

**Whitcher Wildlife Ltd.
Ecological Consultants.**



BANK END ROAD, WORSBOROUGH.

OS REF: SE 35832 04302.

PRELIMINARY ECOLOGICAL APPRAISAL.

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TABLE OF CONTENTS.

	Page Number
1. INTRODUCTION.	3
2. SURVEY METHODOLOGY.	4
3. SURVEY RESULTS.	7
4. EVALUATION OF FINDINGS.	13
5. RECOMMENDATIONS.	15
6. REFERENCES.	16
Appendix I. NESTING BIRD INFORMATION.	17
Appendix II. BAT INFORMATION.	18
Appendix III. ANNOTATED MAP OF THE SURVEY AREA.	20
Appendix IV. TARGET NOTES.	21

1. INTRODUCTION.

1.1. There are plans to submit a planning application to develop a triangle of and off Bank End Road, Worsborough for housing. An ecology survey is required in support of that planning application.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a Preliminary Ecological Appraisal of the site in support of the planning application.

1.3. The site survey was carried out on 1st June 2020. This report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendices I and II of this report provide additional information on protected species and are designed to assist the reader in understanding the contents of this report.

2. SURVEY METHODOLOGY.

2.1. Prior to visiting the site, the survey area was cross referenced to maps and aerial photographs to give a general idea of the habitats and potential issues within the area and to identify potential access and walking routes.

2.2. The survey area was walked where access was agreed and public rights of way were used where no access was agreed. All habitats within and immediately around the survey area were documented and the dominant species within that habitat listed in line with the JNCC Handbook for Phase 1 Habitat surveys.

2.3. 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.

2.4. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Rob Strachan, Tom Moorhouse and Merryl Gelling (2011). *Water Vole Handbook: Third Edition*: -

- * Water vole burrows.
- * Water vole faeces and latrines.
- * Water vole feeding stations.
- * Water vole runs.
- * Water vole prints in areas of soft mud.
- * Water vole lawns.
- * Predator field signs.

2.5. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 50m in each direction were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs

in line with the P Chanin (2003). *Monitoring the Otter and Conserving Natura 2000 Rivers: Monitoring Series No10 Guidelines*: -

- * Otter prints in soft mud.
- * Otter spraints.
- * Otter Holts.

2.6. The survey area was searched for watercourses and waterbodies. Where found, and where safe to enter the water, all were thoroughly searched for the presence of crayfish, for approximately 50m in each direction of the site, by searching under rocks and logs. Where stated, crayfish traps were also deployed into the watercourse. All survey work was carried out in accordance with the *Conserving Natural 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.7. The survey area was searched for mature trees and derelict buildings and where found these were checked for potential bat roosting sites in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition)* by looking for the following signs: -

- * Holes, cracks or crevices.
- * Bat Droppings.

2.8. The land immediately adjacent to the survey area was assessed for bat roosting potential and bat foraging potential. Connective routes and flight lines were also assessed whilst on site and using maps of the area.

2.9. The area within 500m of the survey site was cross referenced to maps to highlight all ponds close to the site. Where possible, all ponds identified were accessed using agreed access or public rights of way to assess the potential for great crested newts (*Triturus cristatus*) to be present.

2.10. The survey area was assessed for the potential for reptiles and suitable reptile habitats. Where applicable the area was also searched for the presence of reptiles.

2.11. Where appropriate, the habitat within and surrounding the survey area was searched for species such as hazel, oak, honeysuckle, bramble and other species which may provide potential habitat for hazel dormice (*Muscardinus avellanarius*). Field signs such as feeding remains and nests were also searched for where possible, in line with P Bright, P Morris and T Mitchell-Jones *the Dormouse Conservation Handbook 2nd Edition*.

2.12. Where appropriate, the area within and surrounding the survey area was assessed for its potential to house habitat for red squirrels. Field signs of red squirrels were searched for at least every 50m, looking for any dreys, feeding signs or sightings of red squirrels.

2.13. All surveys were carried out in line with the Chartered Institute of Ecological and Environmental Management (CIEEM) survey standards and advice.

2.14. This document is prepared in line with The National Planning Policy Framework (NPPF). This sets out the government policy on biodiversity and nature conservation and places a duty on Planning Authorities to give material consideration to the effect of a development on legally protected species when considering planning applications. The NPPF and the Planning Practice Guidance on “Natural Environment” also promote sustainable development by ensuring that developments take account of the role and value of biodiversity and that it is conserved and enhanced within the development.

2.15. This report is prepared in line with the Natural Environment and Rural Communities (NERC) Act that came into force on 1st Oct 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England.

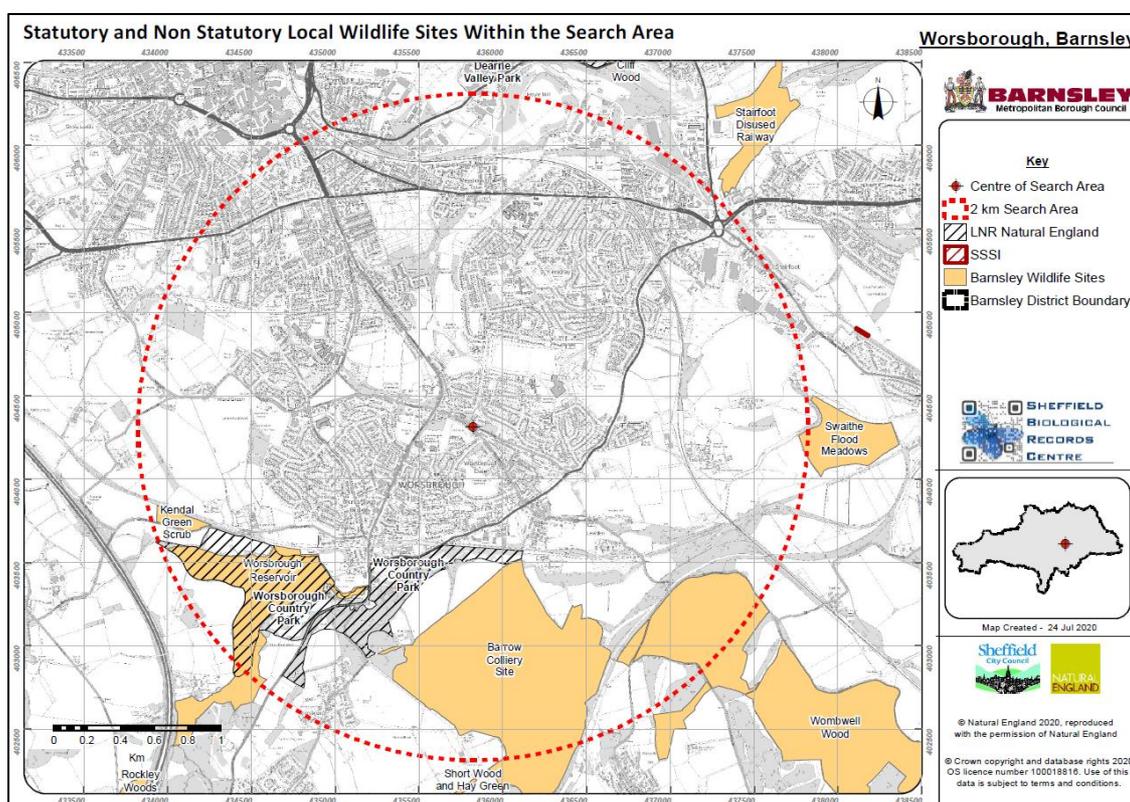
2.16. The survey was undertaken by Derek Whitcher who has over twenty years’ experience of surveying for wildlife and has run his own wildlife consultancy since 1998. He has extensive experience of a wide variety of survey techniques for a variety of species of protected wildlife supplemented by attendance on a wide range of training courses through CIEEM, FSC and BCT. As a member of CIEEM he is committed to continuous professional development, a continual process of learning and career development, a condition of CIEEM membership. He holds current Natural England survey licences for barn owl, bat, great crested newt and white clawed crayfish.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to Barnsley Biological Records Centre for existing records of designated sites and protected species within 2km of the site.

3.1.2. The map below shows the statutory and Non-Statutory Local Wildlife Sites within 2km of the site. The closest site is Worsborough Country Park approximately 1km south of the site.



3.1.3. Abundant common amphibian species have been recorded predominantly in Worsborough Country Park. The closest great crested newt records are on Race Common Lane, 2km from the site.

3.1.4. Abundant bird, insect and plant species records were provided mainly for the Local Wildlife Sites in the surrounding area.

3.1.5. Abundant bat records were provided mainly for Worsborough Country Park.

3.1.6. A relatively small number of reptile records were provided, mainly grass snake with a few common lizard records.

3.1.7. None of the records provided refer to the survey area.

3.1.8. A data search request was submitted to South Yorkshire Badger Group for existing sett records within 2km of the site. There are no existing sett records to the west of the M1 corridor.

3.1.9. The data search results cannot be placed in the public domain but are available to the client on request.

3.2. The Surveyed Area.

3.2.1. The aerial photograph below shows the location of the site shown by the red marker, and the surrounding area. The site is in an urban area to the south of Barnsley surrounded by residential areas and woodland. The development shown on the aerial photograph to the north of the site has been fully developed.



3.2.2. The site itself consists of a triangle of land between two roads. There are old concrete bases present on the site from old houses that used to stand on the site.

3.3. Description of Habitats.

Appendix IV of this report contains an annotated map marked up with the varying habitats that are cross referenced to target notes in Appendix V of this report. The habitats on and adjacent to the site are: -

- Scrub
- Scattered Trees.
- Wall.
- Fence
- Bare Ground.

3.3.1. Scrub.

The main area of the site has been categorised as scrub but it does maintain a mosaic of habitats including dense scrub, tall ruderals and coarse grassland. Species present include Perennial ryegrass, (*Lolium perenne*), cock's foot (*Dactylis glomerata*), goat willow (*Salix caprea*), ash (*Fraxinus excelsior*), buddleia (*Buddleia davidii*), silver birch (*Betula pendula*), elm (*Ulmus procera*), bramble (*Rubus fruticosus*), valerian (*Valeriana officinalis*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), dog rose (*Rosa canina*), spear thistle (*Cirsium vulgare*), ragwort (*Senecio jacobaea*), mugwort (*Artemisia vulgaris*), cleavers (*Galium aparine*), slender plantain (*Plantago heterophylla*), meadow buttercup (*Ranunculus acris*), dandelion (*Taraxacum officinale*) and dock (*Rumex sp.*).





3.3.2. Scattered Trees.

3.3.2.1. There are a few immature trees growing on the site, sycamore (*Acer pseudoplatanus*), silver birch (*Betula pendula*) and ash (*Fraxinus excelsior*).



3.3.3. Wall.

There is a stone wall along the southern site boundary although this is in a poor state of repair with sections missing.



3.3.4. Fence.

3.3.3.1. There is a timber panel fence at the eastern end of the site.



3.3.5. Bare Ground.

There are two concrete pads within the site, presumed to be the bases of previous houses on the site.

3.4. Description of Fauna.

3.4.1. No badger setts or badger field signs were found anywhere within the survey area.

3.4.2. There are no watercourses present on the site and there is therefore no habitat for water voles, otters or white clawed crayfish present on the site.

3.4.3. There are no buildings on the site to provide opportunities for roosting bats and the trees present have no bat roost potential.

3.4.4. The exposed location between two roads was assessed to have low value foraging habitat for bats.

3.4.5. There are no ponds in the area around the site and there are no records of great crested newts on or near the site.

3.4.6. The trees and scrub on the site provide opportunities for nesting birds during the nesting season, which extends from March to September each year.

3.4.7. The site is assessed to be unsuitable habitat for reptiles as the site is confined between roads.

3.4.8. The site is assessed to be totally unsuitable habitat for hazel dormouse as it is located outside the natural range for the species.

3.4.9. The site is assessed to be totally unsuitable habitat for red squirrels.

3.4.10. Cotoneaster, an alien invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) was present on the site. Cotoneaster spreads via its berries. The location of the plant is shown below.



4. EVALUATION OF FINDINGS.

4.1. The data search with Barnsley Biological Records centre identified a number of Local Wildlife Sites within 2km of the site but none close enough to be affected by the proposed development. The proposed development will have **No Negative Impact** on Nationally or Internationally Designated Sites and no Local Wildlife Sites.

4.2. No Priority Habitats as listed under the NERC Act 2006 will be affected by the proposed development. Therefore, there will be **No Negative Impact** on NERC Priority Habitats.

4.3. The habitat to be affected by the proposed development is predominantly the footprint of the previous buildings and an area of scrub. These are assessed to be of low ecological value and there will therefore be a **No Negative Impact** as a result of loss of these habitats.

4.4. No badger setts or badger field signs were found on the site. Therefore, there will be **No Negative Impact** on the species.

4.5. There are no watercourses on the site and therefore no habitat for water voles, otters or white clawed crayfish. There will be **No Negative Impact** on these species as a result of the proposed development.

4.6. There are no ponds in the area around the site and there are no records of great crested newts on or near the site. The proposed development of the site will have **No Negative Impact** on amphibians.

4.7. There are no buildings on the site to provide opportunities for roosting bats and the trees present have no bat roost potential. Therefore, the proposed development will have **No Negative Impact** on roosting bats.

4.8. The habitat on site that will be affected by the proposed new development is assessed to be low value bat foraging habitat and therefore the development will have **No Negative Impact** on foraging and commuting bats.

4.9. The trees and scrub on the site provide opportunities for nesting birds during the nesting season, which extends from March to September each year. With due care there should be **No Direct Negative Impact** on nesting birds.

4.10. The site is assessed to be unsuitable for reptiles and therefore, there will be **No Negative Impact** on reptiles as a result of the proposed development.

4.11. The site is assessed to be totally unsuitable habitat for hazel dormouse, outside the natural range of the species. The proposed development will have **No Negative Impact** on the species.

4.12. The site is assessed to be totally unsuitable habitat for red squirrels, with no suitable habitat present on the site. There will be **No Negative Impact** on the species.

4.13. Cotoneaster, an alien invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981) was present on the site. Cotoneaster spreads via its berries. With due care it will be possible to avoid spreading these plants in the wild.

5. RECOMMENDATIONS.

5.1. It is recommended that any vegetation clearance is carried out outside the nesting bird season, which extends from March to September each year. Any vegetation clearance during the nesting season should be preceded by a nesting bird survey and any active nests identified must remain undisturbed until the young have fledged.

5.2. There is one cotoneaster plant growing on the site. Cotoneaster is an alien invasive species listed on Schedule 9 of the Wildlife and Countryside Act that can be controlled by pulling up the plants before it develops ripe seed in the late summer. The plant should either be burnt or destroyed as a contaminated waste. The ground around the plant can contain berries which will grow again so care must be taken to ensure no seeds remain.

5.3. In order to provide biodiversity enhancements on the site, it is recommended that a selection of bat boxes and nest boxes be provided on the buildings or the trees around the site.

Prepared by:	
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Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 10 th August 2020.

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Appendix I. 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”.

Appendix II. 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 III. ANNOTATED MAP OF THE SURVEY AREA.



Please note all drawings are being prepared by hand during home working due to Covid 19.

Appendix IV. TARGET NOTES.

T1. Concrete bases.

T2. Cotoneaster Plant.