

**Whitcher Wildlife Ltd.
Wildlife Consultants.**



NEW ROAD, STAINCROSS.

**PHASE I HABITAT AND PROTECTED
FAUNA SURVEY.**

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1. INTRODUCTION.

1.1. There are proposed plans for the residential development of an area of land to the north of New Road, Staincross. Prior to the planning permission being granted and the works commencing a Phase I Habitat and Protected Fauna Survey are therefore required.

1.2. Whitcher Wildlife Ltd has been commissioned to carry out a Phase I Habitat and Protected Fauna Survey 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 24th October 2012 and this report outlines the findings of that survey and makes appropriate recommendations.

1.4. Appendices I to VIII of this report provide additional information on specific species and are designed to assist the reader to understand 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 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. 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. All watercourses within the survey area and for approximately 100m 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. All mature trees and derelict buildings were checked for potential bat roosting sites in line with L Hundt (2012). *Bat Conservation Trust Good Practice Guidelines* by looking for the following signs:-

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

2.7. The land adjacent to the survey area was assessed for bat roosting and foraging potential including connective routes and flight lines.

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 the ponds 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. All watercourses and waterbodies within the survey area and for approximately 50m in each direction were thoroughly searched for the presence of crayfish where safe to enter the water. The survey was carried out in accordance with the *Conserving Natura 2000 Rivers Monitoring Series No 1, Protocol for Monitoring the White Clawed Crayfish*.

2.10. The survey area was thoroughly searched for the presence of reptiles or suitable reptile habitats.

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

2.12. This survey was carried by James Campbell. Since 2003 James has had experience in a professional capacity as a Wildlife Consultant carrying out Ecology Surveys and Phase 1 Habitat surveys. James holds Natural England Survey Licences in respect of bats, great crested newts, crayfish and barn owls. He has also

successfully completed numerous courses run by IEEM, BCT and FSC regarding protected species and in carrying out Phase 1 Habitat surveys.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. A data search request was submitted to Barnsley Biological Records Center for records of protected species within the survey area.

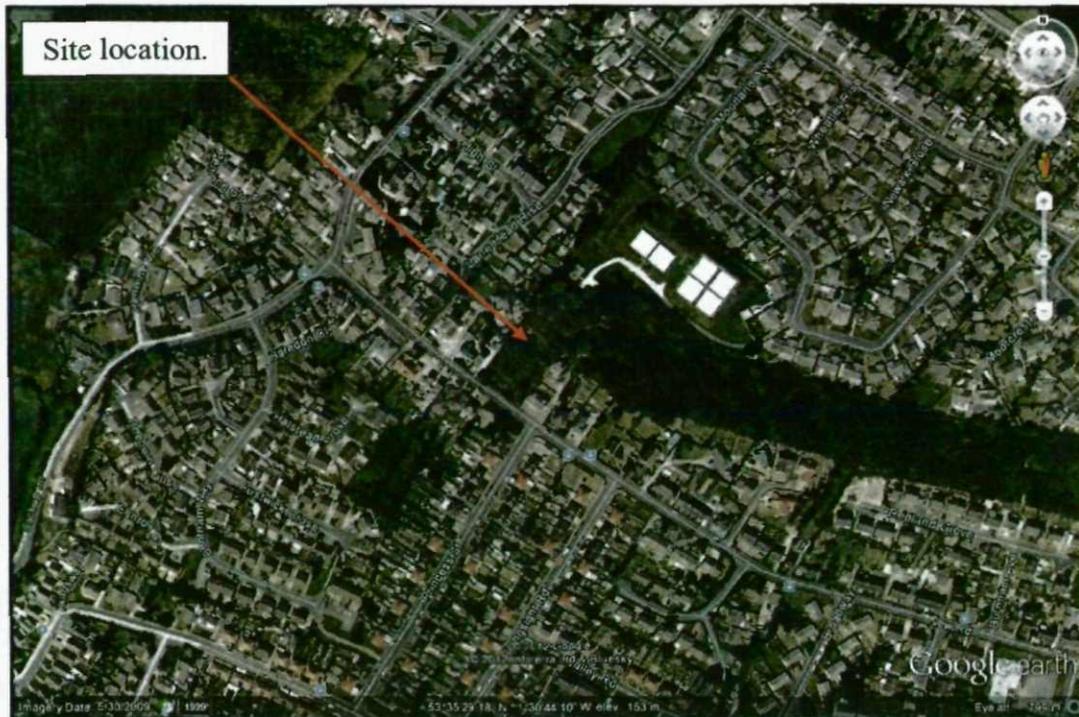
3.1.2. There were no records of protected species identified in the data search within the survey area. However, one record of a bat was identified within the surrounding area. None of these records were relative to the survey area. Further results are provided in Appendix XI of this report.

3.2. The Surveyed Area.

3.2.1. The surveyed area was an area of land to the north of New Road, Staincross which is shown on the plan below.



3.2.2. The land to the east of the survey area is a length of mixed woodland which is surrounded by housing and a covered reservoir to the north. The land to the north, south and west of the survey area is mainly residential housing.



3.3. Description of Habitats.

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

- Improved Grassland.
- Ephemeral/Short Perennial.
- Scattered Mixed Trees.
- Fence.
- Wall.
- Hedgerow with Trees.

3.4.2. Improved Grassland: The majority of the survey area comprises improved grassland which contains species such as cocksfoot (*Dactylis glomerata*), common couch (*Elymus repens*), Yorkshire fog (*Holcus lanatus*) common bent (*Agrostis capillaries*), ribwort plantain (*Plantago lanceolata*) and stands of nettle (*Urtica dioica*), thistle sp (*Carduus* sp) and curled dock (*Rumex crispus*). The photograph below shows the site looking to the north.



3.4.3. Ephemeral/Short Perennial: Within the survey area there are two areas of ephemeral/short perennial species within the survey area comprising bramble (*Rubus fruticosus*), ivy (*Hedera helix*), thistle sp (*Carduus* sp) and cow parsley (*Anthriscus sylvestris*). The photograph below shows the western elevation of the site.



3.4.4. Scattered Mixed Trees: Around the boundary of the site and scattered around the interior of the site there are scattered mixed mature and sapling trees including

oak (*Quercus* sp), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), cherry (*Prunus* sp), broom (*Cytisus scoparius*) and apple (*Malus domestica*). The photograph below shows the western elevation of the site.



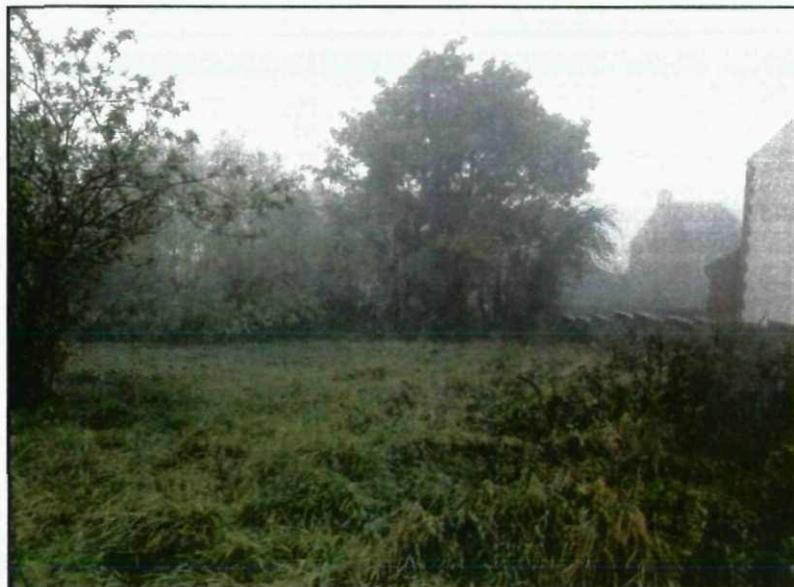
3.4.5. Fence: The site is surrounded by a variety of boundary markers including metal palisade fencing, wooden post and horizontal rail fencing and concrete post and vertical wooden rail fencing. These vary from the separate boundaries with each neighboring property. The photograph below on the left shows the palisade fencing and the photograph on the right shows the vertical wooden fencing.



3.4.6. Wall: The site is also surrounded by a variety of boundary markers including dry stone walls and breeze block walls which are held together with mortar. The photograph below on the left shows the breeze block wall and the photograph on the right shows the dry stone wall.



3.4.7. Hedgerow with Trees: The site is sporadically surrounded by varying walls and fences which also have a low level hedgerow with mixed trees. The trees and hedgerow species mainly comprise oak (*Quercus* sp), ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), The photograph below shows the site looking from the north.



3.5. Description of Fauna.

3.5.1. No badger setts or badger field signs were identified within the survey area.

3.5.2. There were no watercourses identified within the survey area or surrounding the survey area.

3.5.3. There were no suitable ponds identified within 500m of the survey area on the Ordnance Survey website or during the survey that would provide a habitat for great crested newts.

3.5.4. No trees or structures that would provide suitable habitat for roosting bats were identified within the survey area.

3.5.5. There was no Japanese knotweed, giant hogweed or any other Schedule 9 non native invasive plant species identified within the survey area.

3.5.6. The vegetation throughout the survey area will provide a suitable habitat for nesting birds during the nesting bird season, which extends from March to September each year.

3.5.7. The survey area will provide a suitable foraging habitat for reptiles as the woodland to the east of the survey area contains suitable features for reptiles to gain refuge.

4. EVALUATION OF FINDINGS.

4.1. Evaluation of Habitats.

4.1.1. There were no UK/Local BAP habitats identified within the survey area during this survey and no UK/Local BAP species were identified.

4.1.2. The habitats within the survey area mainly comprise Improved Grassland, Ephemeral/Short Perennials, Scattered Mixed Trees and Fencing all of which present poor habitats for protected fauna species.

4.1.3. The Wall's and Hedgerows with Trees will provide a more suitable habitat for a variety of species.

4.2. Evaluation of Fauna.

4.2.1. No badger setts or badger field signs were identified within the survey area. There will be no impact on badgers in connection with the proposed works.

4.2.2. There were no suitable habitats identified for water voles, otters or crayfish within the survey area. There will be no impact on these species in connection with the proposed works.

4.2.3. No ponds were or suitable water bodies were identified within 500m of the survey area that will provide a suitable habitat for great crested newts. There will be no impact on great crested newts in connection with the proposed works.

4.2.4. There were no suitable habitats for roosting bats within the survey area. Therefore, the proposed works will not have an impact on roosting bats.

4.2.5. The surrounding area will provide a suitable habitat for foraging bats and the tree lines will provide connective flight paths for bats. This cannot be fully verified during a day time assessment. The proposed works could have an impact on foraging bats.

4.2.6. There was no Japanese knotweed, giant hogweed or other Schedule 9 invasive plant species identified within the survey area. There will be no issue regarding Schedule 9 invasive plant species in connection with the proposed works.

4.2.7. The vegetation within the surrounding area will provide a suitable habitat for nesting birds during the nesting bird season which extends from March to September, weather dependant. The proposed works will have an impact on nesting birds if carried out between these times.

4.2.8. The site will provide a suitable habitat for foraging reptiles and the proposed works will have an impact on any within the survey area.

5. RECOMMENDATIONS.

5.1. The vegetation clearance works should be carried out outside the nesting bird season which extends from March to September each year weather dependant.

5.2. If the vegetation clearance works are required within this time a nesting bird survey will need to be carried out by a suitably knowledgeable person prior to works commencing.

5.3. The site will provide a suitable habitat for reptiles. All personnel should be briefed using the toolbox talk in Appendix XII of this report on the possible presence of reptiles and the suitable course of action to take if one is found.

5.4. Hedgerows and tree lines should be maintained to allow continued foraging for bats on the site during and after the proposed works.

5.5. Bat roosting potential should be incorporated into the proposed residential properties to enhance the biodiversity of the surrounding area.

Prepared by:	
James Campbell.	Date: 25 th October 2012.

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Appendix I. BADGER INFORMATION.

The following background information on the territorial behaviour, ecology and legal protection of badgers is provided to enable the reader to more clearly understand the contents of this report.

1. Territoriality.

Badgers live in social groups called clans and are territorial. Each clan territory can vary considerably in size, from 0.2 sq. km to 1.5 sq. km. The average number of badgers in a clan has been calculated to be six but this number can vary between two and twenty badgers. In areas with a significant badger population there will be contiguous clans and a well-defined boundary between clan territories will exist with the badgers scent marking their boundary with areas of dung pits, called latrines. In areas with relatively low badger populations there will be less competition for territory and the amount of territorial markings will be low or even non-existent.

Territorial boundaries can be defined using a technique called bait marking. Over a two week period badgers are fed at their main setts with food containing coloured plastic pellets, a different colour at each main sett. The colour of pellet found in dung pits and territorial latrines shows what areas each clan of badgers is occupying.

2. Ecology.

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

The badger's most important sense is that of smell. They will use particular paths around their territory repeatedly, following a scent trail from previous use. As a result badger paths become well worn. These paths are important to the badgers and obstruction to these paths will interfere with the badger's movement around their territory.

Badgers mate at any time of year but delayed implantation controls the time of birth. Most cubs are born between January and March but they can be born at any time between December and June. An average of two to three badger cubs are born to each sow and will initially be totally dependent on their mother. Cubs do not appear above ground until during April or May when they are 8 – 10 weeks old and are not fully weaned until June of each year.

3. Badger Setts.

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

Main Sett. There will normally be one main sett in a territory. This will generally be the largest sett in the territory, typically with five or more entrances, will be permanently occupied throughout the year and used as the breeding sett.

Outlying Sett. These are the smallest setts with generally only one or two entrances. They are intermittently occupied and there can be any number in a territory.

Annex Sett. A sett of intermediate size, located close to the main sett and connected by well-defined paths. These are occupied for prolonged periods and may be used as a second breeding sett if there are two breeding sows in the clan.

Subsidiary Sett. A sett of intermediate size, similar to an annex sett but located at some distance from the main sett and not connected to the main sett by defined paths.

4. Legislation

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

- Willfully kill, injure or take a badger or attempt to do so.
- Cruelly ill-treat a badger.
- Interfere with a sett by doing any of the following:-
 - (i) damaging a badger sett or any part of it
 - (ii) destroying a badger sett
 - (iii) obstructing access to a badger sett
 - (iv) causing a dog to enter a sett
 - (v) disturbing a badger while it is occupying a sett.

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

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

Before any work goes ahead which will cause damage to setts or disturbance to badgers, a licence will be needed from English Nature in accordance with their guidelines. To obtain a licence an application must be made giving at least one month's notice. This application must include full justification for the work, the manner in which any work is to be carried out, full supporting information and a named person capable of carrying out specialised badger work, to supervise that licence. English Nature will normally only issue such licences for work to be carried out between the months of July and October inclusive, to avoid the breeding season, although exceptions may be possible if a sound justification can be made.

Appendix II. WATER VOLE INFORMATION.

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

The water vole is the largest of the British voles. It lives in a series of holes or burrows at the waters edge and can be found along the banks of ditches, streams, rivers, lakes and canals. Although water voles live in colonies, the breeding females are territorial, each defining their contiguous territory with latrines during the breeding season. This lasts from March to October.

The water vole is herbivorous, feeding primarily on the lush aerial stems and leaves of waterside plants growing along side the watercourse. Its activity is normally confined to the area within two metres of the watercourse. Bankside vegetation in this area is not only essential for food but also for cover from predators.

The water vole population has been on the decline in recent years. This is partly due to loss of suitable riverside habitats but also due to the increasing population of predators, particularly the escaped American mink. Population decline has been dramatic and has accelerated over the last seven years. Surveys carried out by the Vincent Wildlife Trust show a loss of 67% of occupied sites and of 88% of the remaining population in the last seven years.

The water vole has received limited legal protection since April 1998 when it was included in Schedule 5 of the Wildlife and Countryside Act 1981. Section 9(4) of the Act protects the water vole's place of shelter or protection but does not protect the water vole itself.

From the 6th April 2008 water voles received an increased level of protection, becoming fully covered by the provisions of section 9 of the Wildlife and Countryside Act 1981 (as amended).

Full legal protection under the Act makes it an offence to:

- Intentionally kill, injure or take water voles.
- Possess or control live or dead water voles or derivatives.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection.
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.
- Sell water voles or offer or expose for sale or transport for sale.
- Publish or cause to be published any advertisement which conveys the buying or selling of water voles.

Appendix III. OTTER INFORMATION.

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

Otters are nocturnal and are active all year round. They are large with an adult male reaching 1.2m from nose to tail and weighing about 10kg.

Otters live by undisturbed waters where there is plenty of cover, mostly by freshwater lakes, rivers and quiet small streams as well as some coasts.

Fish are the otter's main source of food, especially eels and they therefore rely on good fish populations. They also eat amphibians and the occasional bird and small mammal.

An otter may use over 40km of river and needs many resting places throughout this range. A female otter will give birth to 1 to 3 cubs in a natal holt which is often away from the main river and must be completely undisturbed.

Generally the only evidence seen of the otter is its faeces or 'spraint', which are deposited along a watercourse in prominent positions.

Once found throughout Britain, most of our otter populations crashed in the 1960's due to poisoning from agricultural pesticides which drained into our river systems. Although this threat has passed and otter numbers are slowly beginning to recover, they are still subject to a number of serious pressures.

- Habitat loss through intensive river management for drainage and flood defence and due to agriculture and urban development.
- Inadequate food supplies, mainly fish.
- Disturbance of breeding sites by people and especially dogs.
- Low water quality and low river flows.
- Roads which cross or run alongside, rivers.

The UK Biodiversity Plan (BAP) contains an otter Species Action Plan (SAP) aimed at maintaining its existing range and population status, as well as increasing the number of populations through re-colonisation.

The otter is listed on Appendix 1 of CITES, Appendix II of the Bern Convention and Annexes II and IV of the Habitats Directive. It is protected under Schedule 5 of the WCA 1981 and Schedule 2 of the Conservation (Natural Habitats, etc.) Regulations, 1994 (Regulation 38). The European sub-species is also listed as globally threatened on the IUCN/WCMC RDL.

- 39.—(1)** It is an offence-
- (a) deliberately to capture or kill an otter;
 - (b) deliberately to disturb an otter;
 - (c) to damage or destroy a breeding site or resting place of an otter.

Appendix IV. 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.

Over 15 species of bat have been recorded in Britain. These fall into two families, the horseshoe bats and the 'ordinary bats'. 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 man made structures and will readily use these to roost and to rear their young.

Bats are protected under the Wildlife and Countryside Act 1981, The Habitats Regulations 1994 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 V. CRAYFISH INFORMATION.

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

Crayfish are the largest and most mobile freshwater invertebrate. The white-clawed crayfish (*Austropotamobius pallipes*) is the only native crayfish and this is protected under European and UK legislation.

White clawed crayfish are generally found in areas with relatively hard, mineral rich waters on calcareous and rapidly weathering rocks. They can be found in a wide variety of environments including canals, streams, rivers, lakes reservoirs and water-filled quarries.

White clawed crayfish are typically found in water between 0.75 and 1.25m deep but can occur in very shallow streams with as little water as 50mm and in deeper, slow flowing rivers. They are typically found under rocks and submerged logs or among tree roots and in river-banks. White clawed crayfish are omnivorous but primarily carnivorous eating macro invertebrates and carrion when available. They will also eat worms, insect larvae, snails, small fish, macrophytes, algae and calcified plants.

Crayfish can live for up to ten years and generally reach sexual maturity after three to four years. Breeding takes place between September and November when the water temperature drops consistently to below ten degrees centigrade. Females over winter with a clutch of eggs held beneath their tail. These may number from 20 to 120 and hatch on the female. The juveniles are released from the mother from June in the south to August in the north.

The main threat to the indigenous white-clawed crayfish is the spread of introduced non indigenous species, particularly the larger, faster growing and aggressive North American signal crayfish (*pacifastacus leniusculus*). They are also vulnerable to disease, particularly porcelain disease and crayfish plague, and the latter carried by the signal crayfish.

Crayfish are also extremely vulnerable to pollution incidents, particularly those involving biocides, silage and sheep dip.

As a result, white-clawed crayfish are endangered across most of its range and has been given protection under both European and UK legislation.

The white-clawed crayfish is listed on Annex V of the Habitats Directive (EEC 1992), which means that Member States should take measures to ensure that the taking of white-clawed crayfish in the wild is compatible with their being maintained at a favourable status.

In 1998, the white-clawed crayfish was added to Schedule 5 of the Wildlife and Countryside Act giving it partial protection in relation to Section 9(1) as far as it relates to taking and in respect of Schedule 9(5). It is therefore an offence to

intentionally take any white-clawed crayfish from the wild and an offence to sell wild crayfish.

Licences are available from English Nature to allow the taking of white-clawed crayfish for certain specified purposes, including scientific or educational purposes and for conservation purposes. An English Nature survey licence is required where any survey is aimed at finding white-clawed crayfish and involves handling them for counting or identification purposes.

An English Nature Conservation Licence is required for the purpose of conserving white-clawed crayfish or introducing them to particular areas.

Non indigenous crayfish species are also covered under the wildlife and Countryside Act 1981. Section 14 makes it an offence for any person to (a) release or allow to escape, any wild animal which is of a kind not ordinarily resident in or a regular visitor to Great Britain in a wild state or; (b) is included in Schedule 9 of the Wildlife and Countryside Act.

Three species of non-indigenous crayfish are listed on Schedule 9. These are the signal crayfish (*Pacifastacus leniusculus*), the narrow clawed crayfish (*Astacus leptodactylus*) and the noble crayfish (*Astacus astacus*). Any of these three species found during a survey cannot be returned to the wild.

Appendix VI. SCHEDULE 9 INVASIVE PLANT SPECIES.

1. Schedule 9 of the Wildlife and Countryside Act 1981 contains a list of invasive species of plant. 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.

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

Common Name	Latin Name
Alexanders, Perfoliate	<i>Smyrniium perfoliatum</i>
Algae, Red	<i>Grateloupia luxurians</i>
Archangel, Variegated Yellow	<i>Lamiastrum galeobdolon subsp. Argentatum</i>
Azalea, Yellow	<i>Rhododendron luteum</i>
Balsam, Himalayan	<i>Impatiens glandulifera</i>
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>
Fanwort (Carolina Water-Shield)	<i>Cabomba caroliniana</i>
Fern, Water	<i>Azolla filiculoides</i>
Fig, Hottentot	<i>Carpobrotus edulis</i>
Garlic, Three-cornered	<i>Allium triquetrum</i>
Hyacinth, Water	<i>Eichhornia crassipes</i>
Kelp, Giant	<i>Macrocystis pyrifera</i>
Kelp, Giant	<i>Macrocystis angustifolia</i>
Kelp, Giant	<i>Macrocystis intergrifolia</i>
Kelp, Giant	<i>Macrocystis laevis</i>
Kelp, Japanese	<i>Laminarial japonica</i>
Knotweed, Giant	<i>Fallopia sachalinensis</i>
Knotweed, Hybrid	<i>Fallopia japonica x Fallopia</i>

	<i>sachalinensis</i>
Knotweed, Japanese	<i>Fallopia japonica</i>
Leek, Few-flowered	<i>Allium paradoxum</i>
Lettuce, Water	<i>Pistia stratiotes</i>
Montbretia	<i>Crocoshmia x 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>
Primrose, Water	<i>Ludwigia uruguayensis</i>
Rhododendron	<i>Rhododendron ponticum</i>
Rhododendron	<i>Rhododendron ponticum x Rhododendron maximum</i>
Rhubarb, Giant	<i>Gunnera tinctoria</i>
Rose, Japanese	<i>Rosa rugosa</i>
Salvinia, Giant	<i>Salvinia molesta</i>
Seafingers, Green	<i>Codium fragile</i>
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 spp except</i>
	<i>p. amethystea</i>
	<i>p. leucosticta</i>
	<i>p. linearis</i>
	<i>p. miniata</i>
	<i>p. purpurea</i>
	<i>p. umbilicalis</i>
Stonecrop, Australian Swamp (New Zealand Pygmyweed)	<i>Crassula helmsii</i>
Wakame	<i>Undaria pinnatifida</i>
Waterweed, Curly	<i>Lagarosiphon major</i>
Waterweeds	<i>All species of the genus Elodea</i>

3. 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.

4. 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.

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

5.1. Mechanical control includes cultivation, hoeing, pulling, cutting, raking dredging or other methods to uproot or cut weeds.

5.2. Where this method is used all plant material must be considered “controlled waste” and must be disposed properly.

5.3. Chemical control uses approved herbicides.

5.4. Natural control uses pests and diseases of the target weed to weaken it and prevent it from becoming a nuisance.

5.5. Environmental control works by altering the environment to make it less suitable for weed growth, for example by increasing or decreasing water velocity.

Appendix VII. 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 1981 states 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 VIII.

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 IX. 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. This means they are protected against intentional or recklessly killing and injuring and against sale or transporting for sale.

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 markings 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.

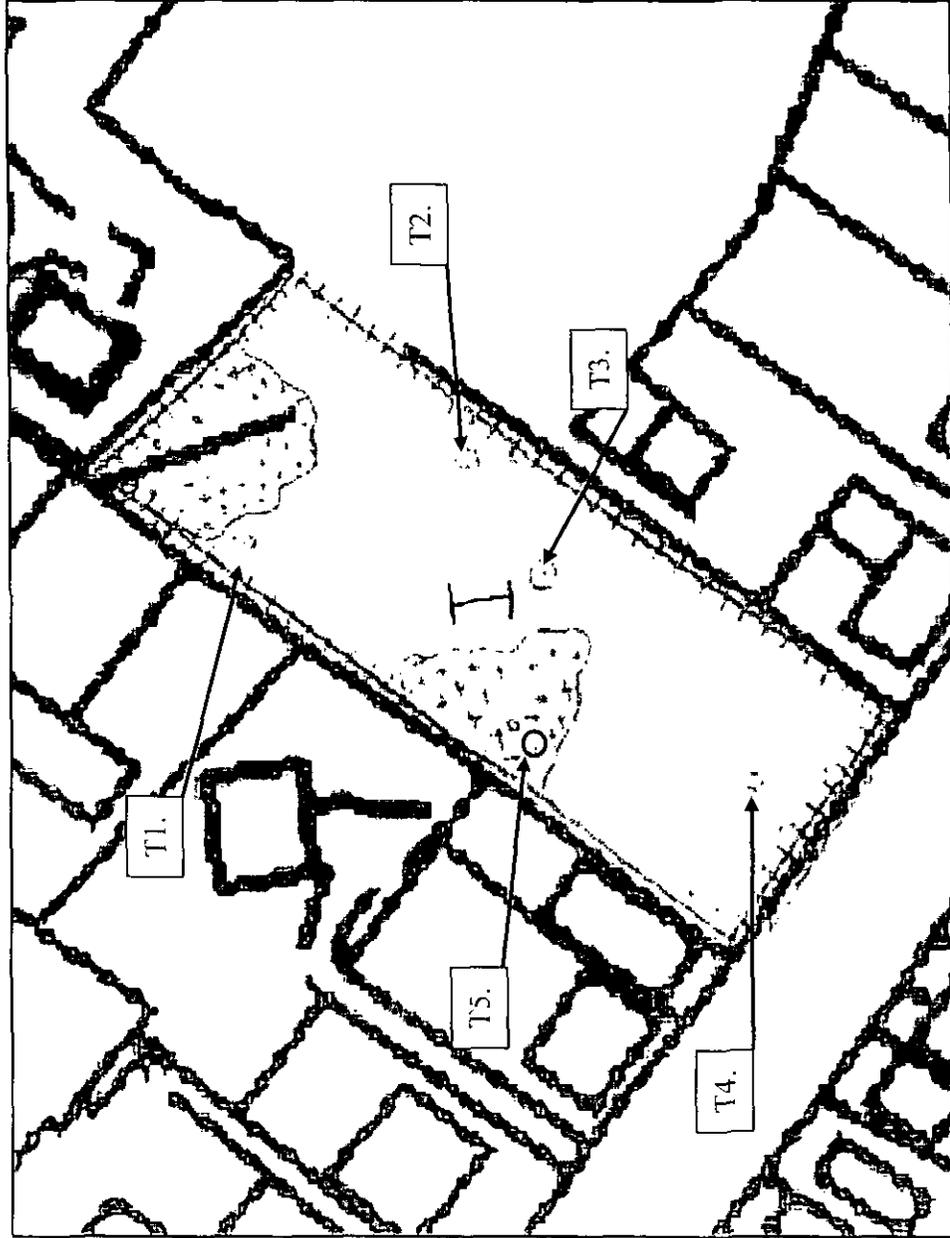
Slow worms hibernate over the winter, emerging from March onwards depending upon the weather. They begin to mate in April and May and six to twelve young are born in August or September.

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

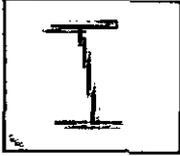
Slow worms are hard to find. They will bask in the sun but they quickly and quietly move into cover when disturbed and do not generally attract attention as they retreat from a basking spot.

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.

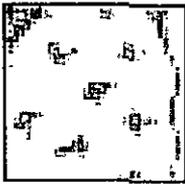
Appendix X. ANNOTATED MAP OF THE SURVEY AREA.



Key.



Improved Grassland.



Ephemeral/Short Perennial.



Scattered Mixed Trees.



Fence.



Wall.



Hedgerow with Trees.

Appendix XI. TARGET NOTES.

T1 – An area of vegetation which has been pruned from the trees on the site boundary.

T2 – An area of vegetation which has been pruned from the trees on the site boundary.

T3 – An area of level previously excavated land which has formed a shallow bank.

T4 – A solitary apple tree towards the south of the site.

T5 – Two cherry trees located to the west of the survey area.

Appendix XII. DATA SEARCH RESULTS.

Grid Ref	Location Name	Date	Location	Group	Scientific Name	Common Name
SE330100		09/07/2003	Staincross 'BARNSLEY	bird	Apus apus	Swift
SE3210	SE31F-1	01/06/2006	MBC' 'BARNSLEY	bird	Apus apus	Swift
SE32401030	near Darton	08/01/2011	MBC'	bird	Bombycilla garrulus	Waxwing
SE325099		15/02/2011	Mapplewell 'BARNSLEY	bird	Bombycilla garrulus	Waxwing
SE325099	Mapplewell	15/02/2011	MBC'	bird	Bombycilla garrulus	Waxwing
SE3210		03/02/1998	Darton	bird	Carduelis cannabina	Linnet
SE330100		09/07/2003	Staincross 'BARNSLEY	bird	Passer domesticus	House Sparrow
SE321099	Barnsley	27/01/2008	MBC'	bird	Sturnus vulgaris	Starling
SE321099	Barnsley	27/01/2008	'BARNSLEY	bird	Turdus merula	Blackbird
SE3110	Barnsley MBC	02/09/2005	MBC'	conifer	Pinus nigra	Austrian Pine
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	fern	Dryopteris dilatata	Broad Buckler-Fern
SE3110	Barnsley MBC	02/09/2005	MBC'	fern	Dryopteris filix-mas	Common Male Fern
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	fern	Phyllitis scolopendrium	Hart's-Tortue
SE3110	Barnsley MBC	02/09/2005	MBC'	flowering plant	Acer pseudoplatanus	Sycamore
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	flowering plant	Achillea millefolium	Yarrow
SE3110	Barnsley MBC	02/09/2005	MBC'	flowering plant	Aesculus hippocastanum	Horse-Chestnut
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	flowering plant	Agrostis capillaris	Common Bent
SE3110	Barnsley MBC	02/09/2005	MBC'	flowering plant	Agrostis stolonifera	Creeping Bent
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	flowering plant	Alnus glutinosa	Alder
SE3110	Barnsley MBC	02/09/2005	MBC'	flowering plant	Alpeccurus pratensis	Meadow Foxtail
SE3110	Barnsley MBC	02/09/2005	'BARNSLEY	flowering plant	Anisantha sterilis	Barren Brome

SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Arhthiscus sylvestris</i>	Cow Parsley
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Arctium minus</i>	Lesser Burdock
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Arrhenatherum elatius</i>	False Oat-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Artemisia absinthium</i>	Wormwood
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Artemisia vulgaris</i>	Mugwort
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Atriplex patula</i>	Common Orache
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Atriplex prostrata</i> agg.	<i>Atriplex prostrata</i> agg.
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Bellis perennis</i>	Daisy
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Betula pendula</i>	Silver Birch
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Buddleja davidii</i>	Butterfly-Bush
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Centaurea nigra</i>	Common Knapweed
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Centranthus tuber</i>	Red Valerian
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Chamerion angustifolium</i>	Rosebay Willowherb
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Chenopodium album</i> agg.	Fat Hen
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Cirsium arvense</i>	Creeping Thistle
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Cirsium vulgare</i>	Spear Thistle
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Convolvulus arvensis</i>	Field Bindweed
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Conyza canadensis</i>	Canadian Fleabane
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Corylus avellana</i>	Hazel
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Crataegus monogyna</i>	Hawthorn
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Crepis capillaris</i>	Smooth Hawk's-Beard
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	<i>Dactylis glomerata</i>	Cock's-Foot

SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Deschampsia caespitosa</i>	Tufted Hair-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Deschampsia flexuosa</i>	Wavy Hair-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Dipsacus fullonum</i>	Wild Teasel
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Elytrigia repens</i>	Common Couch
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Epilobium hirsutum</i>	Great Willowherb
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Epilobium montanum</i>	Broad-Leaved Willowherb
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Euphorbia helioscopia</i>	Sun Spurge
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Festuca rubra</i> agg.	Red Fescue
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Foeniculum vulgare</i>	Fennel
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Fraxinus excelsior</i>	Ash
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Galium aparine</i>	Cleavers
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Galium verum</i>	Lady's Bedstraw
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Glyceria fluitans</i>	Floating Sweet-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Heracleum sphondylium</i>	Hogweed
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hieracium</i>	Hawkweed
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hieracium umbellatum</i>	Hawkweed
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hippophae rhamnoides</i>	Sea-Buckthorn
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Holcus lanatus</i>	Yorkshire-Fog
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hordeum murinum</i>	Wall Barley
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hypericum perforatum</i>	Perforate St. John's-Wort
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Hypochaeris radicata</i>	Cat's-Ear
SE3110	Barnsley MBC	02/09/2005	'BARNSELY MBC'	flowering plant	<i>Ilex aquifolium</i>	Holly

SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Juncus effusus</i>	Soft Rush
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Lactuca serriola</i>	Prickly Lettuce
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Leontodon autumnalis</i>	Autumnal Hawkbit
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Leucanthemum vulgare</i>	Oxeye Daisy
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Linaria vulgaris</i>	Common Toadflax
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Lolium perenne</i>	Perennial Rye-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Lotus corniculatus</i>	Common Bird's-Foot-Trefoil
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Malus sylvestris</i>	Apple
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Malva moschata</i>	Musk-Mallow
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Malva sylvestris</i>	Common Mallow
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Matricaria discoidea</i>	Pineapple Weed
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Medicago sativa subsp. sativa</i>	Medicago sativa subsp. sativa
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Mellilotus albus</i>	White Mellilot
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Mellilotus altissimus</i>	Tall Mellilot
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Mellilotus officinalis</i>	Ribbed Mellilot
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Odonites vernus</i>	Red Bartsia
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Persicaria maculosa</i>	Redshank
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Pilosella officinarum</i>	Mouse-Ear-Hawkweed
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Plantago lanceolata</i>	Ribwort Plantain
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Plantago major</i>	Greater Plantain
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Poa annua</i>	Annual Meadow-Grass
SE3110	Barnsley MBC	02/09/2005	'BARNESLEY MBC'	flowering plant	<i>Poa trivialis</i>	Rough Meadow-Grass

SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Polygonum aviculare agg.	Knotgrass agg.
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Populus nigra 'Italica'	Lombardy-Poplar
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Potentilla reptans	Creeping Cinquefoil
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Prunus spinosa	Blackthorn
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Quercus petraea	Sessile Oak
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Quercus robur	Pedunculate Oak
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Ranunculus repens	Creeping Buttercup
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Reseda luteola	Weld
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Rosa canina agg.	Dog Rose
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Rubus fruticosus agg.	Bramble
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Rumex crispus	Curled Dock
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Rumex obtusifolius	Broad-Leaved Dock
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Sagina procumbens	Procrumbent Pearlwort
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Salix caprea	Goat Willow
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Salix cinerea	Grey Willow
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Salix fragilis	Crack Willow
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Sambucus nigra	Elder
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Senecio jacobaea	Common Ragwort
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Senecio vulgaris	Groundsel
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Sisymbrium officinale	Hedge Mustard
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Solanum dulcamara	Bittersweet
SE3110	Barnsley MBC	02/09/2005	'BARNsLEY MBC'	flowering plant	Sonchus asper	Prickly Sow-Thistle

SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Sonchus oleraceus	Smooth Sow-Thistle
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Sorbus aria agg.	Whitebeam
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Sorbus aucuparia	Rowan
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Sorbus intermedia agg.	Whitebeam
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Stellaria media agg.	Chickweed
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Symphytum officinale	Common Comfrey
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Tanacetum vulgare	Tansy
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Taraxacum	Dandelion Agg.
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Teucrium scorodonia	Wood Sage
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Trifolium dubium	Lesser Trefoil
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Trifolium repens	White Clover
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Tripleurospermum inodorum	Scentless Mayweed
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Tussilago farfara	Coll's-Foot
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Ulex europaeus	Gorse
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Urtica dioica	Common Nettle
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Vicia cracca	Tufted Vetch
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	flowering plant	Vicia sativa	Common Vetch
SE3110	Barnsley MBC	02/09/2005	'BARNLSLEY MBC'	horsetail	Equisetum arvense	Field Horsetail
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Amara familiaris	Amara familiaris
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Anotylus tetracannatus	Anotylus tetracannatus
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Aphthona euphorbiae	Large Flax Flea Beetle
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Atheta fungi	Atheta fungi

SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Atheta fungi	Atheta fungi
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Atheta graminicola	Atheta graminicola
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Atomaria fuscata	Atomaria fuscata
SE315102	Darton, Barnsley	13/10/2000	Darton	insect - beetle (Coleoptera)	Bruchus rufimanus	Bean Beetle
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Cercyon lateralis	Cercyon lateralis
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Chaetocnema hortensis	Chaetocnema hortensis
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Corticara gibbosa	Corticara gibbosa
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Cryptopleurum minutum	Cryptopleurum minutum
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Lesteva longoeolytrata	Lesteva longoeolytrata
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Longitarsus luridus	Longitarsus luridus
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Longitarsus luridus	Longitarsus luridus
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Longitarsus parvulus	Flax Flea Beetle
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Longitarsus parvulus	Flax Flea Beetle
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Longitarsus suturellus	Longitarsus suturellus
SE315102	Darton, Barnsley	05/10/2008	Darton	insect - beetle (Coleoptera)	Loricera pilicornis	Loricera pilicornis
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Meligethes aeneus	Common Pollen Beetle
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Philonthus cognatus	Philonthus cognatus
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Philonthus tenuicornis	Philonthus tenuicornis
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Philonthus varius	Philonthus varius
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Sitona lineatus	Pea and Bean Weevil
SE315102	Darton, Barnsley	01/05/2005	Darton	insect - beetle (Coleoptera)	Sitona lineatus	Pea and Bean Weevil
SE315102	Darton, Barnsley	01/05/2001	Darton	insect - beetle (Coleoptera)	Tachyporus nitidulus	Tachyporus nitidulus

SE3110	roadside	14/07/2011	Darton	insect - butterfly	Pteris brassicae	Large White
SE3110	roadside	14/07/2011	Darton	insect - butterfly	Pteris rapae	Small White
SE3110		07/02/2008	Darton	liverwort	Conocephalum conicum	Great Scented Liverwort
SE3211		03/03/2008	Windhill	liverwort	Lophocolea heterophylla	Variable-leaved Crestwort
SE3110		07/02/2008	Darton	liverwort	Lunularia cruciata	Crescent-cup Liverwort
SE3110		07/02/2008	Darton	moss	Amblystegium riparium	Kneiff's Feather-moss
SE3110		07/02/2008	Darton	moss	Amblystegium serpens	Creeping Feather-moss
SE3211		03/03/2008	Windhill	moss	Amblystegium serpens	Creeping Feather-moss
SE3211		03/03/2008	Windhill	moss	Aulacomnium androgynum	Bud-headed Groove-moss
SE3110		07/02/2008	Darton	moss	Barbula convoluta	Lesser Bird's-claw Beard-moss
SE3210		03/03/2008	Darton	moss	Barbula convoluta	Lesser Bird's-claw Beard-moss
SE3110		07/02/2008	Darton	moss	Barbula cylindrica	Cylindric Beard-moss
SE3210		03/03/2008	Darton	moss	Barbula cylindrica	Cylindric Beard-moss
SE3110		07/02/2008	Darton	moss	Barbula homschuchiana	Homschuch's Beard-moss
SE3211		03/03/2008	Windhill	moss	Barbula homschuchiana	Homschuch's Beard-moss
SE3110		07/02/2008	Darton	moss	Barbula recurvirostra	Red Beard-moss
SE3211		03/03/2008	Windhill	moss	Barbula recurvirostra	Red Beard-moss
SE3210		03/03/2008	Darton	moss	Barbula trifaria	Dusky Beard-moss
SE3110		07/02/2008	Darton	moss	Barbula unguiculata	Bird's-claw Beard-moss
SE3211		03/03/2008	Windhill	moss	Barbula unguiculata	Bird's-claw Beard-moss
SE3110		07/02/2008	Darton	moss	Brachythecium albicans	Whitish Feather-moss
SE3211		03/03/2008	Windhill	moss	Brachythecium albicans	Whitish Feather-moss
SE3110		07/02/2008	Darton	moss	Brachythecium rutabulum	Rough-stalked Feather-moss
SE3210		03/03/2008	Darton	moss	Brachythecium rutabulum	Rough-stalked Feather-moss
SE3110		07/02/2008	Darton	moss	Bryum argenteum	Silver-moss
SE3210		03/03/2008	Darton	moss	Bryum argenteum	Silver-moss
SE3110		07/02/2008	Darton	moss	Bryum bicolor	Bryum bicolor
SE3210		03/03/2008	Darton	moss	Bryum bicolor	Bryum bicolor
SE3110		07/02/2008	Darton	moss	Bryum capillare	Capillary Thread-moss
SE3210		03/03/2008	Darton	moss	Bryum capillare	Capillary Thread-moss
SE3110		07/02/2008	Darton	moss	Calliergon cuspidatum	Pointed Spear-moss
SE3211		03/03/2008	Windhill	moss	Calliergon cuspidatum	Pointed Spear-moss

SE3110	07/02/2008	Darton	moss	Campylopus introflexus	Heath Star Moss
SE3211	03/03/2008	Windhill	moss	Campylopus introflexus	Heath Star Moss
SE3110	07/02/2008	Darton	moss	Ceratodon purpureus	Redshank
SE3210	03/03/2008	Darton	moss	Ceratodon purpureus	Redshank
SE3211	03/03/2008	Windhill	moss	Dicranella heteromalla	Silky Forklet-moss
SE3211	03/03/2008	Windhill	moss	Dicranoweisia cirrata	Common Pincushion
SE3211	03/03/2008	Windhill	moss	Dicranum tauricum	Fragile Fork-moss
SE3110	07/02/2008	Darton	moss	Eurhynchium praelongum	Common Feather-moss
SE3210	03/03/2008	Darton	moss	Eurhynchium praelongum	Common Feather-moss
SE3211	03/03/2008	Windhill	moss	Fissidens bryoides	Lesser Pocket-moss
SE3110	07/02/2008	Darton	moss	Fissidens taxifolius	Common Pocket-moss
SE3211	03/03/2008	Windhill	moss	Fissidens taxifolius	Common Pocket-moss
SE3110	07/02/2008	Darton	moss	Funaria hygrometrica	Common Cord-moss
SE3110	07/02/2008	Darton	moss	Grimmia pulvinata	Grey-cushioned Grimmia
SE3210	03/03/2008	Darton	moss	Grimmia pulvinata	Grey-cushioned Grimmia
SE3110	07/02/2008	Darton	moss	Hypnum cupressiforme var. cupressiforme	Hypnum cupressiforme var. cupressiforme
SE3110	07/02/2008	Darton	moss	Hypnum cupressiforme var. cupressiforme	Hypnum cupressiforme var. cupressiforme
SE3211	03/03/2008	Windhill	moss	Isoperlygium elegans	Elegant Silk-moss
SE3211	03/03/2008	Windhill	moss	Orthotrichum affine	Wood Bristle-moss
SE3110	07/02/2008	Darton	moss	Orthotrichum affine	Wood Bristle-moss
SE3211	03/03/2008	Windhill	moss	Orthotrichum anomalum	Anomalous Bristle-moss
SE3210	03/03/2008	Darton	moss	Orthotrichum diaphanum	White-tipped Bristle-moss
SE3110	07/02/2008	Darton	moss	Orthotrichum diaphanum	White-tipped Bristle-moss
SE3210	03/03/2008	Darton	moss	Polytrichum piliferum	Bristly Haircap
SE3211	03/03/2008	Windhill	moss	Polytrichum piliferum	Bristly Haircap
SE3110	07/02/2008	Darton	moss	Rhynchosostegium confertum	Clustered Feather-moss
SE3210	03/03/2008	Darton	moss	Rhynchosostegium confertum	Clustered Feather-moss
SE3110	07/02/2008	Darton	moss	Rhynchosostegium riparioides	Long-beaked Water Feather-moss
SE3110	07/02/2008	Darton	moss	Rhytidiadelphus squarrosus	Springy Turf-moss
SE3211	03/03/2008	Windhill	moss	Schistidium apocarpum	Schistidium apocarpum
SE3110	07/02/2008	Darton	moss	Schistidium boreale	Schistidium boreale

SE3110		07/02/2008	Darton	moss	Tortula intermedia	Intermediate Screw-moss
SE3110		07/02/2008	Darton	moss	Tortula muralis	Wall Screw-moss
SE3210		03/03/2008	Darton	moss	Tortula muralis	Wall Screw-moss
SE3211		03/03/2008	Windhill	moss	Ulota crispa var. norvegica	Bruch's Pincushion
SE321112	Windhill Avenue	12/04/2005	Staincross	terrestrial mammal	Chiroptera	Bats

Toolbox Talk : Reptiles.

Identification : Grass Snakes.

The grass snake is usually around 120cm long. 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 yellow marking around the neck.



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. 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.



Identification : Slow Worms.

Slow worms grow to around 45cm in length. The males and females display a marked difference in colour when fully grown. Females often have a dark vertebral stripe, the flanks are flecked or striped with dark brown or black, the ventral surface is nearly always uniform black. Males are more uniform in colour dorsally and on the flanks, the belly is usually mottled black or dark grey, they also have larger heads and occasionally distinct blue spots. The upper parts of the body vary from light or dark brown, grey, bronze or brick red.



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.



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.

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

Other Reptiles.

In addition to the reptiles outlined on this document there are also two other reptile species in Great Britain, the smooth snake 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.

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.

DO's.

- ✓ Stop work if any reptiles are found and let them move away safely of their own accord.
- ✓ Stop work immediately if large number of reptiles are found and contact Whitcher Wildlife Ltd.
- ✓ Avoid handling reptiles where possible.
- ✓ Seek medical attention immediately if you are bitten by a snake.
- ✓ If in doubt of the species, photograph the reptile and contact Whitcher Wildlife Ltd regarding identification.

DON'Ts.

- ✗ DON'T handle adders. Their bite is poisonous.
- ✗ DON'T kill or injure any reptiles.

Further information. Contact Whitcher Wildlife Ltd.
Tel : 01226 753271. Email : info@whitcher-wildlife.co.uk.