absolute ecology wildlife surveys

Great Crested Newt Survey

Church Croft, Caverswall

May 2011

Surveyor: Matthew Haydock

(Natural England Licence Number: 20103220)

Contents

Notice to readers

This report has been prepared by Absolute Ecology with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site, and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Institute of Ecology and Environmental Management (www.ieem.org.uk).

1.0 Introduction

Background Information

1.1 Absolute Ecology was commissioned by Ben McDyre on behalf of the Executors to undertake a Great Crested Newt survey of seven ponds within 500 m of a site known as Church Croft, Caverswall (National Grid Ref. SJ 95237 42798) for the proposed development of twelve houses approximately. Seven Ponds were identified during an Extended Phase 1 Habitat survey, conducted in March 2011.

1.2 As defined in Planning Policy Statement 9 (ODPM, 2005) biodiversity and geological conservation, sites of biodiversity conservation value and protected species are material considerations in the planning process.

1.3 Aims and objectives of the field survey were as follows:

- To establish presence/absence of Great Crested Newts.
- If Great Crested Newt presence is confirmed, to determine population size and distribution
- provide sufficient information for the evaluation of perceived impacts of potential development and for the development of a detailed mitigation strategy to ensure legal compliance

Site Description

1.4 The site comprises one residential dwelling and a barn, which are currently vacant, with a driveway. The site is approximately 0.46 ha in size. It is composed almost entirely of managed vegetative habitats of mostly amenity grassland, species-poor hedgerows and stone walling. The surrounding landscape is rural bordered by farmland, residential and a commercial building.

Great Crested Newt Habitat

1.5 There are no ponds on the proposed development site but terrestrial habitat is present in the form of scrub stone walling, rubble and hedgerows on site. The site is well connected via hedgerows to a number of ponds in the surrounding landscape.

2.0 Legislation

2.1 As Great Crested Newts are listed on Schedule 5 of The Wildlife and Countryside Act (1981), they receive protection under Section 9 of this Act. The Act has been amended several times, most recently by the Countryside and Rights of Way Act 2000 which added 'or recklessly' to Section 9(4)(a) and (b). Thus, it is 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 which it uses for that purpose
- transport for sale or exchange, or offer for sale or exchange a live or dead Great Crested Newt or any part of a Great Crested Newt.

2.2 They are also listed in Schedule 2 of the Conservation (Natural Habitats & c.) Regulations (known as the Habitats Regulations) and as such receive protection under Regulation 39 of these Regulations which make 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
- keep, transport, sell or exchange or offer for sale any Great Crested Newts or anything derived from this species.

2.3 This means that the habitat of this species is also protected.

2.4 The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (the 2007 Regulations) have updated the Conservation (Habitats &c.) Regulations 1994. The main changes brought about by this legislation include the removal of the 'incidental result defence'. In other words it is no longer a defence to show that the killing, capture or disturbance of a species covered by the Regulations or the destruction or damage of their breeding sites or resting places was the incidental and unavoidable result of a lawful activity.

2.5 The Great Crested Newt is a UK BAP Priority Species and is included on the Staffordshire Local BAP.

2.6 Smooth or Common Newts, Palmate Newts, Common Toad and Common Frog are listed under Schedule 5 of The Wildlife and Countryside Act (1981). However, only part of Section 9(5) applies to these species. As such it is an offence to transport for sale or exchange, or offer for sale or exchange alive or dead individual or any part of an individual of these species.

3.0 Methodology

Field Survey

3.1 Great Crested Newt surveys took place on the 12th April, 19th April, 26th April and 3rd May 2011.

3.2 The surveys were undertaken by a Licensed Consultant Ecologist (Licence Number **20103220**).

3.3 Weather conditions encountered during the surveys are present in *Appendix 2* along with the full survey results.

3.4 The following methodologies were used:

- Bottle Trapping: tops were cut off empty 2 litre plastic bottles and the nozzle end inverted upon itself, thus creating a funnel trap system. These were then pierced at a vertical angle of around 30 degrees and canes placed through the holes creating a standard bottle trap design as stipulated within the best practice guidelines for Great Crested Newts (English Nature, 2001). These were then placed within the pond at 2m centres, where possible, ensuring that an air pocket formed in the trapping compartment. The traps were set as close to dusk as possible and checked in the morning; the traps were not left in-situ for more than 17 hours.
- Egg Search: the pond was swept across the pond to catch any newts within reach of the pond perimeter
- Torching: this entailed using high powered 1,000,000 candle power torches during the hours of nightfall to search the ponds. The pond was subject to 20 minutes of torching per 50 metres of the circumference, where access allowed.

Assessment

3.5 English Nature (2001) guidelines state that the presence/absence of a Great Crested Newt population in aquatic habitat can be determined from data collected after four survey visits, with at least two of these visits being timed between mid-April and mid-May. The population size class can be determined from data collected after six survey visits, with at least three of these visits being timed between mid-April and mid-May.

3.6 Using the methodology defined by English Nature (2001), population size can be categorised into small, medium or large populations. The maximum adult count per pond per night gained through torch survey or bottle trapping is quoted. For maximum counts up to 10 the population is classed as small, between 11 and 100 it is medium, and for counts over 100 it is defined as large.

Limitations

3.7 During the surveys pond 2 was inaccessible due to resident at Caverswall castle being not present.

4.0 Survey Results

Field Survey

4.1 The full survey results can be found in *Appendix 1.*

4.2 No Great Crested Newts were present in the five ponds surveyed; a summary of the results is shown in the table below.

Pond 1

METHOD	DATE						HIGHEST COUNT
	12/04/11	19/04/11	26/04/11	05/05/11	-	-	
Torching	0	0	0	0	-	-	**0**
Bottle Trap	0	0	0	0	-	-	**0**
Net Search	0	0	0	0	-	-	0

Pond 5

METHOD	DATE						HIGHEST COUNT
	12/04/11	19/04/11	26/04/11	05/05/11	-	-	
Torching	0	0	0	0	-	-	**0**
Bottle Trap	0	0	0	0	-	-	**0**
Net Search	0	0	0	0	-	-	0

Pond 6

METHOD	DATE						HIGHEST COUNT
	12/04/11	19/04/11	26/04/11	05/05/11	-	-	
Torching	0	0	0	0	-	-	**0**
Bottle Trap	0	0	0	0	-	-	**0**
Net Search	0	0	0	0	-	-	0

Pond 7

METHOD	DATE						HIGHEST COUNT
	12/04/11	19/04/11	26/04/11	05/05/11	-	-	
Torching	0	0	0	0	-	-	**0**
Bottle Trap	0	0	0	0	-	-	**0**
Net Search	0	0	0	0	-	-	0

5.0 Evaluation

Presence/absence

5.1 Great Crested Newts have not been recorded in any of the 7 ponds identified within 500m of the proposed development. Great Crested Newts are likely to be absent from Pond 2 which access was inaccessible and at the time of the surveys ponds 3 and 4 had dried up providing unsuitable breeding and colonization of great crested newts of the identified water body's, leaving ponds 1, 5, 6 and 7 to be surveyed.

Site Status Assessment

5.2 Great Crested Newts are a UK Biodiversity Action Plan Priority Species and are listed on the Staffordshire Biodiversity Action Plan. Based on the evidence presented the seven ponds identified within 500 m of the site which pond 2 was inaccessible and ponds 3 and 4 had dried up leaving ponds 1, 5, 6 and 7 which have been surveyed. It is considered that the proposed development will not have a negative impact on the population of Great Crested Newts as none were identified.

6.0 Impacts and Recommendations

Impacts

6.1 The site is the subject of a planning application to permit the redevelopment of the site.

- No impacts will occur towards Great Crested Newts during the terrestrial phase of their lifecycle.

Further Surveys

6.2 No further surveys are necessary in this instance. In line with Natural England guidelines, further surveys would only be required if the proposed works were to be delayed for four years or more. If this were to be the case, a repeat presence/absence survey would be recommended before works could commence, to check whether survey evidence and the status of the ponds remains the same as that described within this report.

Legal Compliance

6.3 European Protected Species (EPS) Licenses to permit activities that would otherwise constitute an offence under The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (the 2007 Regulations) which updated The Conservation Regulations 1994 for the purpose of development must be obtained from the relevant licensing authority.

Care and Vigilance during Works

6.4 Great Crested Newts could be found on site even after the above precautions have been carried out. Any contractors on site should therefore be advised to carry out all work with care and vigilance for this species. Should any Great Crested Newts be found during works, then works must cease and a licensed Ecologist must be consulted before works can continue.

7.0 References

The Conservation (Natural Habitats, &c.) Regulations 1994. HMSO

Countryside and Rights of Way Act (2000)

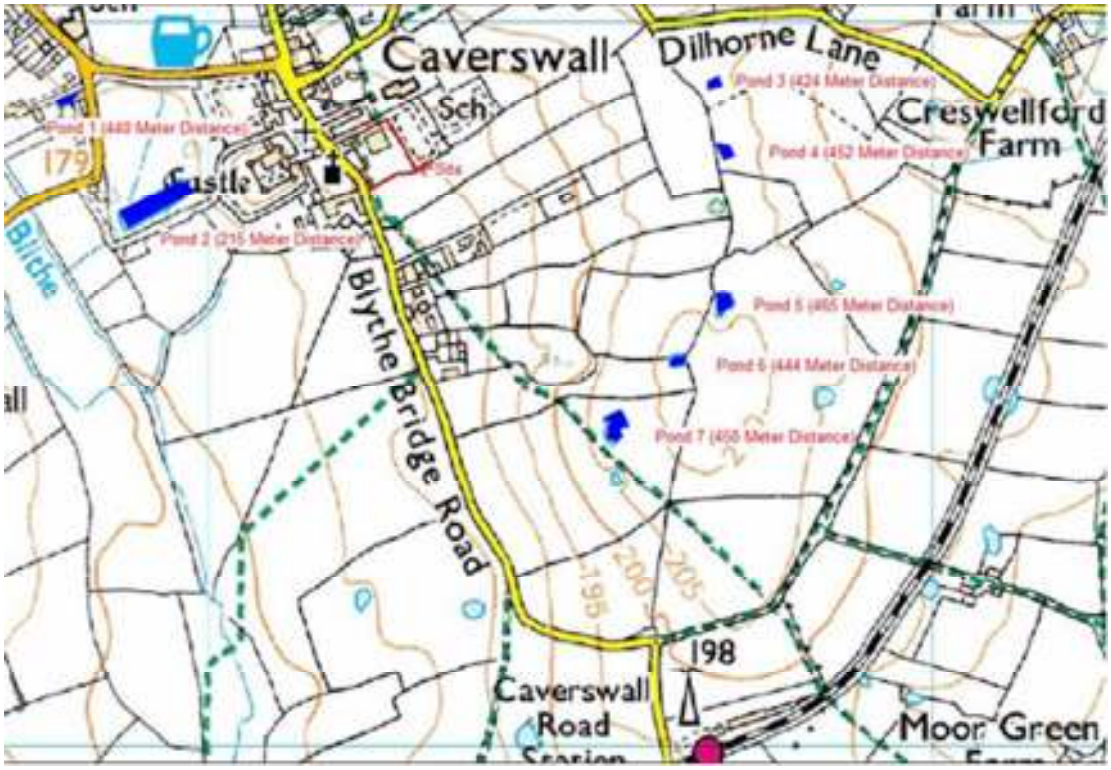
Natural England (2001) *Great Crested Newt Mitigation Guidelines*. Natural England

ODPM (2005). *Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9)*. ODPM: London.

Wildlife and Countryside Act (1981)

8.0 Maps

Map 1: Pond Location Plan with 500 m radius



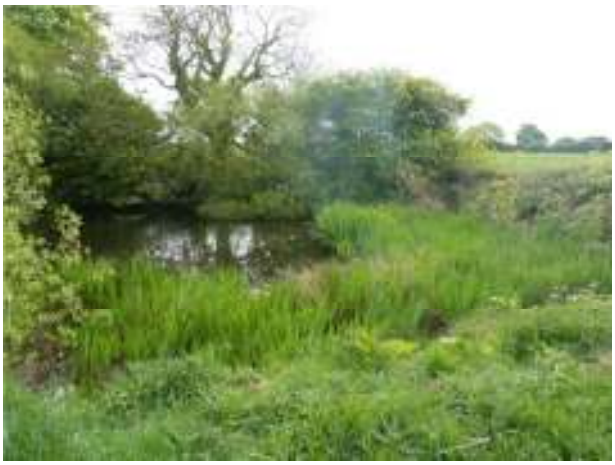
9.0 Photographic Plates

Photograph 1. Pond 1.

Photograph 2. Pond 5.

Photograph 3. Pond 6.

Photograph 4. Pond 7.



10.0 Appendix 1

Great Crested Newt Survey Results

Survey visit: 1	**Date: 12/04/2011**	**Min air temp: 7^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 1		**Turbidity: 10%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 1	**Date: 12/04/2011**	**Min air temp: 7^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 5	**Vegetation cover: 0%**	**Turbidity: 10%**	**No. of Traps: 10**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 1	**Date: 12/04/2011**	**Min air temp: 7^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 6		**Turbidity: 20%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	o	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 1	**Date: 12/04/2010**	**Min air temp: 7^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 7	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 25**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 2	**Date: 19/04/2010**	**Min air temp: 14.5^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 1	**Vegetation cover: 10%**	**Turbidity: 10%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 2	**Date: 19/04/2010**	**Min air temp: 14.6^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 5	**Vegetation cover: 0%**	**Turbidity: 10%**	**No. of Traps: 10**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 2	**Date: 19/04/2010**	**Min air temp: 14.5^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 6	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 2	**Date: 19/04/2010**	**Min air temp: 14.5^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 7	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 25**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 3	**Date: 26/04/2010**	**Min air temp: 13.3^{0}C**	**Weather conditions: 20% cloud, dry, light breeze**
Pond ref: 1	**Vegetation cover: 10%**	**Turbidity: 10%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 3	**Date: 26/04/2010**	**Min air temp: 13.3^{0}C**	**Weather conditions: 20% cloud, dry, light breeze**
Pond ref: 5	**Vegetation cover: 0%**	**Turbidity: 10%**	**No. of Traps: 10**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 3	**Date: 26/04/2010**	**Min air temp: 13.4^{0}C**	**Weather conditions: 20% cloud, dry, light breeze**
Pond ref: 6	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 3	**Date: 26/04/2010**	**Min air temp: 13.4^{0}C**	**Weather conditions: 20% cloud, dry, light breeze**
Pond ref: 7	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 25**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 4	**Date:05/05/2010**	**Min air temp: 15.2^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 1	**Vegetation cover: 10%**	**Turbidity: 10%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 4	**Date:05/05/2010**	**Min air temp: 15.1^{0}C**	**Weather conditions: 50% cloud, dry, light breeze**
Pond ref: 5	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 10**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 4	**Date: 05/05/2010**	**Min air temp: 15.2^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 6	**Vegetation cover: 10%**	**Turbidity: 10%**	**No. of Traps: 20**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	0	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										

Survey visit: 4	**Date: 05/05/2010**	**Min air temp: 15.3^{0}C**	**Weather conditions: clear, dry, light breeze**
Pond ref: 7	**Vegetation cover: 10%**	**Turbidity: 20%**	**No. of Traps: 25**

	Method										
	Torch			**Bottle trap**			**Net**			**Egg search**	**Larvae**
Species	Male	Female*	Imm.	Male	Female	Imm.	Male	Female	Imm.		
Great Crested Newt	2	0	0	0	0	0	-	-	-	0	0
Smooth Newt	0	0	0	0	0	0	-	-	-	0	0
Palmate Newt	0		0	0	0	0	-	-	-	0	0
Other amphibian species	-										