

**Whitcher Wildlife Ltd.
Ecological Consultants.**



HEADLANDS ROAD, LIVERSEEDGE.

OS REF: SE 20157 23398.

BAT AND BADGER SURVEY.

Ref No: 240840.

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1. INTRODUCTION.

1.1. There are plans to develop a site off Headlands Road, Liversedge.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a bat and badger survey of the site and to establish whether there are any issues that may affect the proposed works.

1.3. The survey was carried out on the 12th September 2024 and this report. This report outlines the findings of the survey and makes appropriate recommendations.

1.4. Appendices I and IV of this report provides additional information on specific species and the protection afforded to them and are designed to assist the reader in understanding the contents of this report.

2. SURVEY METHODOLOGY.

2.1. The buildings were thoroughly checked internally and externally for potential bat roosting sites by looking for the following signs: -

- * Holes, cracks or crevices.
- * Bat droppings.
- * Prey remains.
- * Staining on external walls.

2.2. Unless otherwise stated, all lofts were accessed and inspected using a high-powered torch and where necessary an endoscope.

2.3. A thorough external inspection was carried out from ground level for any gaps or openings in the roof and ridge tiles, behind soffits and fascia's and in the walls of the structure for suitable roost access points and field signs to indicate possible use by bats.

2.4. All windowsills, walls and the ground around the structure were checked for signs of bat droppings or staining to indicate possible use by bats. Where necessary, ladders were utilised to gain access within the limits of health and safety.

Any access constraints encountered are outlined within the following report.

2.5. The PRA was carried out in line with Collins, J. (ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*, with an assessment of the buildings suitability for roosting bats made in accordance with these guidelines.

2.6. The survey area and immediate surrounding area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs in line with Harris S, Cresswell P and Jefferies D (1989). *Surveying Badgers*. Mammal Society: -

- * Badger setts.
- * Badger latrines or dung pits.
- * Badger snuffle holes and evidence of foraging.
- * Badger paths.
- * Badger prints in areas of soft mud.
- * Badger hairs caught on fencing.

2.8. The initial survey was carried out by James Campbell MCIEEM and a team of experienced surveyors. Since 2003 James has had experience in a professional capacity as a Wildlife Consultant carrying out Ecology Surveys and Phase 1 Habitat surveys and

is a full member of CIEEM. James holds licences with several licensing bodies including:-

- Natural England Survey Licences in respect of bats, great crested newts, water voles, badger class licence, white clawed crayfish and barn owls.
- Nature Scotland Licences in respect of bats and great crested newts.
- Natural Resources Wales Licences in respect of bats and great crested newts.

He has also successfully completed numerous courses run by CIEEM, BCT and FSC regarding protected species and in carrying out Phase 1 Habitat surveys. He is also confined spaces trained and qualified to NVQ Level 2 in tree climbing and aerial rescue.

2.9. Survey Limitations.

2.9.1. The vegetation on the site to the south, southeast and the southwest on the site could not be thoroughly surveyed as it was extremely dense bramble and scrub.

2.9.2. Internal access was not available to Buildings 1, 3 and 4.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A desktop data search has been requested from the West Yorkshire Bat Group (WYBG) for all records of bats and their roosts within a 2km radius of the survey area.

3.1.2. The WYBG data search returned various records of bats, mainly *Pipistrellus* sp. as well as lesser noctule and *Vesper* sp. The records include both roost records and field records.

3.1.3. The most relevant was a record of a common pipistrelle roost located approximately 700m to the south of the survey area.

3.1.4. A search was carried out on the MAGIC for records of any European protected species licences within 2km of the survey area. None were identified.

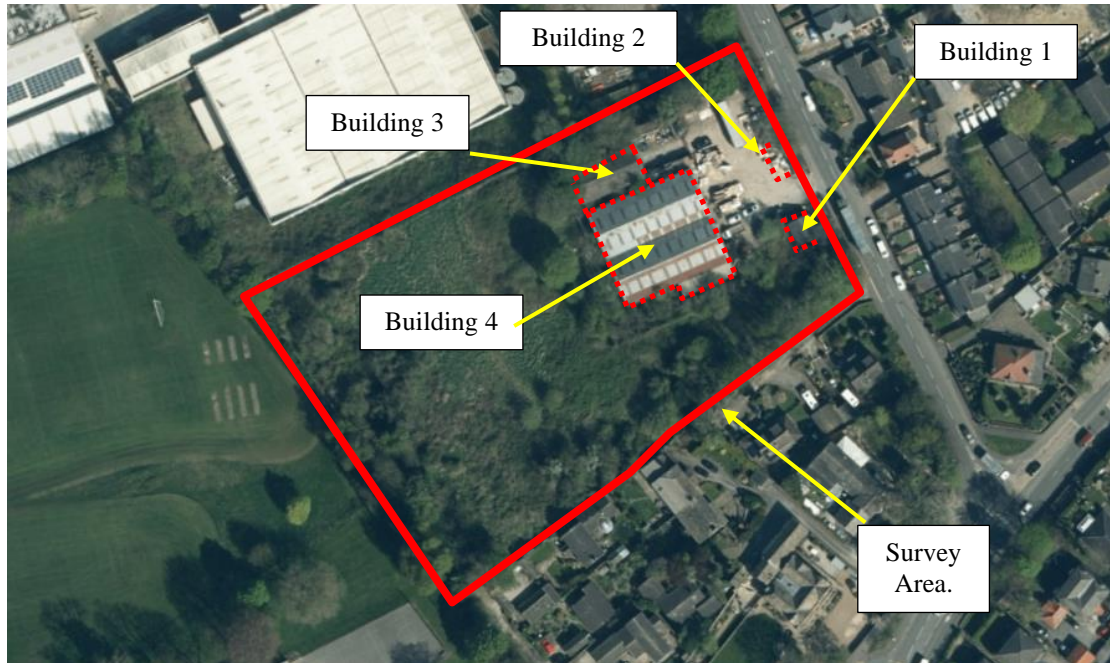
3.2. Site Description.

3.2.1. The survey area was heavily overgrown with trees and scrub, with buildings and hardstanding to the eastern end of the site. The area to the west comprised trees and scrub with an area of tussocky grassland in the centre. The aerial photograph below shows the survey area.



3.2.2. The surrounding area comprised industrial buildings, residential buildings and sports pitches to the west.

3.2.3. There were four buildings located to the east of the survey area adjacent to an area of hardstanding, which were subject to a Preliminary Roost Assessment (PRA). The aerial photograph below shows the survey area and the location of the four buildings.



3.2.3.1. Building 1.



3.2.3.1.1. Building 1 was a single storey brick building, which was generally in a good condition with no cracks or gaps in the brickwork. There was a wooden fascia on the northern elevation of the building with a large gap behind. There was also dense ivy on the southern and eastern elevation of the building leading onto a small section of the roof.

3.2.3.1.2. The building had a pitched roof covered with blue slate with two gable ends with missing pointing between the brick and the slate and along the ridge tiles. There was a plastic gutter on both eaves resting on brick corbels.

3.2.3.1.3. The windows and doors were securely fitted, and no access could be gained internally during this survey.

3.2.3.2. Building 2.



3.2.3.2.1. Building 2 was a single storey brick building, which was generally in a good condition with no cracks or gaps in the brickwork.

3.2.3.2.2. The building had a flat concrete roof, which had a large crack running through the entire building as shown in the photograph below.



3.2.3.2.3. Internally the building was clean but full of large spider webs as shown in the photograph below.



3.2.3.2.4. Due to the missing windows and doors the building was exposed, cold and draughty throughout.

3.2.3.3. Building 3.

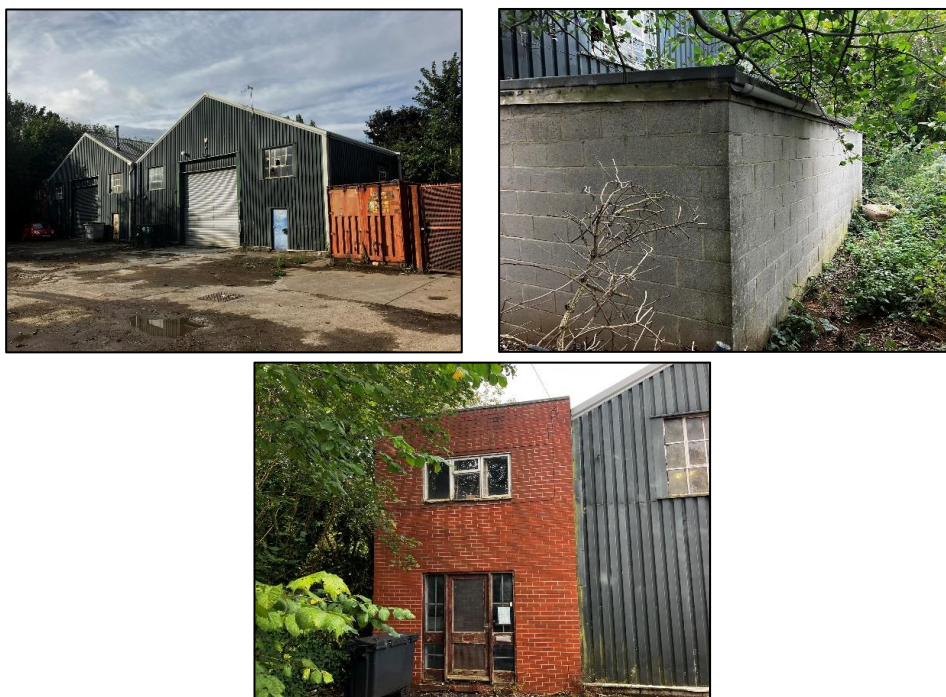


3.2.3.3.1. Building 3 was two-storey in height and constructed from corrugated cement sheets, which were generally in a good condition with no cracks or gaps.

3.2.3.3.2. The building had a pitched roof covered with cement sheets. There was guttering secured by metal brackets at both eaves. There was also some thin ivy cover on the walls at the northern elevation of the building.

3.2.3.3.3. There was one large roller shutter door on the eastern elevation. The door was securely fitted, and no access could be gained internally during this survey.

3.2.3.4. Building 4.



3.2.3.4.1. Building 4 was two-storey in height and constructed from corrugated metal sheets, which were generally in a good condition with no cracks or gaps.

3.2.3.4.2. The building had two pitched roofs covered with corrugated metal sheets. There was guttering secured by metal brackets at both eaves with a valley. There was also some thin ivy cover on the walls at the northern elevation of the building.

3.2.3.4.3. There was a brick office block constructed on the southern elevation and a breeze block single storey extension to the western elevation of the building. The brickwork and blockwork were generally in a good condition with no cracks or gaps.

3.2.3.4.4. The roof of the office block and the breeze block extension were flat and covered with felt, which was tight fitting with no gaps or crevices.

3.2.3.4.5. There were two large roller shutter doors, pedestrian doors and windows some of which were open or broken. No access could be gained internally during this survey.

3.3. Preliminary Roost Assessment.

3.3.1. Building 1.

3.3.1.1. The brick walls were generally in a good condition. However, there was a wooden fascia on the northern elevation and an area of dense ivy on the southern elevation of the building that could provide potential for roosting bats.

3.3.1.2. The roof of the building was generally in a good condition, although there was missing mortar at the gable ends and on the ridge tiles, which could provide a potential location for roosting bats.

3.3.1.3. As the windows and doors were all sealed and no access could be gained, an internal assessment could not be carried out.

3.3.1.4. No bat field signs such as staining, droppings or prey remains were found around the externals of the building.

3.3.1.5. As the building displays some potential roosting features externally, but could not be accessed internally to undertake a full assessment the building was assessed as providing a **moderate** potential for roosting bats. This potential is assessed to be limited

to the building supporting one or more roost sites of small numbers of common bat species but does not provide conditions that would contain a roost of more significant conservation status.

3.3.2. Building 2.

3.3.2.1. The brick walls were generally in a good condition and will not provide a suitable habitat for roosting bats.

3.3.2.2. The roof of the building was generally in a good condition. However, there was a large crack extending through the entire roof of the building which could provide a potential location and access for individual opportunistic roosting bats. Although this was limited due to the feature being exposed and allowing the ingress of water.

3.3.2.3. As the windows and doors were open, access was gained inside the building, which was covered with cobwebs and open to the elements.

3.3.2.4. No bat field signs such as staining, droppings or prey remains were found within the survey area.

3.3.2.5. The building was assessed as providing a **low** potential for roosting bats in accordance with the Bat Conservation Trust Good Practice Guidelines 4th Edition. This potential is assessed to be limited to individual opportunistic common bat species but does not provide conditions that would contain a roost of more significant conservation status.

3.3.3. Building 3.

3.3.3.1. The corrugated cement sheet walls were generally in a good condition with no gaps or cracks.

3.3.3.2. As the windows and doors were all sealed and no access could be gained to undertake an internal assessment.

3.3.3.3. No bat field signs such as staining, droppings or prey remains were found around the externals of the building.

3.3.3.4. Until such time that access can be gained inside this building to undertake a thorough inspection and assessment of the internal areas, this building was assessed as providing a **moderate** potential for roosting bats. This is unlikely to provide conditions that would support a roost of more significant conservation status.

3.3.4. Building 4.

3.3.4.1. The corrugated metal sheet walls and roof were generally in a good condition with no cracks or gaps. The brick office section and the breeze block building were also in a good condition with no cracks or gaps.

3.3.4.2. The windows and doors were generally sealed, with only a few broken or open potentially providing access for foraging and roosting bats. No access could be gained during this survey to allow for an internal assessment.

3.3.4.3. The building had two pitched roofs covered with corrugated metal sheets. There was guttering secured by metal brackets at both eaves. There was also some thin ivy cover on the walls at the northern elevation of the building.

3.3.4.4. The roof of the office block and the breeze block extension were covered with felt, which was tight fitting with no suitable gaps or crevices.

3.3.4.5. No bat field signs such as staining, droppings or prey remains were found road around the external of the building.

3.3.4.6. As the building could not be accessed to undertake a full internal assessment, but there is access for bats inside, the building was assessed as providing a **moderate** potential for roosting bats. This potential is assessed to be limited to the building providing access for bats and potentially supporting one or more roost sites of small numbers of common bat species but does not provide conditions that would support a roost of more significant conservation status.

3.3.5. Building 2 provides a negligible potential for hibernating bats with any roosting opportunities being exposed to regular fluctuating temperatures and humidity levels. A thorough assessment of Buildings 1, 3 and 4 could not be carried out due to lack of internal access.

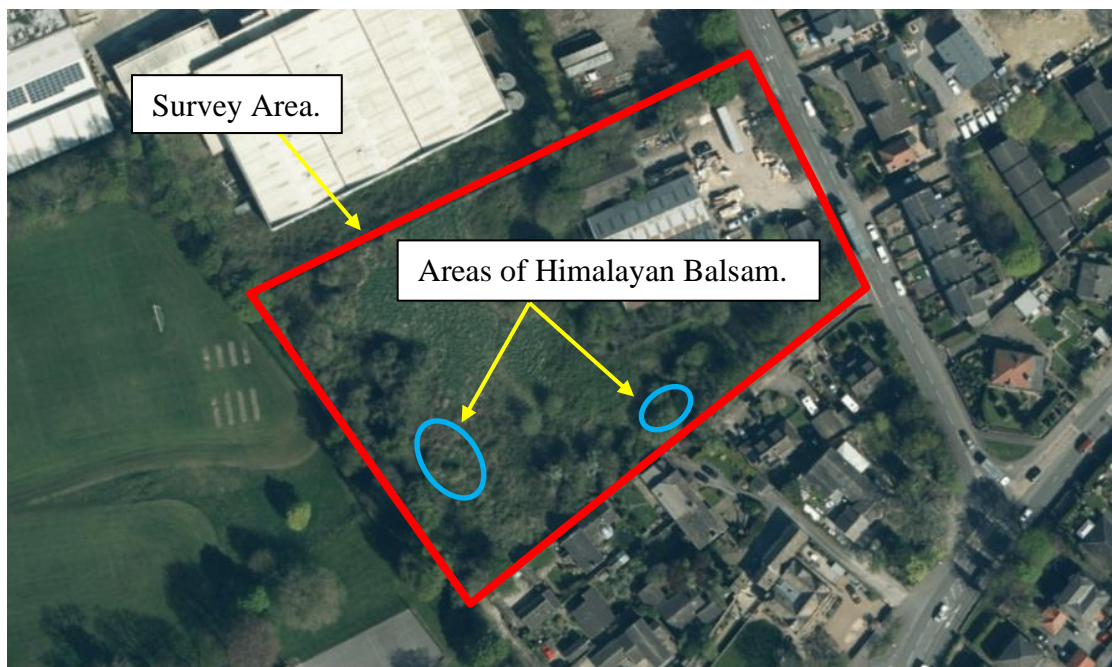
3.3.6. The site was located within an area of moderate habitat suitability as the land to the west of the survey area was open grassland with substantial hedgerows and tree lines.

3.4. Nesting Birds.

There were no redundant bird nests or active bird nests identified within the surveyed buildings where access could be gained. A thorough nesting bird survey of the surrounding vegetation was not feasible due to the dense nature of the vegetation.

3.6. Himalayan Balsam.

3.6.1. The survey area contained two areas of Himalayan Balsam as shown on the aerial photograph below.



3.6.2. The photograph below shows one of the areas of Himalayan Balsam.



4. EVALUATION OF FINDINGS.

4.1. Bats.

4.1.1. The Preliminary Roost Assessment found buildings 1, 3 and 4 to have a **moderate potential** for roosting bats and building 2 to have a **low potential** for roosting bats in line with the Bat Conservation Trust Good Practice Guidelines. Also, no access could be gained into buildings 1, 3 and 4. The works could potentially have a negative impact on roosting bats.

4.1.2. The Preliminary Roost Assessment found building 2 to have negligible potential for hibernating bats due to the lack of features considered suitable to provide the necessary protection and stability through winter. Therefore, the works to that building will have no impact on hibernating bats. Buildings 1, 3 and 4 will need to be assessed when then access can be gained, and the PRA completed.

4.1.3. The habitat around the site was assessed as providing moderate suitability for foraging and commuting bats due to the urban street trees providing some connectivity to more suitable habitat within the wider landscape.

4.2. Birds.

4.1.4. Any access into the building and the vegetation around the site could be used by nesting birds within the nesting season. Therefore, any works within the nesting season, which extends from March to August could have a negative impact on nesting birds.

4.4. Himalayan Balsam.

4.3.1. There were Schedule 9 invasive, non-native plant species identified within the surveyed area. Himalayan balsam was identified in two areas of dense vegetation. Therefore, without precautions, the proposed works could spread this species further.

5. RECOMMENDATIONS.

5.1. Based on the current assessment of the buildings, in line with current guidance it is recommended that two bat dusk emergence surveys are carried out of Buildings 1, 3 and 4 between May and August inclusive to establish presence/likely absence of roosting bats. It is strongly recommended that access into the internals of the buildings is also provided for these surveys for a full PRA to be carried out to confirm the current assessment. There is scope of the number of dusk emergence surveys required to change following the findings of that assessment.

5.2. In line with current guidance, it is recommended that one bat dusk emergence survey is carried out of Building 2 to establish presence/likely absence of roosting bats. Again, this survey should be carried out between May and August.

5.3. In the event that a bat roost is found present during any of the above additional surveys, there will be a requirement for further surveys and a mitigation strategy will need to be prepared to submit with the planning application. A Natural England EPS licence will then need to be applied for to cover all works that will have any impact on the bat roost(s).

5.4. It is recommended that vegetation clearance is carried out across the site with care avoiding any holes and the dense areas of vegetation should be cleared with hand tools only. A further badger survey should then be carried out to check for badger setts within the survey area. Care should be taken not to damage any animal holes while carrying out the vegetation clearance. Further recommendations will be made on completion of the follow up survey.

5.5. All vegetation clearance works should be carried out outside the nesting season, which runs between March and August as the vegetation is so dense in areas that nesting bird survey is not feasible.

5.6. It is recommended that either a method statement is prepared, or specialist contractors are contacted, in order to prevent the spread of Himalayan balsam. The plants should be pulled before it goes to seed, which is usually between July and September. The soil should be excavated up to 1m deep and 7m around all plants and disposed of as controlled waste.

5.6.1. Biosecurity measures should be implemented whilst on site. Boot washes should be provided at each location and all boots should be cleaned before personnel leave the site. There should also be facilities to also wash off machinery at this location. Any materials leaving the site which cannot be cleaned should be disposed of as controlled waste. A toolbox talk on Himalayan balsam has been appended to this report.

5.7. In order to provide biodiversity enhancements in line with the NPPF, it is recommended that a suitable amount of integrated bat bricks are installed in the buildings on the site to enhance the habitat and provide roosting opportunities. The number of integrated bat bricks can only be allocated when the proposed plans are made available.

5.7.1. Nesting potential will also need to be provided in the proposed buildings. The number of nesting boxes can only be allocated when the proposed plans are made available.

Prepared by:	
James Campbell MCIEEM.	Date: 19 th September 2024.

Checked by:	
Ruth Georgiou BSc MCIEEM.	Date: 9 th October 2024.

6. REFERENCES.

- Amphibian and Reptile Groups of the United Kingdom (2010) *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. ARGUK.
- Baker, J., Beebee T., Buckley, J., Gent, A. and Orchard, D. (2011). *Amphibian Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.
- Barn Owl Trust (2012) *Barn Owl Conservation Handbook*, Pelagic Publishing, Exeter.
- Bat Tree Habitat Key (2018) *Bat Roosts in Trees: a guide for identification and assessment for tree-care and ecology professionals*. Pelagic Publishing, Exeter
- Bird Survey & Assessment Steering Group (2023). *Bird Survey Guidelines for assessing ecological impacts, v.1.1.1*. Available at <https://birdsurveyguidelines.org> (Accessed 15/04/2024)
- Bright, P., Morris, P. & Mitchell-Jones, T. (2006) *The Dormouse Conservation Handbook*. English Nature, Peterborough.
- Chanin, P. (2003) *Ecology of the European Otter*. Conserving Natura 2000 Rivers Ecology Series No.10. English Nature, Peterborough.
- Chanin, P. (2003) *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No.10. English Nature, Peterborough.
- CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Cresswell, P., Cresswell, W.J., and Woods, M. (1993) *The Country Life Guide to Artificial Badger Setts*. Country Life, London.
- Collins J. (ed.) 2023. *Bat Surveys for Professional Ecologist: Good Practice Guidelines (4th Edition)*. The Bat Conservation Trust, London.
- Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) *The Water Vole Mitigation Handbook* (Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. Mammal Society, London.
- Department for Environment, Food & Rural Affairs (2024) *Biodiversity Net Gain*. Available at <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides> (Accessed: 15/04/2024).
- Department for Environment, Food & Rural Affairs (2024) *Statutory Net Biodiversity Metric User Guide*. Available at <https://www.gov.uk/government/collections/biodiversity-net-gain> (Accessed: 15/04/2024).
- Department for Levelling Up, Housing and Communities (2023) *National Planning Policy Framework (NPPF)*. Available at <https://www.gov.uk/government/publications/national-planning-policy-framework--2> (Accessed: 15/04/2024).
- Edgar, P., Foster, J. and Baker, J. (2010) *Reptile Habitat Management Handbook*. Amphibian and Reptile Conservation, Bournemouth.

English Nature (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

Froglife (1999) *Froglife Advice Sheet 10: reptile survey*. Froglife, London.

Gurnell, J., & Lurz, P. (2012) *Red Squirrel*. In: *Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehella, W.J., Wells, D. and Wray, S. (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton.

Harris, S., Cresswell, P. and Jefferies D. (1989) *Surveying Badgers*. Occasional Publication No 9, The Mammal Society, London.

Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), *Great Crested Newt Conservation Handbook*, Froglife, Halesworth.

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

Natural England (2022) *Hazel Dormice: Advice for making planning decisions*. Available at <https://www.gov.uk/guidance/hazel-dormice-advice-for-making-planning-decisions> (Accessed: 15/04/2024)

Natural England (2014) *Protected species and development: advice for local planning authorities*. (updated 2021) Available at: <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications> (Accessed: 05/03/2021).

Natural Environment and Rural Communities Act 2006 Available at <https://www.legislation.gov.uk/ukxi/2019/579/contents/made> (Accessed: 15/04/2024).

Peay, S. (2003) *Monitoring the White-clawed Crayfish Austropotamobius pallipes*. Conserving Natura 2000 Rivers Monitoring Series No. 1. English Nature, Peterborough.

Stanbury, A. et al (2021) *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. *British Birds* 114: 723-747. Available at <https://britishbirds.co.uk/content/status-our-bird-populations> (Accessed 15/04/2024)

Joint Nature Conservation Committee (2004). *Common Standards Monitoring Guidance for Birds*. 2004 ed. JNCC, Peterborough.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 Available at <https://www.legislation.gov.uk/ukxi/2019/579/contents/made> (Accessed: 15/04/2024).

The Protection of Badgers Act 1992 Available at <https://www.legislation.gov.uk/ukpga/1992/51/contents> (Accessed: 15/04/2024).

The Wildlife and Countryside Act 1981 (as amended). Available at <http://www.legislation.gov.uk/ukpga/1981/69> (Accessed: 15/04/2024).

UKHab Ltd (2023) *UK Habitat classification Version 2.0* Available at <https://www.ukhab.org>.

Appendix I. BAT INFORMATION.

Ecology

There are currently 18 species of bat residing in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

Surveys

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

Legislation

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATS agreement. Numerous species are

also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SAC's) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

Appendix II. BADGER INFORMATION.

Ecology

Badgers are territorial animals who live in social groups called 'clans'. The territory of these clans can vary in size from 0.2 km² to 1.5 km² with anywhere between two and twenty Badgers present. In areas where two clans meet territorial boundaries become well-defined, marked by a series of dung pits called latrines. In areas with relatively low Badger populations there will be less competition for territory and the number of territorial markings will be low or even non-existent.

Badgers use paths around their territory repeatedly, following a scent trail from previous use; thus, Badger paths become well worn. These paths are important to the Badgers and obstruction to these paths will interfere with the Badger's movement around their territory.

Badger setts are any structure or place which displays signs of current or seasonal use by a Badger. Within a Badger clan territory there can be several Badger setts which are categorised in the following ways:

- **Main Sett.** *There will normally be one main sett in a territory. This will generally be the largest sett in the territory, typically with five or more entrances, will be permanently occupied throughout the year and used as the breeding sett.*
- **Outlying Sett.** *These are the smallest setts with generally only one or two entrances. They are intermittently occupied and there can be any number in a territory.*
- **Annex Sett.** *A sett of intermediate size, located close to the main sett and connected by well-defined paths. These are occupied for prolonged periods and may be used as a second breeding sett if there are two breeding sows in the clan.*
- **Subsidiary Sett.** *A sett of intermediate size, similar to an annex sett but located at some distance from the main sett and not connected to the main sett by defined paths.*

Badgers can mate at any time of year but delayed implantation controls the time of birth. Most cubs are born between January and March but they can be born at any time

between December and June. An average of two to three Badger cubs are born to each sow and will initially be totally dependent on their mother. Cubs do not appear above ground until during April or May when they are 8 – 10 weeks old and are not fully weaned until at least June of each year.

Badgers are omnivorous but their preferred food source is worms and insects. Worms are most abundant in well-grazed pastureland while mixed woodland is a good source of insects and grubs. Badgers have a soft and supple nose with which they snuffle into the ground to find insects. When they do this, they leave distinct round holes known as snuffle holes or grubblings. Badgers easily find worms on the surface of well-grazed pastureland and often leave no visible indications of this foraging.

Surveys

Walkover surveys can be conducted to identify the presence of Badgers within an area. This will identify the presence of any setts, dung pits, paths or foraging activity.

Bait marking techniques can be used to survey Badger territories. This involves feeding Badgers at each sett pellets of different colours over a period of at least two weeks. The colour of pellet found in dung pits and territorial latrines shows what areas each clan of Badgers is occupying.

Legislation

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act (1981) and the Protection of Badgers Act (1992).

This makes it an offence to take, kill or injure a Badger, cruelly ill-treat a badger, use Badger tongs or firearms in the killing or taking (or attempt) of a Badger. It is also an offence to damage, destroy, obstruct access to, or any entrance of, a Badger sett, to cause a dog to enter a Badger sett or disturb a Badger while it is occupying a sett.

Appendix III. INVASIVE PLANT SPECIES INFORMATION.

Ecology

The Government has acknowledged the problems that can be caused by non-native invasive species. In 2008 the Government launched “The Invasive Non-Native Species Framework Strategy for Great Britain”. The strategy provides a framework for a more co-ordinated approach to invasive species management. It seeks to create a stronger sense of shared responsibility across government, key organisations, land managers and the public.

The Non-Native Species Secretariat has been established to oversee the implementation of the strategy. Details of the secretariat including risk assessments and action plans for some species are available at www.nonnativespecies.org.

In general, there are four basic methods of controlling weeds; mechanical, chemical, natural and environmental.

- ***Mechanical control*** includes cultivation, hoeing, pulling, cutting, raking, dredging or other methods to uproot or cut weeds.
Where this method is used all plant material must be considered “controlled waste” and must be disposed of properly.
- ***Chemical control*** uses approved herbicides.
- ***Natural control*** uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.
- ***Environmental control*** works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.

Surveys

A site will be searched for invasive plant species growing on site, from mature plants to new shoots. A site will also be searched for dead stems indicating that plants that may have seasonally died back are present.

Legislation

Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits ‘planting’ or ‘causing to grow’ in the wild of any plant listed in Part 2 of Schedule 9.

The following is a list of all the species of plant listed under Schedule 9 of The Wildlife and Countryside Act 1981.

Common Name	Scientific Name	England & Wales	Scotland
Alexanders, Perfoliate	<i>Smyrniium perfoliatum</i>	✓	
Algae, Red	<i>Grateloupia luxurians</i>	✓	
Archangel, Variegated Yellow	<i>Lamiastrum galeobdolon subsp. Argentatum</i>	✓	
Azalea, Yellow	<i>Rhododendron luteum</i>	✓	
Balsam, Himalayan	<i>Impatiens glandulifera</i>	✓	
Carolina Water-shield	<i>Cabomba caroliniana</i>	✓	✓
Cotoneaster	<i>Cotoneaster horizontalis</i>	✓	
Cotoneaster, Entire Leaved	<i>Cotoneaster integrifolius</i>	✓	
Cotoneaster, Himalayan	<i>Cotoneaster simonsii</i>	✓	
Cotoneaster, Hollyberry	<i>Cotoneaster bullatus</i>	✓	
Cotoneaster, Small Leaved	<i>Cotoneaster microphyllus</i>	✓	
Creeper, False Virginia	<i>Parthenocissus inserta</i>	✓	
Creeper, Virginia	<i>Parthenocissus quinquefolia</i>	✓	
Dewplant, Purple	<i>Disphyma crassifolium</i>	✓	
False-acacia	<i>Robinia pseudoacacia</i>		✓
Fern, Water	<i>Azolla filiculoides</i>	✓	✓
Fig, Hottentot	<i>Carpobrotus edulis</i>	✓	✓
Garlic, Few-flowered	<i>Allium paradoxum</i>	✓	✓
Garlic, Three-Cornered	<i>Allium triquetrum</i>	✓	
Hogweed, Giant	<i>Heracleum mantegazzianum</i>	✓	✓
Hyacinth, water	<i>Eichhornia crassipes</i>	✓	✓
Kelp, Giant	<i>Macrocystis angustifolia</i>	✓	✓
Kelp, Giant	<i>Macrocystis integrifolia</i>	✓	✓
Kelp, Giant	<i>Macrocystis laevis</i>	✓	✓
Kelp, Giant	<i>Macrocystis pyrifera</i>	✓	✓
Kelp, Japanese	<i>Laminaria japonica</i>	✓	✓
Knotweed, Giant	<i>Reynoutria sachalinensis</i>	✓	

Knotweed, Hybrid	<i>Reynoutria japonica x Reynoutria sachalinensis</i>	✓	
Knotweed, Japanese	<i>Reynoutria japonica</i>	✓	
Knotweed, Japanese	<i>Polygonum cuspidatum</i>		✓
Lettuce, water	<i>Pistia stratiotes</i>	✓	✓
Montbretia	<i>Crocsmia x crocosmiiflora</i>	✓	
Parrot's-feather	<i>Myriophyllum aquaticum</i>	✓	
Pennywort, Floating	<i>Hydrocotyle ranunculoides</i>	✓	
Pigmyweed, New Zealand	<i>Crassula helmsii</i>	✓	✓
Potato, Duck	<i>Sagittaria latifolia</i>	✓	
Primrose-willow, Floating	<i>Ludwigia peploides</i>	✓	
Primrose, Water	<i>Ludwigia grandiflora</i>	✓	
Rhododendron	<i>Rhododendron ponticum</i>	✓	
Rhubarb, Giant	<i>Gunnera tinctoria</i>	✓	
Rose, Japanese	<i>Rosa rugosa</i>	✓	
Salvinia, Giant	<i>Salvinia molesta</i>	✓	✓
Seafingers, Green	<i>Codium fragile</i>	✓	
Seafingers, Green	<i>Codium fragile tomentosoides</i>		✓
Seaweed, Californian Red	<i>Pikea californica</i>	✓	✓
Seaweed, Hooked Asparagus	<i>Asparagopsis armata</i>	✓	✓
Seaweed, Japanese	<i>Sargassum muticum</i>	✓	✓
Seaweeds, Laver (except native species)	<i>Porphyra sp. except - P. amethystea P. leucosticta P. linearis P. miniata P. purpurea P. umbilicalis</i>	✓	✓
Shallon	<i>Gaultheria shallon</i>		✓
Wakame	<i>Undaria pinnatifida</i>	✓	✓
Waterweed, Curly	<i>Lagarosiphon major</i>	✓	✓
Waterweeds	<i>All species of the genus Elodea</i>	✓	

Appendix IV. NESTING BIRD INFORMATION.

Ecology

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub but others are ground nesting or prefer man-made structures or buildings.

Surveys

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Legislation

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

Toolbox Talk: Bats



18 species of bat have been recorded in Britain, 17 of which are known to breed here.

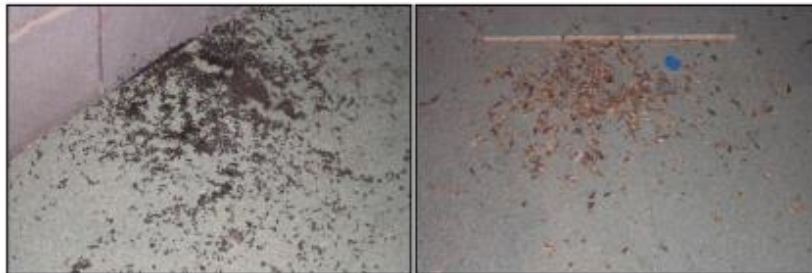
Identification.

Some species can be extremely difficult to identify in the hand and even more so in flight.

Species such as the Brown Long Eared bat pictured above can be more easily identified in the hand. Whereas, the Common Pipistrelle and Soprano Pipistrelle are more difficult to identify.



Bats are more easily identified by field signs such as droppings or feeding remains.



Habitat.

Bats are highly specialised creatures and require a relatively narrow range of suitable conditions in order to sustain a viable population. Bats require an abundant supply of flying insect food in places where they can easily be caught and they need safe and reliable roosting sites, particularly during breeding and hibernation.

Bats are heavily dependent on buildings and trees for their roost sites and therefore extremely susceptible to disturbance from human activities. Development schemes can also isolate bat populations and sever roost sites from favoured feeding areas by removing hedgerows or other features used as commuting routes.

Bats are susceptible to disturbance and have been known to abandon roost sites after instances of disturbance. The effects of disturbance are more pronounced at different times of year. Serious disturbance during breeding can result in the breeding females being killed or the abandonment and subsequent starvation of dependant young. Repeated disturbance during winter hibernation can result in the death of adult animals from starvation.

The level of protection afforded to bats in the UK and European legislation reflects the fact that it is now generally accepted that bats have declined substantially, maybe by as much as 60%, over recent years. Most species are declining and vulnerable with all species being protected.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and occasionally the roofs of buildings.

Certain species, particularly Pipistrelle, can quickly adapt to manmade structures and will readily use these to roost and to rear their young.

Legislation.

Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act (1981) and the Habitats Regulations 2017. Under this legislation it is an offence to intentionally or recklessly kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

Under the Habitats Regulations, where bats may be affected by development proposals, a licence is required from Natural England. Natural England's published guidelines on the licence procedure indicate that if, on the basis of survey information and specialist knowledge of the species concerned, the proposed activity is reasonably likely to result in an offence then a licence is required. If, on the other hand the proposed activity is reasonably unlikely to result in an offence, then a licence is not required.

If bats or bat field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Badgers

Identification.

Badgers are a nocturnal mammal that has a silvery grey back with distinct black and white stripes running from their shoulders to their nose. They are short stocky animals and can grow to approximately 80cm from head to tail.



Badgers are rarely seen during the day therefore the presence of badgers is usually identified from field signs such as setts, prints, paths or dung pits.

Badger prints are very distinctive and will often be found in soft areas of mud. The print has five toes which are almost in a straight line. Where the ground is very soft the print will display claws, but these may not always be visible.

Badgers are animals of habit and therefore they follow set paths throughout their territory leaving the paths very well worn in some areas. Well-worn badger paths may look like public footpaths when very well worn although they may lead under dense areas of vegetation and fences.



Another common badger field sign is the presence of shallow holes scraped in the ground containing dung. These are known as dung pits or, where found in large numbers, as a territorial marking, latrines.

If badgers or badger field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

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Habitat.

Badgers live in a series of underground tunnels called a "sett". A badger sett may be anything from a single entrance with a small spoil heap to an extensive area of entrances and large spoil heaps.



Badgers may also use existing features as setts such as culverts, caves, mines or any underground structure that will provide them with shelter.

Legislation.

Badgers and their setts are protected by the Protection of Badgers Act 1992. Under the Act it is illegal to:

- Willfully kill, injure or take a badger or attempt to do so.
- Cruelly ill-treat a badger.
- Interfere with a sett by doing any of the following:
 - Damaging a badger sett or any part of it.
 - Destroying a badger sett.
 - Obstructing access to a badger sett.
 - Causing a dog to enter a sett.
 - Disturbing a badger while it is occupying a sett.

Penalties for offences under the Act are up to six months in prison and a fine of £5,000 for each offence.

Disturbance to a badger in a sett can be caused by working close to a sett.

Toolbox Talk: Himalayan Balsam

Himalayan Balsam was introduced into the UK in the early 19th century as an ornamental garden plant. The plant has since become established in the wild growing in a wide range of habitats, predominantly damp habitats and along watercourses. Himalayan Balsam grows in dense stands and therefore along river banks it can increase the likelihood of flooding during periods of heavy rainfall and can leave the river banks bare and exposed to erosion during the winter.

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Identification.

Himalayan Balsam grows to around 2m and has a hollow, brittle stem. The plant stem is green to red early in the season and turns pink to red during the summer.



The plant has leaves up to 15cm long which are finely serrated along the edges and may have a pink mid-rib. The flowers are trumpet shaped and pink.



Habitat and Spreading.

Himalayan Balsam grows in a range of habitats but prefers damp habitats and river corridors. The plant grows in dense stands that out-compete native species. Along river corridors the plant can increase the likelihood of flooding during periods of heavy rainfall and leaves the river banks bare and exposed to erosion during the winter.



Himalayan Balsam spreads solely by seeds, which are small and easily carried by wind or water. The seed heads are approximately 2.5cm long and explode on touch when ripe.

The best form of control of the plant is to prevent it from seeding by cutting back or pulling before it can seed.

Legislation.

Under section 14 and Part II of Schedule 9 of the Wildlife and Countryside Act 1981 it is an offence for it to be planted or otherwise caused to grow in the wild. This includes spreading the species by transferring polluted ground material from one area to the other.

If Himalayan balsam is identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Nesting Birds

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The bird nesting season varies according to the weather each year but generally commences in March, peaks during May and June and continues until September.

A bird's nest is the place in which a bird lays and incubates its eggs. Some species build a nest structure while other species lay their eggs directly onto the ground or on a rocky ledge. Nests can be constructed from a variety of materials and are usually lined with feathers or fur.

Identification.

Some birds construct nests in an area where it can be seen while others construct nests that are hidden from view and are more difficult to identify.

The photograph to the right shows a Moorhen nest which can easily be seen.



Nests can also be identified from field signs without the necessity to see the nest itself. The presence of a nest can be identified by seeing the adult birds leaving and returning to the nest regularly with food to feed the chicks.

The photograph to the left shows a Wren's nest in overhanging tree roots, which is almost impossible to see.

Care should be taken at any time during the nesting season particularly when regular bird activity is seen, or birds can be heard calling.



Habitat.

Birds regularly nest in a variety of places with some species nesting in buildings or vegetation and others nesting on the ground or on water. However, birds may nest in any habitat or situation if they identify a suitable nest site.



Legislation.

Part 1. -(1) of the Wildlife and Countryside Act 1981 states that:

If any person intentionally or recklessly:

- Kills, injures or takes any wild bird.
- Takes, damages or destroys the nest of any wild bird while that nest is in use or being built, or
- Takes or destroys an egg of any wild bird.

He shall be guilty of an offence.

Part 1. -(5) of the Act states that:

If any person intentionally or recklessly:

- Disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young, or
- Disturbs young of such a bird.

He shall be guilty of an offence and liable to a special penalty.

If a nest or potential nesting activity is identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk