



Great Crested Newts

Guidance for woodland creation where Great crested newts are present

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1. Introduction

Great crested newts (*Triturus cristatus*) have suffered a significant decline in numbers and distribution across the UK primarily through loss, degradation and fragmentation of suitable habitat, especially ponds. Knowledge of crested newt distribution in Wales is not complete, but we do know that the eastern part of the country, especially the north east, is very important due to the high density of ponds in a UK context and probably at the European level too. Detailed modelling of its predicted range in Wales has recently been carried out.

The great crested newt is Britain's most strictly protected amphibian. It is on Annexes II and IV of the Habitats Directive 1992 (implemented by the Conservation of Habitats and Species Regulations, 2010) as well as Schedule 5, Wildlife & Countryside Act, 1981 (as amended). In summary, this makes it illegal to intentionally or deliberately capture or kill, or intentionally injure a crested newt; deliberately disturb crested newts or intentionally or recklessly disturb them in a place used for shelter or protection; damage or destroy a breeding site or resting place or intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection.

Licences may be required to undertake works that may otherwise constitute an offence.

2. Biology & Ecology

The great crested newt is the largest British newt with an average adult body length of 150mm. The dorsal skin is dark brown to black with a granular texture and very fine white spots on the flanks. The underside is strikingly marked with orange, yellow and black. In the breeding season, males develop prominent crests along the spine and have silvery tail stripes.

Crested newts, like all amphibians, spend a large part of the year on dry land, foraging and hibernating in a mixture of habitats that can support their invertebrate prey. They enter ponds to breed in early spring where the males congregate in the shallow margins to display at the females. Eggs are deposited singly, wrapped in suitable aquatic plant leaves. Newts metamorphose through three distinct development life stages: aquatic larva, terrestrial juvenile (called an aft) and adult.

When not breeding, crested newts live on dry land and feed, shelter and hibernate in many types of habitat. They will disperse up to about 1km from their pond, but generally stay within 250m-500m depending on the quality of the terrestrial habitat available.

3. Habitats

Crested newts favour medium to large (typically 50-300m²) ponds which support aquatic vegetation for egg laying. Groups of ponds provide better population opportunities than single water bodies. Emergent and floating vegetation should ideally not exceed about 60% of the surface area. There should be open bare areas on the bottom of the pond for displaying males and shade around the banks should be minimised, especially on the south side. Warm, sunny ponds produce a better habitat with more abundant invertebrate prey than shady ponds.

Terrestrial habitat should provide a mosaic of tussocky and shorter vegetation and includes all habitat types (ie grassland, scrub and woodland), although some, such as dense conifer plantation and cereal fields, provide very few foraging opportunities. Permanent features such as hedge banks, walls, piles of rock or rubble and branches are useful hibernacula sites, giving stable environmental conditions in the winter away from frost. Studies have shown the amount of fallen deadwood is directly proportional to the size of a newt population. Movement between pond sites and hibernacula is made easier by areas of good cover such as long grass, rushes, hedges and scrub.

4. Woodland creation schemes in areas identified as important for great crested newt should include the following measures:

- Identify suitable breeding and terrestrial habitat within the site, good habitat will have dense vegetation as described above.
- Design the planting scheme to include areas of habitat linking ponds in a network. Leave a buffer of at least 15 metres unplanted especially on the south side of ponds to ensure that when the trees are grown they will not shade the surface. Siltation of ponds from soil run off or leaf fall is one of the major causes of pond decline and site management will be reduced if pond margins are left unplanted.
- Avoid establishing scrub and tree cover where there would be an impact on water supply for ponds or the likelihood of damaging any pond lining.
- Any new ponds should be constructed within 250m of established ones to aid colonisation and should be left to vegetate naturally. Do not connect any new ponds to ditches or streams, or make connections to established ponds that would allow fish invasion. Consideration should be given to ponds drying up once every five years.
- Easy access to pond margins will allow pond and bankside management to take place when required due to vegetation growth leading to succession and decline in available open water habitat.
- Biosecurity measures should be in place when working in ponds to prevent transfer of invasive non-native species or amphibian diseases such as chytrid.
- Consider vehicle access to ponds as part of overall schemes

Advice on licencing requirements should be sought from local Natural Resources Wales offices.

Further Reading

Baker, J., Beebee, T., Buckley, J., Gent, T. & Orchard, D. (2011) Amphibian Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.

Gent, A.H. & Gibson, S.D. (Eds.) (1998) Herpetofauna Workers Manual. Peterborough, Joint Nature Conservation Committee.

Langton, T.E.S., Beckett, C.L. & Foster, J.P. (2001) Great Crested Newt Conservation Handbook, Froglife, Halesworth.

Amphibian and Reptile Conservation Trust website contains valuable information and advice: <http://www.arc-trust.org/>

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