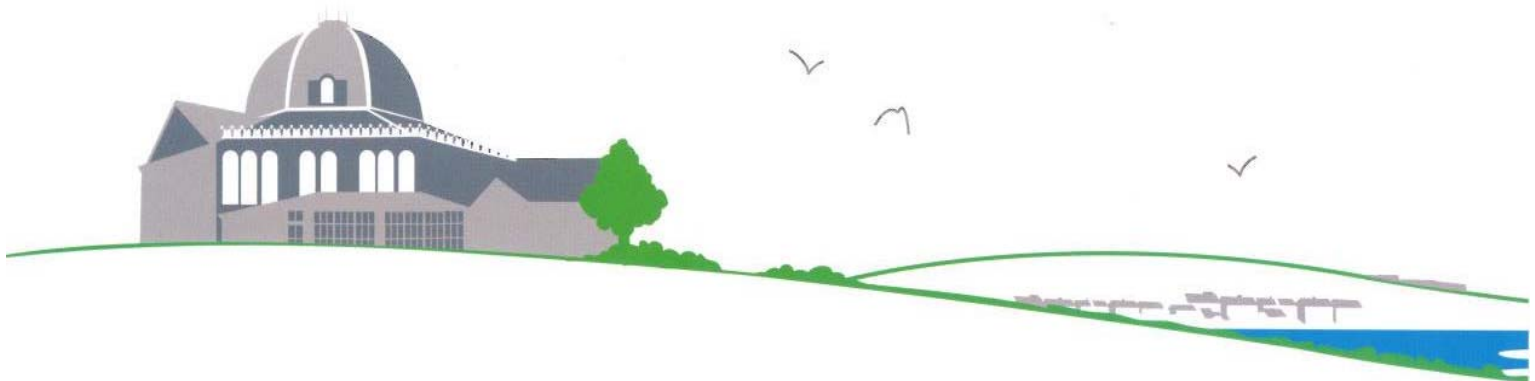




CHRIS BURNETT ASSOCIATES
TREVALYN FARM
GREAT CRESTED NEWT
REASONABLE AVOIDANCE MEASURES
STATEMENT



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TREVALYN FARM

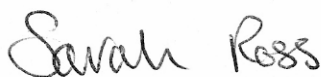
GREAT CRESTED NEWT REASONABLE AVOIDANCE MEASURES STATEMENT

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This project has been undertaken in accordance with PAA policies and procedures on quality assurance.



Signed: _____

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1. INTRODUCTION

Background

- 1.1 Full planning permission for the creation of a new lake, wetland area, wildflower meadows and woodland has been granted at Trevalyn Farm, Darland Lane, Rossett, Wrexham (Code: ROS P/2011/0771).
- 1.2 Penny Anderson Associates Ltd (PAA) undertook an ecological assessment of the site to accompany the planning application. The site was assessed as having some potential for the presence of small numbers of great crested newts (*Triturus cristatus*) (GCN) in suitable terrestrial habitats (grassland and hedgerows) and within the (largely dry) ditch network.
- 1.3 In summary, the desk study data collated during this assessment also identified a record of a single GCN approximately 1.2km from the edge of the application site. A number of ponds occur within the local area although there are none present on site. The ditch and hedgerow networks offered links between the application site and the wider landscape. No records of GCN were identified for the application site itself.
- 1.4 Planning Condition 11 requires the preparation and agreement of a Reasonable Avoidance Measures Statement in respect GCN, to ensure that the potential (albeit low) risk of this protected species being affected by the development is appropriately accounted for during the creation of the new habitats.
- 1.5 This document has been prepared in fulfilment of Condition 11. It provides information on the protected status of GCN, a short section on their habitat requirements and identification, appropriate Reasonable Avoidance Measures (RAMs) to be incorporated into the site clearance to avoid significant impacts on any GCN that might be present, the design of an artificial hibernaculum to be constructed for GCN and an outline of the tool-box talk to be given to the Contractors on site prior to any works (Appendix 1). Illustrative photographs of GCN are provided in Appendix 2 to aid identification.

The Protected Status of GCN

- 1.6 Great crested (or warty) newts are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by various legislation including the Countryside and Rights of Way (CROW) Act 2000 and the Conservation of Habitats and Species Regulations 2010, and this legislation is applicable to England and Wales.
- 1.7 Great crested newts are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:
 - Intentionally or recklessly disturb a GCN while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
 - Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a GCN (S9:4c).
- 1.8 There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

- 1.9 Great crested newts are also listed under Annexes IIa and IVa of EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2010. The Conservation of Habitats and Species Regulations 2010 state that a person commits an offence if they:
- deliberately capture, injure or kill any wild animal of a European protected species,
 - deliberately disturb wild animals of any such species, in such a way as –
 - I. to impair their ability to survive, to breed or reproduce, or to rear their young, or
 - II. in the case of animals of a hibernating or migratory species, to hibernate or migrate, or
 - III. to affect significantly the local distribution or abundance of the species to which they belong;
 - IV. deliberately take or destroy the eggs of such an animal, or
 - V. damage or destroy a breeding site or resting place of such an animal.
- 1.10 Under these Regulations it is an offence to damage or destroy a breeding site or resting place, whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead GCN or part of such an animal.
- 1.11 In addition, GCN are listed as a 'Priority Species' under UK Biodiversity Action Plan (BAP). UK BAP Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity. UK BAP Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England and Wales within Section 74 of the CRow Act 2000, and Sections 41 (England) and 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006. In Planning Policy Statement 9, local authorities in England are required to take measures to protect the habitats of these species from further decline, protect the species from the adverse effect of development and refuse planning permission for development that harms these species unless the need for, or benefit of, the development clearly outweighs that harm. The commitment to preserving, restoring or enhancing biodiversity is further emphasized for England and Wales in Section 40 of the NERC Act 2006.
- 1.12 Please note: the above text provides a brief summary of the legislation in relation to GCN for England and Wales and the original Acts, Regulations and any amendments should be referred to for the precise wording.

Identifying GCN

- 1.13 The following is based upon information given in 'Britain's Reptiles and Amphibians' (Inns 2009).
- 1.14 Adult GCN are approximately 100mm to 130mm in length (while the more common smooth newt is typically no greater than 80mm in length).

- 1.15 Great crested newts are predominantly black/very dark in colour with orange markings on their underside and a dark throat with white speckles (smooth newts are paler brown with brown spots (male) or olive brown (female) with a pale underside, black spotted throat and some orange on the belly).
- 1.16 Great crested newts have a rough, warty skin (smooth newts have smooth skin with no warts).
- 1.17 Breeding male GCN have a distinctive ragged-edged crest running along their back with a definite break in the crest between the back and the tail (breeding male smooth newts have a smaller, wavy-edged crest which is continuous along the back and tail). Out of water the crest becomes flattened.
- 1.18 When not breeding the crest of the male GCN is largely absent and the white stripe on the side of the tail is more useful for identification. The underbelly marking in male and females remain consistent throughout the year.
- 1.19 Photographs illustrating GCN in comparison to the more common smooth newt are presented in Appendix 2.

Summary of the Habitat Requirements of GCN

- 1.20 The great crested newt is an amphibian and relies on waterbodies for breeding, typically ponds but also ditches, canals and other still or slow moving water. They will, however, spend much of their time on land when not breeding.
- 1.21 In winter months GCN hibernate in habitat that provides a suitable cover along with relatively stable temperatures and moist but not wet conditions, such as in mammal burrows, within wood or stone piles, under refugia (including debris) and within the crevices amongst larger tree roots.
- 1.22 In the spring and summer period when the animals are active, GCN will move between favoured breeding ponds and nearby suitable terrestrial habitat, such as dense vegetation and refuges (for shelter) or shorter vegetation (foraging areas where invertebrate prey can be found). In early spring the animals will be moving from their winter hibernation areas to their breeding areas, and moving back again in late autumn.
- 1.23 At Trevalyn Farm the key habitats which are to be affected by the habitat creation scheme and where there is a risk of GCN being present and potentially disturbed by the operations comprise:
 - Grasslands;
 - Ditches;
 - Hedges/trees.
- 1.24 The following Reasonable Avoidance Measures provide a means by which the risk of disturbing or harming any GCN potentially within these habitats is appropriately managed during site operations to create the new habitats.

2. REASONABLE AVOIDANCE MEASURES

General

- 2.1 All Contractors working on site will attend a 'tool-box talk' on protected species issues which will include information on GCN and the RAM that will be followed on site during construction works (outline of talk provided in Appendix 1).
- 2.2 A laminated summary of the identification of GCN and what to do if GCN are uncovered (i.e. contact numbers, etc.) will be provided to the Contractors to carry with them while working on site.
- 2.3 The overseeing Ecologist will directly supervise all construction works where there is potential for GCN to be present.
- 2.4 Site clearance will be undertaken in a manner to allow any GCN potentially present (a) to disperse naturally and/or (b) to be found and relocated to the purpose-built hibernacula before any harm occurs to the animal; details are provided in the following sections.
- 2.5 Storage of materials will be in accordance with the following:
- Materials requiring storage will be retained on their pallets or placed on a pallet until used, to ensure they are slightly raised from the ground.
 - Bulk materials delivered to site and not able to be stored in the above manner will be used on the day of delivery.
 - Where practicable, areas used for storage of materials will be hard-standing or short mown grasslands, thereby avoiding any potential for impacts on GCN.
 - Any areas used for storage of materials that have potential to shelter GCN will be hand searched by the overseeing Ecologist prior to being used for storage. If necessary the appropriate method for clearance of vegetation (as described below) will be employed.
- 2.6 All excavated trenches will be covered over at the end of each working day with plywood and the edges sealed with sand or soil.
- 2.7 Trenches will be checked for any amphibians each morning prior to further works on the trenches, and any amphibians present will be removed to the hibernaculum. If GCN are suspected/confirmed on inspecting a trench their removal should only be undertaken by the overseeing Ecologist.
- 2.8 The Contractor is expressly forbidden to handle any GCN (or potential GCN) that is uncovered during construction works.
- 2.9 The Contractor should stop work and immediately notify the overseeing Ecologist should any GCN be uncovered when undertaking construction works that are not directly supervised by the Ecologist. Advice will then be provided on how to proceed safely.

- 2.10 If at any time GCN are discovered on site during construction works, works may need to be suspended while a decision is made on whether a European Protected Species licence is required to proceed.

Site Walkover

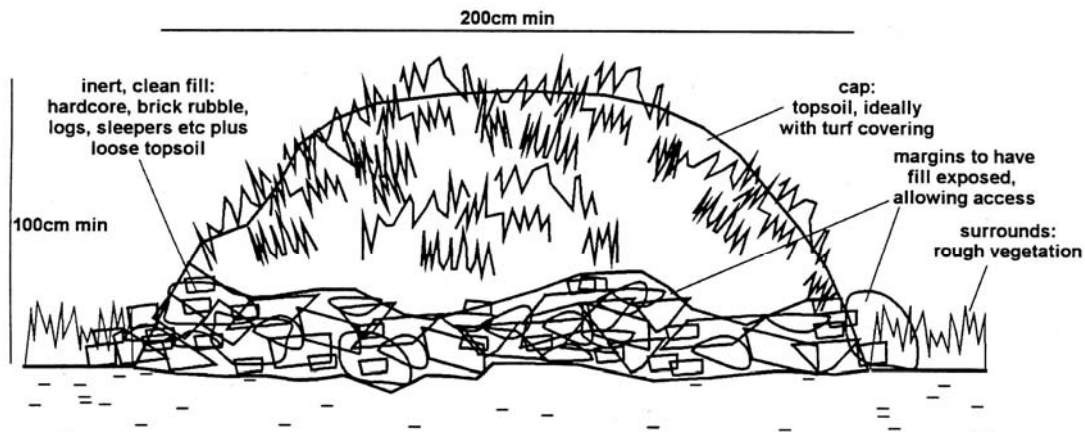
- 2.11 A site walkover will be completed by the supervising Ecologist to undertake the following:
- Re-assess the status of the ditches to be affected by the construction works and their suitability for use by GCN.
 - Re-assess the status of any terrestrial habitat (including trees/hedges) affected by the construction works and their suitability for use by GCN.
 - Identify any other features that could be used by GCN (such as rubble piles or debris) which need to be removed using a 'destructive search' approach (see below).
 - Identify areas suitable for the storage of materials.
 - Identify the location of the hibernaculum.
- 2.12 A map of the of the phased approach to site clearance, the methods to employ on each area to be cleared and the locations of any features such as rubble pile or debris that require a 'destructive search' will be prepared.
- 2.13 The map will also indicate areas that can be used for storage and the location of the new hibernaculum to be created.

Hibernaculum Creation

- 2.14 Should any GCN (or other amphibians) be uncovered during works, a purpose built hibernaculum will be required in which to safely relocate them away from site activity.
- 2.15 The hibernaculum will be built prior to works beginning and its construction will be supervised by the overseeing Ecologist.
- 2.16 The hibernaculum will follow the design provided in the Great Crested Newt Mitigation Guidelines (English Nature 2001), which is reproduced below:

Figure 3: Suggested hibernaculum design

This design mimics artificial and natural conditions in which great crested newts have frequently been found over-wintering. Dimensions should not be below 2m length x 1m width x 1m height. The illustrated design would be suitable for locating on an impermeable substrate. On free-draining substrates, the design is largely similar but the bulk of the fill is sited in an excavated depression in the ground. Hibernacula should ideally be positioned across a site, both close to and distant from breeding ponds, always in suitable terrestrial habitat and above the flood-line.



Phased Site Clearance

- 2.17 The clearance of all vegetation/habitat/features identified as having potential to support GCN will be undertaken in a phased manner and under the direct supervision of the overseeing Ecologist.
- 2.18 Areas of closely mown/grazed vegetation will be searched by hand by the overseeing Ecologist and, if no GCN are found, the area will be cleared under the Ecologist's direction. The majority of the area to be cleared is of this type of habitat.
- 2.19 Any tall vegetation will be trimmed to 150mm height before clearance, arisings removed and the area left for at least 24 hours to enable GCN to disperse naturally. The trimmed area will then be searched by hand for GCN by the overseeing Ecologist and, if no GCN are found, the area will be cleared under the Ecologist's direction. The areas of this type of vegetation are minimal.
- 2.20 A single hedge is to be removed. The overseeing Ecologist will inspect the hedge base prior to removal for any mammal tunnels or other features that might shelter GCN, and inspect any rootballs as they are extracted, as necessary.
- 2.21 A single ditch is to be subject to ground works associated with the new landscape drainage/pool design. This ditch will be carefully searched for any GCN immediately prior to any works. If necessary any water will be netted to enable removal of any GCN and sediments carefully hand-searched for any sheltering juvenile GCN.
- 2.22 Where rubble piles, debris or other features on site which may be used by GCN are to be removed, a 'destructive search' approach will be used, whereby the overseeing Ecologist directly supervises the gradual removal of the feature with careful on-going inspection for GCN.

- 2.23 Any GCN (or other amphibians) found will be immediately relocated to the hibernaculum by the Ecologist.

3. REFERENCES

English Nature, 2001. *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

Inns, H., 2009. *Britain's Amphibians and Reptiles. A Guide to the Reptiles and Amphibians of Great Britain, Ireland and the Channel Islands*. WildGuides Ltd., Hampshire.

APPENDICES 1 and 2

Outline Tool-box Talk to be given to Contractors

Photographs of GCN and Smooth Newts

Appendix 1: Outline Tool-box Talk to be given to Contractors

Trevalyn Farm: Managing Site Works in Respect of Great Crested Newts (GCN)

Key Points:

- GCN are amphibians (along with frogs and toads)
- Rely on water for breeding but spend much time on land
- Key breeding habitats – ponds, ditches
- Key sheltering habitats - rubble/debris piles, dense vegetation, mammal burrows, amongst tree roots
- Their habitats are highly protected
- The animals are highly protected (cannot be handled or disturbed without a licence)
- They may occur at Trevalyn Farm – need measures to ensure they are removed from any works areas prior to construction
- **Reasonable Avoidance Measures (RAM) Statement** gives the approach required

Trevalyn Farm: Managing Site Works in Respect of Great Crested Newts

Identification of GCN:

- Large (100 to 130mm long)
- Dark, warty, moist-looking skin
- Orange underbelly with dark spots
- Black throat with white freckles Male has distinctive crest along back when breeding, which has a break between body and tail
- Male crest indistinct when not breeding but dip between body and tail still noticeable
- Female has no crest, orange stripe along side of tail
- Smooth newts are smaller (80mm), olive/light brown, continuous crest on the male, paler underbelly (with an orange stripe) and pale throat with black markings. Markings and crest indistinct in terrestrial (non-breeding) males

show pictures of GCN and smooth newts

Trevalyn Farm: Managing Site Works in Respect of Great Crested Newts

Measures to implement:

- There will be an overseeing Ecologist for site clearance of habitats/features likely to harbour GCN
- Areas for storage of material to be checked for GCN prior to use
- Material to be stored on pallets or used within the day
- Trenches to be covered and sealed with soil/sand at end of every day, then inspected for GCN when re-opened
- A hibernaculum will be constructed for GCN

Show pictures of hibernaculum design & construction

Trevalyn Farm: Managing Site Works in Respect of Great Crested Newts

Measures to implement:

- Short vegetation will be hand-searched by the Ecologist
- Tall vegetation will be strimmed to 150mm, arisings removed, left for at least 24 hours then hand-searched by the Ecologist
- Rubble piles or debris will be subject to destructive searches by the Ecologist
- Hedge base and rootball to be inspected by the Ecologist
- Any GCN found to be removed to the hibernaculum
- Only the Ecologists to handle any (suspected) GCN

Trevalyn Farm: Managing Site Works in Respect of Great Crested Newts

Procedure if (suspected) GCN found:

- **STOP** work in that area!
- Contact one of the overseeing Ecologists
 - Jon Byrd 07766 253 071
 - Victoria Burton 07796 448 381
 - Sarah Ross 07810 772 215
 - Peter Worrall 07810 772 212
- OR call Penny Anderson Associates office on 01298 27086
- Await their instruction on how to proceed

Appendix 2: Photographs of GCN and Smooth Newts

Male Great Crested Newt (breeding condition)



Photo: Great Crested Newt (by Barry Kemp)

www.uksafari.com

- Large
- Warty skin
- Dark colour
- Crest with break
- Orange belly
- Black throat
- White speckles

Male Great Crested Newt (out of water)

Crest flattened out of water and can become indistinct when not in breeding condition



Large size, dark colour and moist-looking warty skin still characteristic

Photo source: Chloe Pritchard, PAA

Male Smooth Newt (breeding condition)



- Smaller
- Smooth skin
- Brown
- Continuous crest
- Pale belly with orange stripe only
- Pale throat
- Black markings

Female Great Crested Newt (bottom)
Female Smooth Newt (top)



Photo Source: Oxfordshire Amphibian and Reptile Group www.oxfordshire-arg.org.uk

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