

Title	Proposed Multi-purpose Barn and Stables, Bryn Rossett Farm, Hanmer, Wrexham – Great Crested Newt Reasonable Avoidance Measures Method Statement
Client	Mr M. Cooper
Date of Method Statement	15th March 2011
Author	Tom Knight

1 Introduction

Method Statement

- 1.1 Marches Ecology was commissioned by Mr M. Cooper to undertake a site visit at the location of a proposed multi-purpose barn and stables, Bryn Rossett Farm, Hanmer, Wrexham (OS Grid Ref. SJ 463 409). The site visit was required in order to assess the potential value of the habitat present for Great Crested Newts (*Triturus cristatus*) and subsequently to produce a Method Statement detailing Reasonable Avoidance Measures (RAMs) to be implemented prior to and during the construction period.
- 1.2 The Reasonable Avoidance Measures have been discussed with Emma Broad (Wrexham County Borough Council Biodiversity Officer) and more recently with Zara Lomax (Wrexham County Borough Council Ecologist). The proposed RAMs were initially agreed with Emma Broad and outlined in the Design and Access Statement (DAS)¹ which was submitted with the planning application. In a letter dated 28th February 2011 (Ref. GD/MMJ/SJ44/1506830) the Countryside Council for Wales (CCW) confirmed that they do not object to the proposed scheme but recommended changes to reduce potential impacts. With regards protected species the letter states *‘We concur with the Reasonable Avoidance Measures suggested and welcome their appropriate implementation provided they are undertaken whilst under the supervision of a suitably qualified ecologist’*.
- Subsequent to this correspondence the requirement for amphibian exclusion fencing to enclose the proposed development site during the construction phase was identified and discussed with Zara Lomax. This Method Statement provides the Reasonable Avoidance Measures as briefly referred to in the DAS and is to be submitted in support of the planning application (Ref. P/2011/0120).
- 1.3 This document assesses the habitat both within the proposed development site and immediately surrounding area for its potential value to Great Crested Newts. The proposed non-licensed Reasonable Avoidance Measures (RAMs) scheme is outlined.

¹ *Design and Access Statement for Multi-purpose Barn & Stables (Agriculture/ livery) Adjoining Existing Indoor Ménage including Associated Landscaping.* Anthony J. Minshull; dated 15th February 2011.

The RAMs will ensure as far as is reasonably possible that impacts on Great Crested Newts are minimised/ avoided.

Project Background

- 1.4 The proposed development concerns construction of a barn and stables with a courtyard adjacent to an existing indoor ménage. The building will be erected on a steel-frame with grey plastisol sheeting on the external faces with concrete block dwarf walls at the base. Concrete and stone hardcore will be delivered on a daily basis. They would be spread and levelled on delivery. Mortar for the block-work would be delivered in plastic tubs. The footprint of the building would extend to approximately 22 m by 24.4 m. The building footprint will be located on an existing area of hard-standing.
- 1.5 It is envisaged that construction would be completed within two months. The work will be completed using a JCB 3CX (or similar) and a tele-handler for lifting the steel frame into place. The JCB would largely be used for excavating the footings. Vehicular access to the site would be via the existing gravelled track off the A539 road. There will be approximately six site personnel present at any one time.

2 Habitat Assessment

Introduction

- 2.1 The site visit was carried out on 11th March 2011 by Tom Knight of Marches Ecology. The weather was largely sunny with a light breeze. The survey focussed on land within the proposed development footprint and immediately adjacent land where access was provided. Land within 250 m of the proposed development site was also viewed where possible to do so from roads/ rights-of-way.

Site Description

- 2.2 The entire proposed development footprint is fairly level and is currently laid to small diameter hardcore (see photo below). There is virtually no vegetation and it is quite compacted. There are a small number of items such as fence-posts and gas canisters stored on the area; otherwise it is currently used for turning vehicles. It is likely to be of no particular value for amphibians and there are no obvious potential refugia/ hibernacula (other than some of the stored items).



- 2.3 The proposed development site is bordered to the south and east by areas of very short improved grassland largely used as horse paddocks. Immediately to the north there is an existing steel-frame building. To the west of the proposed development footprint there is the main access drive to the house. On the opposite side of the drive there is amenity grassland and a large pond (see photo; further described below).



Status of Great Crested Newts in the Area

- 2.4 An initial review of the OS map 1:25, 000 scale indicates that there may be eight and three further possible waterbodies (other than ditches and streams) within approximately 500 m of the proposed development site. During the site visit it was confirmed that one of these waterbodies is no longer present but a new waterbody was also located. It was not possible to view most of these waterbodies as they are located outside the applicant's landholding and are not close to rights-of-way. Seven of these waterbodies are located within approximately 250 m (of these six were confirmed to be present). The large pond within the applicant's garden (OS Grid Ref. SJ 463 408) measures approximately 70 m by 20-40 m. It is approximately 12 m from the proposed development footprint at its closest point. It supports a number of wildfowl and as such marginal and aquatic vegetation is limited. Marginal vegetation is limited to small stands of *Typha latifolia* (Bulrush) and *Juncus effusus* (Soft-rush). There are some scattered young trees/ shrubs around the edge and some Willows in the water. The applicant confirmed that fish are present in this pond.
- 2.5 A second pond is located within the applicant's land (OS Grid Ref. SJ 463 407). It is located approximately 117 m away from the proposed development footprint at its closest point. It measures approximately 40 m by 10-20 m. It is located in a depression in an improved grassland field and may dry out in the summer. Marginal vegetation is dominated by *Agrostis stolonifera* (Creeping Bent) with abundant *Glyceria fluitans* (Floating Sweet-grass), frequent *Juncus effusus* (Soft-rush), *Cardamine pratensis* (Cuckooflower) and small amounts of *Myosotis scorpioides* (Water Forget-me-not) and *Veronica beccabunga* (Brooklime). A small amount of frog-spawn was noted at the time of the site visit. It is used by small numbers of wildfowl.
- 2.6 A third pond is located on the northwest boundary of the applicant's land and approximately 167 m from the proposed development footprint at its closest point (OS Grid Ref. SJ 461 408). This pond measures approximately 10 m by 4 m. It has formed in a depression adjacent to a hedge and is approximately 0.3 m deep. It is likely to dry out in the summer. The margin and surface is dominated by *Glyceria fluitans* (Floating Sweet-grass) with abundant *Persicaria amphibia* (Amphibious Bistort), frequent *Agrostis stolonifera* (Creeping Bent) and occasional *Juncus effusus* (Soft-rush). It is open to livestock.
- 2.7 A fourth pond is located in an improved grassland field to the west of the applicant's landholding and approximately 210 m from the proposed development footprint at its closest point (OS Grid Ref. SJ 461 408). It could not be viewed in detail but may be shallow as the entire surface is dominated by *Juncus effusus* (Soft-rush). It measures approximately 25 m by 15 m. A number of young Willows are located around the edge.
- 2.8 The waterbody at SJ 463 410 is approximately 157 m from the proposed development footprint at its closest point. It is a small pond but could not be viewed in detail. The waterbody at SJ 462 409 is approximately 185 m from the proposed development footprint at its closest point. It could not be viewed in detail; the presence of this waterbody was confirmed due to the presence of Willows and Rushes.

- 2.9 All four ponds that were viewed within 250 m appear to provide suitable though sub-optimal aquatic habitat for Great Crested Newts. The large pond in the garden may not be suitable for breeding due to the presence of fish. The other three ponds may all be shallow and may dry out at certain times of year. There are no records for Great Crested Newt close to the proposed development site shown on the NBN Gateway².

Summary Evaluation

- 2.10 The terrestrial habitat within the footprint of the proposed development is unlikely to be of any particular value for (foraging/ dispersing/ hibernating) Great Crested Newts. There are virtually no potential refugia/ hibernacula. It is possible that individual newts might disperse across the area.
- 2.11 The short grassland, hard-standing/ buildings that surround the proposed development site also provide potential terrestrial habitat of negligible/ low value. There may be seven (six confirmed as present) waterbodies within 250 m of the proposed development. The large pond within the applicant's garden is approximately 12 m from the proposed development at its closest point. It is believed that this pond supports fish and as such is unlikely to be of particular value for Great Crested Newts. Two other ponds within the applicant's landholding provide sub-optimal potential aquatic habitat for Great Crested Newts.
- 2.12 Great Crested Newts commonly move between ponds that are within 250 m of each other, and have been recorded travelling over 1 km (English Nature 2001). Due to the presence of several waterbodies that may be used by Great Crested Newts nearby it is possible that individuals may disperse across some part of the proposed development footprint. There is the potential for disturbance or killing of animals during any works at this site although the risk accorded by the proposed work is considered to be fairly low.
- 2.13 As such this RAMs Method Statement details a precautionary approach to avoid any impacts on [individual] Great Crested Newts. Subject to appropriate implementation of this RAMs scheme no impacts due to the proposed development on the Favourable Conservation Status of the local Great Crested Newt population are envisaged.

3 Legislation

- 3.1 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981*, as amended, and receive full protection under *Section 9*. The 1981 Act was amended by the *Countryside and Rights of Way Act 2000* (CROW Act) which further extends the protection. It is also listed on *Annexes II* and *IV* of the European Union Directive on Natural Habitats and Wild Fauna and Flora (*Council Directive 92/43/EEC*), which is implemented in the UK by *The Conservation of Habitats and Species Regulations 2010*. It is included on *Schedule 2* of the Habitats Regulations which gives it full protection under *Regulation 40*. The Great Crested Newt is therefore a so-called European

2

<http://data.nbn.org.uk/gridSquares/10kmSquareSpeciesData.jsp?parentSq=SJ54&allIDs=1&desig=0&spGrpKey=53&engOrd=0&src=1&homePageX=158&homePageY=259&spKey=137023&map=1&mapService=tenKmSelectorGBv4>

Protected Species. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.

3.2 Under the above legislation it is an offence to intentionally or recklessly:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

3.3 *Section 74(2) of the CRow Act 2000 (now under Section 42 of the Natural Environment and Rural Communities Act 2006)* requires the National Assembly for Wales to prepare and publish a list of species and habitats that it considers to be of principal importance for the conservation of biological diversity in Wales. The Great Crested Newt is included on this list. *Section 74* also places a duty on the National Assembly for Wales to have regard, in exercising all its functions, to conserve biological diversity in accordance with the United Nations Convention on Biodiversity.

3.4 The Great Crested Newt is a priority species in the UK Biodiversity Action Plan (UK Biodiversity Steering Group 1995, 1998a & b), which includes objectives and targets to protect and restore newt habitats and to create new sites through habitat management and re-creation. There is also a SAP for Great Crested Newts in Wrexham (Wrexham County Borough, 2003). The Wrexham BAP is a supplementary planning guidance document.

4 Great Crested Newt Identification

4.1 This sub-section of the document is provided for reference in the event that any amphibians are found on site during the work. It will be discussed with all site personnel prior to the start of work. Identification of any newts that may be found is likely to require the confirmation of a suitably qualified ecologist.

4.2 Great Crested Newts are the largest of the three British species of newt; adult males can reach 15 cm in length, with females slightly larger at 18 cm. The upper surface and flanks are dark brown or black and distinctly warty, with a row of white/silver dots present along the side of the head and body. Males develop a characteristic jagged dorsal crest (which has a marked break where the tail joins the body) during the breeding season (although this lies flat when newts are on dry land). The belly is dark orange or yellow with a distinct pattern of black blotches. The throat is whitish and thickly spotted with brown/black.



Male Great Crested Newt on land (above) and female (below).



- 4.3 The Great Crested Newt may be confused with the Smooth Newt (*Lissotriton vulgaris*), although adults of this species are generally smaller (at 10-11 cm). In addition, although the male Smooth Newt develops a dorsal crest, this is unbroken from head to tail and is also undulating, as opposed to jagged. The male has brown/olive green or tan skin with black spots and the female a light brown colouration with darker spots or speckles. The belly of both the male and female is creamy yellow or orange, and the throat slightly lighter, both with dark spots or speckles.



Male Smooth Newts on land.

- 4.4 The third species of British Newt is the Palmate Newt (*Lissotriton helveticus*). It is slightly smaller than the Smooth Newt at 7-11 cm in length, although is superficially similar to the Smooth Newt. The two species can be difficult to distinguish, particularly females. The male Palmate Newt has a much less developed dorsal crest (which is also straight edged as opposed to undulating) than a male Smooth Newt. The male Palmate has a 4-7 mm tail filament and black frills / well developed webbing on the hind

feet. Typically, the throat of males and females is pure white/pinkish and very rarely spotted (in contrast to Smooth Newts).

5 Proposed Mitigation Measures

Exclusion Fencing

- 5.1 It is proposed to install temporary amphibian exclusion fencing around the proposed development site. The fencing will be installed in accordance with currently available guidance (*e.g.* English Nature 2001). Wherever possible this exclusion fencing will be 'one-way' particularly along the boundary closest to the pond. Should a low number of Great Crested Newts be located during fence installation or implementation of the RAMs (see below) then they would be moved out of the fenced area and relocated for welfare reasons only to a suitable receptor site (likely to be close to the pond).
- 5.2 If a Great Crested Newt is found during the fence installation it will be moved (for reasons of welfare only) to an appropriate 'receptor site' outside the development site. The receptor site is likely to be within the applicant's garden under dense vegetation. All work will then be suspended and the Countryside Council for Wales consulted. It is possible that in this instance or if a Great Crested Newt is found at any other time during the work, a Welsh Assembly Government (WAG) 'development' licence may be required in order to lawfully proceed. Other amphibians that may be found during the implementation of the RAMs scheme would also be moved to the 'receptor' site.
- 5.3 Following installation of the exclusion fencing construction will not be initiated at the site for a minimum of one week. This will allow any amphibians that may be present the opportunity to cross the one-way fencing. The exclusion fencing will remain in place until all construction/ landscaping activities have been completed. The fence integrity should be maintained; any damage should be repaired within the day on which it occurred. The applicant/ construction personnel will be responsible for checking the condition of the exclusion fencing on a weekly basis and ensuring that it is maintained in an appropriate condition.

RAMs Method Statement

Preparatory

- 5.4 This RAMs Method Statement will be discussed in detail with all site personnel/ on-site contractors before any works on the proposed development are carried out. This will take the form of a site meeting and will incorporate advice with regard to the identification features of Great Crested Newts and the procedure that should be followed if a Great Crested Newt is discovered during work.
- 5.5 Before any works on the proposed development commence a copy of this Method Statement will be issued to all site personnel/ contractors and a signed copy will be retained by the ecologist. This Method Statement must be strictly adhered to by all site personnel/ contractors involved with the proposed work.

- 5.6 The ecologist overseeing this project is Tom Knight (Marches Ecology) who can be reached on 07928 212545. In the event that the ecologist cannot be contacted, please contact Max Ellson on 07950 220188.

Working Protocol

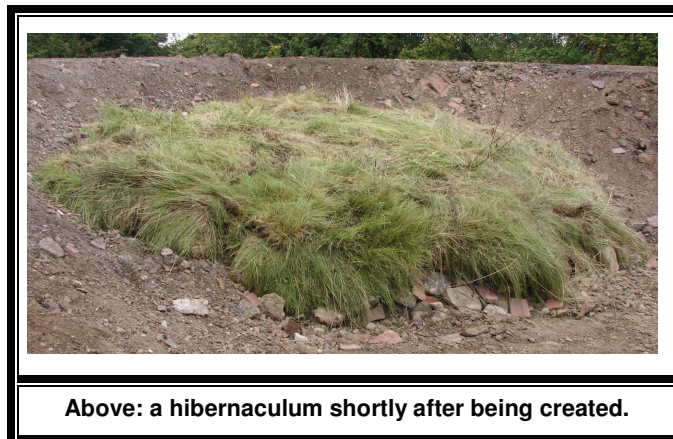
- 5.7 A suitably licensed³ ecologist will undertake a hand-search of the development footprint before any work starts and after the week when the site has been enclosed by the exclusion fencing. This will focus on the area within the exclusion fencing. As stated above if a Great Crested Newt is found during this search it will be moved (for reasons of welfare only) to an appropriate 'receptor site' outside the development site. All work would then be suspended and the Countryside Council for Wales consulted. It is possible that in this instance a Welsh Assembly Government (WAG) 'development' licence may be required in order to lawfully proceed.
- 5.8 The ecologist will subsequently supervise any stage of the work that could potentially impact features that could be used by Great Crested Newts. This is likely to be limited to any small-scale works that may be required outside the amphibian exclusion fencing.
- 5.9 At times when there is less/ no risk to Great Crested Newts (e.g. work within the amphibian exclusion fencing) the ecologist will remain on stand-by (off-site) for the duration of the work; site contractors will be responsible for implementing a watching-brief. This will entail a brief visual search of the site each day prior to work being initiated. When stored materials are moved, particular attention will be paid to determine if any amphibians are located underneath.
- 5.10 Should a newt be found during the work on-site contractors will halt all activity immediately, contact the ecologist and wait until the ecologist arrives to remove the newt to an appropriate location. If any newt is found during the work the ecologist should be called to confirm identification before any action is taken. If other amphibians such as Common Frog (*Rana temporaria*) or Common Toad (*Bufo bufo*) are found during work, and confidently identified, then on-site contractors can move it to an appropriate location, as outlined above (firstly making sure their hands are damp).
- 5.11 In addition to that outlined above, the following measures will be undertaken:
- All work will be undertaken from areas of existing hard-standing/ compacted earth wherever possible. No machinery or other materials will be stored on any grass or other vegetation over night;
 - No machinery/ vehicles will access the area outside the exclusion fencing to undertake work associated with the proposed development unless under supervision by the ecologist (excepting delivery vehicles *etc*);
 - Any work undertaken outside the exclusion fencing would be subject to the RAMs outlined above and supervised by the ecologist;
 - Prior to leaving the site at the end of each day, all tools and other materials will be stored securely either off-site or located on hard-standing within the fenced area;

³ The ecologist should hold a current Countryside Council for Wales 'survey/ disturbance' licence.

- Any spoil or other loose material that may be stored on site overnight must be placed on plastic sheeting on top of a pallet (or similar) so that it is raised off the ground;
- Should any holes/ excavations be left on site overnight a suitable ramp (*e.g.* plank of wood) will be placed so as to provide newts with a means of escape. The hole would be subject to a visual search (for amphibians) in the morning by site personnel; and
- Machinery and vehicles will be located on hard-standing overnight.

6 Proposed Compensation Measures

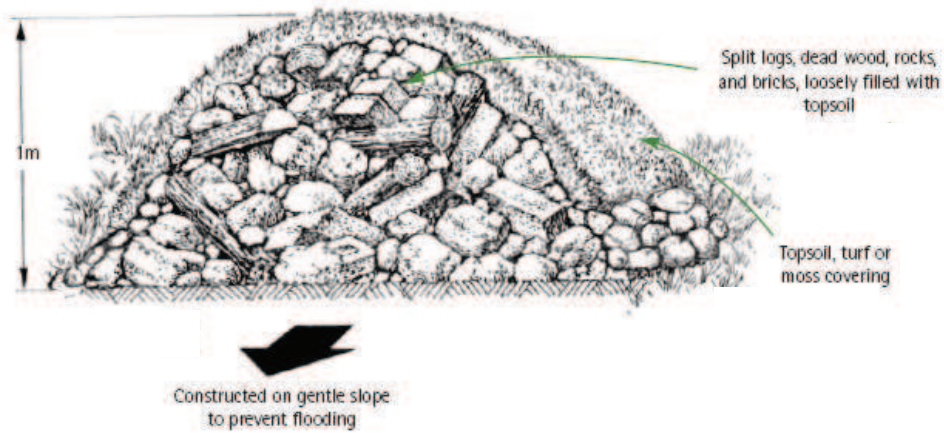
- 6.1 To offset any potential impacts of the scheme on the local Great Crested Newt population and to maintain the FCS it is proposed to construct a hibernaculum close to two ponds. The hibernaculum would be constructed in the corner of the field to the northwest of the pond within the applicant's garden. It would be located on level ground adjacent to (but not in) a dry ditch. Once constructed the field corner would be fenced to prevent stock access to the hibernaculum.
- 6.2 This work would be supervised by the ecologist. As Great Crested Newts are known to spend a considerable proportion of their terrestrial phase either underground or just above ground under refuge sites, it is of great benefit to provide artificial sites, known as hibernacula (see photo below), which they can utilise. The hibernaculum would be created using material from the site wherever possible. A mixture of hardcore, brick rubble, logs, *etc*, and loose topsoil will be piled into a mound which will then be covered with a topsoil cap and, ideally, a turf covering. Dimensions should not be below 2 m length x 1 m width x 1 m height. The lower margins of the mound should be exposed to facilitate access. The design can follow that provided in Langton, *et al.* (2001)⁴.



Above: a hibernaculum shortly after being created.

⁴ Langton, T, Beckett, C. & Foster J. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.

6.3 The following diagram is from page 31 of Langton *et al* (2001).



7 References

- English Nature (2001). *Great Crested Newt Mitigation Guidelines – Version: August 2001*. English Nature, Peterborough.
- HMSO (1981). *The Wildlife and Countryside Act 1981*. HMSO, London.
- HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.
- HMSO (2006). *The Natural Environment and Rural Communities Act 2006*. HMSO, London.
- HMSO (2010). *The Conservation of Habitats and Species Regulations 2010*. HMSO, London.
<http://www.biodiversitywales.org.uk/admin/upload/docs/english/Section%2042%20Priority%20List.doc>
- Langton, T, Beckett, C. & Foster J. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.
- UK Biodiversity Steering Group (1995). *Biodiversity: The UK Steering Group Report Volume 2: Action Plans*. HMSO, London.
- UK Biodiversity Steering Group (1998a). *UK Biodiversity Group Tranche 2 Action Plans Vol I Vertebrates and Vascular Plants*. English Nature.
- UK Biodiversity Steering Group (1998b). *UK Biodiversity Group Tranche 2 Action Plans: Volume II – Terrestrial and Freshwater Habitats*. English Nature.
- Wrexham County Borough (2003). *Wrexham Biodiversity Action Plan (Edition 2 – September 2003)*. The Planning Department, WCBC.

8 Signatories

I have read and understand the requirements of this Method Statement.

Print	Signed	Company	Date
--------------	---------------	----------------	-------------