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Great Crested Newt Risk Assessment & Method Statement

Cherry Tree Farm
Red Hall Lane
LL13 0NA

Client: Mr E Jones

Date: April 2013

T Pearce & C Pearce

*N.B. The contents of this report may contain information regarding a protected species.
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1.0 Introduction

1.1 Background Information

Pearce Environment Ltd were commissioned by Mr E Jones in April 2013 to undertake a Great Crested Newt (GCN) risk assessment at the site.

This report has been prepared by T Pearce (Natural England Great Crested Newt licence number: CLS001127) on behalf of Mr E Jones, whom propose to develop the site known as Red Hall Farm.

1.2 Aims

The aims of this survey were to undertake a risk assessment of the site for the likely presence of great crested newts both within and adjacent to the proposed development site.

The assessment described in this report was commissioned to inform a decision on affect of GCN by the proposed works.

1.3 Project Background

The land during the survey was found to be very rutted, muddy and poached by cattle as it has been used for over wintering the cattle on fodder beet, the recent bad weather has also impacted on the land. (During our previous survey which was conducted in 2010 the field was semi improved grassland/ pasture used by sheep and in much better condition). The application site is bounded by managed mature hawthorn and blackthorn hedgerows, the hedgerow to the south east was partly defunct with gaps present. The southern hedgerow is separated from the application site by an existing track used for farm machinery (stone and mud leading to the entrance off Red Hall Lane). The south eastern corner has an existing gateway (segregating the two hedgerows) leading into semi improved grassland.

The western boundary consists of a newly planted hawthorn dominant hedgerow and stock/ rabbit fencing (with working farmyard and buildings beyond sited on hard standing). The north and north westerly boundary is a more mature and substantial hawthorn and blackthorn hedgerow interspersed with several mature oak tree stands.

The development will result in a change of an area of semi-improved neutral grassland (borderline arable cultivated ground owing to its current state or cultivated ground) to one residential dwelling. There will be no negative effect on the hedgerows surrounding the development and no mature trees will be affected. The nearby pond (pond 2) will not be directly affected by the land surrounding may be affected. Pond 1 is unlikely to be affected by the proposed development.

The site and ponds nearby were surveyed and ponds subjected to a Habitat Suitability Index assessment (HSI) for the suitability to be either terrestrial

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habitat or breeding ponds or both for the species.

1.4 Limitations

There were no limitations to the assessment carried out all land was freely accessible to undertake the works.

2.0 Context

2.1 Great Crested Newts

Great crested newts have a very high level of statutory protection. This means that great crested newts and all places they use for shelter (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) (Section 9, Schedule 5). In addition to the above protection, great crested newts are also protected under European legislation which is implemented in England via The Conservation of Habitats and Species Regulations 2010.

If both national and international legislation are taken together, the legislative protection afforded to the species makes it an offence to:

- Intentionally/deliberately kill, disturb, injure or capture 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.
- Possess or control any live or dead specimen or anything derived from 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 presence of a protected species is a 'material consideration' in planning terms and development of areas of land containing this species may often only proceed under a European Protected Species licence issued by CCW/ Natural Resources Wales. Licences for development purposes are issued under The Conservation of Habitats and Species Regulations 2010 and only allow what is permitted within the terms and conditions of the licence.

2.2 Other Amphibians

Apart from the great crested newt, the other British amphibians likely to be encountered at this site (common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Lissotriton vulgaris* and palmate newt *Lissotriton helveticus*) are protected under Section 9(5) of the Wildlife and Countryside Act 1981. This prohibits their sale, barter, exchange, transportation for sale

and advertising for commercial purchase.

These other amphibian species are generally common and widespread in England and Wales. However, local authorities may take into account situations where noteworthy populations of these species occur. For example, if a pond supports all five species of British amphibians in high numbers it may be afforded local protection via the planning process via its designation as a County Wildlife Site.

3.0 Assessment Methodology

3.1 Desk Study

The site and a wider 1km area was selected for the desk study to place the site in a geographical context. Consultation with freely available datasets was undertaken to identify any existing biological information.

Sites:

There are no sites of designation such as SSSI within close proximity to the site, however the clients land holding includes a County Wildlife Site (Redhall Grassland).

Amphibian Species:

The following species were recorded within 1km of the site;

- Great crested newt
- Common frog

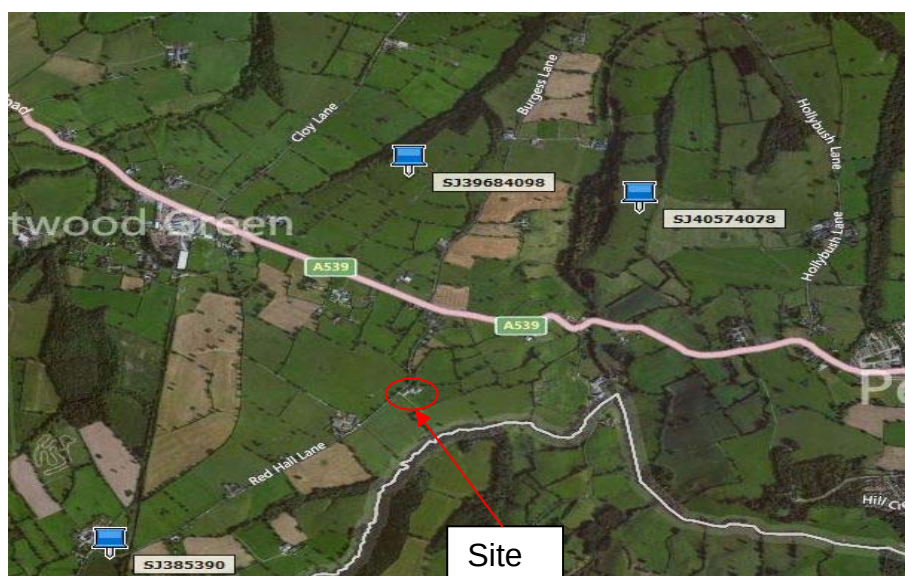


Fig 1 Aerial View showing GCN Records in relation to the site

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3.2 Field Visit

A site visit was undertaken on 17th April 2013 to assess the site and all ponds within 100m (100m is an acceptable survey distance for the scale of the proposed works) of the proposed work site.

This was carried out to determine likelihood of presence, the level of risk posed by the proposed works and whether full survey for great crested newts should be carried out. In order to assess risk, the site assessment comprised the following elements:

A daylight walkover was undertaken to assess the site and surroundings in relation to any nearby ponds which might support great crested newts.

Ponds and ditches were assessed under the HSI assessment where possible and were on this occasion hand netted.

Assessment of the areas to be affected by the proposed works in relation to likely risk to great crested newts.

3.3 Personnel

The field visit was carried out by T Pearce experienced amphibian surveyor (GCN Survey Licence Number: CLS001127 and CCW 32767:OTH:2011) and member of the Shropshire Amphibian and Reptile Group (SARG) and Sponsor of the Amphibian and Reptile Groups of the UK (ARGUK) Workers Meeting 2012.

C Pearce experienced amphibian surveyor licence number CLS001126 also undertook the survey.

3.4 Weather Conditions

The weather on the day of site visit was clear, sunny and dry with a strong breeze.

3.5 Timing & Limitations

The site visit was carried out in April 2013. The inspection involved a straightforward assessment of the terrestrial habitat, so this posed no constraints and could be undertaken at any time of year. The nearby ponds were also subject to a Habitat Suitability Index (HSI) and provided additional useful information. Based upon the nature of the works proposed and the site evidence gathered it is considered that a presence/absence survey for great crested newts is required to enable a decision to be made as to the likely risk to any newts from the proposed works.

4.0 Assessment Results

4.1 Newt Distribution Results

The desk study returned records for great crested newts within this part of Wales and nearby Shropshire. It is clear that the area supports populations of this species across a wide area where suitable conditions exist.

It can be seen from Plate 1 that there are ponds within 100m of the proposed development site.

By looking at Plate 1 it is clear that the wider surrounding land has potential for GCN, (particularly north and north east) with grassland, hedgerows, scrub and ponds and woodland surrounding the site which may provide suitable newt terrestrial habitat. The site itself has poor terrestrial habitat, being currently very rutted, muddy and poached by cattle but has some connective habitat such as the hedgerows.

Risk of great crested newts being present will need to be calculated by conducting the appropriate presence/ absence surveys, four visits between mid April and mid June with a minimum of two visits between mid April and mid May. If GCN are found in one or more of the ponds then a full population assessment comprising of a further two visits if required.

Therefore it has to be assumed that, although a minor risk, should the ponds support great crested newts, they could also potentially be present near and in the working area.

In order to determine whether a CCW EPS Licence may be required to handle or move great crested newts, the conditions at the site and the nature of the proposed works were subsequently evaluated.

Plate 1: The location of ponds near to the application site, with distances from proposed works location shown in metres.



Plate 1 Showing location of ponds in relation to the site

Plate 2: habitat of application site.

	
General view of existing condition of ground on site	General view of existing hedgerow and track
	
Showing existing entrance to site and hard standing	Photograph of pond 2 and surrounding rutted poached field

4.2 Risk Assessment

Following on from the desk study, the site visit also helped to determine those habitats that will be directly affected by the works and any likely level of risk. These were as follows:

- Two species of newt were discovered in pond 2 during hand netting on our recent visit. These were smooth newt and palmate newt.
- None of the other surrounding habitats, such as the hedgerows or ponds will be affected in any way by the proposed works.
- Amphibians may commute over the site (Mar-Oct) if suitable habitat is created or left, this is expected to be along existing hedgerows, north, south and east.
- Hibernating amphibians are not expected to be encountered on site, providing suitable habitat for hibernation is not created.
- The proposed dwelling would be within 100m of pond 2.

The first observation about the working area is that the habitat of the working area is only at best moderately suitable for terrestrial or refuge seeking newts. The site will have some potential value as a habitat for great crested newts, this is limited to the boundary hedgerows and taller vegetation although the size and moderate value is low compared to that prime habitat that exists off the site, particularly to the north and north east of the site. There are no ponds or other features to be affected which are known to be preferred habitats for this species.

4.3 Pond Assessment

Pond 1.



Pond 1 is 105m north west of the proposed development. The pond does not benefit from being stock fenced, but is situated in the corner of a semi improved grassland/ pasture field, at the time of the survey being grazed by sheep. It was evident that sheep do and have entered the pond.

The pond is directly bordered by agricultural buildings and a slatted fence to the south west and to the north and east by pasture land.

To the west of the pond is County Wildlife Site (Redhall Grassland) pictured below, which also contains an open stagnant ditch containing water at the time of the survey. This offers good terrestrial habitat for amphibians in terms of the longer grass, hedgerow and piled branches.



Pond 1 – Grid Ref: SJ 681545857

The pond is approximately 400m² and is made up of a hollow in the field containing an ephemeral pond, it is very over shaded with Salix and Grey Willow (*Salix cinerea*), Poplar and ash (*Fraxinus excelsior*). The water quality in terms of aquatic invertebrate diversity is moderate and water louse and diving beetle were found during hand netting. There was floating sweet grass, and soft rush but the aquatic vegetation was limited and not diverse. There was no frog spawn found in the pond at the time of survey.

The pond was hand netted and no evidence of newts or any other amphibian species were discovered.

The pond scores 0.67 = AVERAGE suitability for the presence of newts.

Pond 2.



Pond 2 is particularly close to the proposed development site, measuring approximately 40m away. The pond is surrounded by rutted, poached land containing fodder beet which has been used to over winter cattle on. The pond has been stock fenced at some point in the past, but more recently has been encroached by cattle, which has caused the creation of a shallower ledge containing common nettle and grass, would suggest some drying out at the edges. The pond is bordered to the east side by a hawthorn dominant hedge approximately 3m away, which is gappy in places.

During hand netting two male smooth newts (*Triturus vulgaris*), two female palmate newts (*Triturus helveticus*) and a newt eft with developed limbs were all discovered within the pond.



Female Palmate newt found in pond 2



Male smooth newt found in pond 2

Pond 2 – Grid Ref: SJ 3970639890

The pond is approximately 350m², The pond is bordered around the southern edge by hawthorn and willow stands, which has been used by nesting birds. The pond contains some diverse aquatic vegetation, including yellow flag, soft rush, floating sweet grass and starwort.

The water quality was good with plenty of invertebrates being noted during the hand netting exercise, such as Dragonfly larvae, water boatman, Damselfly larvae, water louse and water snail.

The pond scores 0.79 = GOOD suitability for the presence of newt

Pond ref	Pond 1	Pond 2
SI1 - Location	1	1
SI2 - Pond area	0.8	0.6
SI3 - Pond drying	0.5	0.9
SI4 - Water quality	0.33	1
SI4 - Shade	0.6	1
SI6 - Fowl	0.67	1
SI7 - Fish	1	1
SI8 - Ponds	0.9	0.9
SI9 - Terr'l habitat	1	0.33
SI10 - Macrophytes	0.4	0.6
HSI	0.67	0.79

Table 1 – HSI scores.

HSI Pond suitability scoring:

<0.5 = poor

0.5 – 0.59 = below average

0.6 – 0.69 = average

0.7 – 0.79 = good

> 0.8 = excellent

To summarise, the key points of the site visit are as follows:

- Pond assessment of the nearby waterbodies (ponds 1, 2) was possible. The ponds were subject to a HSI assessment and netted, two species of newt were discovered therefore a presence/ absence survey for GCN is required.
- The nearby land and hedgerows were considered suitable for great crested newts. It is likely that they would use any hedgerows for commuting and possibly over wintering, preferentially.
- The application site is of short sward height and moderate value. These facts are important because they increase the likelihood of being able to detect any great crested newts which might be present in the working area and also reduce the chances of great crested newts from elsewhere entering the working area.

5 Recommendations

A full GCN presence/absence survey is required to determine presence of GCN within ponds 1 & 2 and the likely effect the proposed works may have if the species is present.

This survey must be undertaken between mid March and mid June using a minimum of three survey methods out of four that are available this would include bottle trapping, torch counts, egg searches or hand netting. A minimum of four visits is required and if GCN are present in a pond a further two visits are required to establish a population estimate.

A minimum of two survey visits must be undertaken between mid April and mid May. This methodology is as per Natural England and ARG UK guidelines.

6 References

ENGLISH NATURE (2001) Great Crested Newt Mitigation Guidelines (August 2001 version). English Nature, Peterborough.

FROGLIFE (2001) Great Crested Newt Conservation Handbook. Published by Froglife, Mansion House, Halesworth, Suffolk.

JOINT NATURE CONSERVATION COMMITTEE (1998) 'Herpetofauna Workers Manual' Gent, A. & Gibson, S. (eds). JNCC, Peterborough.

7. Quality Assurance

Pearce Environment Limited is an established, family run ecological consultancy, based in Shropshire providing common sense, expert ecological advice throughout the UK to our clients including: architects, developers, planning consultants, construction companies, agriculture, utility, road and rail contractors. we assist our clients with protected species/habitat surveying, licensing and mitigation, mostly for planning applications. We are CHAS registered and Linkup approved.

Tristram E Pearce - Managing Director AIEEM

He holds a Natural England Great Crested Newt licence (No:CLS001127) Countryside Council for Wales GCN licence (No: 32767:OTH:SA:2011) Natural England Barn Owl licence 20122567.

Tristram has participated on the Otter Diet and Spraint Research at Bangor University in 2012 and has successfully completed "Barn Owl Ecology, Surveys and Signs" course and was one of the first to complete the higher level "Advanced Barn Owl Surveying and Mitigation" course both run by The Barn Owl Trust. He has completed three day "Bat Survey and Mitigation for Ecological Consultants" course run by the Bat Conservation Trust (BCT)

Tristram's wealth of knowledge about badger and fox behavior has been built up over the past 20 years, working alongside his father and learning at first hand from the animals themselves as they recovered in the wildlife rehabilitation centre. Tristram is a FERA (Food and Environment Research Agency) trained badger trapping and lay vaccinator.

Today as a company director he is actively involved in every aspect of protected species surveying, monitoring, conservation and mitigation. He has experience in surveying for badgers, bats, amphibians, reptiles, water voles, kingfishers, barn owls, birds of prey, otters, breeding birds, and freshwater white clawed crayfish.

He has significant practical experience of sensitive planning issues. He routinely deals with every aspect of mitigation and project management. He has been issued with numerous licenses from English Nature, the Department of Environment Farming and Rural Affairs and the Countryside Council for Wales. Tristram is trained in confined space working and possesses his Personal Track Safety Certification.

Member of: The Mammal Society / Institute of Ecology and Environmental Management

Shropshire Mammal Group / Shropshire Amphibian and Reptile Group

George E Pearce - Director

George who has recently published a book on badgers, conservation and rehabilitation, enjoys the highest reputation as an expert in his field. He has studied badgers and their behavior for over 50 years and has worked closely with many animals on a daily basis. George Pearce became a professional consultant prior to the Protection of Badgers Act, 1992. He has been granted licenses by English Nature, The Ministry of Agriculture Fisheries and Food, Department of Environment Farming and Rural Affairs, The Welsh Office Agricultural Department and The Countryside Council for Wales. He is recognized as a badger and fox expert by Magistrates and Crown Courts and has appeared as an expert witness in numerous badger related court cases. He lectures on the lifestyle of the badger and fox to a wide range of audiences and speaks regularly at nationwide conferences. He has many years of hands on experience, gained when running an animal rehabilitation unit. The RSPCA and local vets have placed injured and convalescent animals and birds in his care and he has successfully returned to the wild, over 100 badgers and 60 foxes. He brings to his work a lifetime's interest in badgers and foxes and offers independent and unbiased advice to all clients.

George is also a successful author with his first book published in 2010 on badgers. (Badger Behaviour, Conservation & Rehabilitation)

Charlotte Pearce – Ecologist

Charlotte holds a Natural England Great Crested Newt licence (No:CLS001127) and has experience in surveying for many species such as newts, bats, badgers, barn owl, reptiles. She has gained a good practical knowledge built up over her time as a surveyor and time spent with Shropshire Bat Group and Field Studies Council. Charlotte has a passion for wildlife and cares for native injured wildlife at the rehabilitation centre, such as barn owls, tawny owls, orphaned animals and has successfully released animals back in the wild.

Will Macken BSc (Hons) Grad IEEM (Associate Ecologist)

Will Macken is a licensed bat worker with many years experience in various ecology disciplines working both nationally and internationally, he is part of Shropshire bat group and specialises in protected species mitigation work and protected species licence application work. NE licence numbers:20114883 (bats), CLSO114 (GCN).

Rory Macken (Associate)

Environmental consultant and contracts manager with over 9 years of experience, running projects to help clients achieve statutory environmental and ecological compliance. Rory is a Code for Sustainable Homes assessor, BREEAM qualified assessor, and has undertaken various protected species surveys as part of a larger team.

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