Whitcher Wildlife Ltd.
Wildlife Consultants.

THE OLD PIT YARD, HOOD GREEN

PROTECTED FAUNA SURVEY.

Ref No:- **091170**

Date:- **29th November 2009.**

Cliff Edge, Cliff Road, Darfield, Barnsley, S73 9HR.
Tel. 01226 753271. Fax. 01226 270993.
info@whitcher-wildlife.co.uk www.whitcher-wildlife.co.uk
Company No. 4401613.

TABLE OF CONTENTS.

1. INTRODUCTION.

1.1. A previous protected species survey was carried out on the Old Pit Yard, Hood Green site in March 2007 followed by great crested newt surveys of the pond on the site between mid March and the end of April 2007. These were in connection with two planning applications, one for a change of use of land to form an area for the storage of caravans and one to construct a composting facility to recycle green waste.

1.2. Whitcher Wildlife Ltd has now been commissioned to update those original surveys in connection with a further application for the erection of a new farm building on the site.

1.3. A further site survey was carried out on 27th November 2009. This report provides information from the previous site surveys updated with information from the recent survey.

1.4. Appendix I of this report provides additional information on specific species and is 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.

This report includes the results of the great crested newt surveys carried out in 2007 and for that the following methodology was employed.

The survey area was thoroughly searched for evidence of great crested newt (*Triturus cristatus*) activity by carrying out the following survey techniques:-

Searching aquatic habitats by:-

- Examining vegetation in ponds and areas of static water for newt eggs.
- Looking for newts in ponds and areas of static water with a high-powered torch during hours of darkness.
- Setting bottle or funnel traps at night and emptying them the next morning and recording what had been trapped.

****

3. SURVEY RESULTS.

3.1. Overall Site Description.

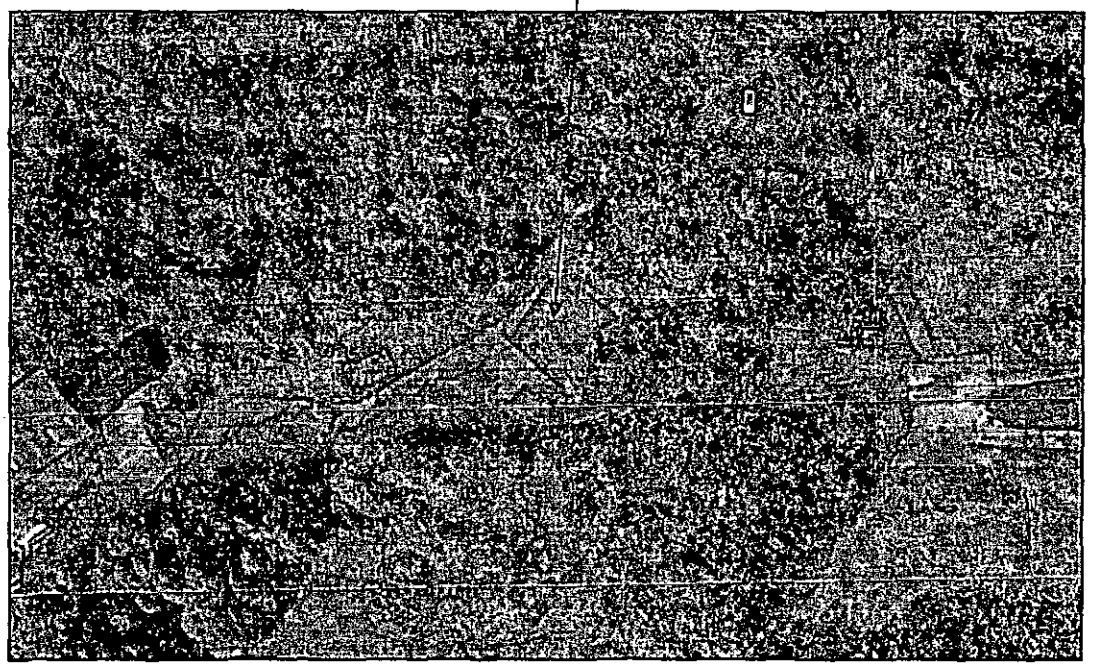
3.1.1. The Old Pit Yard is located in a rural setting to the north of the village of Hood Green. The site was formerly the Levy Pit Yard, spoil heap and surrounding fields and woodland although all of the buildings on the site have been demolished and the site now houses various farm buildings.

3.1.2. The proposed development site is therefore located on a brown field site where the old pit buildings once stood.

3.1.3. Much of the site has regenerated as birch woodland, particularly around the perimeter of the site. Between the regenerating woodland there are open clearings with demolition remains, supporting grass and weeds and this includes the proposed development site.

3.2. The Proposed Site for an Additional Farm Building.

3.2.1. The proposed site for the new farm building is shown in the aerial photograph below.



3.2.2. The site is currently an area of rank grassland and bare ground that has been used for the parking of farm vehicles, as can be seen from the aerial photograph above and the photograph below.

3.3. Site Survey Results.

3.3.1. A number of badger setts were identified around the perimeter of The Old Pit Yard site and well worn badger paths cross the site. None of the setts is located within 50m of the proposed development site or the access roads to the site.

3.3.2. There are two ponds on the site. One of these is the old Levy Pit Yard Pond that has existed on the site for many years. This is one of the eight ponds noted in the Barnsley BAP where there are historic records of a great crested newt breeding population.

3.3.3. The second pond is also an old and historic pond from the distant past that had completely dried out but has been dredged and reinstated. As soon as this pond was created, the owner stocked it with large carp. The pond is therefore used for fishing and also for breeding wildfowl. This pond is not a suitable habitat for amphibians as the carp will prevent effective breeding.

3.3.4. There is one watercourse that flows down through the pit yard from the Hood Green sewage works. The water level within the watercourse fluctuates widely. No

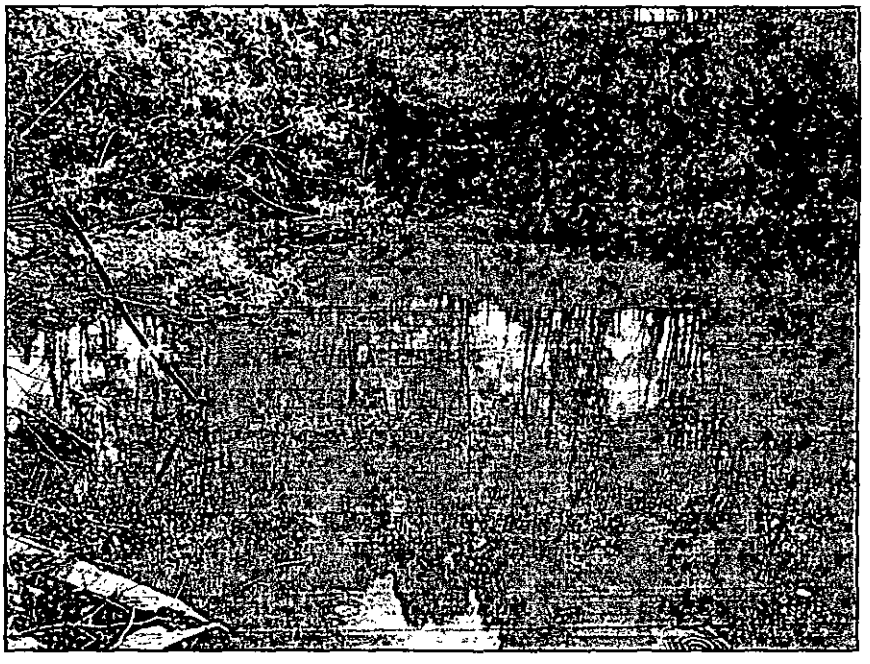
water vole field signs were identified within the banks of the stream and the fluctuating water level and banks devoid of vegetation render it unsuitable water vole habitat.

3.3.5. There are no mature trees within the proposed development site and no old buildings. There are therefore no bat issues associated with the site.

3.3.6. There are no nesting bird opportunities within the very sparse vegetation on the site.

3.4. Great Crested Newt Surveys in the Pit Yard Pond – 2007.

3.4.1. The Pit Yard Pond is approximately 30m square and is located in a hollow surrounded by a margin of trees as shown in the photograph below.



3.4.2. The water in the pond varies considerably in depth with some parts of the margins below 50mm while in others the water was too deep for it to be safe to enter.

3.4.3. The base of the pond comprises large rocks and stones with gaps between that have become full with accumulated detritus and debris. The pond therefore has a layer of relatively clear water but with a black silt base which is easily stirred up.

3.4.4. There are no marginal plants in the pond and no water plants whatsoever.

3.4.5. In 2007 four surveys were carried out in this pond. The first survey was a torch search using a Clulight one million candle power light. While this was a legitimate survey, no amphibians were found so, for the subsequent surveys, bottle trapping was employed to ensure that the water clarity did not in any way affect the accuracy of the surveys.

3.4.6. Bottle traps were placed at approximately 2m intervals, in line with the English Nature Great Crested Newt Mitigation Guidelines. Forty traps were deployed providing approximately 70% cover. The remaining 30% of the pond perimeter was inaccessible due to bank vegetation and was too deep to enter safely.

3.4.7. All surveys were carried out on warm, fine nights when the overnight temperature remained above 9°C. All surveys were carried out by Derek Whitcher under his Natural England survey licence number 20062127.

3.4.8. The table below shows the results of the surveys.

Date	Method	Smooth Newts			Palmate Newts			Great Crested Newts		
		Eggs	Larvae	Adults	Eggs	Larvae	Adults	Eggs	Larvae	Adults
25/04	Torch	0	0	0	0	0	0	0	0	0
26/06	Trapping (40)	0	0	0	0	0	0	0	0	0
27/04	Trapping (40)	0	0	2F	0	0	2M 1F	0	0	0
28/04	Trapping (40)	0	0	0	0	0	0	0	0	0

****

4. EVALUATION OF FINDINGS.

4.1. The site lies within existing badger foraging territory and there are well worn badger paths crossing the site. There are no setts within the proposed development site, there are no badger paths crossing the site and the resultant loss of foraging territory is insignificant. The impact on the badger population is therefore assessed as very low.

4.2. The results of the 2007 extended survey show that there is a very small population of both smooth newts and palmate newts in the pond and the size and shape of the female palmate newt indicates that they breed within the pond. However, no great crested newts were identified during any of the four surveys and therefore the historic great crested newt population in the old Pit Yard Pond has apparently become obsolete. There is therefore no great crested newt issue to address or mitigate for in connection with the proposed development.

4.4. There are no opportunities for nesting birds within the existing vegetation on the site.

4.5. There are no other protected species present on the site that must be considered.

****

5. RECOMMENDATIONS.

5.1. The proposed site is an area of used ground within an existing farm yard setting and is therefore driven over by farm vehicles and is of low ecological importance. There are therefore no ecological issues with the proposed erection of a new farm building on the site and no time limitations to the works.

5.2. In the very unlikely event that a great crested newt is found within the development site, work should cease and the undersigned contacted for further advice.

****

Derek A Whitcher.
29.11.2009.

Natural England Bat Survey Licence Number.	20091076
Natural England Great Crested Newt Survey Licence Number.	20090192
Natural England Crayfish Survey Licence Number.	20090194
Natural England Barn Owl Survey Licence Number	20083902

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.

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 English Nature 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.