

**Whitcher Wildlife Ltd.
Wildlife Consultants.**



RACECOMMON QUARRY, PENISTONE.

PROTECTED FAUNA SURVEY.

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1. INTRODUCTION.

1.1. Plans are being submitted for the construction of two earth sheltered houses on Racecommon Quarry, an old disused quarry site just outside Penistone.

1.2. An initial Phase 1 Habitat survey was carried out by Ecosulis Ltd during July 2009. The survey recommended further surveys of the site including a HSI survey of ponds in the area.

1.3. A follow up protected fauna survey of the site was therefore commissioned as per the recommendations of the original report.

1.4. Whitcher Wildlife Ltd carried out the survey on the 16th October 2009. This report outlines the findings of the survey and makes appropriate recommendations. This report also outlines a number of enhancements that could be made to the site to improve the potential for some species or fauna on the site.

1.5. Appendices I to VI 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.

The survey area was thoroughly searched for evidence of badger (*Meles meles*) activity by looking for the following signs:-

- * 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.

All watercourses within the survey area were thoroughly searched for evidence of water vole (*Arvicola terrestris*) activity by looking for the following signs:-

- * 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.

All watercourses within the survey area were thoroughly searched for evidence of otter (*Lutra lutra*) activity by looking for the following signs:-

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

All mature trees and derelict buildings were checked for potential bat roosting sites by looking for the following signs:-

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

The survey area was searched for the presence of great crested newt (*Triturus cristatus*) breeding ponds within 500m of the site.

3. SURVEY RESULTS.

3.1. Site Description.

3.1.1. Racecommon Quarry is an old disused quarry site just outside Penistone. The site is currently disused although some areas are used for general storage.



3.1.2. The quarry comprises rock faces varying in height from 1.5m to 3m along its western edge, bordering Mortimer Road. Along the eastern side of the site there is a strip of heathland covering the old spoil heaps from the quarry.

3.1.3. At the southern end of the site there is a large pond. The pond comprises 2m rock faces around the southern edge with bare soil banks and exposed rocks around the northern side of the pond. There is no vegetation growing in the pond.

3.1.4. There are abundant semi mature trees on the site, including sycamore, oak, willow and a variety of other species.

3.1.5. There is a hard standing access road leading into the site. This track leads into the area of land immediately adjacent to the eastern side of the pond where the main development will be. This area comprises a hard standing area with patchy flattened grass and occasional trees.

3.1.6. The site sits on a hillside surrounded predominantly by grazing pasture although there is a small holding to the west of the site on the opposite side of Mortimer Road. The field boundaries are low dry stone walls.

3.2. Survey Results.

3.2.1. One badger sett was identified within the surveyed area. A brief description of the sett is provided below.

3.2.1.1. Sett A, Map Reference SE 24853-01436.

A two entrance badger sett located towards the southeast corner of the site, as shown on the plan in Appendix VII of this report. The sett displays large, well-worn entrances with little or no spoil outside. The grass around the entrance is flattened with a faint path leading to the west.

3.2.2. A well used, fresh, badger latrine was identified within the heathland on the southern edge of the pond. The latrine area lies on the faint path leading from Sett A towards Mortimer Road to the west.

3.2.3. A dead badger was seen on the eastern verge of Mortimer Road where the badger path from Sett A crosses the road.

3.2.4. No other badger setts or badger field signs were identified around the site.

3.2.5. No watercourses that would provide suitable habitats for water voles or otters were identified within the surveyed area.

3.2.6. The pond does not provide a suitable habitat for water vole due to the lack of vegetation and abundance of bare rock around its banks.

3.2.7. There are no buildings on the site that would provide suitable bat roosting sites.

3.2.8. The rock faces along the western side of the site and around the southern edge of the pond may provide suitable bat roosting sites within the occasional cracks and voids although no bat field signs were identified during this survey.

3.2.9. The trees on the site are predominantly semi mature with no visible cracks and voids that would provide suitable bat roosting sites.

3.2.10. The site may provide a suitable foraging site for bats although it lies in an exposed location on a hillside above Penistone and is therefore very exposed to the wind and weather.

3.2.11. There is very little suitable bat connectivity to other suitable foraging and roosting areas due to the lack of hedgerows and the abundant grazing pastures and low dry stone walls around the site, as can be seen from the plan below.



3.2.12. Two ponds were identified within 500m of the site on a map of the area. A brief description of each pond is provided below. A Habitat Suitability Index (HSI) assessment of the two ponds is also included in the table below and the location of the ponds is marked on the plan in Appendix VII of this report.

3.2.13. Pond 1 is the pond on site that comprises rock and bare earth banks. The pond appears to be deep and there is little or no marginal vegetation or vegetation within the water. Two ducks were identified on the pond during this survey of the site.

3.2.14. Photograph looking east across Pond 1 on the site.



3.2.15. Pond 2 is a pond located approximately 10m to the west of the site within the small holding on the opposite side of Mortimer Road.

3.2.16. Access could not be gained to the land to thoroughly assess the pond although it was visible from the road. The pond is large, lies at a low point well below the level of the road and is very overshadowed by trees. There is little or no marginal vegetation or vegetation within the water.

3.2.17. There is abundant suitable terrestrial amphibian habitat around the site in the form of the heathland and the various materials stored on the site. No amphibians were identified during a terrestrial search of the site carried out as part of this survey.

3.2.18. The land surrounding the site provides very little suitable terrestrial habitat for amphibians due to the abundance of grazing pasture.

3.2.19. HSI Assessment Table.

| <i>HSI Category\Pond Reference.</i> | <i>1</i> | <i>2</i> |
|-------------------------------------|----------------|----------------------|
| <i>1. Location.</i> | 1 | 1 |
| <i>2. Pond area.</i> | 0.6 | 1 |
| <i>3. Pond drying.</i> | 0.9 | 0.9 |
| <i>4. Water quality.</i> | 0.33 | 0.33 |
| <i>5. Shade.</i> | 1 | 0.2 |
| <i>6. Fowl.</i> | 0.67 | 0.67 |
| <i>7. Fish.</i> | 0.67 | 0.67 |
| <i>8. Ponds.</i> | 0.67 | 0.67 |
| <i>9. Terrestrial habitat.</i> | 1 | 0.67 |
| <i>10. Macrophytes.</i> | 0.3 | 0.3 |
| <i>HSI Score.</i> | 0.66. Average. | 0.57. Below average. |

3.2.20. No invasive species were identified within the surveyed area.

3.2.21. The vegetation on site will provide a suitable nesting site for various species of bird during the nesting season. There are also a large number of nest boxes located on trees around the site.

3.2.22. No nests were identified during this survey because it was carried out outside the nesting season.

3.2.23. The site may provide a suitable habitat for reptiles due to the abundant terrestrial habitat provided by the heathland other vegetation on site.

3.2.24. No reptiles were identified during a terrestrial search of the site carried out as part of this survey.

4. EVALUATION OF FINDINGS.

4.1. One badger sett was identified on the site along with a faint path and a fresh latrine area. The level of badger activity at the sett implies that this is an occasionally used outlying badger sett.

4.2. The fresh latrine located at the southern edge of the pond implies that a territorial boundary between two clans of badgers crosses the site. The fresh dung within the latrine and the recent use around the sett show that badgers have been using the site very recently. The presence of a fairly fresh dead badger on Mortimer Road also supports this.

4.3. No watercourses that would provide a suitable habitat for water voles or otters were identified within the surveyed area and the pond on site does not provide a suitable habitat for either species. Therefore there are no water vole or otter issues on the site.

4.4. There is some potential for bats to roost within cracks and voids in the rock faces on site although this potential is predominantly within the rocks faces along the western boundary of the site and around the southern side of the pond.

4.5. There is also very minimal potential for individual bats to roost within the trees although potential roosting sites in the trees were very scarce due to the semi mature nature of the trees.

4.6. The site may provide some foraging potential for bats although there is very little connectivity with other potential foraging areas due to the lack of hedgerows or larger trees to use as flight lines. The site is also situated in a very exposed location.

4.7. There are two ponds within 500m of the site, the old quarry pond on site and a pond within an adjacent small holding.

4.8. An HSI assessment of the pond was carried out and this gave a result of average for the pond on site and below average for the pond within the adjacent small holding.

4.9. There is suitable terrestrial habitat immediately surrounding the pond on site in the form of heathland, exposed rock and piles of stored material. The land

surrounding the site is predominantly grazing pasture that provides little or no suitability for amphibians.

4.10. Taking into account the low number of ponds, the low HSI assessment score of the ponds and the limited terrestrial habitat that is confined to the site it is seen as unlikely that great crested newts will be present on the site and if a population is present they will be a small isolated population.

4.11. The vegetation and abundant nest boxes on the site will provide a suitable nesting habitat for various species of bird during the nesting season, which extends from March to September.

4.12. No nests were identified during this survey because it was carried out outside the nesting season.

4.13. The site appears to provide a suitable reptile habitat due to the presence of suitable refugia within the heathland and under the other vegetation on site.

4.14. No reptiles were identified during a refuge search carried out as part of this survey.

5. RECOMMENDATIONS.

5.1. The badger sett identified on the site lies approximately 10m away from the proposed location of the houses and will therefore not be directly affected by the works.

5.2. Although the badger sett will not be directly affected by the development it is recommended, due to the proximity of the sett to the development that a Natural England badger disturbance licence is obtained to cover the housing development.

5.3. A Natural England licence will usually take four weeks to be issued once the application has been submitted.

5.4. Once work commences on site, it is recommended that all personnel working on the site are briefed as to the location of the badger sett. It is also recommended that a temporary fence is erected approximately 8m from the badger sett to demarkate the sett during the development work and to prevent machine movements damaging the sett. The fence should take the form of a post and rope fence.

5.5. The potential bat roosting locations on the site lie along the western boundary of the site and around the southern edge of the pond. Both of these areas lie outside the proposed location of the houses and will therefore remain unaffected by the works. This being the case a Natural England bat licence will not be required to cover the proposed works on site.

5.6. If work plans change and either of the potential roosting sites will be affected by the works it is recommended that a further dusk emergence bat survey is carried out prior to work commencing. The dusk survey must be carried out at a time when bats are active, ideally May to August.

5.7. If no work has been carried out on the site before May 2010 it is recommended that the dusk survey is carried out to provide supplementary information about the bat activity on the site.

5.8. Although there are two ponds on the site the ponds scored average and below average on the HSI assessment making them unlikely to provide a suitable great crested newt habitat. The work on site will also not directly affect the pond and will

only affect a small area of the overall suitable terrestrial habitat because the main development will lie on the hard standing area to the east of the pond.

5.9. Taking the HSI assessment and the fact that the work predominantly impacts existing hard standing areas into account it is recommended that work on site commences without the need for further great crested newt surveys.

5.10. If a great crested newt is identified at any stage of the works, all work on site must cease and the undersigned must be contacted immediately.

5.11. It is recommended that during the work, improvements are made to the site to increase the potential for amphibians. This should take the form of the planting of suitable marginal and submerged plants within the pond and the creation of a number of areas of artificial, terrestrial amphibian refugia.

5.12. It is recommended that any vegetation clearance work carried out on the site is done outside the nesting season, which extends from March to September.

5.13. If any vegetation clearance work is carried out within the nesting season it must be immediately preceded by a thorough nesting bird survey. Any nests identified must remain undisturbed until the young have fledged.

5.14. Due to the main area of impact on the site being on a hard standing area with no suitable reptile refuges it is recommended that all personnel working on the site are briefed as to the potential presence of reptiles on the site and how to identify them.

5.15. Where areas of land that would provide suitable reptile refugia are being disturbed it is recommended that the refugia are carefully moved by hand and that any reptiles are allowed to move away of their own accord before any machinery is taken into the area.

5.16. During the landscaping of the site, it is recommended that new areas of heathland and suitable artificial refugia areas are created to provide additional refugia for any reptiles that may be present.

5.17. During the development works, all excavations left open overnight must have a sloping end to allow animals to escape and all pipe ends should be capped.

6. POTENTIAL ECOLOGICAL ENHANCEMENTS.

6.1. The survey identified the presence of or the potential for the following species on or near the site:

- Badgers.
- Bats.
- Amphibians.
- Nesting Birds.
- Reptiles.

6.2. Below are a number of potential enhancements that could be incorporated into the final design of the site to improve the potential for the species on the site.

6.3. Badgers have been identified on the site and therefore the construction of an artificial badger sett on the site may encourage an increase in the level of badger activity. The sett could be located towards the southeast corner of the site close to the location of the current outlying badger sett identified during the survey.

6.4. Locating the artificial badger sett in this area would put it within the area to be planted as new woodland therefore providing a screen around the badger sett.

6.5. There is a relatively low potential for bats on the site although the potential could be increased by the inclusion of bat roosting potential within the buildings on the site.

6.6. Due to the earth sheltered design of the buildings the main area where bat potential could be provided would be within the stone walls at either end of the buildings. The bat roosting potential would need to take the form of narrow voids in the stonework, approximately 15mm x 75mm in size located high up on the walls or bat bricks built into the walls.

6.7. Ideally the voids would need to lead to a cavity within the wall providing a suitable roosting site for various species of bat. If bat bricks were designed into the walls these provide an entrance slot and cavity for roosting.

6.8. If a new pond is created on the site the pond could be designed to provide a suitable amphibian pond. In order to provide a suitable amphibian habitat the pond would have to be designed to have a surface area of between 100 & 300m², preferably be relatively shallow with an abundance of marginal and submerged vegetation as

well as some areas of open water. The pond would preferably not be overshadowed by trees especially on its southern side and would also have to be absent of fish or water fowl.

6.9. Due to the potential for both amphibians and reptiles on the site a number of areas of artificial refugia could be created to provide a terrestrial habitat for amphibians and reptiles therefore encouraging them onto the site.

6.10. The artificial refugia would need to take the form of a shallow excavation no less than 2m x 1m in size. This would then be filled with rubble to approximately 0.25m. The rubble would then be capped with soil to a height of approximately 1m before being turfed to allow the refugia to blend in to the surrounding site.

6.11. To provide additional sites for nesting birds on the site further bird boxes could be erected around the site. These boxes should provide nesting opportunities for a range of species by using different boxes in different areas including swallow boxes in any open fronted covered areas of the site, parking or access structures and owl boxes on trees or on poles around the perimeter of the site.

Steven Whitcher.

Natural England Bat Survey Licence Number: - 20092967.

Natural England Great Crested Newt Survey Licence Number: - 20092339.

09.07.10.

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 grubbings. 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 Natural England in accordance with their guidelines. To obtain a licence an application must be made giving at least one months 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. Natural England 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. 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 III.

BACKGROUND GREAT CRESTED NEWT INFORMATION.

The great crested newt population has suffered a major decline in Britain over the last century. Numerous ponds have been lost, unmanaged ponds have become silted up and over-shaded, development has destroyed ponds and associated terrestrial habitat and caused fragmentation of populations. The loss of grassland, scrub and woodland has resulted in fewer opportunities for foraging, dispersal and hibernation.

The UK Biodiversity Plan (BAP) contains a great crested newt 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 great crested newt is listed on Schedule 5 of the Wildlife and Countryside Act 1981, recently modified by the Countryside and Rights of Way Act 2000. The great crested newt is therefore subject to the provisions of Schedule 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt.
- Possess or control any live or dead specimen or anything derived from a great crested newt.
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt.
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place, which it uses for that purpose.

The great crested newt is also listed on Annex II and Annex IV of The Conservation (Natural Habitats &c) Regulations 1994. Regulation 39 makes it an offence to:

- Deliberately capture or kill a great crested newt
- Deliberately disturb a great crested newt.
- Deliberately take or destroy the eggs of a great crested newt.
- Damage or destroy a breeding site or resting place of a great crested newt.

The legislation applies to all life stages of great crested newts.

The maximum fine on conviction of offences under Section 9 and Regulation 39 currently stands at £5,000. The CroW Act 2000 amendment also allows for a custodial sentence of up to six months instead of, or in addition to, a fine. In addition, items, which may constitute evidence of the commission of an offence, may be seized and detained.

In order to understand the potential effects of development it is essential to understand a little of the great crested newt ecology.

Great crested newts breed in ponds and other water bodies. They can begin to migrate to their breeding ponds as early as the first frost-free days in late January with the majority reaching their breeding ponds by mid March. Timing will be influenced by a number of factors, mainly evening temperatures above 5C and recent rain.

The peak egg-laying period is from mid-March to mid-May. The newts will lay their eggs individually, mainly on the leaves of submerged plants. The larva hatch after three weeks and then take another 2-3 months to complete larval development. Adult newts generally leave their breeding ponds from late May onwards.

Once the larvae have completed metamorphosis (the transition from aquatic larvae to land-adapted juveniles, called efts), they emerge from the pond. This emergence begins in late August and generally continues until late October. It takes 2-4 years to reach sexual maturity, during which time the newts will be land based.

Adults and immature newts spend the winter in places that afford protection from frost and flooding. This will generally be underground amongst tree roots, in mammal burrows, or under suitable refuges above ground like deadwood or rubble piles. Hibernation may last from October to February.

Whilst on land, outside the hibernation period, great crested newts will forage at night, taking a wide range of invertebrate prey.

From the above, it can be seen that great crested newts spend the majority of their time on land and only visit the ponds for breeding purposes. As a result, surveys need to be timed very carefully. Terrestrial surveys are very inaccurate and the only time that surveys can be truly thorough is in the narrow window of opportunity between March and September.

Great crested newts will travel large distances between ponds and terrestrial refuges. It is recommended that anywhere within 500m of a pond should be treated as potential great crested newt habitat and should be surveyed and evaluated.

An experienced surveyor must carry out the surveys and must be in possession of an appropriate Natural England great crested newt survey licence.

It is essential that great crested newt surveys are planned well in advance of any development and ideally before Planning Consent is sought. Surveys can only be carried out at the appropriate time of year and repeat surveys are essential. The guidelines suggest that between four and six surveys need to be carried out, three of these between mid-March and mid-June.

If great crested newts are to be effected by any development, a thorough assessment of the population is essential followed by the design of a comprehensive mitigation package. Only when this has been done can a licence application be submitted to Natural England for approval. It takes 30 working days for a licence application to be determined and the period of time that mitigation measures take can be measured in months. It is therefore essential to plan well in advance of development commencing.

Appendix IV. 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 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 and scrub 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 V. 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 VI.

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 VII. PLAN OF THE SITE.

