



**THURNSCOE BRIDGE LANE, THURNSCOE,
BARNSELY.**

OS REF: SE 45683 – 04931.

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.	17
5. RECOMMENDATIONS.	19
6. REFERENCES.	21
Appendix I. BAT INFORMATION.	22
Appendix II. NESTING BIRD INFORMATION.	24
Appendix III. REPTILE INFORMATION.	25
Appendix IV. SCHEDULE 9 INVASIVE PLANT SPECIES INFORMATION.	27
Appendix V. ANNOTATED MAP OF THE SURVEY AREA.	30
Appendix VI. TARGET NOTES.	31
BATS IN TREES TOOLBOX TALK.	32
NESTING BIRD TOOLBOX TALK.	33
REPTILE TOOLBOX TALK.	34

1. INTRODUCTION.

1.1. Plans are being drawn up to develop an area of disused land that lies to the east of Thurnscoe Bridge Lane, Thurnscoe, Barnsley.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a Preliminary Ecological Appraisal of the site to establish whether there are any issues that may affect the proposed works.

1.3. The site survey was carried out on 6th March 2020 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendices I to IV of this report provide additional information on specific 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.

2.3. The survey area was searched for watercourses and where found all watercourses within the survey area and for approximately 100m in each direction were thoroughly searched for evidence of water vole (*Arvicola amphibius*) activity by looking for the following signs, in line with Dean M, Strachen R, Gow D and Andres R (2016). *The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series)*. Eds Fiona Mathews and Paul Chanin. The mammal Society, London: -

- * 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 trees and structures 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. This survey was carried out by Stevan Roebuck. Since 2011 Stevan has had experience carrying out great crested newt and bat surveys. Since 2013 Stevan has had experience in a professional capacity as a Wildlife Consultant carrying out ecology surveys, badger, great crested newt and bat surveys. Stevan holds a Natural England Survey License for Great Crested Newts and Bats and is currently working towards gaining further Natural England, NRW and SNH survey licences. Stevan is also a Qualifying Member of CIEEM.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to Barnsley Biological Records Centre for records of protected species. The data search also searched for statutory and non-statutory designated sites.

3.1.2. The data search provided several records of Pipistrelle bats within 2km of the surveyed area with the closest record a roost 200m north of the site.

3.1.2. The data search found two records of Noctule bats with the closest record 418m southwest of the site.

3.1.3. Various Barn owl records were identified within 2km of the site with the closest record 948m southeast of the site.

3.1.4. No other relevant records of protected species were identified within 2km of the surveyed area.

3.1.5. The data searched provided no records of statutory or non-statutory designated sites within 2km of the surveyed area.

3.1.6. A data search request was submitted to South Yorkshire Badger Group. The closest badger sett records held by the group are 3km northeast of the site and 4km northwest of the site. There are no records of badgers or badger activity closer to the site.

3.2. The Surveyed Area.

3.2.1. The surveyed area was an area of disused land that lies to the east of Thurnscoe Bridge Lane, Thurnscoe, Barnsley. The aerial photograph below shows the surveyed area and the immediate surrounding area.



3.2.2. The aerial photograph below shows the location of the surveyed area and the wider surrounding area.



3.2.3. The area surrounding the site consists of residential dwellings to the north, and a disused railway with scattered woodland to the south. There is a live railway line that borders the eastern site boundary and Bridge Lane lies to the west with arable land beyond.

3.3. Description of Habitats.

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

- Tall ruderals
- Scattered Scrub
- Dense scrub
- Scattered Trees
- Amenity Grassland
- Introduced Shrub
- Defunct Hedge Species Poor
- Woodland
- Bare Ground
- Fence

3.3.3.1. *Tall ruderals*

The surveyed area is disused and has become overgrown predominantly with tall ruderal species and grasses including willowherb (*Chamerion angustifolium*), dock (*Rumex sp.*), mugwort (*Artemisia vulgaris*), nettle (*Urtica dioica*), teasel (*Dipsacus sylvestris*), ragwort (*Senecio jacobaea*), cow parsley (*Anthriscus sylvestris*), hogweed (*Heracleum sphondylium*), thistle (*Cirsium sp(p)*), buddleia (*Buddleia davidii*), ribwort plantain (*Plantago lanceolata*), dandelion (*Taraxacum officinale*), moss (*Pleurocarpous spp.*), perennial rye grass (*Lolium perenne*), burdock (*Arctium lappa*), sedge (*Carex sp(p)*) and cocks foot (*Dactylis glomerata*). The photograph below shows a section of the site looking south.



3.3.3.2. Scattered Scrub

There are small areas of scattered scrub in the northeast and northwest corners of the site and down the western site boundary that consist mainly of bramble (*Rubus fruticosus*). The photograph below shows a small area of scattered scrub.



3.3.3.3. Dense scrub

The northwest corner of the site consists of dense scrub along the site boundary adjacent to a railway line where species include hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*) and bramble (*Rubus fruticosus*). The photograph below shows the end of the dense scrub.



3.3.3.4. Scattered Trees

There are two mature sycamore (*Acer pseudoplatanus*) trees towards the southwest corner of the site that lie along the western site boundary. The photograph below shows one of the trees.



3.3.3.5. Amenity Grassland

At the northern end of the site there is a small strip of amenity grassland that also includes introduced plants from the adjacent gardens. The survey was carried out when the grass was low and species were difficult to identify but include perennial rye grass (*Lolium perenne*) and annual meadow grass (*Poa annua*) and Yorkshire Fog (*Holcus lanatus*). The photograph below shows the amenity grassland.



3.3.3.6. Introduced Shrub.

Along the northern boundary, plants have been planted along the fence line and include daffodil (*Narcissus pseudonarcissus*), conifer, laurel (*Prunus laurocerasus*), goat willow (*Salix caprea*), rose (*Rosa sp.*), cotoneaster (*Cotoneaster spp.*), beech (*Fagus sylvatica*), Chinese lantern (*Physalis alkekengi*) and iris (*Iris sp.*).

3.3.3.7. Defunct Hedge Species Poor

Along the western site boundary there is a section of hedgerow that includes hawthorn (*Crataegus monogyna*), immature ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) trees. The photograph below shows a section of the hedgerow.



3.3.3.8. Woodland

The southern boundary of the site consists of open woodland with little ground vegetation. The tree species include immature and semi mature sycamore (*Acer pseudoplatanus*), silver birch (*Betula pendula*), oak (*Quercus sp(p)*) and hawthorn (*Crataegus monogyna*). The photograph below shows part of the woodland.



3.3.3.9. Bare Ground

In the northwest corner of the site there is an area of concrete surrounded by palisade fence that houses a communications box. There is a railway line that lies to the east of the site that consists of ballast, the running rail and sleepers. Thurnscoe Bridge Lane lies to the west of the site. The photographs below show Thurnscoe Bridge Lane and the concrete area.



3.3.3.10. Fence

There is a timber fence along the northern site boundary and a metal palisade fence along the eastern site boundary adjacent to the railway line. The photographs below show the fences.



3.4. Description of Fauna.

3.4.1. No badger setts or other badger field signs were identified within the surveyed area during this survey of the site.

3.4.2. No watercourses that may provide a suitable habitat for water voles, otters or freshwater white clawed crayfish were identified within the surveyed area. A watercourse was identified 85m south of the site and was flooded at the time of this survey but will remain unaffected by the proposed works.

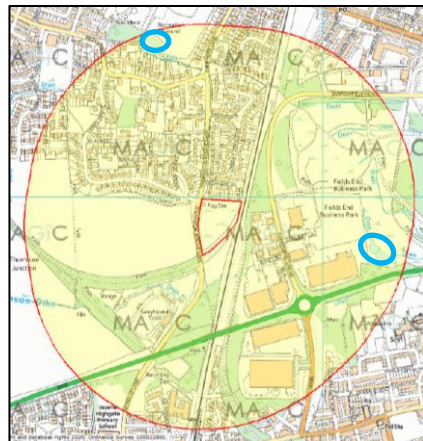
3.4.3. No buildings with any suitable habitat for roosting bats were identified within the survey area.

3.4.4. A sycamore tree with bat roost potential was identified along the western site boundary towards the southern end of the site. The tree has rot holes and broken limbs that may be utilised by roosting bats. The photograph below shows the tree.



3.4.5. The railway corridor and the dense scrub along the boundary to the east and the woodland to the south of the site will provide a moderate potential for foraging and commuting bats. Both these areas will remain unaffected by the proposed development.

3.4.6. Two ponds with the potential to provide a suitable habitat for great crested newts were identified within 500m of the site from maps of the surrounding area. The aerial map below shows the surveyed area, the two ponds and a 500m buffer around the site.



3.4.6.1. The closest pond lies 390m east of the site and both ponds have no suitable terrestrial habitat linking them to the surveyed area as they are separated from the site by built up residential and industrial areas and busy roads. No records of great crested newts were identified within 2km of the site on the data search.

3.4.6.2. During this survey, the ponds were visited and a Habitat Suitability Index score (HSI) score assessed to determine their suitability to support great crested newts. The table below shows the results for each of the ponds.

HSI		Pond 1	Pond 2
SI1	Location	1	1
SI2	Pond Area	0.9	0.8
SI3	Pond Drying	0.5	1
SI4	Water Quality	0.67	0.67
SI5	Shade	1	1
SI6	Fowl	1	0.67
SI7	Fish	1	0.67
SI8	Ponds	0.1	0.1
SI9	Terrestrial Habitat	0.33	1
SI10	Macrophytes	0.9	1
Total score		0.62	0.69
Presence		Average	Average

3.4.7. The vegetation within the surveyed area will provide a suitable habitat for nesting birds during the nesting season, which extends from March to September each year. No active nests were identified during this survey, although old nests were identified in the dense scrub and woodland.

3.4.8. The surveyed area provides low suitability for reptiles as there are rubble and brash piles that provide refugia for reptiles. The adjacent railway line also provides an abundance of suitable refugia and basking sites for reptiles provided by the railway infrastructure. No reptiles were identified during this survey.

3.4.9. The vegetation within the proposed site does not provide any suitable habitat for hazel dormice and the surveyed area is outside of the natural range of the species.

3.4.10. The woodland to the south of the site would provide a suitable habitat for red squirrels. However, the surveyed area lies outside the natural range of the species.

3.4.11. Cotoneaster is a non-native alien invasive plant species listed on schedule 9 of the Wildlife and Countryside act 1981. A single Cotoneaster plant was identified growing through the boundary fence in the northeast corner of the site. No other invasive plants were identified.

4. EVALUATION OF FINDINGS.

4.1. No Designated sites were identified on or near to the proposed development site. Therefore, the proposed works will have no impact on any such sites.

4.2. The hedgerow at along the western site boundary is a Priority Habitat as listed within the NERC Act 2006 and is of high ecological value. Therefore, the proposed works may have an impact on high value habitats if the hedgerow will be affected.

4.3. No badger setts or other badger field signs were identified within the surveyed area during this survey of the site. Therefore, the proposed works will have no impact on badgers or their setts.

4.4. No watercourses that may provide a suitable habitat for water voles, otters or freshwater white clawed crayfish were identified within the surveyed area. A watercourse was identified 85m south of the site and was flooded at the time of this survey but will remain unaffected by the proposed works. Therefore, the proposed works will have no impact on any of these species.

4.5. No buildings with any suitable habitat for roosting bats were identified within the surveyed area. Therefore, the proposed works will have no impact on bats roosting within any structures.

4.6. A sycamore tree with bat roost potential was identified along the western site boundary towards the southern end of the site. The tree has rot holes and broken limbs that may be utilised by roosting bats. Therefore, if this tree will be affected by the proposed works, there may be an impact on bats roosting within trees.

4.7. The railway corridor and the dense scrub along the boundary to the east and the woodland to the south of the site will provide a moderate value habitat for foraging and commuting bats. Both these areas will remain unaffected by the proposed development. However, any lighting to be used during the works or street lights erected for the development may have an impact on roosting bats unless unless a sympathetic lighting scheme is adopted for the development, light interference may have a significant impact on foraging and commuting bats.

4.8. Two ponds with the potential to provide a suitable habitat for great crested newts were identified within 500m of the surveyed site by looking at maps of the

surrounding area. The closest pond lies 390m east of the site and both ponds have no suitable terrestrial habitat linking them to the surveyed area as they are separated from the site by built up residential and industrial areas and busy roads. No records of great crested newts were identified within 2km of the site on the data search.

4.8.1. During this survey, the ponds were visited and a Habitat Suitability Index score (HSI) given for their suitability to support great crested newts. Both ponds returned an average HSI score. Therefore, as there is no suitable terrestrial habitat between the ponds and the site, no records of the species within 2km of the surveyed area and the ponds only having average HSI scores, the proposed development will have no impact on great crested newts.

4.9. The vegetation within the surveyed area will provide a suitable habitat for nesting birds during the nesting season, which extends from March to September each year. Therefore, if any vegetation clearance work is carried out on the site during the nesting season, there may be a high impact on nesting birds if they are present.

4.10. The surveyed area provides low suitability for reptiles as there are rubble and brash piles that provide refugia for reptiles. The adjacent railway line also provides an abundance of suitable refugia and basking sites for reptiles provided by the railway infrastructure. Therefore, the proposed works may have an impact on reptiles if they are present.

4.11. The vegetation within the proposed worksite does not provide any suitable habitat for hazel dormice and the surveyed area is outside of the natural range of the species. Therefore, the proposed works will have no impact on hazel dormice.

4.12. The woodland to the south of the site would provide a suitable habitat for red squirrels. However, the surveyed area lies outside the natural range of the species. Therefore, the proposed works will have no impact on red squirrels.

4.13. Cotoneaster is a non-native alien invasive plant species listed on schedule 9 of the Wildlife and Countryside act 1981. A single Cotoneaster plant was identified growing through the boundary fence in the northeast corner of the site. No other invasive plants were identified. Therefore, the proposed works may have an impact on spreading the plant unless suitable precautionary measures are put into place.

5. RECOMMENDATIONS.

5.1. This Preliminary Ecological Appraisal report is designed to advise the client of the initial survey results so that they may be considered within the site development plan.

5.2. Once all surveys have been completed and the development plans have been finalised, the report must be converted into an Ecological Impact Assessment (EcIA) where details of further survey results, mitigation and biological enhancements are included, to arrive at an assessment of the residual impact of the proposed development. This format will be suitable to submit to the Local Authority.

5.3. It is recommended that the hedgerow along the western site boundary is left undisturbed during the works as hedgerows are a Priority Habitat as listed within the NERC Act 2006 and is of high ecological value.

5.4. It is recommended that the sycamore tree with bat roost potential is left undisturbed by the proposed development. If the tree will be affected, further bat surveys will be required before the tree can be removed.

5.5. During the works any lighting to be used should not be directed directly onto the woodland to the south or towards the railway corridor to avoid having any impact on foraging and commuting bats. Any street lights erected as part of the works should not be placed near to either the woodland or railway corridor.

5.6. It is recommended that any vegetation clearance work carried out on the site is carried out outside of the nesting bird season, which extends from March to September each year.

5.7. If any vegetation clearance work is carried out during the nesting season the work must be immediately preceded by a thorough nesting bird survey carried out by a suitably experienced person. Any nests identified must remain undisturbed until the young have fledged from the nest.

5.8. As there is potential for reptiles to be present within the proposed development site, it is recommended that full reptile surveys are carried out. Reptile surveys should be carried out in the reptile active season, which extends between March and June and in September and October.

5.9. Reptile surveys involve laying refugia mats at various locations around the site. The mats must then be checked on seven occasions when the weather conditions are suitable.

5.10. It is recommended that no works affect the Cotoneaster plant growing through the northern boundary fence. If any works will affect the plant, suitable precautionary measures must be put into place.

Prepared by:	
Stevan Roebuck	Date: 10 th March 2020.

Checked by:	
Derek Whitcher. BSc, MCIEEM, MCMI	Date: 11 th March 2020.

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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. 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 III. REPTILE INFORMATION.

Ecology

There are five main species of reptile that reside in the UK; Common or Viviparous Lizard (*Lacerta vivipara*); Sand Lizard (*Lacerta agilis*); Slow Worm (*Anguis fragilis*); Grass Snake (*Natrix natrix*) and Adder (*Vipera berus*). The Adder is the only native species that is venomous although this is rarely harmful to humans.

Reptiles occupy a wide range of habitats including woodland, marshes, heathland, moors, sand dunes, hedgerows and bogs. Sand Lizards are confined to moorland and coastal sand dunes where they lay their eggs in the warm sand. The range of the Sand Lizard in the UK is therefore very limited. Slow Worms can be found in a wide variety of habitats throughout Britain and is the most likely reptile to be found in urban and suburban environments.

Maintaining the right body temperature is vital to reptiles' survival. In the morning, they find a warm basking site to heat up their bodies, then later they may move back into the shade because they do not sweat and have to be careful not to overheat. During hot summers, Adders will try to move to damper, cooler sites.

Over winter reptiles will hibernate in burrows or under logs where they are protected from the cold and predators, emerging from February onwards as the weather warms up.

Reptiles generally begin to mate April to May with young born in late July to September. The Common Lizard gives birth to live young, hence the term viviparous, meaning live bearing.

Surveys

Reptile surveys involve the searching of refuge such as logs and stones for any animal sheltering below. Artificial refuge may be laid out on site for the purpose of reptile surveys.

Legislation

Reptiles are protected under Appendix II (sand lizards) and Appendix III (common lizard, slow worms, smooth snake, grass snake and adders) of the BERN Convention (1982), partially protected under Schedule 5 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive and are all listed under section 41 of the Natural Environment and Communities Act (2006) making them a species of principal importance.

This makes it an offence to disturb any reptile while it is occupying a structure or place it uses for shelter or protection or to obstruct access to such a place.

Appendix IV. 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

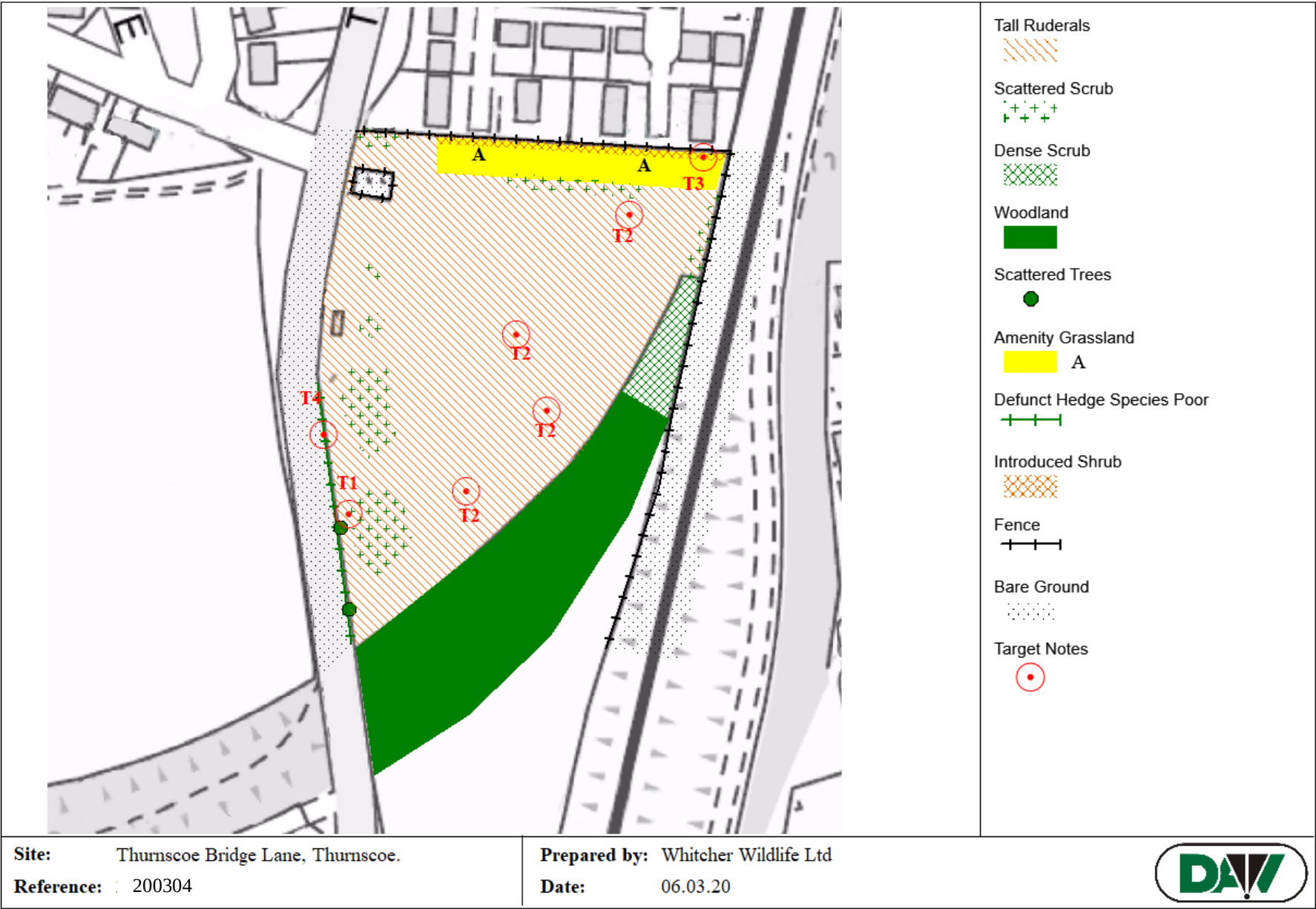
Invasive species listed under Schedule 9 are prohibited from release into the wild. Schedule 9, Section 14(2) prohibits ‘planting’ or ‘causing to grow’ in the wild of any plant listed in Part 2 of Schedule 9.

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>Smyrnium perfoliatum</i>	✓	
Algae, Red	<i>Grateloupia luxurians</i>	✓	
Archangel, Variegated Yellow	<i>Lamium galeobdolon</i> subsp. <i>Argentatum</i>	✓	
Azalea, Yellow	<i>Rhododendron luteum</i>	✓	
Balsam, Himalayan	<i>Impatiens glandulifera</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>		✓
Fanwort	<i>Cabomba caroliniana</i>	✓	✓
Fern, Water	<i>Azolla filiculoides</i>	✓	✓
Fig, Hottentot	<i>Carpobrotus edulis</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>Fallopia sachalinensis</i>	✓	
Knotweed, Hybrid	<i>Fallopia japonica</i> x <i>Fallopia sachalinensis</i>	✓	
Knotweed, Japanese	<i>Fallopia japonica</i>	✓	
Knotweed, Japanese	<i>Polygonum cuspidatum</i>		✓
Leek, Few-flowered	<i>Allium paradoxum</i>	✓	✓
Lettuce, water	<i>Pistia stratiotes</i>	✓	✓
Montbretia	<i>Crocasmia</i> x <i>crocosmiiflora</i>	✓	
Parrot's-feather	<i>Myriophyllum aquaticum</i>	✓	
Pennywort, Floating	<i>Hydrocotyle ranunculoides</i>	✓	
Potato, Duck	<i>Sagittaria latifolia</i>	✓	
Primrose, Floating Water	<i>Ludwigia peploides</i>	✓	
Primrose, Water	<i>Ludwigia grandiflora</i>	✓	
Rhododendron	<i>Rhododendron ponticum</i>	✓	
Rhubarb, Giant	<i>Gunnera tinctorial</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</i> sp. except - <i>P. amethystea</i> <i>P. leucosticta</i> <i>P. linearis</i> <i>P. miniata</i> <i>P. purpurea</i> <i>P. umbilicalis</i>	✓	✓
Shallon	<i>Gaultheria shallon</i>		✓
Stonecrop, Australian swamp	<i>Crassula helmsii</i>	✓	✓
Wakame	<i>Undaria pinnatifida</i>	✓	✓
Waterweed, Curly	<i>Lagarosiphon major</i>	✓	✓
Waterweeds	All species of the genus <i>Elodea</i>	✓	

Appendix V. ANNOTATED MAP OF THE SURVEY AREA.



Appendix VI. TARGET NOTES.

T1 is the sycamore tree with roosting bat potential.

T2 is the refugia piles suitable for reptiles.

T3 is the Cotoneaster plant.

T4 is the hedgerow, a Priority Habitat under the NERC Act 2006.

Toolbox Talk: Bats in Trees

18 species of bat have been recorded in Britain, 17 of which are known to breed here. All UK bat species have been found in and around trees or woodland habitats although the way that different species utilise trees varies with trees or woodland habitat being used for roosting, foraging and navigation.

This document concentrates on the use of trees as bat roosts.

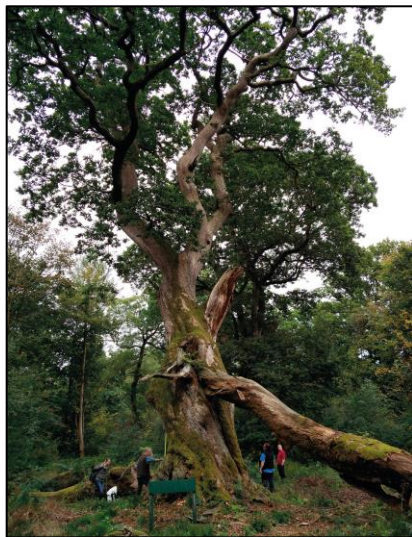
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Trees with Bat Roost Potential.

Typically, it is thought that bats will only roost in large mature trees. However, all trees that display suitable PRF (Potential Roost Features). may be used by bats, despite the overall size of the tree.



In larger trees PRF may not be visible from ground level due to the foliage of the tree, the location of the PRF or due to the small size of the opening.

PRF (Potential Roost Features).

Bats will utilise an abundance of different features around a tree at different times of year including trunk hollows, knot holes, splits/cracks in branches and sheltered areas of flaking bark with different species typically utilising different features.



Any feature matchbox size and above should be considered suitable for use by bats with the preference being for PRF with a smaller entrance for safety.

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 (updated by the Countryside Rights of Way Act 2000) and the Habitats Regulations 1994. 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 works are required on trees that display suitable PRF further advice should be sought prior to the works commencing. For further advice contact Whitcher Wildlife Ltd directly on 01226 753271 or at info@whitcher-wildlife.co.uk

Toolbox Talk: Nesting Birds

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.

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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

Toolbox Talk: Reptiles

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Identification: Grass Snakes.

The grass snake can be up to 120cm long. It is generally dark green in colour but may occasionally appear grey with vertical black bars and spots that run along its sides. There is usually a yellow marking around the neck.



Other Reptiles.

In addition to the reptiles outlined on this document, there are also two other reptile species in Great Britain, the smooth snakes and the sand lizard. These reptiles are a lot less common than the four species covered with the smooth snake being predominantly found on heathland in southern England and the sand lizard found throughout Great Britain in coastal dune areas.

These species are also afforded a higher level of protection because they are European Protected Species.

Identification: Adders.

The adder is the only native species that is venomous, but it is rarely harmful to humans. Adult adders are generally up to 66cm long. Back ground colouration is a light shade of grey or brown with a black zigzag marking along the length of the back. As with all reptiles, colouration varies and becomes duller as sloughing (skin shedding) approaches.



Habitat.

Maintaining the right body temperature is vital to reptiles' survival. In the morning they find a warm basking site to heat up their bodies and then later they may move back into the shade so as not to overheat. Hence, reptiles require a habitat that provides a range of suitable refugia for shelter such as dense vegetation, rubble or log piles, or crevices and open areas for basking such as bare ground, rocks or railway ballast shoulders. During hot summers reptiles may be found in damper, cooler sites. Reptiles hibernate, spending the winter in burrows or under logs protected from the cold and predators.

Identification: Slow Worms.

Slow worms grow to around 45cm in length. The males and females display a marked difference in colour when fully grown. In general, the species displays colouring that varies from light brown, dark brown, grey, bronze or brick red with the females often displaying a dark vertebral stripe and both males and females displaying occasional markings on the flanks.



Identification: Common Lizards.

Common lizards grow to around 16cm. They are grey brown to dark brown, often with a darker streak that may run the entire length of the spine. A continuous dark band bordered by light yellow or white spots is often seen on either side of the body. The underside of the males is egg yolk yellow to orange spotted with black. Females are yellowish grey.



When disturbed in their natural habitat reptiles will usually move away quickly.

Legislation.

Reptiles are protected under Schedule 5 of the Wildlife and Countryside Act 1981. They received greater protection following reviews of the schedules published in 1988 and 1991. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

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

