

Title	Proposed Residential Housing Development on Land at Bedwell Road, Cross Lanes, Wrexham – Great Crested Newt Reasonable Avoidance Measures Method Statement
Client	Tyrer Ecological Consultants Ltd
Date of Method Statement	22nd May 2019
Author	Tom Knight

1 Introduction

Method Statement

- 1.1 Marches Ecology was commissioned by Tyrer Ecological Consultants Ltd to produce a Reasonable Avoidance Measures (RAMs) Method Statement to avoid any impacts on Great Crested Newts (*Triturus cristatus*) due to a proposed residential housing development on land at Bedwell Road, Cross Lanes, Wrexham (Approximate OS Grid Ref. SJ 375 471). The proposal has received planning consent subject to a number of conditions (Planning Ref. P/2018/0138). This RAMs Method Statement has been produced, in part, to satisfy the requirements of Condition 11 of the consent. Condition 11 states the following:
- 'Prior to the commencement of development, a scheme of reasonable avoidance measures in respect of great crested newts and a biosecurity risk assessment shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the details as approved'.*
- 1.2 Non-licensed Reasonable Avoidance Measures (RAMs) are often implemented at sites where the risk to individual Great Crested Newts/ their habitat has been assessed as low or negligible. This document briefly 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 RAMs are outlined which are to be implemented prior to and during the period of works. The RAMs will ensure as far as is reasonably possible that impacts on Great Crested Newts are minimised/ avoided.
- 1.3 It should be noted that following the RAMs outlined in this Method Statement does not waive or derogate any of the offences under the *Habitat Regulations* should an offence be committed. The aim of this Method Statement is to reduce the risk of an offence occurring to an 'acceptable' level by the implementation of reasonable steps.

Project Background

- 1.4 The proposed development briefly concerns the construction of five detached dwelling units with associated garages. The proposed development site would be divided into five private units separated by timber fencing. Shared turning and car parking areas would be provided to the front of the properties. Small gardens would be provided at the rear of the properties with soft landscaping to the front. Two vehicle access junctions are to be provided off Bedwell Road.
- 1.5 The proposed development site is divided into two, roughly rectangular, separate pieces of land. The northern of the two is henceforth referred to as Area A; the southern as Area B. In total the site extends to approximately 0.67 hectares.
- 1.6 The proposed development is presented on a D.S. Jones & Co. plan entitled:
- 'Proposed Site Layout Plan', dwg. no. 10110.04A.dsj, dated Jan 2018.

2 Risk Assessment

Introduction

- 2.1 An Extended Phase 1 Habitat Survey was completed at the site on 4th April 2018 by Tom Knight of Marches Ecology. The purpose of this survey was to appraise the ecological value of the site, identify ecological constraints to development and propose mitigation/compensation measures as required. The survey involved assessment of the potential value of the habitat for protected/ other notable species including for Great Crested Newts. The weather during the survey was 100% grey cloud with some light rain and a light breeze. The site visit focussed on land within the proposed development footprint and immediately adjacent land where access was provided. The results of the survey (with regards Great Crested Newts) are further described below.
- 2.2 The proposed development would be located within part of an existing garden area and a small part of a larger field unit that is characterised by poor semi-improved grassland. Small areas of scrub and short stretches of hedge would also be impacted.

Summary Evaluation of Risk to Great Crested Newts

Habitat Assessment – Area A

- 2.3 Area A is currently part of the garden associated with Bedwell Cottage. It includes a vegetable plot, amenity grassland with a few young ornamental shrubs, some bare ground/ephemeral vegetation and some hard-standing. There are also two small timber buildings which provide accommodation for chickens.



Garden area in Area A.

- 2.4 There is a short fragment of hedge on the north-western boundary that appears to be infrequently managed. It is approximately 3 m high and 1 m wide. It contains abundant *Crataegus monogyna* (Hawthorn), occasional *Sambucus nigra* (Elder) and a small amount of *Prunus* sp.
- 2.5 The hedgerow to the north of Area A and adjacent to Bedwell Road appears to be unmanaged. It is 4-5 m high and 1-2 m wide. It contains abundant Hawthorn, locally abundant *Prunus spinosa* (Blackthorn), frequent *Corylus avellana* (Hazel) and lesser amounts of *Acer campestre* (Field-maple), *Rosa canina* agg. (Dog-rose), *Salix caprea* (Goat Willow), *Alnus glutinosa* (Alder), *Fraxinus excelsior* (Ash) and *Acer pseudoplatanus* (Sycamore). The hedge includes young Ash, Sycamore and Field-maple saplings. The base of the hedge is either bare or dominated by *Hedera helix* agg. (Ivy). There is a narrow verge (approximately 1-1.5 m wide) in front of the hedge. It is heavily disturbed and characterised by *Urtica dioica* (Common Nettle), *Anthriscus sylvestris* (Cow Parsley), *Galium aparine* (Cleavers) and *Aegopodium podagraria* (Ground-elder). On the field side of the hedge *Rubus fruticosus* agg. (Bramble) and Blackthorn scrub is encroaching up to 3-4 m into the field.



The hedge to the north of the site.

- 2.6 The short stretch of hedge that borders the garden at Bedwell Cottage is a continuation of that described above. It is largely unmanaged and as such is more-or-less a line of (mostly Holly) trees. It is approximately 5-7 m high and 1-2 m wide. Some of the tops of the trees had been cut out. It contains abundant Holly, frequent Sycamore, occasional Hawthorn, and small amounts of Blackthorn, Ash, *Ligustrum vulgare* (Wild Privet) and Elder. The base is either bare or is dominated by Ivy with frequent Cleavers and locally frequent *Alliaria petiolata* (Garlic Mustard).



The hedge that borders Bedwell Cottage.

- 2.7 Area A provides less favourable terrestrial habitat (garden and hedges) than Area B. It is of negligible/ low value as the amenity grassland is cut short, the vegetable plot is largely bare with some low-growing ruderals, and the whole area is foraged by chickens. The hedgerow adjacent to Bedwell Road is of moderate value. However, there are some small piles of bricks/ rubble and logs that provide potential refugia/ hibernacula that could potentially be utilised by Great Crested Newts.

Habitat Assessment – Area B

- 2.8 Area B is part of a larger agricultural field that was unmanaged/ ungrazed at the time of survey. It supports poor semi-improved grassland with a variable sward height of between 0.2 m and 0.5 m. It is dominated by *Agrostis capillaris* (Common Bent) with abundant *Holcus lanatus* (Yorkshire-fog), frequent *Lolium perenne* (Perennial Rye-grass), *Ranunculus acris* (Meadow Buttercup), locally frequent *Plantago lanceolata* (Ribwort Plantain), occasional *Cynosurus cristatus* (Crested Dog's-tail), *Festuca rubra* (Red Fescue), *Dactylis glomerata* (Cock's-foot), *Ranunculus repens* (Creeping Buttercup), *Rumex acetosa* (Common Sorrel), *Cerastium fontanum* (Common Mouse-ear) and a small amount of *Centaurea nigra* (Common Knapweed).



Poor semi-improved grassland in Area B.

- 2.9 There is an apparently unmanaged hedge adjacent to Bedwell Road. It is 4-5 m high and 2 m wide. Bramble and Blackthorn scrub is encroaching up to 4-5 m into the field. The hedge contains abundant Hawthorn, Blackthorn, frequent Sycamore, occasional Ash, Dog-rose, Holly, Hazel and small amounts of Field-maple and Elder. It includes young Ash and Sycamore saplings. The base is largely bare or is dominated by Ivy and Cleavers.



The hedge adjacent to Bedwell Road.

- 2.10 The southeast boundary is formed by a gappy, defunct hedge that largely appears to be just outside the site boundary. It is mostly managed to approximately 1.3 m high and 1-1.5 m wide and contains abundant Hawthorn, and small amounts of Holly, Ash and *Lonicera periclymenum* (Honeysuckle).



The hedge on the southeast boundary.

2.11 A narrow band of scrub is located adjacent to the eastern and south-eastern boundaries of Area B. It is characterised by Bramble and young Blackthorn.

2.12 The terrestrial habitat within Area B (poor semi-improved grassland and hedges) is of moderate to high potential value for Great Crested Newts and other amphibians. Potential refugia appear to be limited in Area B but could be provided by, for example, small mammal burrows or cavities around roost systems within the hedge.

Status of Great Crested Newts in the Area

2.13 There is no aquatic habitat within the site.

2.14 An review of the OS map 1:25, 000 scale and relevant internet-based mapping including aerial photography¹ indicates that there may be 16 waterbodies within approximately 500 m of the site (excluding ditches/ watercourses). Three of these waterbodies are within 250 m of the site. There is a further feature visible in a field approximately 105 m southwest of Area B that may be a waterbody: a stand of Willow trees is present. No detailed pond scoping exercise has been undertaken to confirm the actual presence/ absence of these waterbodies.

2.15 The three waterbodies and fourth possible waterbody within 250 m of the site are as follows:

- Pond 1 (Approximate OS Grid Ref. SJ 3733 4729). Located approximately 200 m to the northwest of the site. This is an attenuation lagoon associated with the Wrexham Industrial Estate Approach Road. It is located on the opposite side of the brook to the north of the site.
- Pond 2 (Approximate OS Grid Ref. SJ 3732 4704). Located approximately 242 m to the southwest of the site, adjacent to the Cross Lanes Hotel. It is located on the opposite side of the A525 road to the site.

¹ <https://www.google.co.uk/maps/place/Cross+Lanes,+Wrexham+LL13+0TN/@53.01587,-2.9474085,5335m/data=!3m1!1e3!4m5!3m4!1s0x487ac0990fc4bca5:0x817037074a7ce8fc!8m2!3d53.015846!4d-2.9298989>

- Pond 3 (Approximate OS Grid Ref. SJ 3766 4693). Located approximately 205 m to the south of the site. It is located on the opposite side of the B5130 road to the site.
 - A possible waterbody (Approximate OS Grid Ref. SJ 3748 4704). Located approximately 105 m to the southwest of the site within an agricultural field.
- 2.16 Bowland Ecology (2018)² provides a review of Great Crested Newt records from the surrounding area. Presence/absence surveys were also conducted in 2015 of a small number of ponds including Pond 1, the attenuation lagoon. This Method Statement was produced for an unrelated development located to the north of the site.
- 2.17 A maximum count of one Great Crested Newt was recorded from Pond 1 in 2015. Great Crested Newt eggs were confirmed as present.
- 2.18 The review of data in Bowland Ecology (2018) provides a long list of records. It is difficult to correlate the grid references given with the ponds within 250 m of the proposed development site. However, there is a record for a pond at 'Cross Lanes Hotel' of six Great Crested Newts recorded in 2000. This record only has a six-figure grid reference, while this may refer to Pond 2, it is not possible to confirm.
- 2.19 Given the number of Great Crested Newt records from the surrounding area it is reasonable to assume that most waterbodies in this area will support Great Crested Newts. The data provided by Bowland Ecology (2018) indicates that most of the individual waterbodies support low numbers of newts though the local meta-population is assessed as medium in accordance with the population size class categories provided by English Nature (2001)³. A maximum count of up to 10 is classed as 'small', while a maximum count of between 11 and 100 is classed as 'medium'.

Summary

- 2.20 The potential presence of Great Crested Newts in terrestrial habitat is governed more by the proximity of a suitable breeding waterbody than by the quality of the terrestrial habitat. All of the waterbodies identified within 250 m of the site are separated from the site by a brook to the north, the A525 road to the west, the B5130 road to the south and Bedwell Road with Cross Lanes to the east. These roads, watercourse and village are likely to present something of a barrier to the movement of Great Crested Newts.
- 2.21 The feature located 105 m to the southwest of the site has not been confirmed as a waterbody. As this feature is dominated by Willow trees it is possible that it maybe a waterbody in the latter stages of succession (to terrestrial habitat).
- 2.22 While the presence of Great Crested Newts on the site cannot be entirely ruled out, due to the scale of the proposal, small number of waterbodies within 250 m and the barriers to dispersal between the site and these waterbodies, the risk to individual Great Crested Newts is considered to be low. 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 proposal on the Favourable Conservation Status of the local Great Crested Newt population are envisaged.

² Bowland Ecology (2018). *Black Rock Farm, Cross Lanes, Wrexham – Intensive Poultry Farm Permit Application – Great Crested Newt Method Statement*. Produced on behalf of N & K Elliott.

³ English Nature (2001). *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.

3 Great Crested Newt Legislation

- 3.1 This sub-section provides a brief summary of key legislation relevant to Great Crested Newts. It should not be considered a comprehensive review and is not meant to be so. It is provided here for information only and is not intended to replace specialised legal advice. It does not replace the text of the legislation but summarises the salient points.
- 3.2 Great Crested Newts are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended)⁴, and receive full protection under *Section 9*. The 1981 Act was amended by the *Countryside and Rights of Way Act 2000*⁵ 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 2017*⁶. It is included on *Schedule 2* of the Habitats Regulations which gives it full protection under *Regulation 42(1)*. The Great Crested Newt is therefore a so-called European Protected Species. The legislation applies to all life stages of the Great Crested Newt, including eggs, larvae, juveniles and adults.
- 3.3 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.
- 3.4 The Great Crested Newt is included on *Section 7* of the *Environment Act 2016*⁷.

⁴ HMSO (1981). *The Wildlife and Countryside Act 1981*. HMSO, London.

⁵ HMSO (2000). *The Countryside and Rights of Way Act 2000*. HMSO, London.

⁶ HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.

⁷ HMSO (2016). *The Environment Act (Wales) 2016*. HMSO, London.

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 proposed development and while the ecologist is not present. 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/ 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 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). 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 it is superficially similar. 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 Great Crested Newt Ecology

- 5.1 This sub-section of the document is provided as a brief introduction to the ecology of Great Crested Newts. It is not a substitute for detailed knowledge and experience of working with the species.
- 5.2 Great Crested Newts live both in water (aquatic habitat) and on land (terrestrial habitat). Aquatic habitat is required for breeding and feeding. Terrestrial habitat is required for foraging (for food) and for hibernation during the winter. They can be present in their breeding waterbody between spring and autumn but individuals often spend less time than that in aquatic habitat. The remainder of the year is spent on land. Some adults will migrate back to their breeding waterbody as early as late January but most move later, in March. Adult newts generally leave the waterbody from late May onwards.
- 5.3 Adult females lay eggs individually on submerged plants and can lay 200 eggs in a season. Larvae hatch after about three weeks and take another two to three months to complete their development. While some juveniles leave the waterbody (usually from August onwards) in this first year (and hibernate on land) some will over-winter in the waterbody.
- 5.4 Great Crested Newts hibernate during the winter often underground amongst tree roots, in mammal burrows, down the side of walls/ house foundations, in cellars, and beneath piles of stones/ logs, etc. Hibernation may last from October to February. While on land and outside the hibernation period, Great Crested Newts require refuge from extremes of weather. During the day they will rest in dense vegetation, under refuges (logs, etc), or underground. They will emerge from these refuges at night to forage and or migrate.

6 Method Statement

Preparatory

- 6.1 This RAMs Method Statement will be discussed in detail with all personnel/ contractors involved with the proposed development before any works are carried out. This will take the form of a toolbox talk/ site meeting to be presented by the ecologist 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 any works. This information will be incorporated into all subsequent site inductions for new personnel/ contractors.
- 6.2 Before any works 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. The contact details of the ecologist responsible for implementing this RAMs Method Statement will be provided to all site personnel before the start of work. This method statement must be strictly adhered to by all site personnel/ contractors involved with the proposed development.
- 6.3 Should a Great Crested Newt be located during implementation of the RAMs then it would be moved away from the immediate work area by the ecologist and relocated for welfare reasons only to a suitable receptor site. All work would then be suspended until further notice and Natural Resources Wales (NRW) consulted. It is possible that in this instance or if a Great Crested Newt is found at any other time during the work, an NRW 'development' licence may be required in order to lawfully proceed. Work should not re-commence until the ecologist has provided such confirmation. Other amphibians that may be found during the implementation of the RAMs scheme would also be moved to the 'receptor' site.

Working Protocol

Potential Refugia Within the Site

- 6.4 Potential refuges within the site, mostly in Area A (including piles of bricks/ rubble and logs, sheds) will be subject to a hand-search by the suitably licensed ecologist⁸. Similarly, it may also be necessary to undertake destructive searches on some of these features using an excavator under the supervision of the ecologist. The timber sheds will be carefully removed under the supervision of the ecologist who will check beneath the bases/ footings. All cleared materials should be immediately removed from the site.

Hedges

- 6.5 Prior to any mobilisation of machinery onto the site the hedges to be impacted will be removed to approximately 10 cm above ground level using brush-cutters and chainsaw as necessary. The cut arisings will be collected and removed. The ecologist will then assess these features for potential refugia and under-take hand-searches as necessary. It may also be necessary to employ destructive techniques on these features (e.g. careful removal with an excavator) which would be supervised by the ecologist. The stumps of the shrubs would be carefully pulled out/ upturned while the ecologist checks for amphibians around the roots. All cleared materials should be immediately removed from the site.

⁸ The ecologist should hold a current Natural Resources Wales 'survey/ disturbance' licence.

Vegetation Clearance

- 6.6 Prior to the start of any work associated with the proposed development the vegetation within all work areas will be cut/ removed, this largely relates to the grassland and scrub within Area B. Due to the extent of this habitat it is neither realistically feasible nor justifiable to undertake hand-searches across the entire site. It is therefore proposed to undertake 'sampling' of certain areas of the site where vegetation clearance and hand-searches will be undertaken as directed by the ecologist.
- 6.7 This work will be supervised by the ecologist where deemed necessary and hand-searches of particular habitat features will be undertaken. Grass should be cut no lower than 10-15 cm above ground level. The grass should be cut using a mower with a reciprocating blade only (or similar) and not a rotary blade or a strimmer. Cut material should be raked up and removed from the site. All arisings from this clearance work should be removed from the proposed development site within the same day.
- 6.8 Further to the vegetation being cut down to approximately 10-15 cm above ground level the ecologist will then undertake a visual-/ hand-search. This search will concentrate in particular on any potential refugia. Any potential surface refugia that can be easily moved (such as rocks, wood, etc) will also be removed from the area. Further to this, any remaining vegetation will be cut to ground level, again using hand-held tools and raked up (using a spring-tined rake). This will ensure, as far as is reasonably practical, that the surface of the work area is unsuitable for Great Crested Newts.
- 6.9 Should the grassland be maintained at a height of less than 10 cm (prior to the development) then this vegetation clearance would be unnecessary. The ecologist would then undertake a general visual-/ hand-search of the proposed development site as briefly detailed above.
- 6.10 Following cutting of the grass and the associated visual/ hand-searches all vegetation should be mechanically stripped as soon as possible. Mechanical vegetation stripping should only commence when the preceding and following night-time temperature does not fall below 5°C and should ideally be completed on the same day.
- 6.11 The vegetation will be stripped in a systematic manner in one direction. Stripped vegetation/ soil should be immediately removed from site. If this is not possible and the material would be stored on site then soil mounds should be subject to compaction on creation. This will ensure, as far as is practicable, that the creation of potential refugia associated with the mounds is limited; this will be subject to review by the ecologist. If the footprint of the soil mound has not previously been subject to a vegetation/ soil strip, a visual/ hand-search will be undertaken by the ecologist prior to installation of the soil mound. The ecologist would also need to supervise the eventual removal of the soil mound.

General

- 6.12 The ecologist will undertake a visual/ hand-search prior to the initiation of any work at the start of the construction period. It may be possible to undertake this search at the same time as the vegetation/ soil stripping. It will focus on the footprint of the proposed development as well as any immediately adjacent areas that may be used for storage of materials, vehicles or machinery.
- 6.13 At times when there is less/ no risk to Great Crested Newts the ecologist will remain on stand-by (off-site) for the duration of the development; site contractors will be responsible for implementing a watching-brief. This will entail a brief visual search of the site each day prior

to any works being initiated. When stored materials are moved, particular attention will be paid to determine if any amphibians are located underneath.

6.14 Should a newt be found during the work (and the ecologist is not present at the site) 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 (firstly making sure their hands are damp).

6.15 In addition to that outlined above, the following measures will be undertaken:

- The contractor's compound including all machinery, materials and other associated paraphernalia will be located on areas of hard-standing at all times;
- No machinery/ vehicles will access any area outside that which has been subject to vegetation/ soil stripping to undertake work associated with the proposed development unless under supervision by the ecologist where necessary;
- 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 secure facilities;
- 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. Where this is not possible it must either be removed from site or be located on hard-standing where possible and be compacted as mentioned above;
- Should any holes/ excavations be left on site overnight a suitable ramp (e.g. plank of wood) will be placed, with a slope of no more than 45°, 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;
- Machinery and vehicles will be located on hard-standing overnight;
- Any servicing or repair of machinery or vehicles will be carried out on areas of hard-standing; and
- Refuelling of machinery or vehicles will also be carried out in accordance with the appropriate Environment Agency Pollution Prevention Guidelines and all other relevant pollution guidance.

I have read and understand the requirements of this method statement.

[illegible]