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BADGER ACTIVITY SURVEY

At

Plot 3A

Wrexham Industrial Estate
Bryn Lane
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A handwritten signature in black ink that reads 'K James'.

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EXECUTIVE SUMMARY

United Environmental Services (UES) Ltd undertook a preliminary ecological appraisal (UES03448/01) at Plot 3A, Wrexham Industrial Estate, Wrexham in September 2021.

a faint mammal path were identified on the site during the survey. Reasonable avoidance measures (RAMs), including a pre-commencement survey, were therefore recommended.

However, during minor vegetation clearance works to facilitate access for ecological surveys of the site, consisting of four burrows was observed within an area of dense scrub adjacent to Pond 2. Three of the burrows showed no signs of activity. This suspected sett was subsequently subject to survey including the use of infrared cameras to monitor levels of badger activity and to classify the type of sett.

During the monitoring period, was observed using one of the burrows on a single occasion. No additional evidence of badger activity was recorded on site during the other numerous ecological surveys of the site. Given the levels of badger use, considered to be in use as on an occasional basis by a single or very low number of individuals.

The habitats on site provide moderate-high quality foraging and commuting habitat for and the areas of dense scrub and woodland on site provide sheltered sett building opportunities.

Sett 1 lies within the construction zone of the proposed development and will need to be closed in order to facilitate the proposals. Therefore, the works must proceed under a mitigation licence issued by Natural Resources Wales. This licence must be in place prior to the start of any works within 30m of the sett that has the potential to cause disturbance or damage to the sett. Licences are issued allowing sett closures to be undertaken between July and October inclusive to avoid disturbance to during the breeding season.

A method statement will also be required for submission with the planning application, which will outline the mitigation and compensation measures required in order to safeguard protected species throughout the duration of the development.

The report should be read in conjunction with appendices 1 to 4, which provide visual representations of the survey results and statutory and planning context.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and experience

This report is compiled and written by Jacob Miller BSc Grad IEMA, UES Graduate Ecologist. Other surveyors include:

- Daniel Smith BSc MScRes, UES Ecologist. Daniel has extensive experience in badger surveying and mitigation work and has held a number of Natural England and Natural Resources Wales badger sett disturbance and closure licences.

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Badger" (2013), or were under the supervision of a surveyor with the required competencies.

1.2 Survey objectives

UES was commissioned in February 2022 to conduct site surveys which include the following activities:

- Inspection of the proposed development site (including a 30m buffer) for field signs of
- Assess the suitability of the site for use by
- Confirm the presence or absence of through monitoring the setts
- Assess the level of activity and usage of the sett by

1.3 Proposed development

The applicant proposes to develop the site into three industrial units with associated parking and access roads.

1.4 Structure of the report

This report sets out the methodology, results, recommendations and compensation measures in relation to a specific survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 4, which provide visual representations of the survey results and statutory and planning context.



2 METHODOLOGY

2.1 Site walkover survey

A walkover survey of Sett 1, including the immediate surrounding area, was conducted by Daniel Smith on the 4th, 11th and 19th April 2022. The survey recorded any field signs of use, for example:

- setts - main, annexe, subsidiary and outlier
- Bedding at sett entrances (such as grass or leaves)
- Dung pits - small excavated pits in which droppings are deposited
- Latrines - concentrations of dung pits
- “Snuffle holes” - small scrapes where have excavated whilst foraging for food
- around sett entrances or caught on nearby fences or vegetation
- Conspicuous paths - channels through vegetation that are well used leading to or from setts
- Scratch marks on trees (predominantly in the local vicinity of sett entrances)
- Day nests - patches of grass or other vegetation where may have spent time above ground
- Footprints

2.2 Monitoring survey

Sett entrances, latrines, well-established pathways and other areas of activity were identified during the walkover survey. Motion-triggered, night vision camera traps were then positioned appropriately, in order to give the best coverage of these areas. This also allowed identification of active sett entrances and enabled an estimation of the number of individuals present.

Cameras were set to record between sunset and sunrise for 15 consecutive nights (4th – 19th April 2022). Batteries and memory cards were replaced weekly throughout this period.

Activity levels were then gauged using the information gathered. Setts were classified using the definitions shown in the following table:

SETT TYPE	DEFINITION
Main	Several holes with large spoil heaps and obvious paths emanating from and between sett entrances.
Annexe	Normally less than 150m from a main sett, comprising several holes. May not be in use all of the time, even if the main sett is very active.
Subsidiary	Usually, at least 50m from a main sett, with no obvious paths connecting to other setts. May only be used intermittently.
Outlier	Little spoil outside holes. No obvious paths connecting to other setts and only used sporadically. May be used by foxes and rabbits.

2.3 Survey limitations

Several video recordings from the camera monitoring sett entrance 1a were corrupted and therefore, could not be fully reviewed. However, no evidence of badgers was observed in the



uncorrupted video clips or while during site walkovers within the monitoring period. As no evidence of badgers was found to be associated during the monitoring period, this limitation is not deemed to have a significant effect on the survey results.

3 RESULTS

3.1 Habitat assessment

The application site measures approximately 20.9ha and was formerly used for industrial and agricultural purposes, prior to being left unmanaged for several years. The site contains large semi-improved species-rich grassland fields interspersed with ponds, small stands of woodland, hedgerows and scattered trees. Large areas of the site have succeeded into dense scrub and areas of bare ground and ephemeral / short perennial are present on previously developed land within the south-eastern section of the site. The south-western section of the site contains an area of amenity grassland and a large hardstanding compound used to store vehicles. A shallow stream runs along the northern site boundary and wet ditches are present along the western and part of the eastern site boundaries.

Since the initial walkover survey, the site boundary has been amended to incorporate an additional 4.5ha of adjacent land. This land comprises two agricultural grassland fields that are divided and bordered by hedgerows and trees. A dry and unvegetated ditch runs along part of the eastern boundary, and a pond surrounded by willow scrub is present within the northernmost field.

The habitats on site provide moderate-high quality foraging and commuting habitat for and the areas of dense scrub and woodland on site provide sheltered sett building opportunities.

3.2 Site walkover survey

During minor vegetation clearance works to facilitate access for ecological surveys of the site, a suspected

A single hole located within bramble scrub. A small amount of disturbed ground was present at the entrance (see Appendix 3, Photograph 1), however, throughout the survey visits the hole was covered with vegetation and appeared largely undisturbed.

- **Sett entrances 1b & 1c at (SJ) 39403 50318**

Two holes present within a stand of dense bramble scrub. A worn patch of bare ground was present at the entrance of the largest hole (1b; see Appendix 3, Photograph 2). The smaller hole (1c) seems to be largely undisturbed.

- **Sett entrance 1d at (SJ) 39407 50315**

A single hole with an open top and a very small amount of spoil at the fringe (see Appendix 3, Photograph 3). Throughout the survey visits this hole was covered with vegetation and appeared largely undisturbed.

Well-worn tracks are obvious across the area containing the setts, however, these paths are less defined around sett entrances 1a and 1d, and these paths were previously used by humans.



During GCNs surveys of offsite ponds a suspected [redacted] comprising at least 10 burrows was observed on a steep bank approximately 200m south of the site within an area of offsite woodland (SJ 39566 49934). Furthermore, [redacted] were observed during the night in an off-site agricultural field which has good connectivity to the off-site sett. The individuals were seen by several surveyors on 21st May 2022.

3.3 Monitoring survey

Three infrared cameras were deployed around Sett 1 for a 15 day period. The cameras were installed to monitor levels of [redacted] activity and to classify the type of sett. During the monitoring period, a [redacted] was observed using sett entrance 1b on 27th April 2022. No additional evidence of [redacted] activity was recorded on site during the other numerous ecological surveys of the site. Given the levels of badger use,

Other wildlife recorded by the cameras include red fox *Vulpes vulpes*, wood mouse *Apodemus sylvaticus*, brown rat *Rattus norvegicus* and short-tailed field vole *Microtus agrestis*.



4 EVALUATION AND RECOMMENDATIONS

4.1 Evaluation of results

During the monitoring period a [redacted] was observed using Sett 1 on a single occasion (see Appendix 3, Photograph 4). A single scatt was identified onsite, but very few signs of foraging were recorded in the area, and no latrines or dung pits were located. No additional evidence of badger activity was recorded on site during the other numerous ecological surveys of the site. Given the levels of badger use, the sett is considered to be an outlier sett used on an occasional basis by a single or very low number of individuals.

The habitat surrounding the sett provides sheltered foraging and connectivity features for badgers, with a good provision of hedgerows, scrubland, woodland, semi-improved grasslands and agricultural fields in the wider landscape.

4.2 Mitigation and compensation

This licence must be in place prior to the start of any works within 30m of the sett that has the potential to cause disturbance or damage to the sett. In order to ensure that no badgers are present within the sett prior to destruction, all potential burrows to the sett will be fitted with one way exclusion gates and will be monitored with infra-red motion-triggered cameras to ensure that no badgers enter the sett for a 21-day period. The sett will be destroyed using machinery immediately following the 21-day monitoring period. If a badger forces entry into the sett or excavates an alternative entrance burrow during the 21-day monitoring period or prior to the destructive works, this procedure will be repeated until 21 days of successful badger exclusion are achieved. Licences are issued allowing sett closures to be undertaken between July and October inclusive to avoid disturbance to badgers during the breeding season.

Immediately prior to the start of any works on site and the access of machinery, a pre-commencement badger check will be undertaken by a suitably qualified ecologist to search for signs of any new or additional badger setts, if a potential badger sett is discovered a 30m buffer zone will be implemented around the sett and the procedure detailed above will be followed to close the sett. If any areas of dense vegetation cannot be confidently searched, the vegetation should be removed by cutting / strimming prior to heavy machinery accessing the site, as directed and overseen by an ecological clerk of works.

A badger method statement will also be required for submission with the planning application, which will outline the mitigation and compensation measures required in order to safeguard protected species throughout the duration of the development.



5 CONCLUSION

An outlier badger sett (Sett 1), and any other badgers setts observed on site, should be closed under licence following a 21-day exclusion and monitoring period.

The proposed level of habitat retention, creation and enhancement including the retention of wildlife corridors at the site boundaries will ensure that connectivity to offsite habitats and sufficient foraging opportunities will remain available for the badger population present with the local area. The implementation of a wildlife friendly lighting plan will reduce the potential operational impacts of the development on badgers to the lowest practicable level.

A badger method statement will be required for submission with the planning application, which will outline the mitigation and compensation measures required in order to safeguard badgers throughout the duration of the development.

Badgers are transient animals and may leave occupied setts and create new setts elsewhere in a short period of time. Therefore, ongoing site checks throughout the construction phase will be required to ensure that badgers do not colonise an area within 30m of any ongoing or future development.



6 REFERENCES

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Badger*.

Department for Communities and Local Government (2021). *National Planning Policy Framework*.

Natural England (2011). *Badgers and Development: A Guide to Best Practice and Licensing*, IN75 Version 12/11.

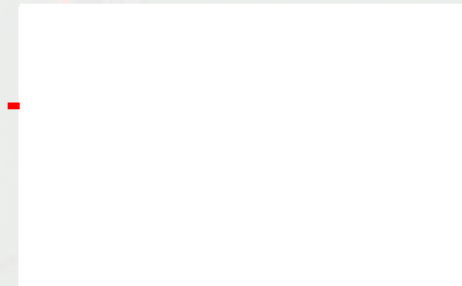


APPENDICES

Appendix 1 – Site plan



Plot 3a – Wrexham Industrial Estate





Appendix 2 – Aerial photographs



Plot 3a – Wrexham Industrial Estate

Close aerial photograph

 Site boundary





Plot 3a – Wrexham Industrial Estate

Wide aerial photograph

 Site location





Appendix 3 – Photographs



Photograph 1 –



Photograph 2 –



11/04/2022 15:42:37 12°C 53°F ToGuard-H80

Photograph 3 – Sett entrance 1d located upon a shallow bank, surrounded by largely undisturbed scrub.



Appendix 4 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Badgers

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2018). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online