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CARDIFF COUNCIL

WOLF'S CASTLE

BADGER SURVEY REPORT

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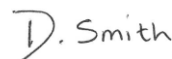
JANUARY 2024

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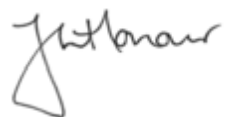


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DRAWINGS	TITLE	SCALE
CA13131-001	Site Location Plan	1:20,000@A4
CA13131-004	Ground Level Tree Assessment Survey Results	1:500@A3

1 INTRODUCTION

1.1 Terms of Reference

1.1.1 Wardell Armstrong LLP (WA) was commissioned by Cardiff Council to undertake a Badger Walkover Survey in support of a proposed development at The Wolf's Castle Inn, Llanishen. The project is located at Wolfs Castle Avenue, Llanishen, Cardiff, CF14 5AF, centred on approximate National Grid Reference (NGR) ST 17432 82244, hereafter referred to as the 'site'. The site is separated into three areas: Area 1, 2 and 3 shown on Drawing Number: CA13131-001.

1.1.2 **This is a confidential report. For badger welfare reasons, this report should be circulated to statutory consultees only and is not for general public release.**

1.1.3 The purpose of this report is to provide an evaluation of the site in terms of its value for badgers.

1.2 Legislative Framework and Background Ecology

Legislation

1.2.1 Badgers are relatively widespread in Wales and England and legislation is based primarily on the need to protect badgers from baiting and deliberate harm or injury.

1.2.2 Badgers are found in a variety of habitats including urban areas, hedgerows and open pasture. Their staple diet is earthworms and, as such good permanent pasture is important for foraging. However, badgers are also known to feed upon cereal crops, fruits, roots and tubers¹.

1.2.3 Badgers live in social groups and the members of each group jointly defend a territory. Other badgers are more or less excluded from this area, which will encompass sufficient foraging opportunities to support the group throughout the year. Badgers defecate in small (2 – 3cm deep) scrapes called dung pits, and these are often used to mark setts, important feeding areas and territory boundaries. A number of setts of different sizes and functions may be found within the range of a single group. In areas where badgers are at low density and in urban areas, territory boundaries may not be as well defined. If necessary, it is possible to move badgers from a sett, but the rate of success of such action varies and will depend on how crucial the sett is and whether suitable alternate setts exist.

¹ Anon, *Badgers: A Guide for Developers* (2005) CCW; Anon, *Badgers and Development* (date unknown), English Nature

1.2.4 Badgers are afforded full protection under the Protection of Badgers Act 1992, which makes it an offence to:

- Wilfully kill, injure or take a badger;
- Possess or control any live or dead badger or any part, or anything derived from, a dead badger;
- Cruelly ill-treat a badger, or attempt to do so; and
- To interfere with a sett by:
 - Damaging or destroying it;
 - Obstructing access to, or any entrance of, a badger sett;
 - Causing a dog to enter a badger sett;
 - Disturbing a badger when it is occupying a sett; or
 - Sell a live badger or offer one for sale.

1.2.5 It is also an offence to mark, attach any ring, tag or other marking device to a badger unless authorised under licence.

2 METHODOLOGY

2.1 Desk Study

2.1.1 The desk study was informed by review of existing available information provided by South East Wales Biological Records Centre (SEWBReC) in November 2024 and from available internet-based resources for a 2km search radius from the site boundaries. Ordnance Survey (OS) and satellite mapping were also used to gain contextual habitat information.

2.2 Badger Walkover Survey

2.2.1 In conjunction with the UKHAB Survey, a search for signs of badger activity including setts, tracks, badger hair, snuffle holes and latrines (both within the site and within a zone of 30m from the site boundary, where possible) was undertaken.

2.2.2 The resultant information was used to confirm the classification of the sett (i.e. main, annexe, subsidiary or outlier). Refer to Table 1 for further details.

Table 1: Conventions used in classifying badger setts	
Sett Type	Definition
Main	Can comprise of one or several entrances often with large spoil heaps and obvious paths emanating from and between sett entrances. A number of activity features suggesting continuous presence and use. A breeding site.
Annexe	Normally less than 150m from main sett, comprising several entrances. May not be in use all the time, even if main sett is very active.
Subsidiary	Usually at least 50m from main sett with no obvious pathways connecting to other setts. May be used regularly/intermittently often relating to clan/territory size, and changes in foraging regimes i.e. crop growing times.
Outlier	Little spoil outside entrances. No obvious pathways connecting to other setts and only used sporadically. May be used by foxes and rabbits.

2.2.3 Evidence recorded was then used to determine whether a sett is either in “current use” or “not in current use” (as per Natural England Guidance on ‘Current Use’ in the Determining of a Badger Sett, 2009) by reviewing the level of activity at setts. A sett is classed as ‘in current use’ if the hole is unblocked (or open) and there are other signs of badger activity (footprints, well-worn paths, latrines and the presence of hairs).

2.2.4 In order to provide a measure of habitat quality and foraging potential, habitats were recorded whilst undertaking the UKHAB Habitat Survey. This included broad habitat types suitable to support foraging badger, as well as habitats suitable to facilitate the excavation of setts. Foraging habitats were then classified into optimal and sub-

optimal foraging habitats. Optimal foraging habitats can include grassland, broadleaved woodland and golf courses, whereas sub-optimal foraging habitats include rough grassland, scrub and mixed woodland.

3 RESULTS

3.1 Desk Study

- 3.1.1 The desk study search for badger records within the last 10 years, within 2km of site returned nine records of badger. The closest is approximately 800m from site, in 2020².

3.2 Badger Walkover Survey

- 3.2.1 A potential sett was identified in the east of Area 1, within the area of scrub and line of trees. This was located beneath Tree T11, as labelled within the Ground Level Tree Assessment (Drawing Number: CA13131-004, Ground Level Tree Assessment Survey Results) a previously coppiced tree with a covering of ivy.
- 3.2.2 Multiple entrances were identified. The largest entrance is approximately 40cm in diameter, and 30cm in height, creating a D shape, and faces east. The entrance travels down and into the tree roots. Inside is bare earth however there is a large piece of wood in the center of the entrance, and ivy has grown over the entrance. The second entrance faces north, with clean, bare earth on the inside. This entrance is approximately 20cm in diameter, and 20cm in height, with the cavity extending into the roots for at least 30cm. The third entrance faces west, with bare earth inside. This entrance measures approximately 35cm in diameter, 20cm in height, and extends into the roots for approximately 30cm.
- 3.2.3 Other potential badger field signs recorded during this survey include:
- A potential badger hair found near the base of T11;
 - A strong musty odor identified in the surrounding area often associated with badger;
 - A spoil heap north of T11, within the area of scrub and line of trees. This spoil heap recorded north of site was relatively compacted, comprised of soil, roots, and a notable amount of dried grass; and
 - A spoil heap to the northwest of T11, within the grassland. This spoil heap was comprised of loose soil, dried grass, dead twigs include bramble stems, bark, moss, and dried leaves.

² Locations of badger activity are confidential due to the sensitivity of this species.



Photo 1: Entrance 1



Photo 2: Entrance 1



Photo 3: Entrance 2



Photo 4: Entrance 3



Photo 5: T11



Photo 6: Spoil Heap North of T11



Photo 7: Potential Badger Hair



Photo 8: Spoil Heap in Grassland

- 3.2.4 The condition of the potential sett would imply it's may not be in current use due to the extent of ivy growing over the entrances, and the debris present at the entrances including a large piece of wood. The potential sett is relatively small, indicating that this sett may be used infrequently by a single badger only. Additional field signs such as well-worn mammal paths leading to the sett, tree scratchings, latrines, or further setts were not found on site. The potential sett is located in a relatively exposed area, within a small, flat area of scrub, and is directly opposite residential buildings, a walkway, and a streetlight approximately 6m.
- 3.2.5 The majority of the site and surrounding area is considered to offer limited foraging opportunities for badger, being mainly residential buildings. Habitat more suitable for sett building and foraging may be present in the wider surrounding area, including to the southwest of the site in the woodland of Coedcochwyn SINC, to the northeast in the woodland of Copperfield park, and to the northwest in and around Mayflower Park and its green belt. The immediate surrounding area is predominantly residential housing to the north and south, with Llanishen High School and its recreational fields to the east, and Ysgol-Y-Wern Primary School and its recreational fields to the west.

4 DISCUSSION AND RECOMMENDATIONS

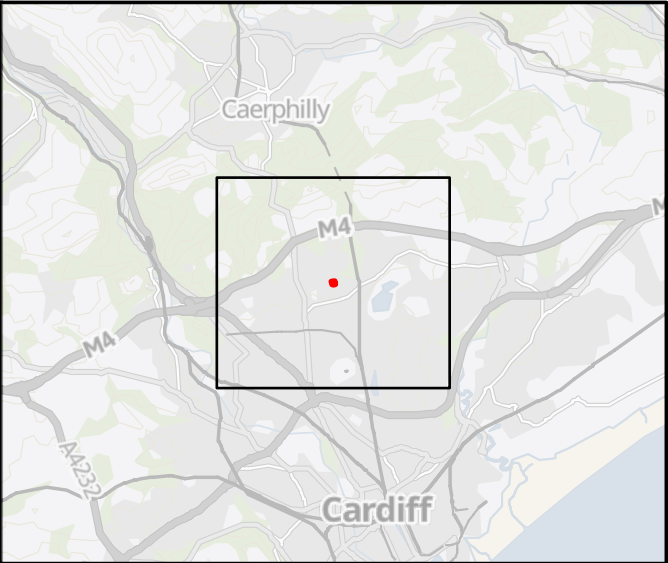
- 4.1.1 It was not possible to confirm the holes are in current use by badger and can be classified as a sett, as other species including fox could utilise this feature. If use by badger is confirmed, then several factors including the condition, size, lack of additional field signs, and location would imply the classification of this sett as an outlier sett, with the main sett located outside of the site boundaries.
- 4.1.2 The development of the site has the potential to affect badgers by:
- Disturbance to and/or damage to occupied setts;
 - Disturbance of or harm to individual animals;
 - Disruption and loss of habitat used by badgers for foraging; and
 - Disruption/interruption to movements throughout the Site and into surrounding land.
- 4.1.3 **A full badger survey is recommended to be undertaken utilising trap cameras to assess the badger activity** on site. The potential sett should be monitored over a 3-week period (21 days) using motion capture camera traps which will be deployed to cover the entrance. Sand/soil will also be placed at each potential sett entrance to capture footprints and insert sticks in the entrance to monitor movement.
- 4.1.4 Outlier setts may be used seasonally and NRW takes the Badgers Act definition to include such seasonally used setts. Before a sett can be damaged or closed without a licence it would have to be demonstrated that the sett had been abandoned by badgers and is not just currently unoccupied. A sett is classed as 'in current use' if the hole is unblocked (or open) and there are other signs of badger activity (footprints, well-worn paths, latrines, presence of hairs, and video footage).
- 4.1.5 If confirmed to be an active sett, and assuming it will be impacted upon by a proposed development, then a badger licence from Natural Resources Wales (NRW) will be required for its 'closure'. Work that disturbs badgers is illegal without a licence. Badgers could be disturbed by work near the sett even if there is no direct interference or damage to the sett³. All closures can only take place between July and November (inclusive) in order to avoid the main breeding and cub rearing season. It is generally

³ The Countryside Council for Wales (2011). Badgers: Guidelines for Developers.


accepted that the loss of a single outlier or subsidiary sett does not significantly affect a badger social group and does not require a replacement artificial sett.


- 4.1.6 Measures to prevent harm and disturbance to badger during site clearance and construction works should be undertaken. This could include limiting night-time working, providing means of escape from excavations left open overnight, and adhering to good construction practices including implementation of a Precautionary Working Method Statement.
- 4.1.7 It is recommended that a pre-construction survey is undertaken to confirm up to date badger activity on or within 30m of the site.

DRAWINGS



KEY

 Approximate Site Boundary

 2km Search Radius

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

Approximate Site Boundary digitised from georeferenced file 'Redline boundary and blue POS x4.jpg' received from client.

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REVISION	DETAILS	DATE	DRAWN	CHKD

CLIENT

CARDIFF COUNCIL

PROJECT

WOLF'S CASTLE

DRAWING TITLE

SITE LOCATION PLAN

DRG No.	CA13131-001		REV	A	SUIT. CODE	--
DRG SIZE	A3	SCALE	1:20,000	DATE	15/01/2025	
DRAWN BY	CP	CHECKED BY	DS	APPROVED BY	--	



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KEY

Approximate Site Boundary

Tree Suitability

- PRF-I – Tree with individual bat roost suitability
- PRF-M – Tree with multiple bat roost suitability
- FAR - Further assessment required
- None


Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

Approximate Site Boundary digitised from georeferenced file "Redline boundary and blue POS x4.jpg" received from client.


T = Tree Reference Number
Tree numbers do not relate to an Arb report.

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
CLIENT					
CARDIFF COUNCIL					
PROJECT					
WOLF'S CASTLE					
DRAWING TITLE					
GROUND LEVEL TREE ASSESSMENT SURVEY					
DRG No.		CA13131-004		REV	A
				SUIT. CODE	--
DRG SIZE		SCALE		DATE	
A3		1:500		15/01/2025	
DRAWN BY		CHECKED BY		APPROVED BY	
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