Whitcher Wildlife Ltd.
Ecological Consultants.

WORTLEY VILLAGE PLOT 7.

OS REF: SK 308 996.

ECOLOGY SURVEY.

Ref No:- **160492, Plot 7/Rev 1.**

Date:- **10th June 2016.**

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1. INTRODUCTION.

1.1. A planning application has been submitted for various small developments within Wortley Village. Planning consent number 2011/0658 has been granted but one of the conditions states

"The application for approval of reserved matters shall be accompanied by updated ecological surveys of the individual sites and details, including an assessment of the impact of the proposed development and any appropriate measures to alleviate any effects shall be submitted to and approved by the Local Planning Authority. Development shall be carried out in accordance with the approved details including any mitigation measures that are identified as being necessary."

1.2. Whitcher Wildlife Ltd has been commissioned to carry out additional ecology surveys to establish whether there are any issues that may affect the proposed works and to prepare a document that satisfies the above condition for each site.

1.3. The repeat site survey was carried out on 27th April 2016 and this report outlines the findings of that survey and makes appropriate recommendations for Plot 7, shown on the village plan below.

1.4. Both of the original ecology surveys recommended dusk emergence surveys and therefore a further dusk emergence survey was carried out on the night of 7th June 2016. This report outlines the findings of all of the surveys.

1.5. Appendices I to IV of this report provide additional information on specific species and are designed to assist the reader to understand the contents of this report.

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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 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 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.

2.4. 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 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.

2.5. 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*.

2.6. 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 edn)* by looking for the following signs:-

* Holes, cracks or crevices.
* Bat Droppings.

2.7. 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.

2.8. 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.

2.9. 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.

2.10. 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 Ed*.

2.11. 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.

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

2.13. 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.

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3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to Barnsley Bat Group for existing records of bat roosts within 1km of the village at the time of the previous survey. Their response is shown in the table below. Further data from a more recent search is shown in Appendix V

Wortley Records

Site Name	NGR	Species	Count
Wortley Top Forge	SK294998	Brown Long-eared-roost	+Dr
Cherry Tree Cottages	SK291995	55 Pipistrelle-roost	1
Top Cottage, Wortley Top Forge	SK 294999	Pipistrelle-roost	+ Dr
Hare Springs Cottage	SK 302986	Indet	-
Finkle Street fields to north	SK302989	Pipistrelle-feeding	2
Finkle Street fields to north	SK302989	Noctule-feeding	5
Rose Cottage	SK3099	Brown Long-eared-found dead	1

3.1.2. All of the roost records are in the valley to the south of the village in both the original data search and the more recent one.

3.1.3. South Yorkshire Badger Group holds records of badgers within the surrounding area with the closest sett being in the gardens of Wortley Hall to the south east of the village although it appears this is no longer in use. The full data search response is provided in Appendix V of this report.

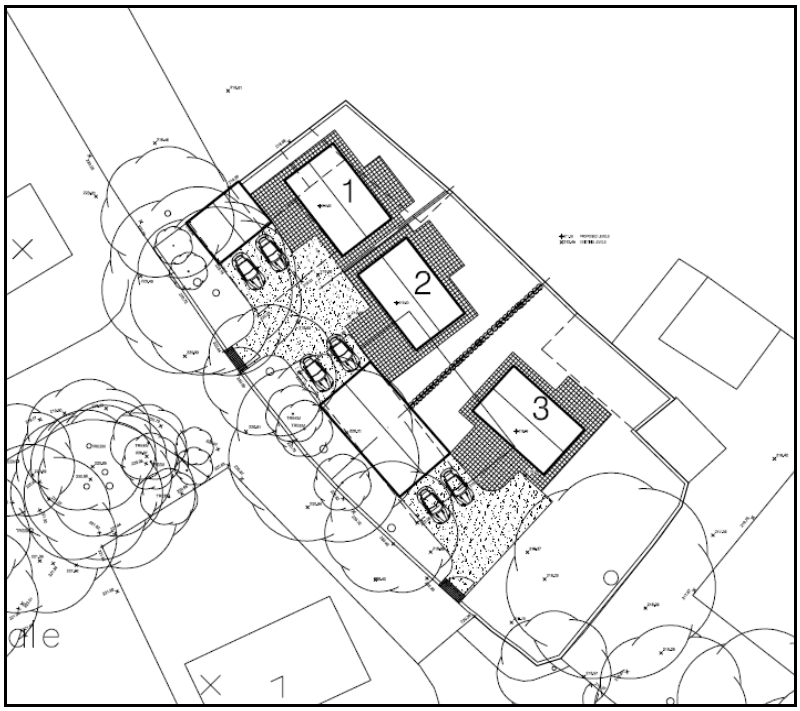
3.1.4. An additional data search request has been submitted to Barnsley Biological Records Centre for existing records of protected species and designated sites within 2km of the site. Appendix V of this report shows a map of the surrounding Local Wildlife Sites. The closest of these to the village of Wortley is Wharncliffe Chase and Wood and that is in excess of 1km from the village and all plots.

3.1.5. A separate Excel Spreadsheet is supplied with this report listing all species held on record by Barnsley Ecological Records Centre. This contains over 8,200 records but none are of particular relevance to this site.

3.2. The Surveyed Area.

3.2.1. Plot 7 is located off the northeast side of The Avenue, as shown by the red arrow on the aerial photograph below.

3.2.2. The plan is to construct three detached residential dwellings on the site as shown in the drawing below.



3.2.3. The existing site comprises a group of stone buildings and the surrounding area. The main building, shown in the photograph below, is used as a car mechanics workshop. There is a line of mature trees adjacent, along the side of The Avenue, inside the stone boundary wall.

3.2.4. To the rear of this building there is a lean-to used for storage. The building is made with a timber frame clad beneath the side windows and on the roof with corrugated metal sheets, as shown below. To the rear of this there is an area of nettles and scrub that extends to the stone wall along the rear of the site.

3.2.5. The inside of the main workshop building is very dirty and dusty. The roof is supported on a timber pitched frame and the roof is covered with welsh slates with no felt lining underneath. The entire roof area is covered with dense cobwebs.

3.2.6. At the northern end of the site there is a further block of stone buildings with pitched, Welsh slate covered roofs. This area is used by a builder as a storage area and there was no access during the initial survey.

3.2.7. The photograph below looks at the northern end of these buildings.

3.2.8. The photograph below looks at this group of buildings from the adjacent field.

3.2.9. In the eastern corner of the site there is an open fronted cart shed constructed with a mix of stone and brick walls and with a pitched rood covered with Welsh slates, as shown below. It is planned to demolish this building.

3.2.10. The roof is in poor condition with missing slates and ridge tiles as can be seen in the photograph below.

3.3. Initial Ecology Survey Results.

3.3.1. No badger setts or badger field signs were identified anywhere on the site.

3.3.2. There are no watercourses present anywhere near the site and therefore no habitat for water voles, otters or white clawed crayfish.

3.3.3. No cracks or crevices were identified in the mature lime trees alongside The Avenue although the survey was carried out from ground level.

3.3.4. The buildings on this site are generally old and in quite a poor state of repair. The roof slates are close fitting and the roofs are not lined but are covered with dense cobwebs. These do not provide opportunities for roosting bats. However, there are open joints and gaps in the stone walls that provide some potential for small numbers of crevice dwelling bats to shelter. The buildings are therefore assessed to have low potential for roosting bats.

3.3.5. The land around the site was assessed to provide good quality foraging habitat for bats as there are good commuting routes along The Avenue including the row of mature trees along the front of the proposed development site.

3.3.6. There are no ponds shown on the Ordnance Survey map of the area at this end of the village that would provide suitable habitat for breeding amphibians and there are no existing records of great crested newts in the area around the village.

3.3.7. The buildings on the site provide suitable nesting bird habitat during the nesting bird season which extends between March and September each year although no active or old bird nests were identified within the surveyed area during this survey.

3.3.8. The habitat on the site is isolated and unsuitable for reptiles, hazel dormice or red squirrels.

3.3.9. No alien, invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified on the site.

3.4. Additional Day Time Survey Results.

3.4.1. At the north western end of the site there is a group of buildings that could not be accessed during the first surveys. There are three buildings arranged in a U shape around a yard. All are used for storing building materials. Each of the buildings is numbered below.

3.4.2. Building 1 is a stone single storey building with stone walls and a pitched, slate covered, pitched roof. Internally the building is well pointed and painted white. The roof is lined with boarding, as shown below.

3.4.3. At the western end of the building there is a room with a false ceiling, as can be seen below.

3.4.4. The loft space above this is accessible through a small square of missing masonry and there is an open loft space above as can be seen in the photograph below. This loft space is riddled with cobwebs.

3.4.5. Building 2 is along the western end of the site at right angles to Building 1. This is also a single storey stone building that is open to the underside of the slates, as shown below.

3.4.6. The internal walls of this building are in good condition, as is the roof. Abundant cobwebs were present all along the ridge. No bats or bat field signs were identified in this building.

3.4.7. Building 3 is the final building along the north western corner of the site. This is an open fronted building with three stone walls. The roof is in surprisingly good condition for the fact that many of the timbers have rotted and the roof is support by props. There is no lining underneath the roof slates.

3.4.8. No bats or bat field signs were identified anywhere inside or outside all of these buildings and all were assessed to have low roosting potential limited to a small number of crevice dwelling bats at best.

3.5. Dusk Emergence Survey Results.

3.5.1. Six surveyors carried out a dusk emergence survey of the buildings on the evening of 7th June 2016. All six of the surveyors hold current Natural England class licences to survey for bats.

3.5.2. Each surveyor was equipped with a Batbox Duet detector and a two way radio and in addition six static Anabat recorders were deployed to record bat echolocation calls for subsequent analysis using Analook software. The aerial photograph below shows the positions of the surveyors (S) and the Anabats (A).

3.5.3. The evening was warm, humid and still with some high cloud cover and a temperature of 20°C at 21:00.

3.5.4. The following are the observations of the surveyors and the Anabats adjacent to them:-

3.5.4.1. Surveyor 1.

22:15. Common Pipistrelle foraging over buildings and away to the SE.
22:16. Common Pipistrelle foraging over buildings.
22:25. Common Pipistrelle N to S.

3.5.4.2. Anabat 7, adjacent to Surveyor 1 recorded six Common Pipistrelles between 21:46 and 22:23. One Myotis was briefly recorded at 22:01 but the call was too brief to determine the species.

3.5.4.3. Anabat 8 between Surveyors 1 and 2 recorded four Common Pipistrelles between 22:12 and 22:24.

3.5.4.4. Surveyor 2.

22:15. Common Pipistrelle NW to SE to north of site.
22:15. Common Pipistrelle NE to SW across field.
22:16. Common Pipistrelle NE to SW across field.
22:22. Faint Common Pipistrelle heard not seen.
22:23. Faint Common Pipistrelle heard not seen.

22:24. Faint Common Pipistrelle heard not seen.
22:25. Faint Common Pipistrelle heard not seen.

3.5.4.5. Anabat 3 adjacent to Surveyor2 recorded three Common Pipistrelles between 22:13 and 22:20.

3.5.4.6. Surveyor 3.

21:49. Common Pipistrelle from SW to NE along farm track.
21:51. Common Pipistrelle NE to SW along farm track.
22:00. Common Pipistrelle SW to NE foraging along farm track.
22:01. Common Pipistrelle NE to SW along farm track.
22:14. Common Pipistrelle NE to SW along farm track.
22:16. Common Pipistrelle SW to NE foraging along farm track.
22:21. Common Pipistrelle SW to NE foraging along farm track.
22:22. Common Pipistrelle NE to SW along farm track.
22:27. Common Pipistrelle SW to NE foraging along farm track.
22:28. Common Pipistrelle SW to NE foraging along farm track.

3.5.4.7. Anabat 5 adjacent to Surveyor 3 recorded eleven Common Pipistrelles between 21:47 and 22:26.

3.5.4.8. Surveyor 4.

21:49. Common Pipistrelle foraging NW to SE over yard and lane.
21:51. Common Pipistrelle foraging SE to NW along lane.
21:53. Common Pipistrelle foraging SE to NW along lane.
21:57. Common Pipistrelle heard not seen.
22:01. Common Pipistrelle heard not seen.
22:04. Bat from the NW over the garage building, no echolocation call.
22:06. Common Pipistrelle foraging SW to NE across the yard.
22:09. Common Pipistrelle foraging SW to NE across the yard.
22:11. Common Pipistrelle SW to NE foraging along farm track.
22:14. Common Pipistrelle NE to SW foraging along farm track.
22:21. Common Pipistrelle NE to SW foraging along farm track.
22:23. Common Pipistrelle NE to SW foraging along farm track.
22:25. Common Pipistrelle SE to NW foraging along farm track.
22:26. Common Pipistrelle NW to SE foraging along farm track.

22:27. Common Pipistrelle NW to SE foraging along farm track.

3.5.4.9. Anabat 1 adjacent to Surveyor 4 recorded six Common Pipistrelles between 21:46 and 22:23. One Myotis was briefly recorded at 22:01 but the call was too brief to determine the species.

3.5.4.10. Surveyor 5.

21:47. Common Pipistrelle heard not seen.
21:53. Common Pipistrelle heard not seen to the SE.
21:57. Faint Common Pipistrelle heard not seen to the SW.
22:02. Common Pipistrelle heard not seen.
22:06. Common Pipistrelle along The Avenue to the NW
22:09. Quiet bat from SW to NE, seen not heard.
22:11. Common Pipistrelle NW to SE along The Avenue.
22:21. Common Pipistrelle SE to NW along The Avenue.
22:27. Common Pipistrelle heard not seen over The Avenue.

3.5.4.11. Anabat 9 adjacent to Surveyor 5 recorded twelve Common Pipistrelles between 21:53 and 22:26 and one Soprano Pipistrelle at 22:16.

3.5.4.12. Surveyor 6.

22:04. Bat from the northwest no echolocation call.
22:15. Common Pipistrelle heard not seen.
22:22. Common Pipistrelle heard not seen.

3.5.4.13. Anabat 6 adjacent to Surveyor 6 recorded no bat activity at all.

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4. EVALUATION OF FINDINGS.

4.1. There are no local or national designated sites in the immediate area around the site and therefore the proposed development will not impact on such sites.

4.2. There are no Habitats of Principal Importance or Section 41 and 42 Habitats present on the site and therefore no such habitat will be affected by the proposed development.

4.3. No badger setts or badger field signs were identified anywhere on the site and therefore the proposed development will have no impact on the species.

4.4. There are no watercourses present anywhere on or near the site and therefore there will be no impact on water voles, otters or white clawed crayfish.

4.5. No cracks or crevices that may provide potential for roosting bats were identified in the mature lime trees although the survey was carried out from ground level. However, the new dwellings are to be located sufficiently far away from the trees to have no impact on roosting bats as long as the external lighting scheme is designed to avoid direct impact on these trees.

4.6. No bats or bat field signs were identified in the buildings on the site although the buildings have some potential to provide roosting opportunities for a small number of crevice dwelling bats in the holes and open joints in the stone walls. The demolition of these buildings would have a major impact on any roosting bats present at that time.

4.7. The land around the site was assessed to provide good quality foraging habitat for bats as there are good commuting routes along The Avenue including the row of mature trees along the front of the proposed development site. However, it is intended that no trees are lost as a result of the development and all mature trees on the site will therefore be retained and therefore the proposed development will have little impact on foraging bats as long as the external lighting scheme is designed to avoid impact on foraging routes.

4.8. The dusk emergence surveys results in fact showed a much lower level of bat activity around the site than was anticipated and that the vast majority of that activity

was Common Pipistrelles. Only one brief Myotis call was recorded and one Soprano Pipistrelle. No bats were seen to emerge from the buildings on the site.

4.9. There are no ponds shown on the Ordnance Survey map of the area at this end of the village that would provide suitable habitat for breeding amphibians and there are no existing records of great crested newts in the area around the village. The proposed development will have no impact on amphibians.

4.10. The buildings on the site provide suitable nesting bird habitat during the nesting bird season which extends between March and September each year although no active or old bird nests were identified within the surveyed area during this survey. Works to demolish the existing buildings during the nesting season will have a major impact on any nesting birds present.

4.11. The habitat on this isolated site is unsuitable for reptiles, hazel dormice or red squirrels and the proposed development will have no impact on any of these species.

4.12. No alien, invasive plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified on the site and therefore the proposed development will not cause such plants to be spread in the wild.

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5. RECOMMENDATIONS.

5.1. One dusk emergence survey was carried out and that identified only a low level of bat activity around the site and no bats emerging from the buildings. Therefore no further surveys are recommended at this time and a Natural England licence will not be required in connection with the proposed development.

5.2. It is recommended that the mature trees to the front of the plots adjacent to The Avenue are protected in line with the recommendation of the arboricultural report. Should the proposed development be changed in a way that would impact on the mature trees it is recommended that a further assessment of the impact on roosting and foraging bats is carried out before development commences.

5.3. Lighting to the dwellings will be designed to shine downwards, particularly at the front of the properties to minimise the light pollution of the trees and the potential bat foraging routes.

5.4. It is understood that there may be a considerable delay before this development goes ahead and therefore if the development has not started within two years of the date on this report, a further precautionary dusk emergence survey is recommended before any works commence.

5.5. To enhance the biodiversity of the site it is recommended that a bat brick is installed in each of the new dwellings constructed on the site. Bat bricks need to be placed high in a gable end wall ideally where there are no windows or doors beneath where bat droppings could accumulate. Examples of suitable bat bricks are provided in the appendices of this report.

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Checked by:	
Sue Whitcher.	Date: 11th June 2016.

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Appendix I. BAT INFORMATION.

It is necessary to understand a little about bats, their basic nature, ecology and legal protection in order to evaluate the findings of this report.

18 species of bat currently reside 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 shortage of food, caused by pesticides, as insects are their sole diet, and habitat change.

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 manmade structures and will readily use these to roost and to rear their young.

Bats are protected under the Wildlife and Countryside Act 1981, Regulation 41 of The Conservation of Habitats and Species Regulations 2010, and the Countryside & Rights of Way Act 2000.

It is an offence to intentionally or recklessly kill, injure or capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

A breeding or resting site of any bat is known as a bat roost. A bat roost is therefore any structure a bat uses for shelter or protection. Because bats tend to use the same roosts each year, legal opinion is that the roost site is protected whether or not the bats are present at that time.

Bat roosts can be identified by looking for:-

- Suitable holes, cracks and crevices.
- Bat droppings.
- Prey remains.
- By carrying out night observations using a bat detector.

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

The person applying for that licence has to be suitably qualified and experienced in bat matters. That person is then responsible for ensuring that the measures contained in the licence are carried out.

Appendix II. NESTING BIRD INFORMATION.

It is necessary to understand a little about the legal protection offered to nesting birds in order to evaluate the findings of this report.

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

If any person intentionally:-

(a) kills, injures or takes any wild bird;
(b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
(c) 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:-

(a) 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
(b) disturbs dependant 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".

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, scrub and buildings but others are ground nesting.

The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

Appendix III.

REPTILES - GRASS SNAKE AND ADDER INFORMATION.

The grass snake (*Natrix natrix*) and the adder (*Vipera berus*) are the two most common snakes to be found in the UK. Adders are found all over Britain while the grass snake becomes rarer towards the north and are rarely found in Scotland.

The grass snake is usually around 120cm long, live in a variety of rough habitats and lay their eggs in warm rotting vegetation. The background colour is dark green and the body is marked with vertical black bars and spots that run along its sides. There is generally a dark collar marking.

The adder is the only native species that is venomous but this is rarely harmful to humans. Adult adders are generally up to 66cm long. Background 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.

Both snakes hibernate, spending the winter in burrows or under logs protected from the cold and predators. 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.

Both snakes 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.

Appendix IV. REPTILES - LIZARD INFORMATION.

The common or viviparous lizard (*Lacerta vivipara*) is one of three species of lizard that occur in the UK. They have a dry scaly skin and are variable in colour ranging from brown or yellow-brown to almost green with varying patterns of spots or stripes. The typical length of an adult is 150mm, including the tail.

Common lizards hibernate over the winter, emerging from February onwards depending upon the weather. They begin to mate in April and May and the young are born in late July or August. The lizard gives birth to live young, hence the term viviparous, meaning live bearing.

The lizards draw their body warmth from the sun and consequently spend long periods basking in the sun. They are commonly seen on road and railway embankments and on walls where they sit for long periods soaking up the heat of the sun before going to find food.

They occupy a wide range of habitats including woodland, marshes, heathland, moors, sand dunes, hedgerows and bogs.

Common lizards hunt insects, spiders, snails and earthworms. They stun their prey by shaking it and then swallow it whole.

At night, and when startled, they will shelter beneath logs or stones or under other refuges that may be available.

Common lizards 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) and Schedule 2 of The Conservation of Habitats and Species Regulations 2010 (as amended) making it a European Protected Species.

Common lizards should not be confused with the somewhat larger sand lizard (*Lacerta agilis*). These are typically 190mm long and stockier than the common lizard. Their marking are distinctly different being considerably more colourful. 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. Sand lizards are a European protected species.

The third species of lizard is the slow worm *(Anguis fragilis)*, which is frequently mis-identified as a snake. The firm body of the slow worm is distinctly cylindrical in shape and the tiny smooth scales result in a very smooth, shiny appearance. Colouration is typically a uniform grey to brown although there is a wide variation from straw coloured to almost black and some animals have very fine stripes or a zig-zag along the centre of the back. The typical length of an adult is 400mm.

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.

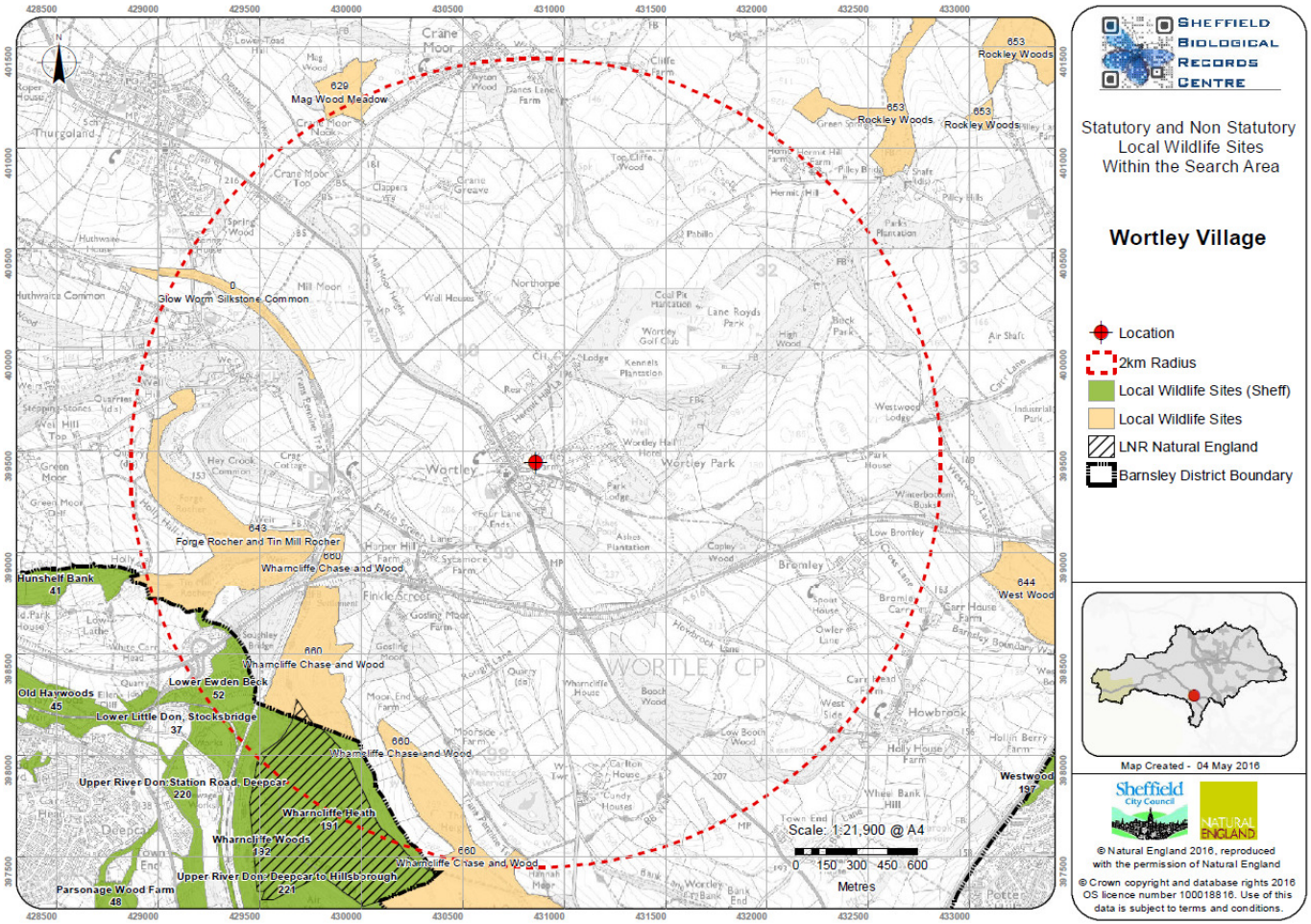
Slow worms hibernate over the winter, emerging from March onwards depending upon the weather. They begin to mate in April and May and six to twelve young are born in August or September.

Their favourite food is slugs but they will also eat insects and spiders.

Slow worms are hard to find. They will bask in the sun but they quickly and quietly move into cover when disturbed and do not generally attract attention as they retreat from a basking spot.

Slow worms are also 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.

Appendix V. BBRC DATA SEARCH RESULTS.



SOUTH YORKSHIRE BADGER GROUP DATA SEARCH RESPONSE.

Derek,

Request for badger setts in Wortley area within 2 km sq.central point SK 308 994.

As I am still having problems with my computer and access to all my records and go away for a week from tomorrow, this is the best information I can give you at the moment.

Setts within Wortley Hall which were active when SYBG was formed are now dead. There used to be setts in rhododendrons to the left of the gate leading from the garden into the park to the north east. There were also badgers in the wood by Ashes pond but I do not know if they are currently active because of access.

To the left of the North Gate from the Park there is a recorded sett near the Chrysler Factory 326 936.The status of that changes.

This week an RTA was found on the Halifax road between Thurgoland and Wortley near the 40 limit sign coming from Wortley towards Thurgoland. This could have come from the active setts at Romtickle 2822 9964 or possibly from Crane Moor Nook, 2964 0117.
I have records of setts at Pinfold Lane Railway embankment 2920 0186.

We do not have records of any other setts in this area

Regards
Monica

SOUTH YORKSHIRE BAT GROUP DATA SEARCH RESULTS.

Date	GridRef 6Fig	Address line 1	Type	Notes	Species	Number
06/08/2008	SK288981	Truman Grove	Roost	Roost at gable apex. Missing rendering repaired by council. Concerned for safety of bats. Roost confirmed. Letter to council	Vespertillionidae	Unknown
28/08/2002	SK289989	Holly Hall		2 bats seen in ridge at dusk. Dr & moth wings + urine spotting.	Brown long-eared bat	2
28/08/2002	SK289989	Holly Hall Barn	Barn		Brown long-eared bat	2
28/08/2002	SK289989	Holly Hall Barn		Dr & moth wings Pl. aur. 2 Pl aur in ridge at dusk.	Brown long-eared bat	2
28/08/2002	SK289989	Holly Hall Barn		Single P.pip feeding.	Common pipistrelle	1
28/08/2002	SK289989	Holly House		Survey for barn conversion	Brown long-eared bat	2
29/08/2002	SK289989	Holly House		Survey for barn conversion	Noctule	Unknown
29/08/2002	SK289989	Holly House		Survey for barn conversion	Common pipistrelle	Unknown
25/11/2002	SK289989	Holly House		Supervised roof strip	Absent	Unknown
27/01/2003	SK289989	Holly House		Supervised roof strip	Absent	Unknown
21/08/2003	SK289989	Holly House		Inspection visit	Vespertillionidae	Unknown
	SK287999	Thurgoland, S35		Grid ref on Postcode	Common pipistrelle	Unknown
23/08/2011	SK282993	Delph Mews	Emergence	Email to SYBG	Pipistrelle sp.	42+
29/09/2000	SK280998	Trunce Farm			Pipistrelle sp.	1
29/09/2000	SK280998	Trunce Farm	Farm House		Pipistrelle sp.	1 + Dr
23/08/2011		Delph Mews	Roost		Pipistrelle sp.	42
25/07/2006	SE289001	Huthwaite Croft		Bat found in bucket.Juvenille bat taken into temp care.	Pipistrelle sp.	1
10/04/2013	SE289001	Huthwaite lane	Unknown - Hib	Finder did not contain bat and it had gone when she returned outside (Had originally dropped from eaves on to window sill so	Vespertillionidae	1
20/12/2014	SE283006	Huthwaite Hall Tree	Roost	1 bat recorded roosting in tree roost	Common pipistrelle	1
24/02/1996	SE281008	Thurgoland Tunnel			Brown long-eared bat	2
	SE281008	Thurgoland Tunnel	Tunnel		Brown long-eared bat	2
17/09/1987	SE278006	Old Mill,			Leisler's bat	1
21.02.15	SE283005	Thurgoland Tunnel		4 roosting bats	Noctule	4
21.02.15	SE283005	Thurgoland Tunnel		1 roosting bat	Daubenton's bat	1
13/10/2012	SK298979	1 bat box in Wharncliffe Heath LNR		13 bats recorded within box	Brown long-eared bat	13

02/10/2004	SK299981		Roost	Bat left in bat box. Species not re-recorded in boxes during next years monitoring checks	Vespertillionidae	1
23/10/2005	SK299981		Roost	Bat box checks as annual monitoring of woods associated with Wharncliffe Heath Nature Reserve	Vespertillionidae	Unknown
13/04/2014	SK298980	Wharncliffe Woods bat box check		5 brown long-eared bat in single box	Brown long-eared bat	5
13/10/2012	SK297980	2 bat boxes in Wharncliffe Heath LN		bats)	Natterer's bat	27
29/09/2013	SK297980	1 bat box in Wharncliffe Heath LNR		Roosting	Noctule	Unknown
	SK295983	Tunnel			Daubenton's bat	Unknown
13/10/2012	SK294982	A bridge in Wharncliffe Heath LNR		Single bat recorded roosting in bridge at time of survey	Daubenton's bat	1
02/12/2012	SK294982	Wharncliffe Woods Bridge		Either pip or Myotis.	Vespertillionidae	1
29/09/2013	SK294982	A bridge in Wharncliffe Heath LNR		Known roost from previous years	Daubenton's bat	Unknown
14/04/2014	SK294982	A bridge in Wharncliffe Heath LNR		Known roost from previous years. 1 bat	Daubenton's bat	1
22/02/2014	SK292981	Goat willow, Wharncliffe Woods		Single bat recorded roosting in tear out in goat willow at 4 m heigh	Brown long-eared bat	1
13/04/2014	SK292981	Goat willow, Wharncliffe Woods		Single bat still in roost	Brown long-eared bat	1
29.11.15	SK298980	Wharncliffe Woods - Bat Boxes		2 roosting bat in single box	Pipistrelle	2
29.11.15	SK298980	Wharncliffe Woods - Bat Boxes		12 bats across 9 roosts	Pipistrelle	12
29.11.15	SK298980	Wharncliffe Woods - Bat Boxes		1 bat roosting in bat box	Soprano pipistrelle	1
01/10/1988	SK294998	Forge Road			Pipistrelle sp.	1
08/01/1989	SK294998	Forge Road			Brown long-eared bat	0
08/01/1989	SK294998	Forge Road	Barn		Brown long-eared bat	+Dr
20/09/2013	SK294998	Forge Road		One bat recorded emerging from south-east corner of main buildin	Myotis sp.	1
20/09/2013	SK294998	Forge Road		One bat returned to roost in east elevation-wall plate	Soprano pipistrelle	1
20/09/2013	SK294998	Forge Road		11 bats observed roositng within engine house, likely more bats	Brown long-eared bat	11
20/09/2013	SK294998	Forge Road		Probable P? maternity roost in south elevation lean-to flashing gap	Pipistrelle sp.	Unknown
20/06/2014	SK294998	Wortley Top Forge, Forge Road		218 bats emerged from maternity roost beneath flashing, mix of cc	Soprano pipistrelle	218
20/06/2014	SK294998	Wortley Top Forge, Forge Road		218 bats emerged from maternity roost beneath flashing, mix of cc	Common pipistrelle	218
20/06/2014	SK294998	Wortley Top Forge, Forge Road		78 bats thought to have emerged - some doubt over count	Brown long-eared bat	78
03/07/2013	SK293997	Forge Road		Foraging	Common pipistrelle	Unknown
03/07/2013	SK293997	Forge Road		Foraging	Soprano pipistrelle	Unknown
03/07/2013	SK293997	Forge Road		Foraging	Daubenton's bat	Unknown
1995	SK294999	Forge Road	House		Pipistrelle sp.	+ Dr

14/03/1991	SK291995	Cottages Cherry Tree			Pipistrelle sp.	1
14/03/1991	SK291995	Cottages	House	ID from specimen	Soprano pipistrelle	1
13/10/2012		A bridge in Wharncliffe Heath LNR		Single bat recorded roosting in bridge at time of survey	Vespertillionidae	1
17.05.15	SK294998	Wortley Top Forge		1 foraging bat	Common pipistrelle	1
17.05.15	SK294998	Wortley Top Forge		10 roosting bats	Brown long-eared bat	10
12.07.15	SK294998	Wortley Top Forge		46 roosting bats	Noctule	46
18.09.15	SK294998	Wortley Top Forge		Activity record	Common pipistrelle	
18.09.15	SK294998	Wortley Top Forge		2 roosting bats	Daubenton's bat	2
18.09.15	SK294998	Wortley Top Forge		Feeding	Soprano pipistrelle	
31/08/1988	SE293001	River Don bridge			Natterer's bat	1
31/08/1988	SE293001	River Don bridge			Noctule	1
02/09/2014	SE294008		Bat Care	PTS	Daubenton's Bat	1
10/08/2007	SE291007	Rookery Way		Grounded bat with sticky stuff on coat. Failed to fly last night. Vet syas bat ok. JG collected for temp care	Pipistrelle sp.	1
17/08/2012	SE291007	Thurgoland, S35		adult male	Soprano pipistrelle	1
14/04/2015	SE291001	Huthwaite Lane		Common and Soprano Pipistrelle - commuting and foraging	Common and Soprano Pip	Unknown
11/05/2015	SE291001	Huthwaite Lane		Common and Soprano Pipistrelle, noctule and a myotis - commutin	Common and Soprano Pip	Unknown
21/07/2000	SE2901	Fir Tree Estate Hare Springs			Vespertillionidae	1
12/07/1994	SK302986	Cottage	House	Prob. Excluded	Vespertillionidae	-
19/06/1989	SK302989	to north			Pipistrelle sp.	2
19/06/1989	SK302989	to north		Bats feeding low over fields	Noctule	5
13/06/1993	SK3099	Rose Cottage		Bat found dead in garden	Brown long-eared bat	1
12/07/2004	SE300000	Bell Bank Way		Bat found in school. EB to visit. No further problems.	Vespertillionidae	1
16/08/2004	SE300000			Bat flying inside house. Advice given - out ok.	Vespertillionidae	Unknown

22/01/2004	SE305014	Woodland View	Roost	200 bats counted out last year. Doing work inside house - hole in ceiling- 6 or 7 bats flying around. EB to visit.Finish internal work to walls -no holes for bats to enter bedrooms. Fascia & rendering	Vespertillionidae	200
25/01/2004	SE305014	Woodland View	House	200+ owner count, dessicated baby in loft.	Pipistrelle sp.	Dr
01/07/1992	SE304014	Crane Moor Road	House		Vespertillionidae	81
17/07/1992	SE304014	Crane Moor Road			Pipistrelle sp.	84
17/07/1992	SE304014	Crane Moor Road			Noctule	2
02/10/1987	SE303015	Wood Lower Toad Hole			Noctule/Leislers	Unknown
02/10/1987	SE302015	Wood Tree	Tree Cherry		Noctule	+Dr
20/04/1988	SE302015	Wood			Noctule/Leislers	Unknown
16/05/1988	SE302015	Wood			Noctule/Leislers	Unknown
11/03/2015	SE305015				Common pipistrelle	1
21/09/2004	SK311978	Woodhead Road		P.aur feeding perch. P.pip social calls.	Various	Unknown
24/08/2012	SK312995	Wortley hall, S36 1E'		adult male	Common pipistrelle	1
01/08/2001	SE318008	The Old Engine House			Vespertillionidae	1
16/08/2001	SE318008	House	House		Vespertillionidae	1/Dr
16/08/2001	SE318008	House			Vespertillionidae	Unknown
31/05/2002	SE316006	Hermit Hill Lane		No roost in barn but possible roost in cottage.2 P.pip feeding.	Common pipistrelle	2
10/07/2014	SE315005		Bat Care	DOA	Common pipistrelle	1
01/09/2003	SK327983	Carr Head Road		P.aur feeding perch. 2 P.pip feeding.	Vespertillionidae	Unknown
01/09/2003	SK327983	Carr Head Road	Barn		Various	Unknown
20/03/2008	SK324980	Berry Lane		Pl.aur dr & moth wings roost	Brown long-eared bat	Unknown
08/07/2010	SK324980	Berry Lane		feeding round farmyard.	Various	Unknown

Appendix VI. BAT BRICKS.

A number of companies market bat bricks to match stone buildings or brick buildings and the various colours of brick used. The following area examples that are available. The ones that will be utilised will be these designs or equivalent that provide an enclosed bat roost within the outer skin of a cavity wall.

Bat Boxes

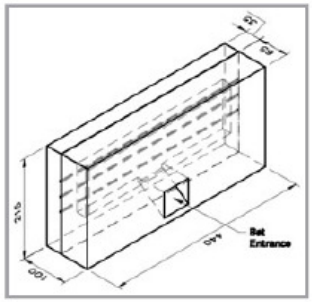
SMART LOOKING HOMES FOR PIPISTRELLE BATS

Forticrete's boxes have been designed to be fitted to your property easily. Suitable for new build construction or renovation work where there is a requirement to provide a habitat for Pipistrelle bats.

Benefits

- Conventional cast stone front face.
- Backed with high grade plywood which is sawn and roughened internally to provide a haven for bats.
- Maintenance free due to the bottom entrance.
- Available from Forticrete's 'Stone in Stock' range.
- Bespoke boxes can be designed and made for any application.

Click here to find your nearest stockist for bat boxes



Enclosed Bat Box B

Designed specifically for the pipistrelle bat
Available in all brick types
Discrete home for bats
Various sizes
Several roosting zones are created inside the box
Bats are contained within the bat box itself
Maintenance free with entrance at the base
Ideal for new build & conservation work

Enclosed Bat Box C with engraved motif

Designed specifically for the pipistrelle bat
Available in smooth blue, smooth gold & smooth red
Attractive "bat" motif
Discrete home for bats
Various sizes
Several roosting zones are created inside the box
Bats are contained within the bat box itself
Maintenance free with entrance at the base
Ideal for new build & conservation work