considerable amount of clearance. If the hole has been disused for some time the spoil heap may be covered in moss or plants.

3.4 Data Search

No records were found relating directly to the site or to any known set within a 50m radius of the site boundary. Badger are known to be present within the general area around St Athan area and are widespread within the Vale of Glamorgan. The data search included information received from the local record centre (SEWBReC) as part of the Extended Phase I Survey February 2016.

3.5 Survey Limitations

There were no limitations to the effectiveness of the survey and therefore the survey results are considered an accurate reflection of current badger activity within the site boundary.

4 Results

4.1 General

The Location of the badger survey boundary including features suitable for use by badger such as hedgerows and wooded areas are shown on the annotated map of the site Appendix I. A total of eleven (11) hedgerows were surveyed along with two wooded areas and a stream corridor. A description of the results are shown in table 1 below with targets notes highlighted on the map in appendix I:

Table 1 Badger Survey Results

Feature	Activity Recorded
H1	No evidence of badger activity
H2	Mammal run through hedge probably fox no badger activity
H3	No evidence of badger activity
H4	No evidence of badger activity
H5	Mammal runs in hedge probably hedgehog and fox. No evidence of badger activity
H6	Mammal runs in scrub along watercourse probably fox and rabbit. No evidence of badger activity
H7	No evidence of badger activity
H8	Mammal runs probably rabbit. No evidence of badger activity
H9	No evidence of badger activity
H10	Mammal runs through hedge probably fox. No evidence of badger activity
H11	Mammal runs probably fox or hare (Hare seen in field). No evidence of badger activity

Woodland 1	Wooded copse immediately outside survey boundary. No evidence of badger activity
Woodland 2	Woodland strip at northern extreme of site abutting un-named road. Mammal tracks probably fox. No evidence of badger activity
Wooded Stream Corridor	Fox prints in silt. No evidence of badger activity.

4.2 Proposed Development Site Survey

The results of the survey show that no badger activity is present within the site boundary. No evidence of foraging or commuting was recorded within any area of the site. No badger sets were found within the site boundary or within 50m of the site.

5 Conclusions

The survey results indicate that badger are not currently using any part of the site for sett construction

No evidence was found suggesting badger use any of the fields or hedgerows within the site as a foraging area or commuting route.

No evidence of badger activity was recorded within a 50m radius of the site boundary

It is therefore concluded that the proposals for the site will not have an impact upon any badger set or affect badger activity within the general locality and no further badger survey work is required.

6 Recommendations

The above survey results are considered an accurate reflection of badger activity within the site boundary and immediate area and therefore no further work is considered necessary.

No evidence of badger was found within the site boundary. However badgers can move into previously unoccupied areas if current sets are disturbed or during the expansion of their range. Should any evidence of badger activity be observed within the site then works should cease until advice has been sought from the ecologist as to the potential for the works to impact on badger and if required appropriate consents and licences obtained.

References

Institute of Ecology and Environmental Management (2006) Guidelines for ecological impact assessment in the United Kingdom.

Lawrence, M.J. and Brown, R.W. (1967). Mammals of Britain. Their Tracks, Trails and Signs. London. Blandford Press. pp 24-34

Natural England; Badgers and Development, a Guide to Best Practice and Licensing – Interim Guidance Document Revised 12/11

Nature Conservancy Council (1990); Handbook for phase I habitat survey. A technique for environmental audit. NCC Peterborough

Welsh Assembly Government (2008) Wildlife Sites guidance Wales, a guide to develop local wildlife systems in Wales

Appendix I









Map Showing Badger Survey Area and Habitats present (Extended Phase I Habitat Survey Map)

TerrAqua Ecological Services Ltd

Client & Project: Edenstone Homes;
St Athans

Drawing: Ecological Assessment;
June 2016

Legend:

-  Development Site Boundary
-  Mitigation Site Boundary
- A** Arable Field
- I** Improved Grassland Field
- F1 - F5** Field Numbers
-  Hedgerow (Species Rich)
- H1 - H11** Hedgerow Numbers
-  **TN1** Target Note
-  Woodland
-  Stream (Direction of Flow)
-  Scrub
-  Building

